



Personal Systems Reference
IBM Monitors
April 1987 to 2005 - withdrawn

May 2005 - Version 291

learn.

think.

succeed.

■ ■ ■ ibm.com/pc/training

IBM Displays (1987 to 1993) - withdrawn

SUPER VGA COLOR (Value - withdrawn)						—SVGA (Low end - withdrawn)—				
Name	≈ 6312	≈ 6314	≈ 6319	≈ 6317	≈ 6318					
Type-model	6312-001	6314-001	6319-001	6317-M01	6318-001					
Screen	14"	14"	15" FST	17" FST	14"					
Actual viewable diagonal size	11.8" / 300 mm	12.0" / 306 mm	12.7" / 322 mm	14.7" / 375 mm	12.1" / 308 mm					
Type	SVGA color	SVGA color	SVGA color	SVGA color	SVGA color					
Dot pitch (mm)	.28	.28	.28	.28	.39					
Viewing area (inches)	9.4 x 7.0"	9.6 x 7.2"	10.2 x 7.4"	11.8 x 8.8"	9.4 x 7.0"					
Max view area (inches)	9.8 x 7.3"	10.7 x 8.0"	11.0 x 8.2"	12.7 x 9.4"	9.7 x 7.3"					
Viewing area (mm)	240 x 180	245 x 184	260 x 190	300 x 224	240 x 180					
Max view area (mm)	250 x 187	272 x 204	281 x 209	323 x 241	247 x 185					
Frequency	Multiscanning	Multiscanning	Multiscanning	Multiscanning	Fixed					
Vertical refresh rate	50 to 100 Hz	50 to 100 Hz	50 to 100 Hz	50 to 130 Hz	—					
Horizontal line rate	30 to 50 kHz	30 to 60 kHz	30 to 60 kHz	31 to 64 kHz	—					
Maximum pel rate	65 MHz	80 MHz	80 MHz	110 MHz	45 MHz					
640 x 480 NI (presets)	60, 72, 75 Hz	60, 72, 75 Hz	60, 72, 75 Hz	60, 72, 75 Hz	60, 72 Hz					
800 x 600 NI (presets)	56, 60, 72 Hz	56, 60, 72 Hz	56, 60, 72 Hz	56, 60, 72 Hz	56, 60 Hz					
1024 x 768 NI (presets)	60	60, 70, 72 Hz	60, 70, 72 Hz	60, 70, 72 Hz	—					
1024 x 768 I (presets)	1 43.5	1 43.5	1 43.5	1 43.5	1 43.5					
1280 x 1024 NI or I (presets)	—	1 50	1 50	1 50, NI 60	—					
3270 MFI emulation modes	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4					
Emission	VLMF	VLMF	VLMF	MPR-II	MPR-II					
ISO 9241-3	No	No	No	ISO 9241-3	No					
Tilt/swivel standard	Yes	Yes	Yes	Yes	Yes					
Lift/Tilt/Swivel option	No	No	No	No (too big)	No					
Brightness/contrast control	Analog	Analog	Analog	Analog	Analog					
Picture width/height control	Analog	Digital	Digital	Digital	Analog					
Horizontal/vertical centering	Analog	Digital	Digital	Digital	Horz only					
Trapezoidal/pincushion adj	No	Digital	Digital	Digital	Pinc only					
Color tint setting (red/blue)	No	2 fixed settings	2 fixed settings	No	No					
Color tint reset button	N/A	N/A	N/A	N/A	N/A					
Type of controls	Knobs	Pushbuttons	Pushbuttons	Pushbuttons	Knobs					
Degauss button	No	No	No	No	No					
Microprocessor (detects modes)	No	Microprocessor 7	Microprocessor 7	Microprocessor 6	No					
Factory preset modes	0	7	7	7	7					
Ability to save a new setting	Only current	Yes	Yes	Automatic	Only current					
User modes that can save	Only current	6	6	8	Only current					
Total recallable modes	0	13	13	14	7					
Prevent overwriting presets	N/A	No	No	Yes	N/A					
Geometry reset button	No	No	No	Reset button	No					
DPMS compliant	No	No	No	No	No					
Power management	No	No	No	No	No					
Power mgmt flashing LED	N/A	N/A	N/A	No	N/A					
Universal power supply	No	No	No	Yes	No					
Anti-glare screen	Anti-glare	Anti-glare	Anti-glare	Anti-glare	Anti-glare					
Anti-static screen	No	No	No	Anti-static	Anti-static					
Available date	Sept 92	Sept 92	Sept 92	Apr 93	Apr 93					
Withdrawal date	Apr 94	Apr 94	Dec 94	Apr 94	Apr 94					
Warranty	1 yr onsite	1 yr onsite	1 yr onsite	1 yr onsite	1 yr onsite					
Warranty coverage	8-5 M-F	8-5 M-F	8-5 M-F	8-5 M-F	8-5 M-F					
Warranty response	Next day	Next day	Next day	Next day	Next day					
Warranty upgrade 24hr/4hr resp	Yes	Yes	Yes	Yes \$8	Yes \$8					
Price (retail USD)	\$ 450	\$ 480	\$ 504 ↘	\$ 924 ↘	\$ 318 ↘					
XGA COLOR (withdrawn)						VGA COLOR (withdrawn)				
	≈ 8515-021	≈ 9515	≈ 8514	≈ 8516	≈ 9517-001	≈ 8513	≈ 8512	≈ 8511	≈ 9518	≈ 8518
Size	14"	14"	16"	14"	17" Trinitron™	12"	14"	14"	14"	14"
Dot Pitch	.28	.28	.31	.28	.26 stripe	.28	.41	.39	.28	.28
Viewing Area	9.8 x 7.4"	9.8 x 7.4"	11.1 x 8.3"	9.8 x 7.4"	11.8 x 8.8"	8.1 x 6.1"	9.4 x 7.1"	9.4 x 7.1"	9.8 x 7.4"	9.8 x 7.4"
640 x 480	NI 60 Hz	NI 75 Hz	NI 60 Hz	NI 60 Hz	NI 75 Hz	NI 60 Hz	NI 60 Hz	NI 60 Hz	NI 75 Hz	NI 60 Hz
800 x 600	—	—	—	—	—	—	—	—	—	—
1024 x 768	I 43.5 Hz	NI 75 Hz	I 43.5 Hz	I 43.5 Hz	NI 72 Hz	—	—	—	—	—
1280 x 1024	—	—	—	—	I 53 Hz	—	—	—	—	—
Emission	VLMF	MPR-II	—	VLMF	MPR-II	—	—	VLMF	MPR-II	VLMF
Other	—	ISO 9241-3	—	Touch	ISO 9241-3	—	—	—	ISO 9241-3	—
Warranty	1 year	3 yr onsite	1 year	1 year	3 yr onsite	1 year	1 year	1 year	3 yr onsite	1 year
Avail date	Sept 91	Sept 92	Apr 87	Jun 91	Nov 92	Apr 87	Apr 87	Mar 92	Sept 92	Oct 91
Price (USD)	\$ 560	\$ 735	\$ 867	\$ 933	\$ 1,110 ↘	withdrawn	\$ 365	\$ 367	\$ 500	\$ 535

85xx also have 720 x 350 and 720 x 400 text modes at 70 Hz (NI).

951x also have 720 x 350 and 720 x 400 text modes at 88Hz (NI).

63xx displays also have 720 x 350 and 720 x 400 text modes at 70 Hz (NI) and 88 Hz (NI); 6318, 14L39 and 14L8 is only 70 Hz.

All trademarks are the property of their respective owners (listed on Trademark sheet)

≈ Withdrawn from marketing
I = Interlaced; NI = Non-interlaced

No warranties are expressed or implied in this summary (DISPW1) Compiled by Roger Dodson, IBM. May 1996

↘ Price decrease effective June 15, 1994

IBM Displays (Touch) - withdrawn

TOUCH - SUPER VGA COLOR (Premium Touch)									
Name	≈ 14PT		≈ 15PT		≈ 17VT	≈ 17PT		≈ 21PT	
Screen	14"		15" FST		17" FST	17" Trinitron™		21" Diamondtron™	
Actual viewable diag size	13" / 331 mm		13.7" / 348 mm		15.6" / 398 mm	15.4" / 391 mm		19.1" / 485 mm	
Type	Touch SVGA		Touch SVGA		Touch SVGA	Touch SVGA		Touch SVGA	
Dot pitch (mm)	.28		.28		.28	.26 stripe		.31 stripe	
Touch technology	Capacitive		Capacitive		Capacitive	Capacitive		Capacitive	
Screen	Anti-glare Polished		Anti-glare Polished		Silica	Anti-glare Polished		Anti-glare Polished	
Type-model	9524-T01	9524-T21	9525-T01	9525-T21	6327-T03	9527-T01	9527-T21	9521-T01	9521-T21
Available date	Sept 93	Feb 94	Sept 93	Feb 94	Feb 95	Nov 93	Feb 94	Nov 93	Feb 94
Price (retail USD)	\$ 1,367	\$ 1,230 ↘	\$ 1,593	\$ 1,434 ↘	\$ 1,795	\$ 2,260	\$ 2,034 ↘	\$ 3,527	\$ 3,174 ↘
Viewing area (inches)	10.0 x 7.6"		10.5 x 8.0"		11.8 x 8.8"	11.8 x 8.8"		15.0 x 11.2"	
Max view area (inches)	10.6 x 8.0"		11.0 x 8.3"		12.6 x 9.5"	12.4 x 9.3		15.5 x 11.5	
Viewing area (mm)	256 x 193		266 x 201		300 x 225	300 x 225		380 x 285	
Max view area (mm)	270 x 202		280 x 210		320 x 244	315 x 235		395 x 292	
Frequency	Multiscanning		Multiscanning		Multiscanning	Multiscanning		Multiscanning	
Vertical refresh rate range	50 to 110 Hz		50 to 110 Hz		50 to 110 Hz	50 to 110 Hz		50 to 152 Hz	
Horizontal line rate range	30 to 64 kHz		30 to 64 kHz		30 to 64 kHz	30 to 82 kHz		30 to 82 kHz	
Maximum pel rate	90 MHz		90 MHz		110 MHz	160 MHz		175 MHz	
640 x 480 NI (presets)	60, 72, 75, 85 Hz		60, 72, 75, 85 Hz		60, 72, 75, 85, 98	60, 72, 75, 85, 98 Hz		60, 72, 75, 85, 98 Hz	
800 x 600 NI (presets)	56, 60, 72 Hz		56, 60, 72 Hz		56, 60, 72, 85 Hz	56, 60, 72, 85, 99 Hz		56, 60, 72, 85, 99 Hz	
1024 x 768 NI (presets)	60, 70, 72, 75		60, 70, 72, 75		60, 70, 72, 76	60, 70, 72, 75, 93		60, 70, 72, 75, 93	
1024 x 768 I (presets)	I 43.5		I 43.5		I 43.5	I 43.5		I 43.5	
1280 x 1024 NI or I (presets)	I 50, NI 60		I 50, NI 60		I 50, NI 60	I 50, NI 60, 77		I 50, NI 60, 77	
1360 x 1024 NI or I (presets)	-		-		-	NI 77 Hz		NI 77	
1600 x 1200 NI (presets)	-		-		-	-		NI 60	
3270 MFI emulation modes	2, 3, 4, 5		2, 3, 4, 5		2, 3, 4, 5	2, 3, 4, 5		2, 3, 4, 5	
Emission	MPR-II		MPR-II		MPR-II	MPR-II		MPR-II	
ISO 9241-3	ISO 9241-3		ISO 9241-3		ISO 9241-3	ISO 9241-3		ISO 9241-3	
Lift/tilt/swivel option	Lift option		Lift option		No (too big)	No (too big)		No (too big)	
Brightness/contrast control	Digital		Digital		Digital	Digital		Digital	
Picture width/height control	Digital		Digital		Digital	Digital		Digital	
Horizontal/vertical centering	Digital		Digital		Digital	Digital		Digital	
Trapezoidal/pincushion adj	Digital		Digital		Digital	Digital		Digital	
Color tint (red, green, blue)	Continual (r,b)		Continual (r,b)		Continual (r,b)	Continual (r,b)		Continual (r,g,b)	
Color tint reset button	Reset button		Reset button		Reset button	Reset button		Reset button	
5 BNC connectors	No		No		No	5 BNC		5 BNC	
Apple/RS/6000/Sun attach	No		No		No	Apple attach		Apple attach	
Horz converg adj button	No		No		No	Horz converg		Horz converg	
Vert converg adj button	No		No		No	Vert converg		No	
Rotation adjustment button	No		No		No	Rotation button		Rotation button	
Converg/rotation reset button	No		No		No	Reset button		Reset button	
Degauss button	No		No		No	Degauss button		Degauss button	
Microproc (detects modes)	Microprocessor		Microprocessor		Microprocessor	Microprocessor		Microprocessor	
Factory preset modes	15		15		15	14		12	
User modes that can save	11		11		11	16		10	
Ability to save a new setting	Automatic		Automatic		Automatic	Automatic		Automatic	
Prevent overwriting presets	Yes		Yes		Yes	Yes		Yes	
Geometry reset button	Reset button		Reset button		Reset button	Reset button		Reset button	
Power management	No		No		DPMS Energy Star	No		No	
Power mgmt flashing LED	No		No		Flashing LED	No		No	
Power mgmt on/off switch	No		No		No	No		Yes	
Warranty	3 year		3 year		1 year onsite	3 year		3 year	

14PT and 15PT is the successor to the 8516 touch display.

Touch capability on 14PT, 15PT, 17PT, 17VT, and 21PT is done by a capacitive overlay which reacts to the naturally occurring charge in the body. Although it will not work with a non charged object like a pencil, it will work through thin gloves like surgical ones. The 8516 worked with anything because it detected movement via strain gauges. The 8516 required recalibration after relocating, but the PT models do not require this. Touch displays are factory fitted and the display looks just like a non-touch display.

The 17VT has a silica coating (better than anti-glare/etched or polished/non-etched) which reduces glare while maintaining excellent sharpness. Appearance is like a regular non-touch screen.

T0x (1993 PT models)	T2x (1994 PT models)
Anti-glare (etched screen)	Polished (non-etched screen)
Dull glass surface	Shiny glass surface
Little glare from lights so recommend when reflections are a problem	Subject to glare from lights so recommend when reflections are minimal
Better for darker screen backgrounds	Better for lighter screen backgrounds
Less screen sharpness	Enhanced screen sharpness
Ideal for kiosk use	Ideal for desktop use

STANDARD FEATURES
95xx TOUCH
Universal power supply
Anti-static screen
Tilt/swivel stand
Automatic degauss

TOUCH - XGA COLOR	
Size	≈ 8516
Dot pitch	14"
Touch technology	.28
Screen	Strain gauge
Viewing area	Etched
	9.8 x 7.4"
640 x 480	NI 60 Hz
800 x 600	-
1024 x 768	I 43.5 Hz
Emission	VLMF
Other	Touch
Warranty	1 year
Avail date	Jun 91
Price	withdrawn

The 14PT, 15PT, 17PT, and 21PT have the same functions and features of the 14P, 15P, 17P, and 21P (except no power management).

952x "P" DISPLAYS WARRANTY SERVICE SUPPORT

- ↻ 3 year warranty
- ↻ IBM Express Maintenance
- ↻ Replacement normally arrives in two business days
- ↻ IBM pays all shipping costs
- ↻ Warranty upgrade options:
 - On site exchange M-F 8-5 with 2nd day response
 - On site exchange 7 day x 24 hr with same day response
- ↻ Post warranty: on site options
- ↻ 24 hour / 7 day telephone support
- ↻ IBM® or dealer warranty/service
- ↻ 30 day money back guarantee

All trademarks are the property of their respective owners. ≈ = Interlaced; ♂ = Non-interlaced

↘ Price decrease effective June 15, 1994

≈ 9527-T01 withdrawn effective April 12, 1995; all others in December 1995

No warranties are expressed or implied in this summary (DISPT) Compiled by Roger Dodson, IBM. December 1995

IBM Displays (Low end; active matrix) - withdrawn

SUPER VGA COLOR (Low end)			ACTIVE MATRIX - FLAT PANEL	
	≈< 14L39	14L8	≈< 10FA Color Monitor	
Name	6321-011	6321-001	9507-001	
Type-model	14"	14"	10.4" (similar to 12" display)	➔ 10.4" active matrix flat panel color display.
Screen	12.5" / 318 mm	12.5" / 318 mm	10.4" / 263 mm	➔ Thin film transistor (same screen as
Viewable image size	SVGA color	SVGA color	VGA color	ThinkPad® 720C).
Type	.39	.28	.33	➔ VGA 640 x 480 with 16 simultaneous
Dot pitch (mm)	9.8 x 7.4"	9.8 x 7.4"	8.3 x 6.2"	colors (out of 512).
Viewing area (inches)	10.2 x 7.7"	10.2 x 7.7"	9.7 x 7.3"	➔ No flicker.
Max view area (inches)	250 x 187	250 x 187	211 x 158	➔ No glare.
Viewing area (mm)	260 x 195	260 x 195	247 x 185	➔ No black boarder.
Max view area (mm)	Fixed	Fixed	Fixed	➔ 50 to 1 contrast ratio.
Frequency	—	—	—	➔ 13.9 lbs.
Vertical refresh rate	—	—	—	➔ No fan so virtually silent.
Horizontal line rate	45 MHz	45 MHz	28 MHz	➔ Virtually no emissions.
Maximum pel rate	640 x 480 NI (presets) 60, 72 Hz	60, 72 Hz	60, 70 Hz	➔ External power supply to reduce
640 x 480 NI (presets)	800 x 600 NI (presets) 56, 60 Hz	56, 60 Hz	—	size/foot print.
800 x 600 NI (presets)	1024 x 768 NI (presets) —	—	—	➔ Low power consumption (37 watts).
1024 x 768 NI (presets)	1024 x 768 I (presets) 1 43.5 Hz	1 43.5 Hz	—	➔ Low power standby mode (17 watts).
1024 x 768 I (presets)	1280 x 1024 NI or I (presets) —	—	—	➔ ISO 9241 -3 conformance.
1280 x 1024 NI or I (presets)	1360 x 1024 NI or I (presets) —	—	—	➔ Requires little desk space (48 sq in).
1360 x 1024 NI or I (presets)	1600 x 1200 NI —	—	—	➔ Includes lift, tilt, swivel stand.
1600 x 1200 NI	3270 MFI emulation modes 2, 3, 4	2, 3, 4	—	➔ Easily place/remove 9507 from stand.
3270 MFI emulation modes	Emission MPR-II	MPR-II	MPR-II and TCO-91	➔ Hang off wall (when remove from stand).
Emission	ISO 9241-3 No	No	Yes (Flat Panel Addendum)	The 9507 operates at only 37 watts and idles
ISO 9241-3	Tilt/swivel standard Yes	Yes	Standard	at 17 watts. The 9507 powers down to 17
Tilt/swivel standard	Lift/Tilt/Swivel option No	No	Rocker switch	watts independent of any system unit driver.
Lift/Tilt/Swivel option	Brightness/contrast control Analog	Analog	No	Contrary to other displays (V and P series),
Brightness/contrast control	Picture width/height control Analog	Analog	No	the 9507 does not need VESA DPMS
Picture width/height control	Horizontal centering control Analog	Analog	No	drivers for power saving stages.
Horizontal centering control	Vertical centering control Analog	Analog	No	
Vertical centering control	Trapezoidal adjustment No	No	No	
Trapezoidal adjustment	Pincushion adjustment No	No	No	
Pincushion adjustment	Color tint setting (r, b, g) No	No	No	
Color tint setting (r, b, g)	Color tint reset button N/A	N/A	N/A	
Color tint reset button	Type of controls Knobs	Knobs	Rocker switch	
Type of controls	Microprcor (detects modes) No	No	Yes (but not via	9507 text modes include:
Microprcor (detects modes)	Factory preset modes 7	7	Many microprocessor)	① 640 x 350 at 60, 70 Hz
Factory preset modes	Ability to save a new setting Only current	Only current	No	② 640 x 400 at 60, 70 Hz
Ability to save a new setting	User modes that can save Only current	Only current	N/A	③ 720 x 400 at 70 Hz
User modes that can save	Total recallable modes 7	7	N/A	
Total recallable modes	Prevent overwriting presets N/A	N/A	N/A	
Prevent overwriting presets	Geometry reset button No	No	N/A	
Geometry reset button	Auto-borderless No	No	N/A	
Auto-borderless	DPMS compliant No	No	No	
DPMS compliant	Power management No	No	Energy Star (17 watts)	
Power management	Power mgmt flashing LED N/A	N/A	Yes	
Power mgmt flashing LED	Universal power supply No	No	Yes	
Universal power supply	Anti-static screen Anti-static	Anti-static	N/A	
Anti-static screen	Anti-glare screen Anti-glare	Anti-glare	Anti-glare	
Anti-glare screen	Available / withdrawn date April 94 / Dec 95	Jan 94 / Mar 96	October 93 / Jun 96	
Available / withdrawn date	Warranty 1 yr onsite	1 yr onsite	1 yr onsite	
Warranty	Warranty coverage 8-5 M-F	8-5 M-F	8-5 M-F	
Warranty coverage	Warranty response 2nd bus day	2nd bus day	2nd bus day	
Warranty response	Warranty upgrad same day 95 Yes \$15	Yes \$15	Yes \$15	
Warranty upgrad same day 95	Warranty upgrade 7 day/4hr resp Yes \$25	Yes \$25	Yes \$25	
Warranty upgrade 7 day/4hr resp	Price (retail USD) \$ 324	\$ 359	\$ 1,759 ↘	
Price (retail USD)				

The 14L39 replaces the 6318.

6318, 14L39 and 14L8 also have 720 x 350 and 720 x 400 text modes at 70 Hz.

↘ Price decrease effective September 13, 1995
All trademarks are the property of their respective owners (listed on Trademark sheet)

≈< Withdrawn from marketing
‡ † Interlaced³ † = Non-interlaced

No warranties are expressed or implied in this summary (DISPL) Compiled by Roger Dodson, IBM. May 1996

IBM Displays (Monochrome and Image) - withdrawn

MONOCHROME				IMAGE								
Name	≈ 12M	≈ 8504	≈ 8507	≈ 9504 <i>Requires IBM® Image-I Adapter/A</i>								
Type-model	8504-021	8504-001	8507-001	9504-001								
Screen	12" FST	12" FST	19"	21" FST								
Viewable image size	10.3" / 261 mm	10.3" / 261 mm	17.3" / 439 mm	19.0" / 482 mm								
Type	Monochrome	Monochrome	Monochrome	Monochrome - Image								
Dot pitch (mm)	N/A ²	N/A ²	N/A ²	N/A ² (110 dots per inch)								
Viewing area (inches)	8.3 x 6.2"	8.2 x 6.2	14 x 10.5	14.6 x 11.7"								
Max view area (inches)	Same	Same	Same	15.1 x 12.1"								
Viewing area (mm)	210 x 157.5	210 x 157.5	350 x 265	370 x 296								
Max view area (mm)	Same	Same	Same	384 x 308								
Frequency	Fixed	Fixed	Fixed	Fixed								
Vertical refresh rate range	-	-	-	-								
Horizontal line rate range	-	-	-	-								
Horizontal scan frequency	31.5 kHz	31.5 kHz	31.5 or 35.5 kHz	102 Khz								
Maximum pel rate	28 MHz	28 MHz	45 MHz	230 Mhz								
640 x 480 NI (presets)	NI 60 Hz	NI 60Hz	NI 60 Hz	NI 77 Hz (emulated by Image-I)								
800 x 600 NI (presets)	-	-	-	-								
1024 x 768 NI or I (presets)	-	-	I 43.5 Hz	NI 77 Hz (emulated by Image-I)								
1280 x 1024 NI or I (presets)	-	-	-	-								
1360 x 1024 NI or I (presets)	-	-	-	NI 77 Hz (emulated by Image-I)								
1600 x 1280 NI (presets)	-	-	-	NI 77 Hz with 16 grey shades								
3270 MFI emulation modes	2, 3, 4	2, 3, 4	2, 3, 4	None								
Emission	MPR-II	VLMF	-	MPR-II								
ISO 9241-3	No	No	No	ISO 9241-3								
Tilt/swivel stand standard	Yes	Yes	Yes	Yes								
Lift/tilt/swivel option	No	No	No	No								
Brightness/contrast control	Analog	Analog	Analog	Analog								
Picture width/height control	No	No	No	Analog								
Horizontal/vertical centering	No	No	No	Analog								
Trapezoidal/pincushion adj	No	No	No	No								
Color point setting (blue/pink)	N/A	N/A	N/A	N/A								
Type of controls	Knobs	Knobs	Knobs	Knobs								
Microprocsr (detects modes)	No	No	No	No								
Factory preset modes	3	3	4	1								
Ability to save a new setting	No	No	No	Only current								
User modes that can save	None	None	None	Only current								
Total recallable modes	N/A	N/A	N/A	N/A								
Prevent overwriting presets	N/A	N/A	N/A	N/A								
Power management	No	No	No	None								
Power mgmt flashing LED	N/A	N/A	N/A	No								
Universal power supply	No	No	No	Universal								
Anti-static screen	Anti-static	No	No	Anti-static								
Anti-glare screen	Anti-glare	Anti-glare	Anti-glare	Anti-glare								
Available / withdrawn date	Oct 93 / Dec 95	Jun 91 / Dec 94	Sept 88 / Dec 93	Aug 93 / Dec 95								
Warranty	1 year carry in	1 year carry in	1 year carry in	1 year (second business day 9-5)								
Price (retail USD)	\$ 221	\$ 245	\$ 400	\$ 829 ↘								
<p>The resolution, vertical refresh rate, and maximum shades of grey are controlled by a combination of the video controller, device driver, and display.</p> <p>Note 2: Monochrome displays have no shadow mask and therefore no dot pitch. The gun design determines differences in screen quality.</p> <p>Monochrome displays do not have or need degauss as there is no metal in the tube to become magnetized.</p> <p>Analog = knobs / thumbwheel; Digital = pushbuttons</p> <p>85xx also have 720 x 350 and 720 x 400 text modes at 70 Hz (NI).</p> <p>The 9504 requires the IBM® Image-I Adapter/A. A special connector is used to make it plug only into this adapter.</p> <p>The 9504 is specifically designed for the Image Plus market to run at 1600 x 1280 resolution. If used in any other resolution than 1600 x 1280 there will be a reduction in picture size in accordance with the following table:</p> <table border="0"> <tr> <td>1600 x 1280 = 370 x 296 mm</td> <td>The Image-I Adapter/A always fills the screen with</td> </tr> <tr> <td>1360 x 1024 = 315 x 237 mm</td> <td>1600 x 1200 pels. The 1360 x 1024 and 1024 x 768</td> </tr> <tr> <td>1024 x 768 = 237 x 178 mm</td> <td>are just windows within this. The 640 x 480 mode is</td> </tr> <tr> <td>640 x 480 = 296 x 222 mm</td> <td>pel doubled to look like 1280 x 960.</td> </tr> </table>				1600 x 1280 = 370 x 296 mm	The Image-I Adapter/A always fills the screen with	1360 x 1024 = 315 x 237 mm	1600 x 1200 pels. The 1360 x 1024 and 1024 x 768	1024 x 768 = 237 x 178 mm	are just windows within this. The 640 x 480 mode is	640 x 480 = 296 x 222 mm	pel doubled to look like 1280 x 960.	<p>MONOCHROME DISPLAYS WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↻ 1 year warranty ↻ All cities in all states ↻ 8am-5pm, Monday-Friday coverage ↻ Warranty upgrade option available <ul style="list-style-type: none"> - Same day M-F 9-5 - Same day 24 hr / 7 day ↻ 24 hour / 7 day telephone support ↻ IBM or dealer warranty / service ↻ 30 day money back guarantee
1600 x 1280 = 370 x 296 mm	The Image-I Adapter/A always fills the screen with											
1360 x 1024 = 315 x 237 mm	1600 x 1200 pels. The 1360 x 1024 and 1024 x 768											
1024 x 768 = 237 x 178 mm	are just windows within this. The 640 x 480 mode is											
640 x 480 = 296 x 222 mm	pel doubled to look like 1280 x 960.											

All trademarks are the property of their respective owners (listed on Trademark sheet)

≈ Withdrawn from marketing
 ‡ Interlaced; NI = Non-interlaced
 ↘ Price decrease effective September 13, 1995

No warranties are expressed or implied in this summary (DISPM) Compiled by Roger Dodson, IBM. December 1995

IBM Displays (S/S series) - withdrawn

SUPER VGA COLOR (S/S = Sight and Sound)

Name	≈ 17S/S
Type-model	7091-7S1
Screen	17" FST
Actual viewable diagonal size	15.9" / 404 mm
Type	SVGA color
Dot pitch (mm)	.27
Viewing area (inches)	11.8 x 8.8"
Max view area (inches)	12.8 x 9.4"
Viewing area (mm)	300 x 225
Max view area (mm)	325 x 240
Frequency	Multiscanning
Vertical refresh rate range	50 to 160 Hz
Horizontal line rate range	30 to 82 kHz
Maximum pel rate	148 MHz
640 x 480 NI (presets)	60, 72 Hz to 85 Hz
800 x 600 NI (presets)	to 85 Hz
900 x 720 NI (presets)	112 Hz StereoScopic
1024 x 768 NI, I (presets)	76 Hz 143.5 to 77 Hz
1280 x 496 NI (presets)	120 Hz StereoScopic
1280 x 1024 NI or I (presets)	60, 72, 77 Hz to 77 Hz
3270 MFI emulation modes	2, 3, 4, 5
Emission	MPR-II
ISO 9241-3	ISO 9241-3
Lift/tilt/swivel option	No (too big)
On screen menu	On screen menu
Brightness/contrast control	On screen - digital
Vertical position/size control	On screen - digital
Horizontal position/size control	On screen - digital
Trapezoidal/pincushion control	On screen - digital
Parallelogram control	On screen - digital
Rotation control	On screen - digital
Vertical/Horizontal moire control	On screen - digital
Color select (red, green, blue)	On screen - digital (r,b)
Degauss	On screen - digital
Display refresh rates	On screen - digital
Vert/Horz converg adj button	No
Connector	13W3 with cable choice
Apple/RS/6000/Sun attach	RS/6000 only
Microprocsr (detects modes)	Microprocessor
Factory preset modes	8
User modes that can save	8
Ability to save a new setting	Automatic
Prevent overwriting presets	Yes
Geometry reset button	Reset button
Auto-borderless	No
Focus adjustment	None
Stereo speakers	Stereo speakers
Microphone	Integrated microphone
Video camera	Optional camera
Audio jacks	In/out jacks
DPMS compliant	DPMS compliant
Power management	Energy Star compliant
Power mgmt flashing LED	No
Power mgmt on/off switch	No
Available / withdrawn date	Nov 1994 / March 1996
Warranty	3 year
Price (retail USD)	\$ 1,410

17S/S strengths:

- ⊠ Integrated stereo speakers
- ⊠ Integrated microphone
- ⊠ Video camera enabled
- ⊠ On-screen display menu
- ⊠ On-screen display of refresh rates
- ⊠ On-screen self test menu
- ⊠ Microphone and headphone jacks

A **video camera compartment** is located on the top left of the display. It can be removed for installation of an optional video camera. It contains a 8-pin Mini-Din connector for attachment of the camera. IBM intends to provide a video camera that can be integrated into the 17S/S as an option

Video signal cable - customer chooses either:

- ① 13W3 D-shell (display) to 13W3 D-shell (system unit); 88G3097 or
- ② 13W3 D-shell (display) to a 15 pin D-shell (system unit); 11H3991

A **multimedia cable** is included which is a single cable with a 26 pin D-shell that contains the video camera and audio signal lines

Stereo speakers

- Mounted on left and right sides on front
- 2.5 watts each
- Dial volume control on front of 17S/S

Dimensions: 16.7"H x 17.2"W x 17.2"D; 45 pounds

ON-SCREEN DISPLAY MENU CONTROLS

- ⊠ Brightness
- ⊠ Contrast
- ⊠ Geometry
 - Horizontal position
 - Horizontal size
 - Vertical position
 - Vertical size
 - Vertical pincushion
 - Trapezoid
 - Parallelogram
 - Rotation
 - Horizontal moire connection
 - Vertical moire connection
- ⊠ Color select
 - 9300 degrees Kelvin (blue tint)
 - 6550 degrees Kelvin (whiter tint)
 - User selectable (red and blue adjustment; green is fixed)
- ⊠ Video level (0.7 volts or 1 volt)
- ⊠ Degauss (also at power-on)
- ⊠ Display vertical and horizontal refresh rates
- ⊠ Recall factory presets
- ⊠ Self test (when system off or cable disconnected)

17S/S DISPLAY

WARRANTY SERVICE SUPPORT

- ⊠ 3 year warranty
- ⊠ On-site first year
- ⊠ Mail-in repair second & third year (with option of upgrade to on-site)
- ⊠ All cities in all states
- ⊠ 24 hr/7 day service coverage 1st yr
- ⊠ 4 hr average response time (1st yr)
- ⊠ Option to upgrade yrs 2 and 3 to:
 - 9-5 Mon-Fri cov, next day resp (\$25 each year) or 24 hr/7 day coverage, 4 hr resp (\$34 each year)
- ⊠ 24 hour / 7 day telephone support
- ⊠ IBM® or dealer warranty/service
- ⊠ 30 day money back guarantee

STANDARD FEATURES 17S/S

- Universal power supply
- Anti-static screen
- Anti-glare screen (AGRAS™)
- Tilt/swivel stand
- Automatic degauss

≈ Withdrawn from marketing

‡ Interlaced; ⊠ Non-interlaced

All trademarks are the property of their respective owners (listed on Trademark sheet)

No warranties are expressed or implied in this summary (DISPSS) Compiled by Roger Dodson, IBM. March 1996

IBM Monitors (E series / E51) - withdrawn

IBM® E Series Color Monitors - US models		
Name	E51	E51
Case color	Pearl white	Stealth black
Type-model	6333-07N	6333-47N
CRT size and type	15" FST	
Viewable image size	13.8" / 350mm	
Dot pitch	0.28mm / shadow mask	
Phosphor type	P22	
Max view area (inches)	11.1 x 8.3" (w/h)	
Max view area (mm)	282 x 211mm (w/h)	
Video input	Analog	
Frequency	Multiscanning	
Vertical refresh rate range	50 to 120Hz	
Horizontal line rate range	30 to 54kHz	
Clock rate	65Mpels/sec (MHz)	
Optimum addressability	800x600 at 85Hz	
Max 85Hz flicker free mode	800x600	
Maximum addressability	1024x768	
720x400 (presets)	70	
640x480 (presets)	60, 75, 85	
800x600 (presets)	60, 75, 85	
960x529 (presets)	-	
1024x768 (presets)	60	
1280x1024 (presets)	-	
Factory presets/user setngs	8 / 4	
Emission	MPR-II, FCC-B	
TCO-compliant	No	
ISO 9241-3 and -8 ²	Yes	
On screen display	No	
User controls	Digital front mounted controls	
Brightness/contrast control	Yes	
Horizontal size/position	Yes	
Vertical size/position	Yes	
Geometry reset/recall	Yes	
Controls lock/unlock	Yes	
Display mode information	Yes	
Date of manufacture	Yes	
Pincushion	Yes	
Trapezoidal/parallelogram	Yes	
Image rotation	Yes (manual)	
Horz/vert convergence	No	
Geometry reset	Yes	
User color settings	No	
Color point adjustment/reset	No	
Moire reduction	No	
Manual degauss	No	
Twin video input	No	
Video signal cable	One 1.8m captive with 15-pin D shell	
Power cord	1.8m detached	
Anti-reflective treatment	Yes	
Anti-static treatment	Yes	
Self diagnosis function	Yes	
Dimensions (H x W x D)	15.4" x 14.6" x 15.7"	
Dimensions (H x W x D)	390mm x 371mm x 399mm	
Weight	28.6 lbs (13 kg)	
VESA DDC1/DDC2B ⁵	DDC1/DDC2B	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ¹ / NUTEK	
Limited warranty	1 year	
Avail / withdrawn date	August 2000 / August 2001	

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 1 year limited warranty³ ↪ International Warranty Service³ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs ↪ Warranty upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁶ • On site exchange 7 day x 24 hr with 4 hour response⁶ ↪ Post warranty: two options above ↪ 24 hour x 7 day telephone, electronic, and Internet support ↪ IBM or reseller warranty/service 	<p>STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<p>The E Series of monitors for the home office or small business environment provide high quality display performance and reliability at exceptional value.</p>
---	---	--

IBM Monitors (E series / E54, E74) - withdrawn

IBM® E Series Color Monitors					
Name	≈ E54	≈ E54	≈ E74	≈ E74	≈ E74
Case color	Pearl white	Stealth black	Pearl white	Pearl white	Stealth black
Type-model	6331-A2N	6331-B2N	6332-02N	6332-01N	6332-J1N
CRT size and type	15" FST		17" FST	17" FST	
Viewable image size	13.8" / 350mm		15.86" / 403mm	15.87" / 403mm	
Dot pitch	0.28mm		0.27mm	0.27mm	
Phosphor type	P22		P22	P22	
Max view area (inches)	11.18 x 8.34" (w/h)		12.71 x 9.52" (w/h)	12.79 x 9.6" (w/h)	
Max view area (mm)	284 x 212mm (w/h)		323 x 242mm (w/h)	325 x 244mm (w/h)	
Video input	Analog		Analog	Analog	
Frequency	Multiscanning		Multiscanning	Multiscanning	
Vertical refresh rate range	50 to 120Hz		50 to 120Hz	50 to 120Hz	
Horizontal line rate range	30 to 69kHz		30 to 69kHz	30 to 69kHz	
Clock rate	110Mpels/sec (MHz)		110Mpels/sec (MHz)	110Mpels/sec (MHz)	
Optimum addressability	800x600		1024x768	1024x768	
Max 85Hz flicker free mode	1024x768		1024x768	1024x768	
Maximum addressability	1280x1024		1280x1024	1280x1024	
720x400 (presets)	70		70, 85	70, 85	
640x480 (presets)	60, 75, 85		60, 75, 85	60, 75, 85	
800x600 (presets)	75, 85		75, 85	75, 85	
960x529 (presets)	—		—	75	
1024x768 (presets)	75, 85		75, 85	75, 85	
1280x1024 (presets)	—		—	—	
Factory presets/user setngs	8 / 7		10 / 10	10 / 8	
Emission	MPR-II, FCC-B		MPR-II, FCC-B	MPR-II, FCC-B	
TCO-compliant	TCO in Canada and EMEA only		TCO-99 in Canada and EMEA only	TCO in Canada and EMEA only	
ISO 9241-3 ²	Yes		Yes	Yes	
On screen display	Yes (5 languages)		Yes (5 languages)	Yes (6 languages)	
User controls	Digital front mounted controls		Digital front mounted controls	Digital front mounted controls	
Brightness/contrast control	Yes		Yes	Yes	
Horizontal size/position	Yes		Yes	Yes	
Vertical size/position	Yes		Yes	Yes	
Geometry reset/recall	Yes		Yes	Yes	
Controls lock/unlock	Yes		Yes	Yes	
Display mode information	Yes		Yes	Yes	
Date of manufacture	Yes		Yes	Yes	
Pincushion / balanced pinc	Yes		Yes	Yes	
Trapezoidal/parallelogram	Yes		Yes	Yes	
Image rotation	Yes (no zoom)		Yes (no zoom)	Yes (no zoom)	
Horz/vert convergence	No		No	No	
Geometry reset	Yes		Yes	Yes	
User color settings	9300K, 6500K, User1, User2		9300K, 6500K, User1, User2	9300K, 6500K, User1, User2	
Color point adjustment/reset	Yes		Yes	Yes	
Moire reduction	Yes		Yes	Yes	
Manual degauss	Yes		Yes	Yes	
Twin video input	No		No	No	
Video signal cable	One 1.8m captive with 15-pin D shell		One 1.8m captive with 15-pin D shell	One 1.5m captive with 15-pin D shell	
Power cord	1.8m detached		1.8m detached	1.8m detached	
Anti-reflective treatment	1/4-wave anti-reflective film		1/4-wave anti-reflective film	1/4-wave anti-reflective film	
Anti-static treatment	Yes		Yes	Yes	
Self diagnosis function	Yes		Yes	Yes	
Dimensions (H x W x D)	14.6" x 14.1" x 14.9"		17.9" x 16.3" x 17.4"	16.3" x 16.2" x 16.5"	
Dimensions (H x W x D)	370mm x 358mm x 379mm		455mm x 414mm x 443mm	415mm x 412mm x 420mm	
Weight	27 lbs (12.2 kg)		39.7 lbs (18.0 kg)	36.3 lbs (16.5 kg)	
VESA DDC1/DDC2B ⁵	DDC1/DDC2B		DDC1/DDC2B	DDC1/DDC2B	
VESA DPMS compliant	DPMS		DPMS	DPMS	
Power management	ENERGY STAR ¹ / NUTEK		ENERGY STAR ¹ / NUTEK	ENERGY STAR ¹ / NUTEK	
Limited warranty	3 year		3 year	3 year	
Avail / withdrawn date	2/00 / 1/01 March 2000 / Jan 2001		November 1999 / March 2000	Mar 00 / Jul 01 May 2000 / July 2001	

WARRANTY SERVICE SUPPORT

- ↪ 3 year limited warranty³
- ↪ International Warranty Service³
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days
- ↪ IBM pays all shipping costs
- ↪ Warranty upgrade options:
 - On site exchange M-F 8-5 with next day response⁶
 - On site exchange 7 day x 24 hr with 4 hour response⁶
- ↪ Post warranty: two options above
- ↪ 24 hour / 7 day telephone, electronic, and Internet support
- ↪ IBM or reseller warranty/service

STANDARD FEATURES

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand
- Automatic degauss
- Northern hemisphere
- Separate power cord

The E Series of monitors for the home office or small business environment provide high quality display performance and reliability at exceptional value.

Touch screen version of these monitors may be available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com/ibm)

IBM® E Series Color Monitors - US models	
Name	E94 E94
Case color	Pearl white Stealth black
Type-model	6634-00N 6634-40N
CRT size and type	19" FST
Viewable image size	18.0" / 457.8mm
Diagonal dot pitch	0.26mm / shadow mask
Phosphor type	P22
Max view area (inches)	14.4 x 10.78" (w/h)
Max view area (mm)	366 x 274mm (w/h)
Video input	Analog
Frequency	Multiscanning
Vertical refresh rate range	50 to 160Hz
Horizontal line rate range	30 to 96kHz
Clock rate	202Mpels/sec (MHz)
Optimum addressability	1280x1024 at 85Hz
Max 85Hz flicker free mode	1280x1024
Maximum addressability	1600x1200 at 75Hz
720x400 (presets)	70
640x480 (presets)	60, 85
800x600 (presets)	75, 85
1024x768 (presets)	75, 85
1280x1024 (presets)	75, 85
1600x1200 (presets)	75
Factory presets/user setngs	Factory presets: 10; Factory loads: 5; User locations: 13
Emission	MPR-II, FCC-B
TCO-compliant	No
ISO 9241-3 and -8 ¹	Yes
On screen display	Yes (5 languages)
User controls	Digital front mounted controls
Borderless operation	Yes
Brightness/contrast control	Yes
Horizontal size/position	Yes
Vertical size/position	Yes
Geometry reset/recall	Yes
Controls lock/unlock	No
Display mode information	Yes
Date of manufacture	No
Pincushion and balance	Yes
Trapezoidal/parallelogram	No
Image rotation	Yes
Picture zoom	Yes
Geometry reset	Yes
User color settings	9300K, 6500K, User1
Color point adjustment/reset	Yes
Moire control	Yes
Manual degauss	Yes
Video signal cable	One 1.8m captive with 15-pin D-shell
Power cord	1.8m detached
Anti-reflective treatment	Yes
Anti-static treatment	Yes
Self diagnosis function	Yes
Dimensions (H x W x D)	17.6" x 17.3" x 17.2"
Dimensions (H x W x D)	446.5mm x 440mm x 437.2mm
Weight	42.8 lbs (19.4 kg)
VESA DDC1/DDC2B ²	DDC1/DDC2B
VESA DPMS compliant	DPMS
Power management	ENERGY STAR ³ / NUTEK
Limited warranty ^{*4}	3 year
Avail / withdrawn date	November 2000 / February 2002

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty^{*4} ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁷ • On site exchange 7 day x 24 hr with 4 hour response⁷ ↪ Post warranty: two options above ↪ 24 hour x 7 day telephone⁸, electronic, and Internet support 	<p>STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<p>The E Series of monitors for the home office or small business environment provide high quality display performance and reliability at exceptional value.</p>
--	---	--

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary (ME94) © IBM Corp. February 2002

IBM Displays (V series / 63xx) - withdrawn

SUPER VGA COLOR (Value)				
Name	≈< 14V	≈< 15V	≈< 17V	≈< 17V
Type-model	6324-001	6325-001	6327-001	6327-023
Screen	14"	15" FST	17" FST	17" FST
Viewable image size	13.0" / 330 mm	13.7" / 348 mm	15.6" / 397 mm	15.6" / 398 mm
Type	SVGA color	SVGA color	SVGA color	SVGA color
Dot pitch (mm)	.28	.28	.28	.28
Viewing area (inches)	10.0 x 7.6"	10.5 x 8.0"	11.8 x 8.8"	11.8 x 8.8"
Max view area (inches)	10.6 x 8.0"	11.0 x 8.3"	12.6 x 9.4"	12.6 x 9.5"
Viewing area (mm)	256 x 193	266 x 201	300 x 225	300 x 225
Max view area (mm)	270 x 202	280 x 210	320 x 239	320 x 244
Frequency	Multiscanning	Multiscanning	Multiscanning	Multiscanning
Vertical refresh rate	50 to 110 Hz	50 to 110 Hz	50 to 110 Hz	50 to 110 Hz
Horizontal line rate	30 to 64 kHz	30 to 64 kHz	30 to 64 kHz	30 to 64 kHz
Maximum pel rate	90 MHz	90 MHz	110 MHz	110 MHz
640 x 480 NI (presets)	60, 72, 75 Hz	60, 72, 75 Hz	60, 72, 75 Hz	60, 72, 75 Hz
800 x 600 NI (presets)	56, 60, 72 Hz	56, 60, 72 Hz	56, 60, 72 Hz	56, 60, 72 Hz
1024 x 768 NI (presets)	60, 70, 72, 75	60, 70, 72, 75	60, 70, 72, 75	60, 70, 72, 76
1024 x 768 I (presets)	1 43.5	1 43.5	1 43.5	1 43.5
1280 x 1024 NI or I (presets)	I 50, NI 60	I 50, NI 60	I 50, NI 60	I 50, NI 60
3270 MFI emulation modes	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5
Emission	MPR-II	MPR-II	MPR-II	MPR-II
ISO 9241-3	ISO 9241-3	ISO 9241-3	ISO 9241-3	ISO 9241-3
Lift/Tilt/Swivel option	Lift option	Lift option	No (too big)	No (too big)
Brightness/contrast control	Digital	Digital	Digital	Digital
Picture width/height control	Digital	Digital	Digital	Digital
Horizontal/vertical centering	Digital	Digital	Digital	Digital
Trapezoidal/pincushion adj	Digital	Digital	Pincushion only	Digital
Color tint setting (red/blue)	Continual (r, b)	Continual (r, b)	Continual (r, b)	Continual (r, b)
Color tint reset button	Reset button	Reset button	Reset button	Reset button
Type of controls	Pushbuttons	Pushbuttons	Pushbuttons	Pushbuttons
Rotation adjustment button	No	No	No	Rotation button
Degauss button	No	No	Degauss button	Degauss button
Microprocsr (detects modes)	Microprocessor	Microprocessor	Microprocessor	Microprocessor
Factory preset modes	15	15	10	15
Ability to save a new setting	Automatic	Automatic	Automatic	Automatic
User modes that can save	11	11	6	11
Total recallable modes	26	26	16	26
Prevent overwriting presets	Yes	Yes	Yes	Yes
Geometry reset button	Reset button	Reset button	Reset button	Reset button
Auto-borderless	No	No	No	Auto-borderless
Focus adjustment	Single	Single	No	Double
DPMS compliant	DPMS compliant	DPMS compliant	DPMS compliant	DPMS compliant
Power management	Energy Star 30 watts	Energy Star 30 watts	Energy Star 30 watts	Energy Star 30 watts
Power mgmt flashing LED	Flashing LED	Flashing LED	Flashing LED	Flashing LED
Universal power supply	No	No	Yes	Yes
Anti-glare screen	Anti-glare	Anti-glare	Anti-glare	Anti-glare
Anti-static screen	Anti-static	Anti-static	Anti-static	Anti-static
Available / withdrawn date	July 93 / Mar 96	July 93 / Mar 96	Oct 93 / Dec 95	August 94 / March 96
Warranty	1 year onsite	1 year onsite	1 year onsite	1 year onsite
Price (retail USD)	\$ 450 ↘	\$ 606 ↘	\$ 1,050 ↘	\$ 1,050

<p align="center">63xx DISPLAYS</p> <p align="center">WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 1 year warranty (International) ↪ IBM Express Maintenance ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs ↪ Warranty upgrade options: <ul style="list-style-type: none"> - On site exchange M-F 8-5 with 2nd day response - On site exchange 7 day x 24 hr with same day response ↪ Post warranty: on site options ↪ 24 hour / 7 day telephone support ↪ IBM® or dealer warranty/service ↪ 30 day money back guarantee 	<p>6324 (14V) is the successor to the 6312 and 6314.</p> <p>6325 (15V) is the successor to the 6319.</p> <p>6327 (17V) is the successor to the 6317.</p> <p>63xx displays also have 720 x 350 and 720 x 400 text modes at 70 Hz (NI) and 88 Hz (NI). (6318 is only 70 Hz).</p> <p>The 63xx (except 6318, 14L39, and 14L8) displays are multi-sync (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range (for example, 50 to 100 Hz). Preset modes (listed in italics) allow the picture on screen to be perfectly positioned without adjustment.</p> <p>All IBM color displays have automatic degauss at power on.</p> <p>632x = 14V, 15V, 17V</p>
<p align="center">STANDARD FEATURES 63xx</p> <ul style="list-style-type: none"> Tilt / swivel stand Automatic degauss Borderless 	<p>17" displays provide almost 50% more viewing area than a 14" display.</p> <p>V series displays work on all IBM system brands and on non-IBM brands.</p>

All trademarks are the property of their respective owners (listed on Trademark sheet)

‡ Interlaced³ ◊ = Non-interlaced
 ↘ Price decrease effective June 15, 1994
 ≈< Withdrawn from marketing

No warranties are expressed or implied in this summary (DISPV) Compiled by Roger Dodson, IBM. March 1996

IBM Displays (G series / 654x) - withdrawn

SUPER VGA COLOR (General Purpose)					
Name	≈ G40	≈ G41	≈ G50	≈ G70	≈ G200
Type-model	6542-103	6542-301	6543-301 303	6544-403 433 (black)	6545-603
Part number	96G1572	96G1569	96G1573 96G1579	96G1581 96G1893	96G2196
Screen	14" Conventional	14" Conventional	15" FST	17" FST	20" Conventional
Viewable image size	12.3 / 312 mm	13.0" / 330 mm	13.4" / 342 mm	15.7" / 398 mm	18.4" / 468 mm
Dot pitch (mm)	.28	.28	.28	.28	.28
Max view area (inches)	9.8 x 7.4"	10.6 x 7.9"	10.8 x 8.1"	12.6 x 9.4"	15.2 x 11.1"
Max view area (mm)	250 x 187	270 x 200	274 x 205	320 x 240	386 x 282
Frequency	Multiscanning	Multiscanning	Multiscanning	Multiscanning	Multiscanning
Vertical refresh rate range	50 to 90 Hz	50 to 100 Hz	50 to 100 Hz	50 to 120 Hz	50 to 120 Hz
Horizontal line rate range	30 to 38 kHz	31 to 58 kHz	31 to 58 kHz	31 to 64 kHz	30 to 85 kHz
Maximum pel rate	45 MHz	79 MHz	79 MHz	108 MHz	260 MHz
720 x 400 text (presets)	70 to 75 Hz	70 to 85	70 to 85 Hz	70 to 120 Hz	70 to 70
640 x 480 (presets)	60, 72, 75 to 75 Hz	60, 72, 75, 85 to 85	60, 72, 75, 85 to 85 Hz	60, 72, 75, 85 to 120 Hz	60, 75, 85 to 85
800 x 600 (presets)	56, 60 to 60 Hz	72, 75, 85 to 85	72, 75, 85 to 85 Hz	72, 75, 85 to 100 Hz	75, 85 to 85
1024 x 768 (presets)	43.5 I to 43.5 I	43.51, 70, 72 to 72	43.51, 70, 72 to 72 Hz	43.51, 70, 72, 75 to 78 Hz	43.51, 75, 85 to 85
1280 x 1024 (presets)	—	—	—	60 to 60 Hz	60, 75 to 75
1152 x 870 Mac (presets)	—	—	—	—	75 to 75
1600 x 1280	—	—	—	—	No presets to 60
3270 MFI emulation modes	N/A	2, 3, 4	2, 3, 4	2, 3, 4	N/A
Emission	MPR-II	MPR-II	MPR-II	MPR-II	MPR-II
ISO 9241-3	No	to 800x600	to 800x600	to 1024x768	to 1280x1024
Blue Angel	No	No	No	No	No
On screen display	No	No	No	No	Yes
On screen refresh/line rate	No	No	No	No	On-screen
On screen elapsed time	No	No	No	No	Elapsed time
Borderless modes	No	Yes	Yes	Yes	Yes
Brightness/contrast control	Digital	Digital	Digital	Digital	On-screen
Horizontal size/position	Digital	Digital	Digital	Digital	On-screen
Vertical size/position	Digital	Digital	Digital	Digital	On-screen
Trapezoidal/pincushion adj	Digital	Digital	Digital	Digital	On-screen
Color select	No	No	No	5000, 7500, or 9300 degK	7200, 9300 or user
Color tint	No	No	No	Red, Blue	On screen (r, g, b)
Connectors	Captive with 15 pin D shell	Captive with 15 pin D shell	Captive with 15 pin D shell	Captive with 15 pin D shell	15 pin / 5 BNC with on-screen select
Apple/RS/6000/Sun attach	RS/6000	RS/6000	RS/6000	RS/6000	Apple / RS/6000
Horz/vert convergence	No	No	No	No	No
Rotation adjustment button	No	No	No	Digital	On-screen
Converge/rotation reset btn	No	No	No	No	No
Zoom	No	No	No	No	On-screen
Degauss button	Power switch only	Power switch only	Power switch only	Degauss button	Degauss button
Factory presets/user setngs	8 / 4	11 / 9	11 / 9	15 / 11	12 / 13
Ability to save a new setng	Automatic	Automatic	Automatic	Automatic	Automatic
Geometry reset button	Digital	Digital	Digital	Digital	On-screen
Autoborderless	No	No	No	Autoborderless	No
Focus adjustment	None	Single	Single	Double	None
Anti-reflective	Silica anti-glare	Silica anti-glare	Silica anti-glare	Silica anti-glare	Multi-layer
Self test	No	No	No	Multi-color pattern	Multi-color/text
Dimensions (H x W x D)	14.4" x 14.1 x 15.5	14.4" x 14.1 x 15.5	14.4" x 14.1" x 15.5"	16.4" x 16.0" x 17.8"	19.6" x 19.0" x 19.8"
Weight	30 lbs	30 lbs	32 lbs	46 lbs	66 lbs
VESA DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B
DDC on/off button	Press two keys	Press two keys	Press two keys	Press two keys	On-screen
VESA DPMS compliant	DPMS	DPMS	DPMS	DPMS	DPMS
Power management	Energy Star	Energy Str/NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star/NUTEK
Power mgmt indicator	LED	LED	LED	LED	LED
Warranty	1 year	1 year	1 year	1 year	1 year
Available / withdrawn date	Oct 95 / Aug 97	Oct 95 / May 97	10/95 5/97 2/97 9/97	10/95 7/97 10/95 7/97	Sept 95 / May 97
Price (retail USD)	\$ 299	\$ 389	\$ 379 ↘ \$ 379	\$ 399 ↘ \$ 679 ↘ \$ 719 ↘	\$ 1,469

654x "G" DISPLAYS

WARRANTY SERVICE SUPPORT

- ↪ 1 year warranty (International)
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days
- ↪ IBM pays all shipping costs
- ↪ Warranty upgrade options:
 - On site exchange M-F 8-5 with 2nd day response
 - On site exchange 7 day x 24 hr with same day response
- ↪ Post warranty: on site options
- ↪ 24 hour / 7 day telephone support
- ↪ IBM® or dealer warranty/service

STANDARD FEATURES 654x

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand
- Automatic degauss

G40 is the successor to the 14L8 (6321-001)
G41 is the successor to the 14V (6324-001)
G50 is the successor to the 15V (6325-001)
G70 is the successor to the 17V (6327-023)

654x = G40, G41, G50, G70, G200

The **654x** displays are **multi-sync** (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in *italics*) allow the picture on screen to be perfectly positioned without adjustment

G200 cable descriptions:

- 96G2203 15 pin to 15 pin cable w/ DDC capability (default)
- 96G2694 15 pin IBM to 15 pin Apple cable adapter
- 96G3739 5 BNC to 15 pin ID bits cable
- 96G3740 5 BNC to 13W3 ID bits cable

↘ = Price decrease effective May 12, 1997; ‡ = Interlaced; ◊ = Non-interlaced
 All trademarks are the property of their respective owners (listed on Trademark sheet)
 No warranties are expressed or implied in this summary (DISPG) Compiled by Roger Dodson, IBM. September 1997

IBM Displays (G series / Touch) - withdrawn

SUPER VGA COLOR (General Purpose Touch)			
Name	≈ G41t	≈ G50t	≈ G70t
Type-model	6542-313	6543-313	6544-413
Part number	96G2027	96G2029	96G2031
Screen	14" Conventional	15" FST	17" FST
Viewable image size	13.0" / 330 mm	13.4" / 342 mm	15.7" / 398 mm
Type	Touch SVGA color	Touch SVGA color	Touch SVGA color
Dot pitch (mm)	.28	.28	.28
Max view area (inches)	10.6 x 7.9"	10.8 x 8.1"	12.6 x 9.4"
Max view area (mm)	270 x 200	274 x 205	320 x 240
Frequency	Multiscanning	Multiscanning	Multiscanning
Vertical refresh rate range	50 to 100 Hz	50 to 100 Hz	50 to 120 Hz
Horizontal line rate range	31 to 58 kHz	31 to 58 kHz	31 to 64 kHz
Maximum pel rate	79 MHz	79 MHz	108 MHz
720 x 400 text (presets)	70 to 85 Hz	70 to 85 Hz	70 to 120 Hz
640 x 480 (presets)	60, 72, 75, 85 to 85 Hz	60, 72, 75, 85 to 85 Hz	60, 72, 75, 85 to 120 Hz
800 x 600 (presets)	72, 75, 85 to 85 Hz	72, 75, 85 to 85 Hz	72, 75, 85 to 100 Hz
1024 x 768 (presets)	43.51, 70, 72 to 72 Hz	43.51, 70, 72 to 72 Hz	43.51, 70, 72, 75 to 78 Hz
1280 x 1024 (presets)	-	-	60 to 60 Hz
1152 x 870 Mac (presets)	-	-	-
1600 x 1280	-	-	-
3270 MFI emulation modes	2, 3, 4	2, 3, 4	2, 3, 4
Emission	MPR-II	MPR-II	MPR-II
ISO 9241-3	to 800x600	to 800x600	to 1024x768
Blue Angel	Blue Angel pending	Blue Angel pending	No
On screen display	No	No	No
On screen refresh/line rate	No	No	No
On screen elapsed time	No	No	No
Borderless modes	Yes	Yes	Yes
Brightness/contrast control	Digital	Digital	Digital
Horizontal size/position	Digital	Digital	Digital
Vertical size/position	Digital	Digital	Digital
Trapezoidal/pincushion adj	Digital	Digital	Digital
Color select	No	No	5000, 7500, or 9300 degK
Color tint	No	No	Red, Blue
Connectors	Captive with 15 pin D shell	Captive with 15 pin D shell	Captive with 15 pin D shell
Apple/RS/6000/Sun attach	RS/6000	RS/6000	RS/6000
Horz/vert convergence	No	No	No
Rotation adjustment button	No	No	Digital
Converg/rotation reset btn	No	No	No
Degauss button	Power switch only	Power switch only	Degauss button
Factory presets/user setngs	11 / 9	11 / 9	15 / 11
Ability to save a new setng	Automatic	Automatic	Automatic
Geometry reset button	Digital	Digital	Digital
Autoborderless	No	No	Autoborderless
Focus adjustment	Single	Single	Double
Anti-reflective	Silica anti-glare	Silica anti-glare	Silica anti-glare
Self test	No	No	Multi-color pattern
Dimensions (H x W x D)	14.4" x 14.1" x 15.5"	14.4" x 14.1" x 15.5"	16.4" x 16.0" x 17.8"
Weight	33 lbs	35 lbs	50 lbs
Touch pen option	Pen option from Microtouch	Pen option from Microtouch	Pen option from Microtouch
VESA DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B
DDC on/off button	Press two keys	Press two keys	Press two keys
VESA DPMS compliant	DPMS	DPMS	DPMS
Power management	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK
Power mgmt indicator	LED	LED	LED
Warranty	1 year	1 year	1 year
Available / withdrawn date	Dec 95 / Sept 97	Dec 95 / Sept 97	Dec 95 / Jan 98
Price (retail USD)	\$ 939	\$ 939 ↘	\$ 1419 ↘

<p>654x "G" DISPLAYS</p> <p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↻ 1 year warranty (International) ↻ IBM Express Maintenance ↻ Replacement normally arrives in two business days ↻ IBM pays all shipping costs ↻ Warranty upgrade options: <ul style="list-style-type: none"> - On site exchange M-F 8-5 with 2nd day response - On site exchange 7 day x 24 hr with same day response ↻ Post warranty: on site options ↻ 24 hour / 7 day telephone support ↻ IBM® or dealer warranty/service ↻ 30 day money back guarantee 	<p>STANDARD FEATURES 654x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss <p>G41T is the successor to the 14PT (9524-T01/T21) G50T is the successor to the 15PT (9525-T01/T21) G70T is the successor to the 17PT (9527-T01/T21) and 17VT (6327-T03)</p>	<p>These touch-enabled monitors function as normal monitors when the touch capabilities are not required. The touch capability with a silica coated overlay is factory fitted providing a total integrated solution that does not impact the external design.</p> <p>The G touch monitors use a silica coating (better than anti-glare/etched or polished/non-etched) which reduces glare while maintaining excellent sharpness. Appearance is like a regular non-touch screen.</p> <p>A 9 pin mini D-shell (with 9-25 way adapter) is provided for touch pen connection. This allows a pen to be attached to the back of the unit. Microtouch pen options:</p> <p>69-502 Pen with 3.5 foot cable 69-503 Pen with 5.5 foot cable</p>
--	---	--

↘ = Price decrease effective January 31, 1997; ‡ = Interlaced; ◻ = Non-interlaced
 All trademarks are the property of their respective owners (listed on Trademark sheet)
 ≈ = Withdrawn from marketing

No warranties are expressed or implied in this summary (DISPGT) Compiled by Roger Dodson, IBM. January 1998

IBM Monitors (G series / G42, G51, G52) - withdrawn

IBM® General Purpose Color Monitors				
Name	≈< G42	≈< G51	≈< G52	
Case color	Pearl white	Pearl white	Pearl white	Stealth Gray
Type-model	6540-00N	6541-02N	6546-00N	6546-40N
Screen	14" Conventional	15" FST	15" FST	
Viewable image size	13.2" / 335mm	13.6" / 347mm	13.6" / 347mm	
Dot pitch (mm)	.28	.28	.28	
Max view area (inches)	10.8 x 7.9"	11 x 8.26"	11 x 8.26"	
Max view area (mm)	274 x 201mm	280 x 210mm	280 x 210mm	
Frequency	Multiscanning	Multiscanning	Multiscanning	
Vertical refresh rate range	55 to 120Hz	55 to 100Hz	50 to 120Hz	
Horizontal line rate range	30 to 50kHz	30 to 54kHz	30 to 69kHz	
Maximum pel rate	65MHz	65MHz	110MHz	
720x400 text (presets)	70 to 90Hz	70 to 85Hz	70 to 90Hz	
640x480 (presets)	60, 72, 75, 85 to 90Hz	60, 72, 75, 85 to 85Hz	60, 75, 85 to 90Hz	
800x600 (presets)	60, 75 to 80Hz	60, 75, 85 to 85Hz	75, 85 to 90Hz	
1024x768 (presets)	60 to 60Hz	43 (I), 60 to 65Hz	70, 75, 85 to 85Hz	
1280x1024 (presets)	—	—	No presets to 60Hz	
1152x870 Mac (presets)	—	—	—	
1600x1280	—	—	—	
3270 MFI emulation modes	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5, 6	
Emission	MPR-II	MPR-II	MPR-II, TCO-95	
ISO 9241-3 ²	to 800x600	to 800x600	to 1024x768	
Blue Angel	No	No	No	
On screen display	No	No	Yes	
On screen refresh/line rate	No	No	Yes	
On screen elapsed time	No	No	No	
Borderless modes	Yes	Yes	Yes	
Brightness/contrast control	Analog	Digital	Digital	
Horizontal size/position	Digital	Digital	Digital	
Vertical size/position	Digital	Digital	Digital	
Trapezoidal/pincushion adj	Digital	Digital	Digital	
Selectable color points	No	No	9300K and 7200 degK	
Color tint	No	No	No	
Video signal cable	Attached with 15 pin D shell	Attached with 15 pin D shell	Attached with 15 pin D shell	
Apple/RS/6000/Sun attach	No	No	No	
Horz/vert convergence	No	No	No	
Rotation adjustment button	No	No	Digital	
Converg/rotation reset button	No	No	No	
Zoom	No	No	No	
Degauss button	Power switch only	Power switch; degauss butttn	Power switch; degauss button	
Factory presets/user settings	8 / 8	11 / 14	9 / 14	
Ability to save a new setting	Automatic	Automatic	Automatic	
Geometry reset button	Digital	Digital	Digital	
Autoborderless	No	No	No	
Focus adjustment	None	None	Single	
Anti-reflective	Silica anti-glare	Silica anti-glare	Silica anti-glare	
Self test	No	Low intensity full white scrn	No	
Dimensions (H x W x D)	14.3" x 14.0" x 15.7"	15.0" x 14.6" x 16.9"	15.2" x 14.5" x 16.4"	
Weight	25 lbs (11.5 kg)	28.7 lbs (13.0 kg)	29.8 lbs (13.5 kg)	
VESA DDC1/DDC2B ⁵	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	
DDC on/off button	No	No	No	
VESA DPMS compliant	DPMS	DPMS	DPMS	
Power management	ENERGY STAR	ENERGY STAR	ENERGY STAR / NUTEK	
Power mgmt indicator	LED	LED	LED	
Limited warranty	1 year	1 year	3 year	
Available / withdrawn date	April 1997 / May 2000	July 1997 / April 1999	April 1997 / October 1998	
Price				

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 1 or 3 year warranty³ ↪ International Warranty Service³ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs ↪ Warranty upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁶ • On site exchange 7 day x 24 hr with 4 hour response⁶ ↪ Post warranty: two options above ↪ 24 hour / 7 day telephone, electronic, and Internet support ↪ IBM or reseller warranty/service 	<p>STANDARD FEATURES 654x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord <p>The G42 replaces the earlier G40 and G41 The G51 and G52 replaces the earlier G50 and P50</p> <p>Touch screen version of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p>	<p>The 654x displays are multi-sync (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in <i>italics</i>) allow the picture on screen to be perfectly positioned without adjustment</p>
--	--	--

I = Interlaced; NI = Non-interlaced; ≈< = Withdrawn from marketing
All trademarks are the property of their respective owners

No warranties are expressed or implied in this summary
(DISPG97) © IBM Corp. March 2000

IBM® General Purpose Color Monitors								
Name	≈ G72		≈ G72		≈ G94		≈ G96	
Case color	Pearl white	Stealth Gray	Pearl white	Stealth Gray	Pearl white	Stealth Gray	Pearl white	Stealth Gray
Type-model	6547-01N	6547-41N	6547-00N	6547-40N	6549-00N	6549-40N	6549-0AN	6549-4AN
Screen	17" FST CRT		17" FST CRT		19" FST CRT		19" FST CRT	
Viewable image size	15.7" / 398mm		15.7" / 400mm		17.8" / 454mm		17.9" / 454mm	
Diagonal dot pitch	0.28mm		0.28mm		0.22mm		0.25mm (mask)	
Max view area (inches)	12.6 x 9.4"		12.7 x 9.5"		13.4 x 10.0"		14.3 x 10.7"	
Max view area (mm)	320 x 240mm		323 x 242mm		340 x 255mm		364x272mm	
Short neck tube type	N/A		N/A		N/A		Wide deflection tube (96°)	
Frequency	Multiscanning		Multiscanning		Multiscanning		Multiscanning	
Vertical refresh rate range	50 to 160Hz		50 to 120Hz		50 to 160Hz		50 to 160Hz	
Horizontal line rate range	30 to 69kHz		30 to 69kHz		30 to 95kHz		30 to 95kHz	
Maximum pel rate	110MHz		110MHz		202MHz		202MHz	
720x400 text (presets)	70	to 90Hz	70	to 90Hz	70, 85		70, 85	
640x480 (presets)	60, 72, 85	to 90Hz	60, 75, 85	to 90Hz	60, 75, 85		60, 75, 85	
800x600 (presets)	75, 85	to 90Hz	75, 85	to 90Hz	75, 85		75, 85	
1024x768 (presets)	75, 85	to 85Hz	75, 85	to 85Hz	75, 85		75, 85	
1280x1024 (presets)	60	to 60Hz	—	to 60Hz	75, 85		75, 85	
1600x1200	—		—		75		75	
3270 MFI emulation modes	2, 3, 4, 5, 6		2, 3, 4, 5, 6		2, 3, 4, 5, 6		2	
Emission	MPR-II		MPR-II		MPR-II		MPR-II	
ISO 9241-3 ¹	to 1024x768		to 1024x768		Yes		Yes	
Blue Angel	No		No		No		No	
On screen display	Yes		Yes		Yes		Yes (5 languages)	
On screen refresh/line rate	Yes		Yes		Yes		Yes	
Borderless modes	Yes		Yes		Yes		Yes and geometry reset/recall	
Brightness/contrast control	Digital		Digital		Digital		Digital	
Horizontal size/position	Digital		Digital		Digital		Digital	
Vertical size/position	Digital		Digital		Digital		Digital and Moire cancellation	
Trapezoidal/pincushion adj	Digital		Digital		Digital		Digital and Image rotation	
Selectable color points	9300K and 6500 degK		9300K and 6500 degK		5000, 6500, 9300K		6500, 9300K, User1, User2	
Color tint	No		No		No		No	
Video signal cable	Separated with 15 pin D shell		Separated with 15 pin D shell		Captive with 15 pin D shell		Captive with 15 pin D shell	
Apple/RS/6000/Sun attach	No		No		No		Apple attach capable	
Horz/vert convergence	No		No		No		No	
Rotation adjustment button	Digital		Digital		Digital		Digital	
Converg/rotation reset btn	No		No		Yes		Yes	
Zoom	No		No		Yes		Yes	
Degauss button	Power switch; degauss buttn		Power switch; degauss button		Power switch; on-screen display		Power switch; control panel	
Factory presets/user setngs	9 / 8		9 / 14		12 / 14		12 / 10	
Ability to save a new setting	Automatic		Automatic		Automatic		Automatic	
Geometry reset button	Digital		Digital		Digital		Digital	
Anti-reflective	Silica anti-glare		Silica anti-glare		Three layer film coating / anti-glare		Multi-layer film / anti-glare	
Self test	No		No		No		No	
USB upgradable	No		No		USB Hub Option (pn11L2989)		No	
Dimensions (H x W x D)	16.4" x 16.8" x 17.2"		16.2" x 16.8" x 17.6"		18.4" x 17.9" x 19.6"		18.3" x 17.9" x 16.7"	
Weight	39.2 lbs (18 kg)		38.5 lbs (17.5 kg)		53 lbs (24.0 kg)		49 lbs (22.1 kg)	
VESA DDC1/DDC2B ²	DDC1/DDC2B		DDC1/DDC2B		DDC1/DDC2B		DDC1/DDC2B	
VESA DPMS compliant	DPMS		DPMS		DPMS		DPMS	
Power management	ENERGY STAR ³ / NUTEK		ENERGY STAR / NUTEK		ENERGY STAR / NUTEK		ENERGY STAR / NUTEK	
TCO compliance	TCO-95		TCO-95		TCO-95		TCO-95	
Power mgmt indicator	LED		LED		LED		LED	
Limited warranty ^{*,4}	3 year		3 year		3 year		3 year	
Available / withdrawn date	May 97 / Jan 98		Oct 1997 / Oct 1998		April 1998 / April 1999		March 1999 / February 2002	

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty^{*,4} ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁷ • On site exchange 7 day x 24 hr with 4 hour response⁷ ↪ Post warranty: two options above ↪ 24 hour x 7 day telephone⁸, electronic, and Internet support 	<p>STANDARD FEATURES 654x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<p>The 654x displays are multi-sync (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in <i>italics</i>) allow the picture on screen to be perfectly positioned without adjustment</p>
<p>Touch screen version of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p>		
<p>↪ Products announced March 2, 1999</p>		
<p>654x = G40, G41, G42, G50, G51, G52, G70, G72, G94, G96, G200</p>		

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227
≈ = Withdrawn from marketing

No warranties are expressed or implied in this summary (DISPG72) © IBM Corp. February 2002

IBM® G Series General CRT Monitors - US models			
Name	G78	G78	G78
Case color	Pearl white	Stealth Black	Two-tone black (bezel is ash gray; rear bucket and stand are stealth black)
Type-model	6627-0AN	6627-4AN	6627-KAN
CRT size and type	17" flat shadow mask (flat screen) CRT		
Viewable image size	16.0" / 406.4mm		
Dot pitch	0.24mm diagonal / 0.21 horizontal		
Max view area (inches)	12.79 x 9.6"		
Max view area (mm)	325 x 244mm		
Video input	Analog		
Frequency	Multiscanning		
Vertical refresh rate range	50 to 160Hz		
Horizontal line rate range	30 to 85kHz		
Clock rate	135Mpels/sec		
Optimum addressability	1024x768 at 85Hz		
Max 85Hz flicker free mode	1024x768		
Maximum addressability	1600x1200		
720x400 text (presets)	70		
640x480 (presets)	60, 85		
800x600 (presets)	75, 85		
1024x768 (presets)	75, 85		
1280x1024 (presets)	75		
1600x1200	65		
IBM 3270/5250 emulation	-		
Factory presets/user setngs	Factory presets: 1; Factory loads: 8; User locations: 9		
Emission	MPR-II, FCC-B		
TCO-compliant	TCO 99	TCO 99	TCO 03
ISO 9241-3 ¹	Yes		
On screen display (OSD)	Yes (6 languages)		
User controls	Digital		
Borderless operation	Yes		
Brightness/contrast control	Yes		
Horizontal size/position	Yes		
Vertical size/position	Yes		
Geometry reset/recall	Yes		
Image rotation	Yes		
Preset color selection	9300K, 6500K		
R, G, B color adjustment	No		
Moire reduction	Yes		
Degauss via OSD	Yes		
Controls lock/unlock	Yes		
Picture zoom	Yes		
Keystone/keystone balance	Yes		
Halftone	Yes		
Video level	Yes		
Linearity ADV	Yes		
Language select	Yes		
OSD position	No		
Video signal cable	1.8m captive with 15-pin D shell		
Anti-reflective treatment	Multilayer film		
Anti-static treatment	Yes		
Self test	Yes		
Dimensions (H x W x D)	17.1" x 16.6" x 16.5"		
Dimensions (H x W x D)	435mm x 422mm x 420mm		
Weight	37.6 lbs (17.0 kg)		
VESA DDC1/DDC2B ²	DDC1/DDC2B		
VESA DPMS compliant	DPMS		
Power management	ENERGY STAR ³ / NUTEK		
Limited warranty ^{*4}	3 year		
Available date	August 2000	August 2000	May 2002
<p>LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↔ 3 year limited warranty⁴ ↔ International Warranty Service⁵ ↔ IBM Express Maintenance at 1-800-772-2227 ↔ Replacement normally arrives in two business days ↔ IBM pays all shipping costs for valid warranty claims⁶ ↔ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↔ Post warranty: two options above ↔ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 		<p>STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord <p>• IBM G Series General CRT Monitors provide perfect balance of price and performance</p>	
<p>Touch screen version of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>If the interface cable is disconnected upon power on, an error message will be displayed. If the monitor is operated outside its intended frequency range, the power indicator will flash every 0.3 seconds.</p>			

See footnotes for important warranty information
US models withdrawn from marketing effective January 2003 or August 2003

IBM® G Series General CRT Monitors		
Name	G97	G97
Case color	Pearl white	Stealth Black
Type-model	6634-0AN	6634-4AN
Service part number	22P7906	22P7907
CRT size and type	19" (18.0" vis) FST CRT	
Viewable image size (vis)	18.0" / 457.3mm	
Horizontal dot pitch	0.22mm shadow mask	
Phosphor type	P22	
Max view area (inches)	14.4 x 10.8" (w/h)	
Max view area (mm)	365.8 x 274.5mm (w/h)	
Video input	Analog	
Frequency	Multiscanning	
Vertical refresh rate range	50 to 160Hz	
Horizontal line rate range	30 to 96kHz	
Clock rate	202.5Mpels/sec	
Optimum addressability	1280x1024 at 85Hz	
Max 85Hz flicker free mode	1280x1024	
Maximum addressability	1600x1200 at 75Hz	
640x480 (presets)	60, 85	
720x400 (presets)	70	
800x600 (presets)	75, 85	
1024x768 (presets)	75, 85	
1280x1024 (presets)	75, 85	
1600x1200	75	
Factory presets/user setngs	10 / 13	
Emission	MPR-II, FCC-B	
TCO-compliant	TCO 99	
ISO 9241-capable	Parts 3, 7, 8 ¹	
On screen display	Yes (5 languages)	
User controls	Digital front mounted controls	
Brightness/contrast control	Yes	
Horizontal size/position	Yes	
Vertical size/position	Yes	
Geometry reset/recall	Yes	
Controls lock/unlock	Yes	
Display mode information	Yes	
Pincushion / balanced pinc	Yes	
Trapezoidal/parallelogram	Yes	
Image rotation/zoom	Yes	
Horz/vert convergence	No	
Geometry reset	Yes	
User color settings	9300K, 6500K, User	
Color point adjustment/reset	Yes	
Moire reduction	Yes	
Manual degauss	Yes	
Rear connector	None; captive video signal cable	
Twin video input	No	
Video signal cable	One 1.8m captive with 15-pin D shell	
Power cord	1.8m detached	
Anti-reflective treatment	1/4-wave anti-reflective film	
Anti-static treatment	Yes	
Self diagnosis function	Yes	
Dimensions (H x W x D)	18.3" x 17.9" x 17.5"	
Dimensions (H x W x D)	466mm x 454mm x 445mm	
Weight	43.6 lbs (21.1 kg)	
VESA DDC2B ²	DDC2B	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³	
Ship group	Monitor, attached tilt-swivel stand, attached video signal cable, power cord, diskette containing INF, ICM and CAT files, Setup Guide	
Limited warranty ³	3 year	
Available date	November 2001 / 6634-0AN withdrawn effective May 2003; 6634-4AN withdrawn effective August 2003	

• IBM G97 is a replacement for the IBM G96

<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<ul style="list-style-type: none"> • IBM G Series General CRT Monitors provide perfect balance of price and performance
--	--	--

See footnotes for important warranty information
US models announced October 30, 2001
US models withdrawn effective May or August 2003

IBM Monitors (P series / 655x) - withdrawn

SUPER VGA COLOR (Professional)		± P50	± P50	± P70	± P70	± P200	± P200	± P201
Name	± P50	± P50	± P70	± P70	± P200	± P200	± P201	± P201
Color	Pearl wht	Pearl white	Pearl white	Pearl wht	Pearl white	Pearl white	Pearl white	Pearl white
Type-model	6553-503	6553-523	6554-603	6554-673	6555-703	6555-773	6555-803	6555-803
Part number	6553503	6553523	6554603	6554673	6555703	6555773	6555803	6555803
Screen	15" Trinitron	15" Trinitron	17" Trinitron	17" Trinitron	20" Trinitron	20" Trinitron	20" Trinitron	20" Trinitron
Viewable image size	13.6" / 346 mm	13.6" / 346 mm	15.9" / 403 mm	15.9" / 403 mm	19.1" / 486 mm	19.1" / 486 mm	19.1" / 486 mm	19.1" / 486 mm
Dot pitch (mm)	.26 stripe	.26 stripe	.26 stripe	.26 stripe	.31 stripe	.31 stripe	.26 stripe	.26 stripe
Max view area (inches)	10.9 x 8.2"	10.9 x 8.2"	12.8 x 9.4"	12.8 x 9.4"	15.3 x 11.5"	15.3 x 11.5"	15.3 x 11.5"	15.3 x 11.5"
Max view area (mm)	278 x 208	278 x 208	325 x 240	325 x 240	389 x 293	389 x 293	389 x 293	389 x 293
Frequency	Multiscanning		Multiscanning		Multiscanning		Multiscanning	
Vertical refresh rate range	50 to 120 Hz		50 to 120 Hz		50 to 120 Hz		50 to 160 Hz	
Horizontal line rate range	30 to 69 kHz		29 to 82 kHz		29 to 90 kHz		30 to 107 kHz	
Maximum pixel rate	95 MHz		148 MHz		200 MHz		240 MHz	
720 x 400 text (presets)	70	to 120 Hz	70	120	to 150 Hz	70	to 120	to 160 Hz
640 x 480 (presets)	60, 75, 85	to 120 Hz	60, 75, 85	120	to 150 Hz	60, 75, 85	to 120	to 160 Hz
800 x 600 (presets)	72, 75, 85	to 103 Hz	72, 75, 85	120	to 127 Hz	75, 85	to 120	No presets to 160 Hz
1024 x 768 (presets)	43.5 I, 75, 85	to 85 Hz	70, 75, 85	101	to 105 Hz	43.5 I, 75, 85	to 111	No presets to 132 Hz
1280 x 1024 (presets)	No presets	to 64 Hz	60, 75, 77	76	to 79 Hz	60, 75, 77	to 84	77, 85 to 100 Hz
1600 x 1200	-		No presets	65	to 68 Hz	66	to 72	66, 75, 85 to 85 Hz
1600 x 1280 SoG	-		-			60	to 72	60, 77 to 85 Hz
3270 MFI emulation modes	2, 3, 4, 5, 6		N/A			N/A		N/A
Emission	MPR-II	MPR-II/TCO-91	MPR-II / TCO-91/TCO-92	MPR-II / TCO-91/TCO-92	MPR-II / TCO-91/TCO-92	MPR-II / TCO-91/TCO-92	MPR-II/TCO-91 and -92	MPR-II/TCO-91 and -92
ISO 9241-3	to 1024x768	TCO-92	to 1280x1024	to 1280x1024	to 1280x1024	to 1280x1024	to 1280x1024	to 1280x1024
On screen display	Yes	Yes	Yes	Yes	Yes	Yes	No	No
On screen refresh/line rate	On-screen refresh/line rate	On-screen refresh/line rate	On-screen refresh/line rate	On-screen refresh/line rate	On-screen refresh/line rate	On-screen refresh/line rate	No	No
Brightness/contrast control	On-screen	On-screen	On-screen	On-screen	On-screen	On-screen	Digital	Digital
Horizontal size/position	On-screen	On-screen	On-screen	On-screen	On-screen	On-screen	Digital	Digital
Vertical size/position	On-screen	On-screen	On-screen	On-screen	On-screen	On-screen	Digital	Digital
Trapezoidal/pincushion adj	On-screen (pincushion only)	On-screen (pincushion only)	On-screen (pincushion only)	On-screen (pincushion only)	On-screen (pincushion only)	On-screen (pincushion only)	Digital	Digital
Color select	5000 or 9300 degK	5000 or 9300 degK	5000 or 9300 degK (603)	5000 or 9300 degK (603)	5000 or 9300 degK (703)	5000 or 9300 degK (703)	5000 or 9300 degK	5000 or 9300 degK
Color temperature	On-screen	On-screen	On-screen (673 has r, g, b)	On-screen (673 has r, g, b)	On-screen	On-screen	Digital	Digital
Color purity	No	No	No	No	No	No	Digital	Digital
Connectors	Captive with 15 pin D shell	Captive with 15 pin D shell	13W3	13W3	13W3	13W3	13W3	13W3
Apple/RS/6000/Sun attach	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000
Horz/vert convergence	No	No	On-screen	On-screen	On-screen	On-screen	Digital	Digital
Rotation adjustment button	On-screen	On-screen	On-screen	On-screen	On-screen	On-screen	Digital	Digital
Conver/rotation reset btn	No	No	No	No	Reset button	Reset button	Reset button	Reset button
Moire cancellation	No	No	No	No	No	No	Digital	Digital
Degauss button	Power switch	Power switch	Power switch	Power switch	Power switch	Power switch	Power switch	Power switch
Factory presets / user sett	10 / 10	10 / 10	15 / 10	15 / 10	15 / 10	15 / 10	9 / 9	9 / 9
Ability to save a new sett	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Geometry reset button	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital
Auto-borderless	No	No	No	No	No	No	No	No
Focus adjustment	None	None	None	None	None	None	None	None
Anti-reflective	Silica anti-glare	Silica anti-glare	Multi-layer film	Multi-layer film	Multi-layer bonded panel	Multi-layer bonded panel	Multi-layer bonded panel	Multi-layer bonded panel
Black video level switch	No	No	Yes	Yes	Yes	Yes	No	No
Self test	Multi-color pattern	Multi-color pattern	Multi-color pattern	Multi-color pattern	Multi-color pattern	Multi-color pattern	White	White
Dimensions	14.7"H x 14.5"W x 15.3"D	14.7"H x 14.5"W x 15.3"D	16.3" x 16.0" x 17.9" (603)	16.3" x 16.0" x 17.9" (603)	18.7"H x 18.7"W x 19.9"D (703)	18.7"H x 18.7"W x 19.9"D (703)	18.7"H x 18.7"W x 19.9"D	18.7"H x 18.7"W x 19.9"D
Weight	31 lbs	31 lbs	51 lbs	51 lbs	66 lbs	66 lbs	68 lbs	68 lbs
VESA DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B
VESA DPMS compliant	DPMS	DPMS	DPMS	DPMS	DPMS	DPMS	DPMS	DPMS
Power management	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK
Power mgmt indicator	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)
Warranty	3 year	3 year	3 year	3 year	3 year	3 year	3 year	3 year
Available / withdrawn date	Jun 95/8-97	Jul 95 / Aug 97	Jun 95/May 96	Jun 95/May 96	June 95/May 96	June 95/May 96	June 95 / August 98	June 95 / August 98
Price (retail USD)	\$ 469	\$ 499	\$ 1,069	\$ 1,069	\$ 1,179	\$ 1,179	\$ 1,329	\$ 1,329

655x "P" DISPLAYS WARRANTY SERVICE SUPPORT

- ↪ 3 year warranty
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days
- ↪ IBM pays all shipping costs
- ↪ Warranty upgrade options:
 - On site exchange M-F 8-5 with 2nd day response
 - On site exchange 7 day x 24 hr with same day response
- ↪ Post warranty: on site options
- ↪ 24 hour / 7 day telephone, electronic, and Internet support
- ↪ IBM® or dealer warranty/service

STANDARD FEATURES 655x

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand
- Automatic degauss

P50 is the successor to the 15P
 P70 is the successor to the 17P
 P200 is the successor to the 21P

655x = P50, P70, P200, P201

The 655x displays are **multi-sync** (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in *italics*) allow the picture on screen to be perfectly positioned without adjustment.

Cable options for P70 and P200:

- 40H2934 13W3 to 13W3 Cable
- 96G2156 1.8m (6 ft) 13W3 to 15 Pin Cable w/ DDC Plug and Play
- 96G2688 1.8m (6 ft) 13W3 to 15 Pin Cable with 1010 ID bits
- 96G2689 1.8m (6 ft) 13W3 to 13W3 Cable with 1010 ID bits
- 96G2693 15 Pin to 15 Pin Cable Adapter with 1010 ID bits
- 96G2694 15 Pin IBM to 15 Pin Apple Cable Adapter

♣ = Price decrease effective April 15, 1998
 † = Withdrawn from marketing
 ‡ = Interlaced
 ⚡ = Non-interlaced

IBM Monitors (P series / 655x) - Stealth gray - withdrawn

SUPER VGA COLOR (Professional)			
Name	± P70	± P200	± P201
Color	Stealth Gray	Stealth Gray	Stealth Gray
Type-model	6554-6E3	6555-7E3	6555-8E3
Screen	17" Trinitron	20" Trinitron	20" Trinitron
Viewable image size	15.9" / 403 mm	19.1" / 486 mm	19.1" / 486 mm
Dot pitch (mm)	.26 stripe	.31 stripe	.26 stripe
Max view area (inches)	12.8 x 9.4"	15.3 x 11.5"	15.3 x 11.5"
Max view area (mm)	325 x 240	389 x 293	389 x 293
Frequency	Multiscanning	Multiscanning	Multiscanning
Vertical refresh rate range	48 to 150 Hz	48 to 160 Hz	50 to 160 Hz
Horizontal line rate range	30 to 85 kHz	30 to 96 kHz	30 to 107 kHz
Maximum pel rate	200 MHz	240 MHz	240 MHz
720 x 400 text (presets)	70 to 150 Hz	70 to 160 Hz	70 to 160 Hz
640 x 480 (presets)	60, 75, 85 to 150 Hz	60, 75, 85 to 160 Hz	60 to 160 Hz
800 x 600 (presets)	72, 75, 85 to 127 Hz	75, 85 to 144 Hz	No presets to 160 Hz
1024 x 768 (presets)	70, 75, 85 to 105 Hz	43.5 I, 75, 85 to 118 Hz	No presets to 132 Hz
1280 x 1024 (presets)	60, 75, 77 to 79 Hz	60, 75, 77 to 90 Hz	77, 85 to 100 Hz
1600 x 1200	No presets to 68 Hz	66 to 76 Hz	66, 75, 85 to 85 Hz
1600 x 1280 SoG	-	60 to 76 Hz	60, 77 to 85 Hz
3270 MFI emulation modes	N/A	N/A	N/A
Emission	MPP-II / TCO-91/TCO-92 to 1280x1024	MPP-II / TCO-91/TCO-92 to 1280x1024	MPP-II/TCO-91 and -92 to 1280x1024
ISO 9241-3	Yes	Yes	No
On screen display	On-screen refresh/line rate	On-screen refresh/line rate	No
On screen refresh/line rate	On-screen	On-screen	Digital
Brightness/contrast control	On-screen	On-screen	Digital
Horizontal size/position	On-screen	On-screen	Digital
Vertical size/position	On-screen	On-screen	Digital
Trapezoidal/pincushion adj	On-screen (pincushion only)	On-screen (pincushion only)	Digital
Color select	6500,7200,9300 degK	6500,7200,9300 degK	5000 or 9300 degK
Color temperature	On-screen (r, g, b)	On-screen	Digital
Color purity	No	No	Digital
Connectors	13W3	13W3	13W3
Apple/RS/6000/Sun attach	Apple / RS/6000	Apple / RS/6000	Apple / RS/6000
Horz/vert convergence	On-screen	On-screen	Digital
Rotation adjustment button	On-screen	On-screen	Digital
Converg/rotation reset btn	No	Reset button	Reset button
Moire cancellation	No	No	Digital
Degauss button	Power switch	Power switch	Power switch
Factory presets / user sett	15 / 10	15 / 10	9 / 9
Ability to save a new sett	Automatic	Automatic	Automatic
Geometry reset button	Digital	Digital	Digital
Auto-borderless	No	No	No
Focus adjustment	None	None	None
Anti-reflective	Multi-layer film	Multi-layer bonded panel	Multi-layer bonded panel
Black video level switch	Yes	Yes	No
Self test	Multi-color pattern	Multi-color pattern	White
Dimensions (with std stand)	16.8" x 15.9" x 17.7"	19.4" H x 18.6" W x 19.7" D	18.7" H x 18.7" W x 19.9" D
Weight	44 lbs	66 lbs	68 lbs
VESA DDC1/DDC2B	DDC1/DDC2B	DDC1/DDC2B	DDC1/2B via cable
VESA DPMS compliant	DPMS	DPMS	DPMS
Power management	Energy Star / NUTEK	Energy Star / NUTEK	Energy Star / NUTEK
Power mgmt indicator	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)	LED (no pwr mgmt switch)
Warranty	3 year	3 year	3 year
Available / withdrawn date	March 1997 / August 1998	March 1997 / August 1998	March 1997 / August 1998
Price (retail USD)	\$ 619 ↘	\$ 1,209 ↘	\$ 1,359 ↘

These stealth gray color displays match the color of the IBM IntelliStation Professional Workstations

WARRANTY SERVICE SUPPORT

- ↪ 3 year warranty
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days
- ↪ IBM pays all shipping costs
- ↪ Warranty upgrade options:
 - On site exchange M-F 8-5 with next day response
 - On site exchange 7 day x 24 hr with same day response
- ↪ Post warranty: on site options
- ↪ 24 hour / 7 day telephone, electronic, and Internet support
- ↪ IBM® or dealer warranty/service

STANDARD FEATURES 655x

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand
- Automatic degauss

P50 is the successor to the 15P
P70 is the successor to the 17P
P200 is the successor to the 21P

655x = P50, P70, P200, P201

All stealth gray displays ship with a black signal cable and black power cord. Black signal cable part numbers:

- P70 60H9392
- P200 60H9392
- P201 60H9405

The **655x** displays are **multi-sync** (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in *italics*) allow the picture on screen to be perfectly positioned without adjustment.

Cable options for P70 and P200:

40H2934	13W3 to 13W3 Cable
96G2156	1.8m (6 ft) 13W3 to 15 pin Cable w/ DDC Plug and Play
60H9392	1.8m (6 ft) 13W3 to 15 pin black cable w/ DDC PnP
96G2688	1.8m (6 ft) 13W3 to 15 pin Cable with 1010 ID bits
96G2689	1.8m (6 ft) 13W3 to 13W3 Cable with 1010 ID bits
96G2693	15 pin to 15 pin Cable Adapter with 1010 ID bits
96G2694	15 pin IBM to 15 Pin Apple Cable Adapter

Cable options for P201:

52G3255	15 pin to 13W3 cable converter
96G1712	13W3 to 15 pin cable with DDC Plug and Play
60H9405	13W3 to 15 pin black cable w/DDC Plug and Play

All trademarks are the property of their respective owners (listed on Trademark sheet)
 ↘ = Price decrease effective April 15, 1998
 ± = Withdrawn from marketing
 No warranties are expressed or implied in this summary (DISPP97) Compiled by Roger Dodson, IBM. July 1998

IBM Displays (P series / 95xx) - withdrawn

SUPER VGA COLOR (Premium)							
Name	≈ 14P or X40	≈ 15P	≈ 15P Black	≈ 15P DDC	≈ 17P	≈ 17P	≈ 21P
Type-model	9524-001	9525-001	9525-B01	9525-0X1	9527-001	9527-011	9521-001
Screen	14"	15" FST			17" Trinitron	17" Trinitron	21" Diamndtrnā
Viewable image size	13.0"/331mm	13.7"/348mm	Same as 15P	Same as 15P	15.4"/391mm	15.4"/391mm	19.1"/485mm
Type	SVGA color	SVGA color	except the color is black (not pearl white)	except is DDC1 and DDC2B compliant	SVGA color	SVGA color	SVGA color
Dot pitch (mm)	.28	.28			.26 stripe	.26 stripe	.31 stripe
Viewing area (inches)	10.0 x 7.6"	10.5 x 8.0"			11.8 x 8.8"	11.8 x 8.8"	15.0 x 11.2"
Max view area (inches)	10.6 x 8.0"	11.0 x 8.3"			12.4 x 9.3"	12.4 x 9.3"	15.5 x 11.5"
Viewing area (mm)	256 x 193	266 x 201	Appropriate for black		300 x 225	300 x 225	380 x 285
Max view area (mm)	270 x 202	280 x 210			315 x 235	315 x 235	395 x 292
Frequency	Multiscanning	Multiscanning	ThinkPads® and black docking stations	Same as 15P	Multiscanning	Multiscanning	Multiscanning
Vertical refresh rate range	50 to 110 Hz	50 to 110 Hz		Same	50 to 110 Hz	50 to 110 Hz	50 to 152 Hz
Horizontal line rate range	30 to 64 kHz	30 to 64 kHz		Same	30 to 82 kHz	30 to 82 kHz	30 to 82 kHz
Maximum pel rate	90 MHz	90 MHz		Same	160 MHz	160 MHz	175 MHz
640 x 480 NI (presets)	60, 72, 75, 85	60, 72, 75, 85	Same as 15P	Same	60,72,75,85,98	60,72,75,85,98	60,72,75,85,98
800 x 600 NI (presets)	56, 60, 72 Hz	56, 60, 72 Hz	Same	Same	56,60,72,85,99	56,60,72,85,99	56,60,72,85,99
1024 x 768 NI (presets)	60, 70, 72, 75	60, 70, 72, 75	Same	Same	60,70,72,75,93	60,70,72,75,93	60,70,72,75,93
1024 x 768 I (presets)	143.5	143.5	Same	Same	143.5	143.5	143.5
1280 x 1024 NI or I (presets)	150, NI 60	150, NI 60	Same	Same	150, NI 60, 77	150, NI 60, 77	150, NI 60, 77
1360 x 1024 NI or I (presets)	-	-	Same	Same	NI 77	NI 77	NI 77
1600 x 1200 NI	-	-	Same	Same	-	-	NI 60
3270 MFI emulation modes	2, 3, 4, 5	2, 3, 4, 5	Same	Same	2, 3, 4, 5	2, 3, 4, 5	2, 3, 4, 5
Emission	MPR-II	MPR-II	Same	Same	MPR-II	MPR-II	MPR-II
ISO 9241-3	ISO 9241-3	ISO 9241-3	Same	Same	ISO 9241-3	ISO 9241-3	ISO 9241-3
Lift/tilt/swivel option	Lift option	Lift option	Same	Same	No (too big)	No (too big)	No (too big)
Brightness/contrast control	Digital	Digital	Same	Same	Digital	Digital	Digital
Picture width/height control	Digital	Digital	Same	Same	Digital	Digital	Digital
Horizontal/vertical centering	Digital	Digital	Same	Same	Digital	Digital	Digital
Trapezoidal/pincushion adj	Digital	Digital	Same	Same	Digital	Digital	Digital
Color tint (red, green, blue)	Continual (r,b)	Continual (r,b)	Same	Same	Continual (r,b)	Continual (r,b)	Continual (r,g,b)
Color tint reset button	Reset button	Reset button	Same	Same	Reset button	Reset button	Reset button
5 BNC connectors	No	No	Same	Same	5 BNC	5 BNC	5 BNC
Apple/RS/6000/Sun attach	No	No	Same	Same	Apple attach	Apple attach	Apple attach
Horz converg adj button	No	No	Same	Same	Horz converg	Horz converg	Horz converg
Vert converg adj button	No	No	Same	Same	Vert converg	Vert converg	No
Rotation adjustment button	No	No	Same	Same	No	Rotation button	Rotation button
Converg/rotation reset buttn	No	No	Same	Same	Reset button	Reset button	Reset button
Degauss button	No	No	Same	Same	Degauss buttn	Degauss buttn	Degauss button
Microprocsr (detects modes)	Microprocessor	Microprocessor	Same	Same	Microprocessor	Microprocessor	Microprocessor
Factory preset modes	15	15	Same	Same	14	14	12
Ability to save a new setting	Automatic	Automatic	Same	Same	Automatic	Automatic	Automatic
User modes that can save	11	11	Same	Same	16	16	10
Total recallable modes	26	26	Same	Same	30	30	22
Prevent overwriting presets	Yes	Yes	Same	Same	Yes	Yes	Yes
Geometry reset button	Reset button	Reset button	Same	Same	Reset button	Reset button	Reset button
Auto-borderless	No	No	Same	Same	No	Auto-borderless	No
Focus adjustment	Single	Single	Same	Same	None	None	None
DDC1/DDC2B	No	No	Same	DDC1/DDC2B	No	No	No
DPMS compliant	DPMS comp	DPMS comp	Same	Same	DPMS comp	DPMS comp	DPMS comp
Power management	NUTEK 8 watt	NUTEK 8 watt	Same	Same	NUTEK 8 watt	NUTEK 8 watt	NUTEK 8 watt
Power mgmt flashing LED	Flashing LED	Flashing LED	Same	Same	Flashing LED	Flashing LED	Flashing LED
Power mgmt on/off switch	No	No	Same	Same	No	No	Yes
Available / withdrawn date	July 93/Jun 96	July 93/Oct 95	Oct 93/Oct 95	Nov 94/Oct 95	Sept 93/Dec 94	May 94/Oct 95	Sept 93/Oct 95
Warranty	3 year	3 year	3 year	3 year	3 year	3 year	3 year
Price (retail USD)	\$ 570 ↘	\$ 762 ↘	\$ 762 ↘	\$ 780	\$ 1,260 ↘	\$ 1,260	\$ 2,340 ↘

952x "P" DISPLAYS WARRANTY SERVICE SUPPORT

- ≈ 3 year warranty
- ≈ On-site first year
- ≈ Mail-in repair second & third year (with option of upgrade to on-site)
- ≈ All cities in all states
- ≈ 8-5 M-F coverage (1st yr)
- ≈ 2nd day response time (1st yr)
- ≈ On site warranty upgrade options:

2nd day	Same day	Same day
Mon-Fri 8-5	M-F 8-5	7 dayx24 hr
Year 1	Std \$ 60 for	\$ 90 for
Year 2/3	\$ 15 all 3 yrs	all 3 yrs

- ≈ Post warranty: on site options
- ≈ 24 hour / 7 day telephone and electronic support
- ≈ IBM® or dealer warranty/service
- ≈ 30 day money back guarantee

STANDARD FEATURES 95xx

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand
- Automatic degauss

9524 (14P) is the successor to the 8518 and 9518.

9525 (15P) is the successor to the 8515 and 9515.

9527 (17P) is the successor to the 8517 and 9517.

The 14P and X40 are identical except for the names on the bezel. The X40 was introduced in July 1995 in the US.

952x = X40, 14P, 15P, 17P, 21P

The 952x displays are **multi-sync** (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in *italics*) allow the picture on screen to be perfectly positioned without adjustment.

17P and **21P** (and **17PT**, **21PT**) incorporate special sync processing which allows connection to Apple's **Macintosh**[®] systems via optional cables or cable adapters. The **17P** and **21P** can also connect to the **RS/6000**[®] and other workstations such as **Sun**[®] and **Unisys**[®].

952x also have 720 x 350 and 720 x 400 text modes at 70 & 88 Hz (NI).

Premium displays (**85xx** and **952x** - P Series) and Value displays (**63xx** - V Series) work on all IBM system brands and on non-IBM brands.

Auto-borderless (17P-011): if operating in a factory preset mode, the auto-borderless function expands the image to fill the entire screen when the geometry reset button is pressed and held for 6 seconds

≈ = Withdrawn from marketing
 ↘ = Price decrease effective June 15, 1994
 ‡ = Interlaced; ◊ = Non-interlaced
 No warranties are expressed or implied in this summary (DISPP) Compiled by Roger Dodson, IBM. June 1996

IBM Monitors (P series / P72, P92, P202) - withdrawn

IBM® Professional Color Monitors						
Name	≈ P72	≈ P72	≈ P92	≈ P92	≈ P202	≈ P202
Case color	Pearl white	Stealth gray	Pearl white	Stealth gray	Pearl white	Stealth gray
Type-model	6556-03N	6556-43N	6557-03N	6557-43N	6558-03N	6558-43N
Screen	17" Trinitron®		19" Trinitron		21" Trinitron	
Viewable image size	16.0" / 407mm		17.9" / 456mm		19.8" / 503mm	
Aperture grille (mm)	.25 stripe		.25 stripe		.25 stripe	
Max view area (inches)	13 x 9.62" (w/h)		14.37 x 10.74" (w/h)		15.9 x 11.9" (w/h)	
Max view area (mm)	329.5 x 243 (w/h)		365 x 273 (w/h)		403.8 x 302.2 (w/h)	
Frequency	Multiscanning		Multiscanning		Multiscanning	
Vertical refresh rate range	50 to 150Hz		50 to 160Hz		50 to 160Hz	
Horizontal line rate range	30 to 85kHz		30 to 94kHz		30 to 107kHz	
Maximum pixel rate	135MHz		203MHz		230MHz	
640x480 (presets)	60, 75, 85		60, 85		60, 85	
800x600 (presets)	75, 85		85		85	
1024x768 (presets)	75, 85		75, 85		85	
1280x1024 (presets)	75		75, 85		75, 85	
1600x1200 (presets)	-		75		75, 85	
3270 MFI emulation modes	N/A		N/A		N/A	
Factory presets / user sett	8 / 10		8 / 10		8 / 10	
Reset to factory presets	Yes		Yes		Yes	
MPR-II compliant	MPR-II		MPR-II		MPR-II	
TCO-95 compliant	TCO-95		TCO-95		TCO-95	
ISO 9241-3 ²	Yes		Yes		Yes	
<i>Controls:</i>						
Digital controls	Yes		Yes		Yes	
On-screen display	Yes		Yes		Yes	
On-screen refresh/line rate	On-screen		On-screen		On-screen	
Display language	On-screen		On-screen		On-screen	
Brightness/contrast	On-screen		On-screen		On-screen	
Centering	On-screen		On-screen		On-screen	
Horiz/vertical adjustment	On-screen		On-screen		On-screen	
Picture height/width	On-screen		On-screen		On-screen	
Pincushion/trapezoid	On-screen		On-screen		On-screen	
Image rotate	On-screen		On-screen		On-screen	
Pin balance/key balance	On-screen		On-screen		On-screen	
Picture zoom	On-screen		On-screen		On-screen	
Color temperature	On-screen (5000K/9300K)		On-screen (5000/6500/9300K)		On-screen (5000/6500/9300K)	
Horiz/vert convergence	On-screen		On-screen		On-screen	
Moire and purity adjust	On-screen		On-screen		On-screen	
Degauss	On-screen		On-screen		On-screen	
Additional controls	Control lock function Enhanced video mode Landing adjust		Control lock function		Control lock function	
Connectors	① Captive 15 pin VGA		① 15 pin VGA, ② 13W3		① 15 pin VGA, ② 13W3	
Anti-reflective	AGARAS		1/4 Wave Film		1/4 Wave Film	
Dimensions	17.4"H x 16.1"W x 17.4"D		18.8"H x 18.2"W x 18.7"D		20.2"H x 19.6"W x 19.7"D	
Weight	43 lbs		55 lbs		69 lbs	
VESA DDC1/DDC2B ⁵	DDC1/DDC2B		DDC1/DDC2B/2AB/2B+		DDC1/DDC2B/2AB/2B+	
VESA DPMS compliant	DPMS		DPMS		DPMS	
Power management	ENERGY STAR ¹ / NUTEK		ENERGY STAR / NUTEK		ENERGY STAR / NUTEK	
Limited warranty	3 year		3 year		3 year	
Available date	April 1998 / December 1998		April 1998		April 1998 / December 1998	
Price						

<p>655x "P" DISPLAYS</p> <p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 3 year warranty³ ↪ International Warranty Service³ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs ↪ Warranty upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁶ • On site exchange 7 day x 24 hr with 4 hour response⁶ ↪ Post warranty: on site options ↪ 24 hour / 7 day telephone, electronic, and Internet support ↪ IBM or reseller warranty/service 	<p>STANDARD FEATURES 655x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss <p>P72 is the successor to the P70 P202 is the successor to the P200 and P201</p> <p>Touch screen versions of these monitors may be available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p>	<p>The 655x displays are multi-sync (multifrequency, multiscanning, variable frequency, autosyncing) displays and are capable of any modes whose refresh rates fall within the displays range. Preset modes (listed in <i>italics</i>) allow the picture on screen to be perfectly positioned without adjustment.</p> <p>Cable options:</p> <ul style="list-style-type: none"> 40H2934 13W3 to 13W3 Cable 96G2156 1.8m (6 ft) 13W3 to 15 Pin Cable w/ DDC Plug and Play 96G2688 1.8m (6 ft) 13W3 to 15 Pin Cable with 1010 ID bits 96G2689 1.8m (6 ft) 13W3 to 13W3 Cable with 1010 ID bits 96G2693 15 Pin to 15 Pin Cable Adapter with 1010 ID bits
---	--	---

All trademarks are the property of their respective owners
≈ = Withdrawn from marketing

No warranties are expressed or implied in this summary
(DISPP98) © IBM Corp. March 2000

IBM® Professional Color Monitors							
	P76		P96		P260		
Name	Pearl white	Stealth Black	Pearl white	Stealth Black	Pearl white	Stealth Black	
Case color	Pearl white	Stealth Black	Pearl white	Stealth Black	Pearl white	Stealth Black	
Type-model	6550-23N	6550-63N	6551-23N	6551-63N	6552-23N	6552-63N	
CRT size and type	17" FD Trinitron® CRT (virtually flat)		19" FD Trinitron® CRT (virtually flat)		21" FD Trinitron CRT (virtually flat)		
Viewable image size	16.0" / 407mm		17.9" / 456mm		19.8" / 503mm		
Aperture grill pitch	0.24mm		0.24mm		0.24mm		
Phosphor type	P22		P22		P22		
Max view area (inches)	12.875 x 9.625" (w/h)		14.33 x 10.74" (w/h)		15.86 x 11.8" (w/h)		
Max view area (mm)	327 x 243mm (w/h)		364 x 273mm (w/h)		403 x 302mm (w/h)		
Video input	Analog		Analog		Analog		
Frequency	Multiscanning		Multiscanning		Multiscanning		
Vertical refresh rate range	48 to 120Hz		48 to 120Hz		50 to 160Hz		
Horizontal line rate range	30 to 94kHz		30 to 107kHz		30 to 121kHz		
Clock rate	202.5Mpels/sec		230Mpels/sec		300Mpels/sec		
Optimum addressability	1024x768		1280x1024		1600x1200		
Max 85Hz flicker free mode	1280x1024		1600x1200		1600x1200		
Maximum addressability	1600x1200		1600x1200		1920x1440		
640x480 (presets)	60, 75, 85		60, 85		60, 75, 85		
800x600 (presets)	75, 85		75, 85		75, 85		
1024x768 (presets)	75, 85		75, 85		75, 85		
1280x1024 (presets)	75, 85		75, 85		75, 85		
1600x1200	75		75, 85		75, 85		
Factory presets/user setngs	10 / 15		10 / 15		11 / 14		
Emission	MPR-II, FCC-B		MPR-II, FCC-B		MPR-II, FCC-B		
TCO-compliant	TCO-99 TCO-95		TCO-99 TCO-95		TCO-99 TCO-95		
ISO 9241-3 ¹	Yes		Yes		Yes		
On screen display	Yes (9 languages)		Yes (9 languages)		Yes (9 languages)		
User controls	Digital front mounted controls		Digital front mounted controls		Digital front mounted controls		
Brightness/contrast control	Yes		Yes		Yes		
Horizontal size/position	Yes		Yes		Yes		
Vertical size/position	Yes		Yes		Yes		
Geometry reset/recall	Yes		Yes		Yes		
Controls lock/unlock	Yes		Yes		Yes		
Display mode information	Yes		Yes		Yes		
Monitor help and hints	Yes		Yes		Yes		
Date of manufacture	Yes		Yes		Yes		
Pincushion / balanced pinc	Yes		Yes		Yes		
Trapezoidal/parallelogram	Yes		Yes		Yes		
Image rotation/zoom	Yes		Yes		Yes		
Horz/vert convergence	Yes		Yes		Yes		
Geometry reset	Yes		Yes		Yes		
User color settings	9300K, 5000K, User		9300K, 5000K, User		9300K, 6500K, 5000K, User		
Color point adjustment/reset	Yes		Yes		Yes		
Moire reduction	Yes		Yes		Yes		
Manual degauss	Yes		Yes		Yes		
Twin video input	No		Two video inputs with selection by front switch (both 15-pin D shell)		Two video inputs with selection by front switch (DVI and 15-pin D shell)		
Video signal cable	One 1.8m captive with 15-pin D shell		One 1.8m detached with 15-pin D shell		One 1.8m DVI to DVI (and one 1.8m DVI to 15-pin D shell adapter)		
Power cord	1.8m detached		1.8m detached		1.8m detached		
Anti-reflective treatment	1/4-wave anti-reflective film		1/4-wave anti-reflective film		1/4-wave anti-reflective film		
Anti-static treatment	Yes		Yes		Yes		
Self diagnosis function	Yes		Yes		Yes		
Dimensions (H x W x D)	16.4" x 16.0" x 17.0"		18.2" x 18.2" x 18.7"		19.8" x 19.6" x 20.0"		
Dimensions (H x W x D)	416mm x 406mm x 432mm		462mm x 462mm x 474mm		504mm x 498mm x 507mm		
Weight	41.7 lbs (18.9 kg)		59.0 lbs (26.8 kg)		70.5 lbs (32 kg)		
VESA DDC1/DDC2B ²	DDC1/DDC2B		DDC1/DDC2B		DDC1/DDC2B		
VESA DPMS compliant	DPMS		DPMS		DPMS		
Power management	ENERGY STAR ³ / NUTEK		ENERGY STAR ³ / NUTEK		ENERGY STAR ³ / NUTEK		
Limited warranty ⁴	3 year		3 year		3 year		
Available / withdrawn date	October 1999 / October 2001		January 2000 / July 2002		October 1999 / October 2001		

<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Warranty service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response • On site exchange 7 day x 24 hr with 4 hour response ↪ Post warranty: two options above ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES 655x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord
--	---

See footnotes for important warranty information
 < = US models withdrawn from marketing

IBM® P Series Performance CRT Monitors		
Name	P77	P77
Case color	Pearl white	Stealth Black
Type-model	6639-T3N	6639-U3N
Service part number	22P6361	22P6362
CRT size and type	17" (16.0" vis) FD Trinitron® CRT (virtually flat screen)	
Viewable image size (vis)	16.0" / 406.4mm	
Aperture grill pitch	0.24mm	
Phosphor type	P22	
Max view area (inches)	12.875 x 9.625" (w/h)	
Max view area (mm)	326.7 x 242.5mm (w/h)	
Video input	Analog	
Frequency	Multiscanning	
Vertical refresh rate range	48 to 170Hz	
Horizontal line rate range	30 to 94kHz	
Clock rate	202.5Mpels/sec	
Optimum addressability	1024x768 at 85Hz	
Max 85Hz flicker free mode	1280x1024	
Maximum addressability	1600x1200 at 75Hz	
640x480 (presets)	60, 75, 85	
800x600 (presets)	75, 85	
1024x768 (presets)	75, 85	
1280x1024 (presets)	75, 85	
1600x1200	75	
Factory presets/user setngs	10 / 15	
Emission	MPR-II, FCC-B	
TCO-compliant	TCO-99 (pearl white) TCO-95 (stealth black)	
ISO 9241-capable	Parts 3, 7, 8 ¹	
On screen display	Yes (9 languages)	
User controls	Digital front mounted controls	
Brightness/contrast control	Yes	
Horizontal size/position	Yes	
Vertical size/position	Yes	
Geometry reset/recall	Yes	
Controls lock/unlock	Yes	
Display mode information	Yes	
Pincushion / balanced pinc	Yes	
Trapezoidal/parallelogram	Yes	
Image rotation/zoom	Yes	
Horz/vert convergence	Yes	
Geometry reset	Yes	
User color settings	9300K, 5000K, User	
Colorpoint adjustment/reset	Yes	
Moire reduction	Yes	
Manual degauss	Yes	
Rear connector	None; captive video signal cable	
Twin video input	No	
Video signal cable	One 1.8m captive with 15-pin D shell	
Power cord	1.8m detached	
Anti-reflective treatment	1/4-wave anti-reflective film	
Anti-static treatment	Yes	
Self diagnosis function	Yes	
Dimensions (H x W x D)	16.5" x 16.3" x 16.9"	
Dimensions (H x W x D)	418mm x 414mm x 428mm	
Weight	42.0 lbs (19 kg)	
VESA DDC1/DDC2B ²	DDC1/DDC2B	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³ / NUTEK	
Ship group	Monitor, attached tilt-swivel stand, attached video signal cable, power cord, CD containing User's Guide and INF, ICM and CAT files, Setup Guide	
Limited warranty ⁴	3 year	
Available date	September 2001	

• IBM P77 is a replacement for the IBM P76

<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response • On site exchange 7 day x 24 hr with 4 hour response ↪ Post warranty: two options above ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<ul style="list-style-type: none"> • IBM P Series Performance CRT Monitors provide accurate colors and crystal clear images
---	--	--

See footnotes for important warranty information
US models announced August 28, 2001
US models withdrawn effective August 2003

IBM® P Series Performance CRT Monitors		
Name	P97	P97 • IBM P97 is a replacement for the IBM P96
Case color	Pearl white	Stealth Black
Type-model	6651-T3N	6651-U3N
Service part number	22P7456	22P7457
CRT size and type	19" (18.0" vis) FD Trinitron® CRT (virtually flat screen; not a flat panel monitor)	
Viewable image size (vis)	18.0" / 456.4mm	
Aperture grill pitch	0.24mm	
Phosphor type	P22	
Max view area (inches)	14.3 x 10.7" (w/h)	
Max view area (mm)	365.0 x 274.0mm (w/h)	
Video input	Analog	
Frequency	Multiscanning	
Vertical refresh rate range	48 to 170Hz	
Horizontal line rate range	30 to 107kHz	
Clock rate	230Mpels/sec	
Optimum addressability	1280x1024 at 85Hz	
Max 85Hz flicker free mode	1600x1200	
Maximum addressability	1600x1200 at 85Hz	
640x480 (presets)	60, 85	
720x400 (presets)	70, 85	
800x600 (presets)	60, 75, 85	
1024x768 (presets)	60, 70, 75, 85	
1152x864 (presets)	75, 85	
1280x960 (presets)	60, 85	
1280x1024 (presets)	60, 75, 85	
1600x1200 (presets)	60, 65, 70, 75, 85	
Factory presets/user setng	8 / 15	
Emission	MPR-II, FCC-B	
TCO-compliant	TCO-99 (pearl white) TCO-95 (stealth black)	
ISO 9241-capable	Parts 3, 7, 8 ¹	
On screen display	Yes (9 languages)	
User controls	Digital front panel controls	
Brightness/contrast control	Yes	
Horizontal size/position	Yes	
Vertical size/position	Yes	
Automatic sizing	Yes	
Pincushion / balanced pinc	Yes	
Trapezoidal/parallelogram	Yes	
Image rotation	Yes	
Geometry reset	Yes	
Horz/vert convergence	Yes	
Convergence reset	Yes	
Manual degauss	Yes	
Moire reduction	Yes	
Colorpoint adjustment/reset	Yes	
User color settings	9300K, 6500K, 5000K, User	
Control lock	Yes	
Language select	Yes	
OSD position	Yes	
Rear connector	None; captive video signal cable	
Video signal cable	One 1.8m captive with 15-pin D shell	
Power cord	1.8m detached (same color as monitor)	
Anti-reflective treatment	1/4-wave anti-reflective film	
Anti-static treatment	Yes	
Self diagnosis function	Yes	
Dimensions (H x W x D)	19.0" x 18.4" x 18.2"	
Dimensions (H x W x D)	482.7mm x 469.4mm x 462.2mm	
Weight	59.5 lbs (27kg)	
VESA DDC2B ²	DDC2B/2Bi	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³ / NUTEK	
Ship group	Monitor, attached tilt-swivel stand, attached video signal cable, power cord, CD containing User's Guide and INF, ICM and CAT files, Setup Guide	
Limited warranty ⁴	3 year	
Avail / withdrawn date	Jan 2002 / June 2002 November 2001 / August 2003	

<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days ↪ IBM pays all shipping costs for valid warranty claims⁵ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<ul style="list-style-type: none"> • IBM P Series Performance CRT Monitors provide accurate colors and crystal clear images
---	---	--

See footnotes for important warranty information
US models announced October 30, 2001
US models withdrawn effective June 2002 or August 2003

IBM® P Series Performance CRT Monitors													
Name	P275 P275												
Case color	Pearl white Business black												
Type-model	6652-T3N 6652-U3N												
CRT size and type	21" FD Trinitron® CRT (virtually flat screen)												
Viewable image size	19.8" / 503mm												
Aperture grill pitch	0.24mm												
Phosphor type	P22												
Max view area (inches)	15.86 x 11.8" (w/h)												
Max view area (mm)	403 x 302mm (w/h)												
Video input	Analog												
Vertical refresh rate range	48 to 170Hz												
Horizontal line rate range	30 to 130kHz												
Clock rate	297Mpels/sec												
Recommended addressability	1600x1200 at 85Hz												
Max 85Hz flicker free mode	1600x1200												
Maximum addressability	2048x1536 at 75Hz												
640x480 (presets/loads)	60, 85												
720x400 (presets/loads)	70, 85												
800x600 (presets/loads)	60, 75, 85												
1024x768 (presets/loads)	60, 70, 75, 85												
1152x864 (presets/loads)	75												
1280x1024 (presets/loads)	60, 75, 85												
1600x1200 (presets/loads)	60, 65, 75, 85												
1920x1440 (presets/loads)	75												
2048x1536 (presets/loads)	75												
Factory presets/user setngs	9 factory presets / 14 factory preloads / 15 user settings												
Emission	MPR-II, FCC-B												
TCO-compliant	TCO 99												
ISO 9241-3 ¹	Yes												
On screen display	Yes (9 languages)												
User controls	Digital front mounted controls												
Brightness/contrast	Yes												
Horizontal size/position	Yes												
Vertical size/position	Yes												
Geometry and color recall	Yes												
Control lock/unlock	Yes												
Horz/vert convergence	Yes												
User color settings	9300K, 6500K, 5000K, user												
Picture tilt	Yes												
Moire control	Yes												
Manual degauss	Yes												
Rear connectors	DVI-A (primary) and 15-pin D-shell / two video inputs with selection by front switch												
Video signal cable	One standard cable (1.8m DVI-A to 15-pin D-shell)												
Power cord	1.8m detached												
Anti-reflective treatment	1/4-wave anti-reflective film												
Anti-static treatment	Yes												
Self diagnosis function	Yes												
Base	Tilt-swivel stand (horizontal: +/-90 degrees; vertical: +15/-5 degrees)												
Dimensions (H x W x D)	20.1" x 19.8" x 18.1"; 511mm x 504.2mm x 495.4mm (height includes tilt-swivel stand)												
Weight	68.3 lbs (31 kg)												
VESA DDC1/DDC2B ²	DDC1/DDC2B												
VESA DPMS compliant	DPMS												
Power management	ENERGY STAR ³ / NUTEK												
Ship group	Monitor, attached tilt-swivel stand, video signal cable, power cord, CD containing User's Guide and INF, ICM and CAT files, Quick Installation Guide												
Limited warranty ⁴	3 year												
Available date	July 2001 (6652-T3N withdrawn effective July 2003; 6652-U3N withdrawn effective April 2004)												
<table border="1"> <tr> <td style="background-color: #e0e0e0;"> <p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↻ 3 year limited warranty⁴ ↻ International Warranty Service⁵ ↻ IBM Express Maintenance at 1-800-772-2227 ↻ Replacement normally arrives in two business days, excluding holidays ↻ IBM pays all shipping costs for valid warranty claims ↻ Service upgrade options⁷: <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9180) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9181) ↻ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ </td> <td style="background-color: #e0e0e0;"> <p align="center">STANDARD FEATURES 655x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord </td> <td> <ul style="list-style-type: none"> • IBM P Series Performance CRT Monitors provide accurate colors and crystal clear images </td> </tr> <tr> <td align="center" colspan="3">OPTIONS</td> </tr> <tr> <td>Video signal cable 15-pin D-shell to 15-pin D-shell</td> <td></td> <td>61H0227</td> </tr> <tr> <td>Video signal cable DVI-A to DVI-A</td> <td></td> <td>04N7529</td> </tr> </table>		<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↻ 3 year limited warranty⁴ ↻ International Warranty Service⁵ ↻ IBM Express Maintenance at 1-800-772-2227 ↻ Replacement normally arrives in two business days, excluding holidays ↻ IBM pays all shipping costs for valid warranty claims ↻ Service upgrade options⁷: <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9180) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9181) ↻ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES 655x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<ul style="list-style-type: none"> • IBM P Series Performance CRT Monitors provide accurate colors and crystal clear images 	OPTIONS			Video signal cable 15-pin D-shell to 15-pin D-shell		61H0227	Video signal cable DVI-A to DVI-A		04N7529
<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↻ 3 year limited warranty⁴ ↻ International Warranty Service⁵ ↻ IBM Express Maintenance at 1-800-772-2227 ↻ Replacement normally arrives in two business days, excluding holidays ↻ IBM pays all shipping costs for valid warranty claims ↻ Service upgrade options⁷: <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9180) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9181) ↻ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p align="center">STANDARD FEATURES 655x</p> <ul style="list-style-type: none"> Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand Automatic degauss Northern hemisphere Separate power cord 	<ul style="list-style-type: none"> • IBM P Series Performance CRT Monitors provide accurate colors and crystal clear images 											
OPTIONS													
Video signal cable 15-pin D-shell to 15-pin D-shell		61H0227											
Video signal cable DVI-A to DVI-A		04N7529											

See footnotes for important warranty information
US models withdrawn effective July 2003 or April 2004

IBM Flat Panel Color Monitors (14.x inch) - withdrawn

IBM® Flat Panel Color Monitors			
Name	‡ 9514 LCD Color Monitor Pearl White 9514-A03	‡ 9514 LCD Color Monitor Pearl White 9514-B03	‡ 9514 LCD Color Monitor Stealth Gray 9514-B23
Case color			
Type-model	Active Matrix TFT	Active Matrix TFT	Active Matrix TFT
Screen	14.5" / 368mm	14.1" / 358mm	14.1" / 358mm
Viewable image size (diag)	.29mm	.28mm	.28mm
Dot pitch (mm)	16.7 million simultaneous	16.7 million simultaneous	16.7 million simultaneous
Display colors (maximum)	100:1	200:1	200:1
Contrast ratio	11.6" x 8.7"	11.2" x 8.4"	11.2" x 8.4"
Max view area (inches)	295mm x 221mm	285mm x 214mm	285 mm x 214 mm
Max view area (mm)	15° up, 45° down, 45° right/left	15° up, 45° down, 45° right/left	15° up, 45° down, 45° right/left
Minimum viewing angle			
Frequency	Autosync (multiscanning)	Autosync (multiscanning)	Autosync (multiscanning)
Max addressability	1024x768	1024x768	1024x768
Brightness	180 cd/m ² or nits	200 cd/m ² or nits	200 cd/m ² or nits
Display modes/frequencies	Supports all modes from 640x480 to 1024x768	VGA, SVGA, XGA VGA 640x350 69-88Hz VGA 640x450 55-88Hz VGA 640x480 59-75Hz VGA 720x350 69-88Hz VGA 720x400 55-88Hz SVGA 800x600 55-76Hz XGA 1024x768 59-76Hz Option for full screen for VGA, SVGA	VGA, SVGA, XGA VGA 640x350 69-88Hz VGA 640x450 55-88Hz VGA 640x480 59-75Hz VGA 720x350 69-88Hz VGA 720x400 55-88Hz SVGA 800x600 55-76Hz XGA 1024x768 59-76Hz Option for full screen for VGA, SVGA
Features			
ISO 9241-3 ²	ISO 9241-3	ISO 9241-3	ISO 9241-3
On screen display	Yes	Yes	Yes
Digital user controls	Power, brightness, contrast	Power, brightness, contrast	Power, brightness, contrast
On screen user controls	Horizontal/vertical position, setup	Horizontal/vertical position, setup	Horizontal/vertical position, setup
Connectors	5 BNC plugs	5 BNC plugs	5 BNC plugs
Signal cable	One 15-D to 5 BNC cable	One 15-D to 5 BNC cable	One 15-D to 5 BNC cable
Factory presets / user sett	N/A	13 / 25	13 / 25
Anti-reflective	Anti-reflective	Anti-reflective	Anti-reflective
Dimensions	13.8"H x 15.0"W x 7.1"D	13.8"H x 14.9"W x 7.4"D	13.8"H x 14.9"W x 7.4"D
(with standard stand)	350mm x 380mm x 180mm	352mm x 379mm x 188mm	352mm x 379mm x 188mm
Weight	9.9 lbs / 4 kg	10.4 lbs / 4.7 kg	10.4 lbs / 4.7 kg
VESA DDC1/DDC2B ⁵	No	Yes	Yes
VESA DPMS compliant	DPMS	DPMS	DPMS
Power management	ENERGY STAR ¹ / NUTEK	ENERGY STAR / NUTEK	ENERGY STAR / NUTEK
Standards		MPR-2 / MPR-3	MPR-2 / MPR-3
Power supply		External / 30 watt typical	External / 30 watt typical
Limited warranty	3 year	3 year	3 year
Available / withdrawn date	November 1997 / August 1998	March 1998 / Noember 1998	March 1998 / November 1998
Price			

WARRANTY SERVICE SUPPORT

- ↪ 3 year warranty³
- ↪ International Warranty Service³
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days
- ↪ IBM pays all shipping costs
- ↪ Warranty upgrade options:
 - On site exchange M-F 8-5 with next day response⁶
 - On site exchange 7 day x 24 hr with 4 hour response⁶
- ↪ Post warranty: on site options listed above
- ↪ 24 hour / 7 day telephone, electronic, and Internet support
- ↪ IBM or reseller warranty/service

STANDARD FEATURES

- Universal power supply
- Anti-static screen
- Anti-glare screen
- Tilt/swivel stand

Compact size with thin design takes minimal desktop space
Lift/tilt/swivel thin-line stand to improve operator usability
Extremely sharp, bright, and high contrast screen resolution
Energy efficiency and low heat generation
Small footprint and low power consumption when compared to an equivalent CRT technology monitor
Flicker-free viewing
Digital user controls set on front bezel
On-screen displays let you see the immediate effect of user control adjustments
Compliance with the ISO Standard 9241 Part 3 (Flat Panel Addendum) for front-of-screen ergonomics when forming part of an ISO compliant system
Compliance with Swedish MPR-II Guidelines for low-electric, magnetic, and electrostatic emissions

All trademarks are the property of their respective owners
‡ = Withdrawn from marketing

No warranties are expressed or implied in this summary
(DF14) © IBM Corp. December 1998

IBM Flat Panel Color Monitors (16.1 inch) - withdrawn

IBM® Flat Panel Color Monitors						
Name	9516 LCD Color Monitor					
Case color	Pearl White	Raven Black	Stealth Gray	Pearl White	Raven Black	Stealth Gray
Type-model	≈ 9516-A03	≈ 9516-A13	≈ 9516-A23	≈ 9516-B03	≈ 9516-B13	≈ 9516-B23
Screen	Active Matrix TFT (Thin Film Transistor)					
Viewable image size (diag)	16.1" / 408mm					
Dot pitch (mm)	.25mm					
Display colors (maximum)	16.7 million simultaneous colors					
Contrast ratio	100:1					
Max view area (inches)	12.5" x 10.1"					
Max view area (mm)	319mm x 255mm					
Minimum viewing angle	20° up, 40° down, 45° right/left					
Frequency	Fixed	Fixed	Fixed	Autosync (multiscanning)		
Max addressability	1280x1024	1280x1024	1280x1024	1280x1024		
Brightness	150 nits	150 nits	150 nits	200 cd/m ² or nits		
Display modes/frequencies	VGA: 640x480 29-3 kHz (horizontal) 69-71Hz (vertical)			VGA, SVGA, XGA, SXGA		
	SXGA: 1280x1024 63-72kHz (horizontal) 59-68Hz (vertical)			VGA 640x480 55 to 120Hz SVGA 800x600 55 to 120Hz SVGA 800x600 43 to 50Hz (I) XGA 1024x768 59 to 100Hz XGA 1024x768 40 to 50Hz (I) SXGA 1280x1024 60 to 75Hz SXGA 1280x1024 40 to 50Hz (I)		
Features				Option for full screen for VGA, SVGA, XGA		
ISO 9241-3 ²	ISO 9241-3					
On screen display	Yes					
Digital user controls	Power, brightness, contrast					
On screen user controls	Horizontal/vertical position, setup					
Connectors	5 BNC plugs					
Signal cable	One 15-D to 5 BNC cable					
Factory presets / user sett	N/A					
Anti-reflective	Anti-reflective					
Dimensions	17.0"H x 16.1"W x 9.8"D					
(with standard stand)	431 mm x 408mm x 250mm					
Weight	21.8 lbs / 9.9 kg					
Features	Supports attachment to RS/6000, HP, and Sun workstations					
VESA DDC1/DDC2B ⁵	No					
VESA DPMS compliant	DPMS					
Power management	ENERGY STAR ¹ / NUTEK					
Standards				MPR-2 / MPR-3 / TCO 92		
Power supply	External / 55 watts typical			External / 55 watts typical		
Limited warranty	3 year			3 year		
Available / withdrawn date	Nov 97 / Aug 98	Nov 97 / Aug 98	Mar 97 / Aug 98	Nov 97 / Jan 99	Nov 97 / Jan 99	Mar 98 / Jan 99
Price						
WARRANTY SERVICE SUPPORT	STANDARD FEATURES			Compact size with thin design takes minimal desktop space		
↻ 3 year warranty ³	Universal power supply Anti-static screen Anti-glare screen Tilt/swivel stand			Lift/tilt/swivel thin-line stand to improve operator usability; height adjustable and removable		
↻ International Warranty Service ³				Extremely sharp, bright, and high contrast screen resolution		
↻ IBM Express Maintenance at 1-800-772-2227				Energy efficiency and low heat generation		
↻ Replacement normally arrives in two business days				Small footprint and low power consumption when compared to an equivalent CRT technology monitor		
↻ IBM pays all shipping costs				Flicker-free viewing		
↻ Warranty upgrade options:	Digital user controls set on front bezel					
• On site exchange M-F 8-5 with next day response ⁶	On-screen displays let you see the immediate effect of user control adjustments					
• On site exchange 7 day x 24 hr with 4 hour response ⁶	Compliance with the ISO Standard 9241 Part 3 (Flat Panel Addendum) for front-of-screen ergonomics when forming part of an ISO compliant system					
↻ Post warranty: on site options listed above	Compliance with Swedish MPR-II Guidelines for low-electric, magnetic, and electrostatic emissions					
↻ 24 hour / 7 day telephone, electronic, and Internet support						
↻ IBM or reseller warranty/service						

All trademarks are the property of their respective owners
 ≈<= Withdrawn from marketing

No warranties are expressed or implied in this summary
 (DF16) © IBM Corp. December 1998

IBM Flat Panel Color Monitors (15 inch) - withdrawn

IBM® Flat Panel Color Monitors	
Name	T55A LCD TFT Color Monitor
Case color	Pearl White Stealth Black
Type-model	9513-AW1 9513-AG1
Screen	Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	15.0" / 381mm
Pixel pitch (mm)	.30mm
Max view area (inches)	12.0" x 9.0"
Max view area (mm)	304.1mm x 228.1mm
Minimum viewing angle	45° up/down, 60° left/right
Video input	Analog
Frequency	Autosync (multiscanning)
Max addressability	1024x768
Max pixel rate	80MHz
Vertical frequency	59 to 76Hz
Horizontal frequency	30 to 61kHz
Display colors (maximum)	16.7 million simultaneous colors
Preset display modes	VGA: 640x350 70Hz 640x480 60, 75Hz 720x400 70Hz SVGA: 800x600 60, 75Hz 832x624 75Hz XGA: 1024x768 60, 70, 75Hz
Factory presets / user sett	10 / 10
Brightness	200 nits or cd/m ²
Contrast ratio	150:1
On screen display	Yes (English, German, Spanish, French, Italian)
Control features	Brightness, contrast, and color Color point (3 presets) Image horizontal and vertical position OSD language selection, menu position, video mode and timing information Auto setup Coarse clock and fine clock for image adjustment Image expansion or normal use
Lockable image controls	Yes (except brightness and contrast)
Connector	15-pin D-Sub on back of monitor
Signal cable	1.8 meter / 15-pin D-Sub on each end / detachable
Anti-reflective	Anti-reflective
Anti-glare	Anti-glare
Dimensions (with stand)	15.0"H x 16.3"W x 8.1"D 380.6mm x 413mm x 204.3mm
Weight (with stand)	14.3 lbs / 6.5 kg
Base	Tilting / detachable / meets FPMPMI standard
Features	Supports attachment to RS/6000, HP, and Sun workstations
VESA DDC1/DDC2B ⁵	Yes
VESA DPMS compliant	DPMS
Power management	ENERGY STAR ¹ / NUTEK / TCO 95
Ergonomics	ISO 9241 Part 3 and 8 ² , ISO 13406 Part 2 ²
Emission standards	MPR-2, MPR-3A
Environmental label	TCO 95
Power supply	Universal / external / 40 watts typical
Limited warranty	3 year (includes backlight)
Announce date	September 1998
Available date	October 1998
Withdrawn date	October 2000 July 2000
WARRANTY SERVICE SUPPORT	<p>Toughened glass and touch-enabled versions of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.</p>
<ul style="list-style-type: none"> ☞ 3 year warranty³ ☞ International Warranty Service³ ☞ IBM Express Maintenance at 1-800-772-2227 ☞ Replacement normally arrives in two business days, excluding holidays ☞ IBM pays all shipping costs ☞ Warranty upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁶ • On site exchange 7 day x 24 hr with 4 hour response⁶ ☞ Post warranty: on site options listed above ☞ 24 hour / 7 day telephone, electronic, and Internet support ☞ IBM or reseller warranty/service 	


IBM Flat Panel Color Monitors (15 inch - Digital) - withdrawn

IBM® Flat Panel Color Monitors

Name	T55D LCD TFT Color Monitor		
Case color	≪ Pearl White	≪ Stealth Black	≪ Pearl White
Type-model	9513-DW0	9513-DG0	9513-DW1
Graphics adapter	None		AGP-2X adapter
Graphics controller	N/A		Matrox Millennium G200A
Screen	Active Matrix TFT (Thin Film Transistor)		
Viewable image size (diag)	15.0" / 381mm		
Pixel pitch (mm)	.30mm		
Max view area (inches)	12.0" x 9.0"		
Max view area (mm)	304.1mm x 228.1mm		
Minimum viewing angle	45° up/down, 60° left/right		
Video input	Digital		
Frequency	Single frequency		
Max addressability	1024x768		
Max pixel rate	80MHz		
Vertical frequency	60Hz		
Horizontal frequency	48.4kHz		
Display colors (maximum)	16.7 million simultaneous colors		
Preset display modes	Preset modes are a function of a P&D-D Adapter (not monitor)		
Brightness	200 nits or cd/m ²		
Contrast ratio	150:1		
On screen display	None, unnecessary for complete digital system		
Control Features	Brightness		
On screen user controls	None, unnecessary for complete digital system		
Connector	First units: VESA P&D Later units: Digital Video Interface (DVI)		
Signal cable	First units: 2.0 meter / VESA P&D on each end / detachable Later units: 2.0 meter / Digital Video Interface (DVI) / detachable / includes DVI to VESA P&D dongle		
Anti-reflective	Anti-reflective		
Anti-glare	Anti-glare		
Dimensions (with stand)	15.0"H x 16.3"W x 8.1"D 381mm x 413mm x 204mm		
Weight (with stand)	14.3 lbs / 6.5 kg		
Base	Tilting / detachable / meets FPMPMI standard		
Features	Supports attachment to RS/6000, HP, and Sun workstations via appropriate P&D-Digital adapter		
VESA DDC1/DDC2B ⁵	Yes		
VESA DPMS compliant	DPMS		
Power management	ENERGY STAR ¹ / NUTEK / TCO 95		
Ergonomics	ISO 9241 Part 3 and 8 ² , ISO 13406 Part 2 ²		
Emission standards	MPR-2 / MPR-3A		
Environmental label	TCO 95		
Power supply	Universal / external / 40 watts typical		
Limited warranty	3 year (includes backlight)		
Announce date	September 1998		
Avail / withdrawn date	October 1998 / October 2000		October 1998 / March 1999

IBM intends to announce an optional internal PCI P&D Digital Video Adapter that can plug directly into system boards with a spare PCI slot. This only represents IBM's plan to announce this option and is not a commitment that the option will be announced or made available. IBM plans are subject to change without notice.

The T55D digital flat panel color monitors require a digital graphics controller in your system. This controller must adhere to the VESA Plug & Display Standard Interface. IBM T55D models DW1 and DG1 include an adapter for the customer to install in their system. Models DW0 and DG0 do not include an adapter. Third Party OEM Adapter offerings are anticipated to emerge in the marketplace beginning in fourth quarter 1998. Customers should only purchase models DW0 or DG0 only if they plan to use a third party OEM P&D-compliant adapter when they are available.

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ↪ 3 year warranty³ ↪ International Warranty Service³ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs ↪ Warranty upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁶ • On site exchange 7 day x 24 hr with 4 hour response⁶ ↪ Post warranty: on site options listed above ↪ 24 hour / 7 day telephone, electronic, and Internet support ↪ IBM or reseller warranty/service 	<p>Matrox Millennium G200A Features</p> <ul style="list-style-type: none"> • AGP-2x 533MB/sec adapter • Sideband addressing / split transactions • 8MB std / 16MB max / 125MHz, 64-bit SDRAM • 250MHz RAMDAC • Max 2D resolution of 1600x1200 in 24-bit color at 85Hz <p>Toughened glass and touch-enabled versions of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.</p>	<p>Connection to Digital Monitor is via VESA P&D connector on system unit</p> 
--	--	---

All trademarks are the property of their respective owners

No warranties are expressed or implied in this summary (MF15D) © IBM Corp. October 2000

IBM Monitors (T Series / T54A) - withdrawn

IBM® Flat Panel Color Monitors

Name	T54A LCD TFT Color Monitor
Case color	Pearl White Stealth Black
Type-model	9511-AW1 9511-AG1
Screen	Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	15.0" / 380mm
Pixel pitch (mm)	.30mm
Max view area	12.0" x 9.0" / 304mm x 228mm
Viewing angle (typical)	50° up/down, 60° left/right
Video input	Analog
Rotating screen	None
Frequency	Multi-mode operation / non-interlaced operation
Max addressability	1024x768
Max pixel rate (max)	94.5MHz at 1024x768 at 85Hz
Corresponding screen ref	1024x768 at 70Hz
Vertical frequency	56 to 75Hz
Horizontal frequency	31 to 70kHz
Cell response time (typ)	50ms
Display colors (maximum)	16.7 million color combinations
Display modes	VGA 640x480 and 640x350 and 720x400 / 60 to 70Hz SVGA 800x600 and 832x624 / 56 to 75Hz XGA 1024x768 / 60, 70, 75Hz
Preset / user settings	13 factory presets / 10 user settings
Brightness	200 nits or cd/m ² (typical)
Contrast ratio	300:1 (typical)
On screen display	Yes (5 languages)
Control features	Brightness, contrast, auto setup
Lockable image controls	Locks setup (except brightness, contrast, auto setup)
Digital controls	Yes
Color	Three selectable presets and one user setting
Horizontal/vertical adjust	On-screen
Information screen	Yes
Image setup	Auto and manual options
Image size and reset	Normal or expanded format
Connectors	15-pin D-Sub on back of monitor
Signal cable	15-pin D-Sub on each end of cable / detachable / 1.8 meter
Anti-reflective / anti-glare	Anti-reflective / anti-glare
Dimensions (with stand)	14.6"H x 15.8"W x 7.9"D / 371 x 401 x 202.3mm
Weight (with stand)	14.3 lbs / 6.5 kg
Stand	Detachable / adjustments for tilt
Features	Can be replaced by a third-party stand or arm assembly conforming to VESA Mechanical Interface Standard
Mounting	Meets VESA Flat Panel Monitor Physical Mounting Interface Standard (FPMPMI®, 100mm x 100mm)
Environmental label	TCO 99 TCO 95
VESA® compliant	DDC1/DDC2B ⁵ and DPMS [®]
Power management	ENERGY STAR ¹ / NUTEK
Ergonomics	ISO/DIS 13406 Part 2 ²
Emission standards	MPR-2 / MPR-3A
Power supply	Universal / external / 1.8m power cord
Limited warranty	3 year (includes parts/labor/backlight)
Avail / withdrawn date	April 2000 / May 2001

WARRANTY SERVICE SUPPORT

- ⇒ 3 year warranty³
- ⇒ International Warranty Service³
- ⇒ IBM Express Maintenance at 1-800-772-2227
- ⇒ Replacement normally arrives in two business days, excluding holidays
- ⇒ IBM pays all shipping costs
- ⇒ Warranty upgrade options:
 - On site exchange M-F 8-5 with next day response⁶
 - On site exchange 7 day x 24 hr with 4 hour response⁶
- ⇒ Post warranty: on site options listed above
- ⇒ 24 hour / 7 day telephone, electronic, and Internet support
- ⇒ IBM or reseller warranty/service

Toughened glass and touch-enabled versions of these monitors may be available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)

On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.

IBM® Flat Panel Color Monitors - US models

Name	T54T LCD TFT Color Monitor	The 2nd T in T54T indicates "Touch". The T54T incorporates a capacitive touch screen. Capacitive touch screens sense electrical signals to determine the presence and position of your finger when it makes contact with the screen.
Case color	Pearl White Stealth Black	
Type-model	9511-TW1 9511-TG1	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.0" / 380mm	
Pixel pitch (mm)	.297mm	
Max view area (inches)	11.9" x 9.0"	
Max view area (mm)	304.1mm x 228.1mm	
Minimum viewing angle	80° vertical, 100° horizontal	
Video input	Analog	

Frequency	Multi-frequency
Optimum addressability	1024x768
Video input (maximum)	1024x768 at 75Hz (78MHz maximum pixel rate)
Corresponding scr refresh	1024x768 at 70Hz
Vertical frequency	55 to 75Hz
Horizontal frequency	31 to 60kHz
Display colors (maximum)	16.7 million simultaneous colors
Preset display modes	VGA: 640x480 60, 72, 75Hz 640x350 70Hz 720x400 70Hz SVGA: 800x600 56, 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75Hz
Factory presets / user sett	Factory presets: 13, user locations: 10
Brightness	150 nits or cd/m ²
Contrast ratio	150:1
Cell response time	50ms (typical)
Scaling	Can expand image of lower addressability to full screen of 1024x768

Touch input	Finger
Touch screen technology	Analog capacitive
Resolution	1024 touch points per axis
Initial touch speed	8-15ms
Conversion speed	200 touch points per sec at 19.2K Baud
Accuracy	Less than +/- 1% error within recommended viewing area
Sensor construction	Capacitive
Touch life	Greater than 120 million touches in any one location
Software	Touch screen software CD with drivers for Microsoft® Windows® 95, 98, NT, 2000 Set up test pattern diskettes

On screen display	On screen display with digital user controls in 5 languages (US English, French, German, Spanish, and Italian)
Control features	Brightness and contrast User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time Information screen Image setup with auto and manual options Image size to show normal or expanded format Reset of geometry and color point to factory default settings Lockable settings

Monitor connector	15-pin D-sub on back of monitor
Signal cable	Detachable analog, 15-pin D-sub on on each end of cable, 1.8m, matches color of monitor
Touch screen cable	Attached RS-232 cable with DB-9 female connector

Face plate surface	Anti-glare etch
Dimensions (with stand)	14.6"H x 15.8"W x 7.9"D 371mm x 401mm x 202.3mm
Weight (with stand)	12.1 lbs / 5.5 kg
Stand	Tilting, 2° forward, 29° backward / no swivel / detachable
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard

VESA DDC1/DDC2B ²	Yes
VESA DPMS compliant	DPMS
Power management	ENERGY STAR ³ / NUTEK
Emission standards	MPR-2 / MPR-3B
Power supply	Universal / external / 30 watts typical
Limited warranty ^{*.4}	3 year (includes backlight)
Avail / withdrawn date	March 2001 / February 2002

Options

Dongle (Apple attach)	96G2694
IBM Radial Arm Mount	19K4464
ServicePac 3yr IOE 9x5	30L9179
ServicePac 3yr IOE 7x24	30L9183

WARRANTY SERVICE SUPPORT

- ↪ 3 year limited warranty^{*.4}
- ↪ International Warranty Service⁵
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days, excluding holidays
- ↪ IBM pays all shipping costs for valid warranty claims⁵
- ↪ Warranty service upgrade options:
 - On site exchange M-F 8-5 with next day response⁷
 - On site exchange 7 day x 24 hr with 4 hour response⁷
- ↪ Post warranty: on site options listed above
- ↪ 24 hour x 7 day telephone⁸, electronic, and Internet support

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary (MT54T) © IBM Corp. February 2002

IBM Monitors (T Series / T56A, T74A) - withdrawn

IBM® Flat Panel Color Monitors		
Name	T56A LCD TFT Color Monitor	T74A LCD TFT Color Monitor
Case color	Pearl White Stealth Black	Stealth Black Pearl White
Type-model	9493-AW1 9493-AG1	9495-AG1 9495-AW1
Screen	Active Matrix TFT (Thin Film Transistor)	Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	15.1" / 383.54mm	17.0" / 432.75mm
Pixel pitch (mm)	.30mm	.26mm
Max view area	12.09" x 9.07" / 307.2mm x 230.4mm	13.3" x 10.6" / 338mm x 270mm
Viewing angle (typical)	45° up/down, 60° left/right	80° up/down, 80° left/right
Video input	Analog	Analog
Rotating screen	Screen pivots 90 degrees clockwise from landscape to portrait (Pivot® Software included)	None
Frequency	Multi-mode operation / non-interlaced operation	Multi-mode operation / non-interlaced operation
Max addressability	1024x768	1240x1024
Max pixel rate (max)	94.5MHz at 1024x768 at 85Hz	1280x1024 at 76Hz (135MHz)
Corresponding screen ref	1024x768 at 70Hz	1280x1024 at 66Hz (108MHz)
Cell response time (typ)	45ms	50ms
Display colors (maximum)	16.7 million simultaneous colors	16.7 million simultaneous colors
Display modes	VGA 640x480 and 640x350 and 640x400 / 60 to 85Hz SVGA 800x600 and 832x624 / 56 to 75Hz XGA 1024x768 / 60, 70, 75, 85Hz	VGA 640x480 and 640x350 and 720x400 / 60, 72, 75Hz SVGA 800x600 and 832x624 / 60, 72, 75Hz XGA 1024x768 and 1152x870 / 60, 70, 75Hz SXGA 1280x1024 / 60, 75Hz
Preset / user settings	16 factory presets / 10 user settings	20 factory presets / 10 user settings
Brightness	200 nits or cd/m ² (typical)	170 nits or cd/m ² (typical)
Contrast ratio	200:1 (typical)	150:1 (typical)
On screen display	Yes (5 languages)	Yes (5 languages)
Control features	Brightness, contrast, auto setup	Brightness, contrast, auto setup
Lockable image controls	Locks setup (except brightness, contrast, auto setup)	Locks setup (except brightness, contrast, auto setup)
Digital controls	Yes	Yes
Color	Three selectable presets and one user setting	Three selectable presets and one user setting
Horizontal/vertical adjust	On-screen	On-screen
Information screen	Yes	Yes
Image setup	Auto and manual options	Auto and manual options
Image size and reset	Normal or expanded format	Normal or expanded format
Connectors	15-pin D-Sub on back of monitor	15-pin D-Sub and 13W3 on back of monitor (selectable via on screen display)
Signal cable	15-pin D-Sub on each end of cable / detachable / 3.0 meter (2.7 meter usable)	15-pin D-Sub on each end of cable / detachable / 1.8 meter
Anti-reflective / anti-glare	Anti-reflective / anti-glare	Anti-reflective / anti-glare
Dimensions (with stand)	18.3"H x 15.8"W x 9.9"D / 463.5 x 401.3 x 250mm	18.1"H x 17.5"W x 8.7"D / 458 x 440 x 220mm
Weight (with stand)	15.7 lbs / 7.1 kg	18.5 lbs / 8.4 kg
Stand	Swivel/Lift/Tilt/Rotate/Pivot stand / detachable - Lift 125mm (4.9") - Tilt +0 forward and -30 degrees backward - Rotate +/- 150 degrees - Pivot 90 degrees clockwise from landscape to portrait	Swivel, tilt / detachable - Tilt 5 degrees forward and 30 degrees backward - Swivel 160 degrees left and 160 degrees right
Features	Can be replaced by a third-party stand or arm assembly conforming to VESA Mechanical Interface Standard	Can be replaced by a third-party stand or arm assembly conforming to VESA Mechanical Interface Standard
Mounting	Meets VESA Flat Panel Monitor Physical Mounting Interface Standard (FPMPMI®, 100mm x 100mm)	Meets VESA Flat Panel Monitor Physical Mounting Interface Standard (FPMPMI®, 100mm x 100mm)
VESA® compliant	DDC1/DDC2B ⁵ and DPMS®	DDC1/DDC2B ⁵ and DPMS®
Power management	ENERGY STAR ¹ / NUTEK	ENERGY STAR ¹ / NUTEK
Ergonomics	ISO 9241 Part 3 and 8 ² , ISO/DIS 13406 Part 2 ²	ISO 9241 Part 3 and 8 ² , ISO/DIS 13406 Part 2 ²
Emmission standards	MPR-2 / MPR-3A	MPR-2 / MPR-3A
Environmental label	TCO 99 TCO 95	TCO 95
Power supply	Universal / external / 30 watts max / 1.8m power cord	Universal / external / 30 watts max / 1.8m power cord
Limited warranty* ³	3 year (includes parts/labor/backlight)	3 year (includes parts/labor/backlight)
Available date	February 2000	March 2000 May 2000
Withdrawn date	October 2001	April 2001 April 2001
WARRANTY SERVICE SUPPORT	<p>Toughened glass and touch-enabled versions of these monitors may be available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.</p>	
<ul style="list-style-type: none"> ⇒ 3 year limited warranty³ ⇒ International Warranty Service⁵ ⇒ IBM Express Maintenance at 1-800-772-2227 ⇒ Replacement normally arrives in two business days, excluding holidays ⇒ IBM pays all shipping costs¹¹ ⇒ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁵ • On site exchange 7 day x 24 hr with 4 hour response⁵ ⇒ Post warranty: on site options listed above ⇒ 24 hour x 7 day telephone¹⁴, electronic, and Internet support 		

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary (MT1) © IBM Corp. October 2001

IBM Monitors (T Series / T54H) - withdrawn

IBM® Flat Panel Color Monitors - US models

Name	T54H LCD TFT Color Monitor	The "H" in T54H stands for Hybrid. Hybrid means both an analog (15-pin D-shell) and digital (Digital Visual Interface [DVI-D]) connector is on the back of the monitor. This allows one monitor to connect to different types of graphics adapters.
Case color	Pearl White Stealth Black	
Type-model	9511-HW2 9511-HG2	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.1" / 383mm	
Pixel pitch (mm)	.30mm (actually 0.297mm)	
Max view area (inches)	12.1" x 9.1"	
Max view area (mm)	307.2mm x 230.4mm	
Minimum viewing angle	60° up/down, 80° left/right	
Video input	Digital or analog (two separate connectors)	
Frequency	Multi-frequency	
Max addressability	1024x768	
Video input (maximum)	1024x768 at 80Hz (94.5MHz maximum pixel rate)	
Corresponding scr refresh	1024x768 at 70Hz	
Vertical frequency	56 to 75Hz	
Horizontal frequency	31.5 to 60kHz	
Display colors (maximum)	16.7 million simultaneous colors	
Preset display modes	VGA: 640x480 60, 67, 72, 75Hz 720x400 70Hz SVGA: 800x600 56, 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75Hz	
Factory presets / user sett	Factory presets: 16, user locations: 10	
Brightness	250 nits or cd/m ²	
Contrast ratio	300:1	
Cell response time	45ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1024x768	
On screen display	On screen display with digital user controls (5 languages)	
Control features	Brightness and contrast User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time Information screen Image setup with auto and manual options Image size to show normal or expanded format Reset of geometry and color point to factory default settings Lockable settings	
Monitor connectors	Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-D); select via on screen display	
Signal cable	Two cables: (1) detachable analog, 15-pin D-shell at each end, 1.8m, matches color of monitor (2) detachable digital, DVI-D at each end, 1.8m, matches color of monitor	
Anti-reflective	Anti-reflective	
Anti-glare	Anti-glare	
Dimensions (with stand)	15.0"H x 15.8"W x 7.9"D 381mm x 401mm x 202.3mm	
Weight (with stand)	12.3 lbs / 5.6 kg	
Stand	Tilting, -4° forward, -40° backward / no swivel / detachable	
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard	
VESA DDC1/DDC2B ⁵	Yes	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ¹ / NUTEK / TCO 95	
Ergonomics	ISO 9241 Part 3 and 8 ² , ISO 13406 Part 2 ²	
Emmission standards	MPR-2 / MPR-3A	
Environmental label	TCO 95 (both) / TCO 99 (pearl white model only)	
Power supply	Universal / external / 40 watts typical	
Limited warranty	3 year (includes backlight)	
Avail / withdrawn date	August 2000 / August 2001	

WARRANTY SERVICE SUPPORT

- ↪ **3 year limited warranty³**
- ↪ **International Warranty Service³**
- ↪ **IBM Express Maintenance at 1-800-772-2227**
- ↪ **Replacement normally arrives in two business days, excluding holidays**
- ↪ **IBM pays all shipping costs**
- ↪ **Warranty upgrade options:**
 - **On site exchange M-F 8-5 with next day response⁶**
 - **On site exchange 7 day x 24 hr with 4 hour response⁶**
- ↪ **Post warranty: on site options listed above**
- ↪ **24 hour x 7 day telephone, electronic, and Internet support**
- ↪ **IBM or reseller warranty/service**

IBM® T Series Flat Panel Monitors - US models

Name	T84H LCD TFT Color Monitor	The "H" in T84H stands for Hybrid. Hybrid means both an analog (15-pin D-shell) and digital or analog (Digital Visual Interface [DVI-I]) connector is on the back of the monitor. This allows one monitor to connect to different types of graphics adapters.
Case color	Pearl White Stealth Black	
Type-model	6658-HW2 6658-HG2	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	18.1" / 460mm	
Pixel pitch (mm)	.28mm (actually 0.2805mm)	
Max view area (inches)	14.1" x 11.3"	
Max view area (mm)	359mm x 287.2mm	
Minimum viewing angle	80° up/down, 80° left/right	
Video input	Digital or dual analog (two separate connectors)	
Frequency	Multi-frequency	
Max addressability	1280x1024	
Video input (maximum)	1280x1024 at 75Hz (135MHz maximum pixel rate)	
Corresponding scr refresh	1024x768 at 60Hz	
Vertical frequency	55 to 85Hz	
Horizontal frequency	31 to 81kHz	
Display colors (maximum)	16.7 million simultaneous colors	
Preset display modes	VGA: 640x480 60, 66 (MAC), 72 (analog), 75, 85Hz 640x350 70Hz 720x400 70Hz SVGA: 800x600 60, 72, 75, 85Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75, 85Hz SXGA: 1280x1024 60, 72, 75Hz (also 1152x864, 1152x870, 1152x900)	
Factory presets / user sett	Factory presets: 21, user locations: 15	
Brightness	235 nits or cd/m ² (typical)	
Contrast ratio	400:1 (typical)	
Cell response time	30ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1280x1024	
On screen display	On screen display with digital user controls (5 languages)	The "T84H is capable of accepting dual input. This can be two analog inputs or one analog and one digital input.
Control features	Brightness and contrast User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time Information screen Image setup with auto and manual options Image size to show normal or expanded format Reset of geometry and color point to factory default settings Lockable settings	Dual analog input requires a customer-supplied cable that has DVI-A connectors on both ends or it requires DVI-A on the monitor end and 15-in D-shell on the system end. The cable will depend on the type of interface in the system unit.
Monitor connectors	Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-I); select via on screen display	
Signal cable	Two cables: (1) detachable analog, 15-pin D-shell at each end, 1.8m, matches color of monitor (2) detachable digital, DVI-D at each end, 3.0m, matches color of monitor	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions (with stand)	18.3"H x 18.2"W x 9.1"D 465mm x 462mm x 232mm	
Weight (with stand)	18.7 lbs / 8.5 kg	
Tilt and swivel stand	Tilting, -5° forward, -40° backward / swivel / detachable	
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard	
Security	Security keyhole for attachment of optional cable lock	
VESA DDC1/DDC2B ²	Yes	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³ / NUTEK / TCO 95	
Ergonomics	ISO 9241 Part 3 and 8 ¹ , ISO 13406 Part 2 ¹	
Emmission standards	MPR-2 / MPR-3A	
Environmental label	TCO 95 (both) / TCO 99 (pearl white model only)	
Power supply	Universal / external / 40 watts typical	
Limited warranty ⁴	3 year (includes backlight)	
Available date	October 2000	

LIMITED WARRANTY

- ↪ 3 year limited warranty⁴
- ↪ International Warranty Service⁵
- ↪ IBM Express Maintenance at 1-800-772-2227
- ↪ Replacement normally arrives in two business days, excluding holidays
- ↪ IBM pays all shipping costs for valid warranty claims⁶
- ↪ Warranty service upgrade options:⁷
 - On site exchange M-F 8-5 with next day response
 - On site exchange 7 day x 24 hr with 4 hour response
- ↪ Post warranty: on site options listed above
- ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴

See footnotes for important warranty information
US models announced October 24, 2000
US models withdrawn effective August 2002

IBM® Flat Panel Color Monitors			
Name	T85A LCD TFT Color Monitor	T86A LCD TFT Color Monitor	
Case color	Pearl White	Pearl White	Stealth Black
Stand	Stand	No stand	Stand
Type-model	9519-AW1	9497-AW1	9497-AW6
Screen	Active Matrix TFT (Thin Film Transistor)	Active Matrix TFT (Thin Film Transistor) / Co-planar electrode	
Viewable image size (diag)	18.1" / 459.7mm	18.1" / 459.7mm	
Pixel pitch (mm)	.2805mm	.2805mm	
Max view area (inches)	14.1" x 11.3"	14.1" x 11.3"	
Max view area (mm)	359.0mm x 287.2mm	359.0mm x 287.2mm	
Viewing angle	+ / - 80° horizontal, + / - 80° vertical	+ / - 80° horizontal, + / - 80° vertical	
Video input	Analog	Analog	
Rotating screen	None	Screen pivots 90 degrees clockwise from landscape to portrait (Pivot® Software included)	
Frequency	Multi-frequency	Multi-frequency	
Max addressability	1280x1024	1280x1024	
Video input (maximum)	75Hz (135MHz) at 1280x1024	76Hz (135MHz) at 1280x1024	
Corresponding scr refresh	60Hz (108MHz) at 1280x1024	60Hz (108MHz) at 1280x1024	
Vertical frequency	56 to 76Hz	50 to 85Hz	
Horizontal frequency	30 to 82kHz	30 to 92kHz	
Display colors (maximum)	16.7 million simultaneous colors	16.7 million simultaneous colors	
Preset display modes	VGA: 640x350 70Hz 640x480 60, 66 (MAC), 72, 75Hz 720x400 70Hz SVGA: 800x600 56, 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75 (MAC), 75Hz 1152x870 75Hz (Apple) SXGA: 1280x1024 60, 72 (HP), 75, 76Hz (Sun)	VGA: 640x350 70Hz 640x480 60, 66 (MAC), 72, 75Hz 720x400 70Hz SVGA: 800x600 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75 (MAC), 75Hz 1152x870 75Hz (Apple) (also 1152x864/900) SXGA: 1280x1024 60, 72 (HP), 75, 76Hz (Sun)	
Factory presets / user sett	20 / 10	21 / 11	
Brightness (luminance)	200 (max) / 170 (typ) / 150 (min) cd/m ² at 100 POH 150 (max) / 120 (typ) / 100 (min) cd/m ² at 10K POH	200 (max) / 170 (typ) / 150 (min) cd/m ² at 100 POH 150 (max) / 120 (typ) / 100 (min) cd/m ² at 10K POH	
Cell response time	50ms	60ms	
Contrast ratio	150:1	300:1	
On screen display (OSD)	Yes (English, German, Spanish, French, Italian)	Yes (English, German, Spanish, French, Italian)	
User controls	Power, brightness, contrast, image position, size, color, horizontal/vertical position, setup language selection, menu position	Power, brightness, contrast, image position, size, color, horizontal/vertical position, setup language selection, menu position	
Lockable image controls	Yes (except brightness and contrast)	Yes (except brightness and contrast)	
Connectors	15-pin D-Sub and 13W3 on back of monitor (selectable via on screen display)	Two DVI-A connectors on back of monitor	
Signal cable	1.8 meter / 15-pin D-Sub on each end / detachable	1.8 meter / DVI-A (monitor) to 15-pin D-Sub / detachable	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions (with stand)	18.2"H x 18.1"W x 8.8"D or 462.6 x 459.0 x 224.3mm	21.7"H x 16.5"W x 10.2"D or 550 x 418 x 260mm	
Weight (with stand)	19.8 lbs / 9.0 kg	23.1 lbs / 10.5 kg	
Stand	Swivel, Tilt / detachable - Swivel 320 degrees - Tilt 4 degrees forward and 41 degrees backward	Swivel, Lift, Tilt, Rotate, Pivot stand / detachable - Swivel 300 degrees - Lift 130mm (5.1") - Tilt +0 forward and -30 degrees backward - Rotate +/- 150 degrees - Pivot 90 degrees clockwise from landscape to portrait	
Panel	Meets VESA FPMPMI standard	Meets VESA FPMPMI standard (100mm x 100mm)	
VESA compliant	DDC1/DDC2B ² , DPMS	DDC1/DDC2B ² , DPMS	
Power management	ENERGY STAR ³ / NUTEK / TCO 95	ENERGY STAR ³ / NUTEK / TCO 95	
Ergonomics	ISO 9241 Part 3 and 8 ¹ , ISO 13406 Part 2 ¹ (target)	ISO 9241 Part 3 and 8 ¹ , ISO 13406 Part 2 ¹ (target)	
Emission standards	MPR-2, MPR-3A, FCC Class B	MPR-2, MPR-3A, FCC Class B	
Environmental label	TCO 95	TCO 99 TCO99 TCO95 TCO95	
Power supply	Universal / external / 48 watts typical	Universal / external / 65 watts maximum	
Limited warranty ^{*.4}	3 year (includes parts/labor/backlight)	3 year (includes parts/labor/backlight)	
Avail / withdrawn date	January 1999 / March 2001	March 2000 / February 2002	
WARRANTY SERVICE SUPPORT			
<ul style="list-style-type: none"> ➤ 3 year limited warranty^{*.4} ➤ International Warranty Service⁵ ➤ IBM Express Maintenance at 1-800-772-2227 ➤ Replacement normally arrives in two business days, excluding holidays ➤ IBM pays all shipping costs for valid warranty claims⁶ ➤ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁷ • On site exchange 7 day x 24 hr with 4 hour response⁷ ➤ Post warranty: on site options listed above ➤ 24 hour x 7 day telephone⁸, electronic, and Internet support 		<p>Toughened glass and touch-enabled versions of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.</p> <p>For the most up to date information, please visit www.ibm.com/options</p>	

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary (MF18) © IBM Corp. February 2002

IBM® Flat Panel Color Monitors - US models			
	T85D LCD TFT Color Monitor		T86D LCD TFT Color Monitor
	Pearl White	Stealth Black	Pearl White Stealth Black
	9497-DW0	9519-DG0	9497-DW5 9497-DG5
	Included		Included No stand No stand
	Landscape only		Landscape or portrait (includes Pivot® software)
Screen	Active Matrix TFT (Thin Film Transistor)		Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	18.1" / 459mm		18.1" / 459mm
Pixel pitch (mm)	.28mm (actual 0.2805mm)		.28mm (actual 0.2805mm)
Max view area (inches)	14.1" x 11.3"		14.1" x 11.3"
Max view area (mm)	359.0mm x 287.2mm		359.0mm x 287.2mm
Minimum viewing angle	+ / - 80° horizontal, + / - 80° vertical		+ / - 80° horizontal, + / - 80° vertical
Video input	Digital (VESA P&D-Digital interface)		Digital (DVI-D)
Frequency	Single frequency		Single frequency
Max addressability	1280x1024		1280x1024
Max pixel rate	108MHz		108MHz
Vertical frequency	60Hz		60Hz
Horizontal frequency	48.4kHz		48.4kHz
Display colors (maximum)	16.7 million simultaneous colors		16.7 million simultaneous colors
Display modes	VGA, SVGA, XGA, SXGA		VGA, SVGA, XGA, SXGA
Brightness (luminance)	200 (max) / 170 (typ) / 150 (min) cd/m² at 100 POH		200 cd/m²
Cell response time	50ms		60ms
Contrast ratio	150:1		300:1
On screen display (OSD)	Yes (English, German, Spanish, French, Italian)		Yes (6 languages)
On screen user controls	Digital / shows mode information		Digital / shows mode information
Connector	First units: VESA P&D Later units: Digital Video Interface (DVI)		Digital Video Interface (DVI-D)
Signal cable	First units: 2.0 meter / VESA P&D on each end / detachable Later units: 2.0 meter / Digital Video Interface (DVI) / detachable / includes DVI to VESA P&D dongle		3.0 meter / Digital Video Interface (DVI-D) connector at both ends / detachable / matches color of unit
Anti-reflective	Anti-reflective		Anti-reflective
Anti-glare	Anti-glare		Anti-glare
Dimensions (with stand)	18.1"H x 18.2"W x 8.8"D 458.9mm x 461.6mm x 224.3mm		15.7"H (lowest limit) to 21.7"H (highest limit) x 16.5"W x 10.2"D 400mm (lowest limit) to 550mm (highest) x 418mm x 260mm
Weight (with stand)	20.9 lbs / 9.5 kg		23.1 lbs / 10.5 kg
Stand (base)	Tilting / detachable / meets VESA FPMPI standard		Lift, tilt, swivel and pivot base / tilting: 1° forward, 29° backward / swivel: 150° right, 150° left / detachable / meets VESA FPMPI 100mm standard
Security			Security keyhole for attachment of optional cable lock
VESA DDC1/DDC2B²	Yes		Yes
VESA DPMS compliant	DPMS		DPMS
Power management	ENERGY STAR³ / NUTEK / TCO 95		ENERGY STAR³ / NUTEK / TCO 95
Ergonomics	ISO 9241 Part 3 and 8¹, ISO 13406 Part 2¹		ISO 9241 Part 3 and 8¹, ISO 13406 Part 2¹
Emmission standards	MPR-2, MPR-3A, FCC Class B		MPR-2, MPR-3A, FCC Class B
Environmental label	TCO 95		TCO 95 (all) / TCO 99 (pearl white models only)
Power supply	Universal / external AC Adapter / less than 48 watts typical		Universal / external AC Adapter / less than 48 watts typical
Limited warranty* ⁴	3 year (includes backlight)		3 year (includes backlight)
Avail / withdrawn date	April 1999 / March 2001		June 2000 / February 2002

<p>WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ☞ 3 year limited warranty*⁴ ☞ International Warranty Service⁵ ☞ IBM Express Maintenance at 1-800-772-2227 ☞ Replacement normally arrives in two business days, excluding holidays ☞ IBM pays all shipping costs for valid warranty claims⁶ ☞ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange M-F 8-5 with next day response⁷ • On site exchange 7 day x 24 hr with 4 hour response⁷ ☞ Post warranty: on site options listed above ☞ 24 hour x 7 day telephone⁸, electronic, and Internet support 	<p>Toughened glass and touch-enabled versions of these monitors are available from, and warranted by, MicroTouch Systems, Inc. (www.microtouch.com)</p> <p>On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. IBM recommends using a refresh rate of 60Hz non-interlaced.</p>
---	--

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary (MF18D) © IBM Corp. February 2002

IBM® Flat Panel Color Monitors - US models	
Name	T540 LCD TFT Color Monitor
Case color	Pearl White Stealth Black
Type-model	9511-AW4 9511-AG4
Screen	Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	15.0" / 380.1mm
Pixel pitch (mm)	.297
Max view area (inches)	12.0" x 9.0"
Max view area (mm)	304.1mm x 228.1mm
Minimum viewing angle	110° vertical, 120° horizontal
Video input	Analog
Frequency	Multi-frequency
Max addressability	1024x768
Video input (maximum)	1024x768 at 85Hz (94.5MHz maximum pixel rate)
Corresponding screen refresh	1024x768 at 70Hz
Vertical frequency	55 to 75Hz
Horizontal frequency	31 to 60KHz
Display colors (maximum)	16.7 million simultaneous colors
Display modes	VGA: 640x480 at 60, 72, 75Hz SVGA: 800x600 at 56, 60, 72, 75Hz XVGA: 1024x768 at 60, 70, 75Hz Other: 640x350 at 70Hz 640x480 at 66Hz 720x400 at 70Hz 832x624 at 75Hz
Display presets / user settings	Factory presets: 13; user settings: 10
Brightness	200 nits or cd/m ² (typical)
Contrast ratio	350:1 (typical)
Cell response time	50ms (typical)
Scaling	Can expand image of lower addressability to full screen of 1024x768
On screen display (OSD)	On screen display with digital user controls
OSD user controls	Brightness and contrast (non lockable) Horizontal and vertical position Image position Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (5 languages: US English, French, German, Spanish, and Italian) Information screen Image lock Reset of geometry and color point to factory default settings Image size to show normal or expanded format Lockable settings
Monitor connector	One 15-pin D-shell analog
Signal cable	Detachable, 15-pin D-shell at each end, 1.8m, matches color of monitor
Anti-reflective	Anti-reflective
Anti-glare	Anti-glare
Dimensions with stand (HxWxD)	14.6 x 15.8 x 8.0" 371 x 401 x 202mm
Weight with stand	12.1 lbs / 5.5 kg
Tilt and swivel stand	Tilting, 5° forward, 40° backward / swivel / detachable
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard
Power supply	Universal / external / 30 watts typical
VESA DDC1/DDC2B ²	Yes
VESA DPMS compliant	Yes
Power management	ENERGY STAR ³ / NUTEK / TCO
Ergonomics	ISO 13406 Part 2 ¹
Emission standards	MPR-2 / MPR-3A / FCC B
Environmental label	TCO 99 TCO 95
Limited warranty ^{*.4}	3 year (includes backlight)
Available date	April 2001
Withdrawn date	April 2002

WARRANTY SERVICE SUPPORT	
<ul style="list-style-type: none"> ↪ 3 year limited warranty^{*.4} ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁵ ↪ Warranty service upgrade options: <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response⁷ (ServicePac[®] part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response⁷ (ServicePac part number 30L9183) ↪ 24 hour x 7 day telephone⁸, electronic, and Internet support 	

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

No warranties are expressed or implied in this summary
(MT540) © IBM Corp. April 2002

IBM® T Series Flat Panel Monitors - US models		
Name	T541 LCD TFT Color Monitor	<ul style="list-style-type: none"> • Exceptional flat panel design provides space savings • IBM T541 is a replacement for the IBM T540 • The IBM T541 has a new slim bezel design
Case color	Pearl White Stealth Black	
Type-model	9512-AW1 9512-AB1	
Stand (base)	Included	
Orientation	Landscape only (does not rotate to portrait)	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.0" / 381mm	
Pixel pitch (mm)	.297	
Max view area (inches)	12.0" x 9.0"	
Max view area (mm)	304.1mm x 228.1mm	
Minimum viewing angle	120° vertical (55° up/65° down), 150° horizontal	
Video input	Analog	
Frequency	Multi-frequency	
Max addressability	1024x768	
Video input (maximum)	1024x768 at 75Hz (80MHz maximum pixel rate)	
Corresponding screen refresh	1024x768 at 60Hz	
Vertical frequency	56 to 75Hz	
Horizontal frequency	30 to 60KHz	
Display colors (maximum)	16.7 million simultaneous colors	
Display modes	VGA: 640x480 at 60, 72, 75Hz SVGA: 800x600 at 56, 60, 72, 75Hz XVGA: 1024x768 at 60, 70, 75Hz Other: 640x350 at 70Hz 640x480 at 66Hz 720x400 at 70Hz 832x624 at 75Hz	
Display presets / user settings	Factory presets: 13; user settings: 10	
Brightness	250 nits or cd/m ² (typical)	
Contrast ratio	300:1 (typical)	
Cell response time	30ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1024x768	
On screen display (OSD)	On screen display with digital user controls	
OSD user controls	Information screen Brightness and contrast (non lockable) Horizontal and vertical position Image lock and image position Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (5 languages: US English, French, German, Spanish, and Italian) Reset of geometry and color point to factory default settings Lockable settings	
Monitor connector	One 15-pin D-shell analog	
Signal cable	Detachable, 15-pin D-shell at each end, 1.8 meter, matches color of monitor	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions with stand (HxWxD)	13.6 x 14.4 x 8.0" 345 x 365 x 202mm	
Weight with stand	10.5 lbs / 4.8 kg	
Tilt stand	Tilting, 4° forward, 41° backward / no swivel / detachable	
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard	
Power supply	Universal / external / 30 watts typical	
Ship group	Monitor, attached tilt stand, Setup Guide, Safety and Warranty Information, CD with multilingual User's Guide and monitor installation files, analog signal cable, external power supply, detachable 1.8 meter power cord	
Security	Security keyhole for attachment of optional cable lock	
VESA DDC1/DDC2B ²	Yes	
VESA DPMS compliant	Yes	
Power management	ENERGY STAR ³ / TCO	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC B	
Environmental label	TCO 99	
Limited warranty ⁴	3 year (includes backlight)	
Available date	April 2002	

LIMITED WARRANTY	OPTIONS
<ul style="list-style-type: none"> ↻ 3 year limited warranty⁴ ↻ International Warranty Service⁵ ↻ IBM Express Maintenance at 1-800-772-2227 ↻ Replacement normally arrives in two business days, excluding holidays ↻ IBM pays all shipping costs for valid warranty claims ↻ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↻ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p>IBM 15-Inch Flat-Panel Speaker Bezel</p> <ul style="list-style-type: none"> • Two stereo speakers • Slides on to the bezel of monitor from the top with speakers to the side • Uses no desk space • Power on/off button and volume control knob on right side of unit • Innovative carbon fiber composite flat-speaker technology • Two watts per channel (4 watts total) • Utilizes the existing power from the monitor; 3 meter audio cable • Headphone jack on right side of unit provides private listening • Supported on IBM Monitors T541, T541H, and T560 • Stealth black color • Part number 22P8986 <p>Apple Attach Dongle</p> <ul style="list-style-type: none"> • Part number 96G2694

IBM® T Series Flat Panel Monitors - US models

Name	T541H LCD TFT Color Monitor	<ul style="list-style-type: none"> • Exceptional flat panel design provides space savings. • IBM T541H 15.0-inch hybrid flat-panel color monitor offers dual connectors that support either analog or digital system attachment. This attachment flexibility allows you to migrate from analog to digital attachment without having to acquire a new monitor. The monitor offers a stylish, compact slim bezel design with integrated power. • The T541H is capable of accepting dual input. This can be from one analog input and one digital input (it can not accept two analog inputs).
Case color	Pearl White Stealth Black	
Type-model	9512-HW0 9512-HB0	
Stand (base)	Included	
Orientation	Landscape only (does not rotate to portrait)	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.0" / 381mm	
Pixel pitch (mm)	.297	
Max view area (inches)	12.0" x 9.0"	
Max view area (mm)	304.1mm x 228.1mm	
Minimum viewing angle	130° vertical (+/-65 degrees), 160° horizontal (+-80 degrees)	
Video input	Analog and/or digital (two separate connectors)	
Dual input	Dual input (two different PCs attach to two different connectors; one PC shows image; select via button on monitor)	
Frequency	Multi-frequency	
Max addressability	1024x768	
Video input (maximum)	1024x768 at 75Hz (80MHz maximum pixel rate)	
Corresponding screen refresh	1024x768 at 60Hz	
Vertical frequency	56 to 75Hz	
Horizontal frequency	31 to 61KHz	
Display colors (maximum)	16.0 million simultaneous colors	
Display modes	VGA: 640x480 at 60, 66, 70, 72, 75Hz SVGA: 800x600 at 56, 60, 72, 75Hz XVGA: 1024x768 at 60, 70, 75Hz Other: 640x350 at 70Hz 720x400 at 70Hz 832x624 at 75Hz	
Display presets / user settings	Factory presets: 13; user settings: 10	
Brightness	250 nits or cd/m ² (typical)	
Contrast ratio	300:1 (typical)	
Cell response time	40ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1024x768	
On screen display (OSD)	On screen display with digital user controls	
OSD user controls	Information screen Brightness and contrast (non lockable) / horizontal and vertical position Image lock and image position Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (5 languages: US English, French, German, Spanish, and Italian) Reset of geometry and color point to factory default settings / lockable settings	
Monitor connector	Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-D)	
Signal cable	Detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor / digital attachment requires customer supplied video cable with DVI-D connector on both ends	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions with stand (HxWxD)	14.0 x 14.4 x 8.0" / 356 x 365 x 202mm	
Weight with stand	9.5 lbs / 4.3 kg	
Tilt stand	Tilting, 4° forward, 41° backward / no swivel / detachable	
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard	
Power supply	Universal / integrated (no external brick-like power supply) / 25 watts typical / 1.8 meter power cord	
Ship group	Monitor, attached tilt stand, Setup Guide, Safety and Warranty Information, CD with User's Guide and monitor installation files, analog signal cable, detachable 1.8 meter power cord	
Security	Security keyhole for attachment of optional cable lock	
VESA DDC1/DDC2B ²	Yes	
VESA DPMS-compliant	Yes	
Power management	ENERGY STAR ³ / TCO	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC B	
Environmental label	TCO 99	
Limited warranty ⁴	3 year (includes backlight)	
Available date	August 2002	

LIMITED WARRANTY

- ↔ **3 year limited warranty⁴**
- ↔ **International Warranty Service⁵**
- ↔ **IBM Express Maintenance at 1-800-772-2227**
- ↔ **Replacement normally arrives in two business days, excluding holidays**
- ↔ **IBM pays all shipping costs for valid warranty claims**
- ↔ **Service upgrade options⁷:**
 - **3 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac[®] part number 30L9179)
 - **3 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 30L9183)
 - **4 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac part number 69P9182)
 - **4 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 69P9183)
- ↔ **24x7⁹ day toll-free support for warranty issues during the warranty period⁴**

OPTIONS

- IBM 15-Inch Flat-Panel Speaker Bezel
- Two stereo speakers
 - Slides on to the bezel of monitor from the top with speakers to the side
 - Uses no desk space
 - Power on/off button and volume control knob on right side of unit
 - Innovative carbon fiber composite flat-speaker technology
 - Two watts per channel (4 watts total)
 - Utilizes the existing power from the monitor; 3 meter audio cable
 - Headphone jack on right side of unit provides private listening
 - Supported on IBM Monitors T541, T541H, and T560
 - Stealth black color
 - Part number 22P8986
- Apple Attach Dongle
- Part number 96G2694
- IBM Radial Arm⁹
- Part number 19K4464

See footnotes for important warranty information
US models announced July 16, 2002
US models withdrawn from marketing effective July or October 2003

IBM® T Series Flat Panel Monitors - US models

Name	T545 LCD TFT Color Monitor	<ul style="list-style-type: none"> • Exceptional flat panel design provides space savings. • The T545 is a hybrid monitor having both analog and digital interfaces implemented via one DVI-I connector on the back of the monitor. This allows one monitor to connect to either technology of graphics adapter by using the appropriate interface cable. • The T545 replaces the T54H.
Case color	Pearl White Stealth Black	
Type-model	6653-HW2 6653-HG2	
Stand (base)	Included	
Orientation	Landscape only	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.1" / 384.5mm	
Pixel pitch (mm)	.30mm	
Max view area (inches)	12.1" x 9.1"	
Max view area (mm)	307.2mm x 230.4mm	
Minimum viewing angle	120° horizontal (+/-60°), 110° vertical (+/-45°)	
Video input	Digital or analog (one connector)	
Frequency	Multi-frequency	
Max addressability	1024x768	
Video input (maximum)	1024x768 at 75Hz (78MHz maximum pixel rate)	
Corresponding scr refresh	1024x768 at 70Hz	
Vertical frequency	56 to 75Hz	
Horizontal frequency	31.5 to 61kHz	
Display colors (maximum)	16.7 million simultaneous colors	
Preset display modes	VGA: 640x350 70Hz 640x480 60, 66, 75Hz 720x400 70Hz SVGA: 800x600 56, 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75Hz	
Factory presets / user sett	Factory presets: 13 / user locations: 10	
Brightness	200 nits or cd/m ²	
Contrast ratio	300:1	
Cell response time	45ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1024x768	
On screen display	On screen display with digital user controls (5 languages)	
Control features	Brightness Image setup User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time, size Information screen Lockable settings	
Monitor connector	One Digital Visual Interface (DVI-I)	
Signal cables	Two cables: (1) detachable 3.0 m analog, 15-pin D-shell attaches to graphics adapter, DVI-A attaches to monitor (2) detachable 3.0 m digital, DVI-D attaches to graphics adapter, DVI-D attaches to monitor All cables match color of monitor	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions (with stand)	(In landscape orientation) 15.8"W x 9.8"D x 18.2"H (at maximum lift) or 13.3"H (at minimum lift) (In landscape orientation) 401.3mm x 250mm x 463.5mm (at maximum lift) or 338.5mm (at minimum lift)	
Weight (with stand)	12.5 lbs / 5.7 kg	
Stand	Lift, 5" / tilting, 0° forward, 40° backward / swivel, ± 150° / detachable	
Mounting features	Wall or desk mounting using optional IBM Radial Arm (not included) or third-party accessories meeting the VESA FPMPI standard	
Security	Security keyhole for attachment of optional cable lock	
VESA DDC1/DDC2B ²	Yes	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³ / NUTEK	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC class B	
Environmental label	TCO 99 (pearl white model HW2) / TCO 95 (black model HG2)	
Power supply	Universal / external / 30 watts typical	
Ship group	Monitor, attached tilt stand, User Guide, installation diskette (set-up test pattern, .inf, .icm files), analog signal cable, digital signal cable, external power supply, power cord	
Limited warranty ⁴	3 year (includes backlight)	
Available date	June 2001	

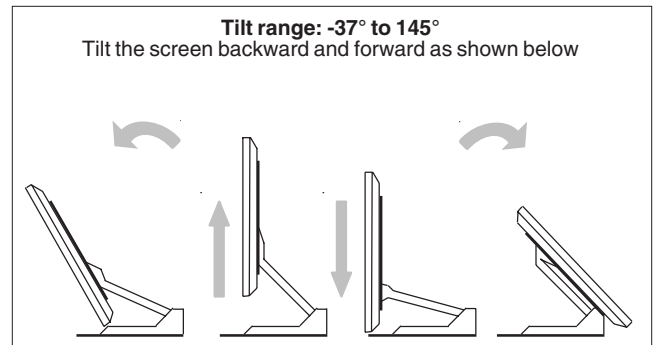
<p align="center">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Warranty service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac[®] part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p>OPTIONS</p> <p>Radial Arm Kit 19K4464</p>
---	--

See footnotes for important warranty information
US models announced June 12, 2001
US models withdrawn effective November 2002

IBM® T Series Flat Panel Monitors - US models

Name	T560 LCD TFT Color Monitor	• Exceptional flat panel design provides space savings.
Case color	Pearl White Business black	• The T560 is a hybrid monitor having both analog and digital interfaces via one analog connector and one DVI-D connector on the back of the monitor. This allows one monitor to connect to different types of graphics adapters. It tilts backward 145 degrees allowing someone across a desk from the user to view the image. It also allows the user to choose between portrait and landscape viewing.
Type-model	6656-HW2 6656-HG2	• The T560 replaces the T56.
Stand (base)	Included	
Orientation	Landscape or portrait (includes Pivot® software)	
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	15.0" / 380.1mm	
Pixel pitch (mm)	.30mm	
Max view area (inches)	12.1" x 9.1"	
Max view area (mm)	304.1mm x 228.1mm	
Minimum viewing angle	120° horizontal (+/-60°), 90° vertical (+/-45°)	
Video input	Digital or analog (two connectors)	
Dual input	Dual input (two different PCs attach to two different connectors; one PC shows image; select via button on monitor)	

Frequency	Multi-frequency
Max addressability	1024x768
Video input (maximum)	79MHz maximum pixel rate
Corresponding scr refresh	1024x768 at 75Hz
Vertical frequency	56 to 75Hz
Horizontal frequency	31.5 to 61kHz
Display colors (maximum)	16.7 million simultaneous colors
Preset display modes	VGA: 640x350 70Hz 640x480 60, 67, 75Hz 720x400 70Hz SVGA: 800x600 56, 60, 72, 75Hz 832x624 75Hz (Apple) XGA: 1024x768 60, 70, 75Hz
Presets / user settings	IBM presets: 13 / user settings: 10
Brightness	250 nits or cd/m ²
Contrast ratio	300:1
Cell response time	45ms (typical)
Scaling	Can expand image of lower addressability to full screen of 1024x768



On screen display	On screen display with digital user controls (5 languages)
Control features	Brightness Image setup User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time, size Information screen, lockable settings
Monitor connector	Two connectors: one analog 15-pin D-shell, one Digital Visual Interface (DVI-D)
Signal cables	Two cables: (1) detachable 3.0 m analog, 15-pin D-shell attaches to graphics adapter, 15-pin D-shell to monitor (2) detachable 3.0 m digital, DVI-D attaches to graphics adapter, DVI-D attaches to monitor All cables match color of monitor
Anti-reflective / anti-glare	Anti-reflective / anti-glare
Dimensions (with stand)	(In landscape orientation) 14.4"W x 9.3"D x 17.2"H (at maximum lift) or 12.3"H (at minimum lift) (In landscape orientation) 365.2mm x 235mm x 435.8mm (at maximum lift) or 312mm (at minimum lift)
Weight (with stand)	10.8 lbs / 4.9 kg
Stand	Lift, 0 to 4.9" in landscape, 0 to 3.9" in portrait / tilting, 37° forward, 145° backward / no swivel / detachable
Mounting features	Wall or desk mounting using optional IBM Radial Arm (not included) or third-party accessories meeting the VESA FPMPI standard
Security	Security keyhole for attachment of optional cable lock (Kensington® lock-compatible)
VESA DDC1/DDC2B ²	Yes
VESA DPMS compliant	DPMS
Power management	ENERGY STAR ³ / NUTEK
Ergonomics	ISO 13406 Part 2 ¹
Emission standards	MPR-2 / MPR-3A / FCC class B
Environmental label	TCO 99
Power supply	100-240Vac (universal) / external / 30 watts typical
Ship group	Monitor, attached tilt stand, User Guide, installation diskette (set-up test pattern, .inf, .icm files), analog signal cable, digital signal cable, external power supply, 1.8-meter power cord, Pivot Pro Software CD-ROM for 90°, 180°, and 270° image rotation
Limited warranty ⁴	3 year (includes parts, labor and backlight)
Available date	September 2001

<p>LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service registration available⁵ ↪ IBM Express Maintenance at 1-800-IBM-SERV (426-7378) ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	<p>OPTIONS</p> <table border="1"> <tr> <td>Radial Arm Kit⁹</td> <td>19K4464</td> <td rowspan="2">For the most up-to-date compatibility information, visit ibm.com/options</td> </tr> <tr> <td>Apple attach dongle</td> <td>96G2694</td> </tr> </table>	Radial Arm Kit ⁹	19K4464	For the most up-to-date compatibility information, visit ibm.com/options	Apple attach dongle	96G2694
	Radial Arm Kit ⁹	19K4464	For the most up-to-date compatibility information, visit ibm.com/options			
Apple attach dongle	96G2694					
	<p>Landscape and portrait</p> <p>The monitor rotates 90° from landscape to portrait and back</p>					

See footnotes for important warranty information
US models announced September 18, 2001
US models withdrawn effective July 2003 (6656-HW2) or May 2004 (6656-HG2)

IBM® Flat Panel Color Monitors - US models		
<p>Name Case color Type-model Screen Viewable image size (diag) Pixel pitch (mm) Max view area (inches) Max view area (mm) Minimum viewing angle Video input Dual input</p>	<p>T710 LCD TFT Color Monitor Pearl White Stealth Black 6637-AW0 6637-AB0 Active Matrix TFT (Thin Film Transistor) 17.0" / 432mm .264 13.3" x 10.6" 338mm x 270mm 125° vertical (+65 degrees up/-60 degrees down), 150° horizontal (+/-75 degrees) Analog No</p>	<ul style="list-style-type: none"> • Exceptional flat panel design provides space savings • IBM T710 17.0-inch flat panel monitor is an ideal replacement for a 19" or smaller CRT monitor
<p>Frequency Max addressability Video input (maximum) Corresponding screen refresh Vertical frequency Horizontal frequency Display colors (maximum) Display modes</p>	<p>Multi-frequency 1280x1024 1280x1024 at 75Hz (135MHz maximum pixel rate) 1280x1024 at 75Hz 56 to 75Hz 31 to 81KHz 16.2 million simultaneous colors VGA: 640x480 at 60, 72, 75Hz SVGA: 800x600 at 56, 60, 72, 75Hz XGA: 1024x768 at 60, 70, 75Hz SXGA: 1280x1024 at 60, 75Hz Others: 640x350 at 70Hz 720x400 at 70Hz 832x624 at 75Hz</p>	
<p>Display presets / user settings Brightness Contrast ratio Cell response time Scaling</p>	<p>Factory presets: 16; user settings: 15 250 nits or cd/m² (typical) 350:1 (typical) 30 ms (typical) Can expand image of lower addressability to full screen of 1280x1024</p>	
<p>On screen display (OSD) OSD user controls</p>	<p>On screen display with digital user controls Brightness and contrast (non lockable) Horizontal and vertical position Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (6 languages: US English, French, German, Spanish, Italian, and Japanese) Information screen Image lock Reset of geometry and color point to factory default settings Menu position Menu display time Lockable settings</p>	
<p>Monitor connector Signal cable Anti-reflective / anti-glare Dimensions with stand (HxWxD) Weight with stand Tilt stand Mounting features Power supply Ship group</p>	<p>One connector: analog 15-pin D-shell Detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor Anti-reflective / anti-glare 18.0 H x 16.3 W x 8.2" D 457 x 414 x 208mm 12.6 lbs / 5.7 kg Tilting, 5° forward, 30° backward / no swivel / detachable Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard Universal / integrated (no external brick-like power supply) / <40watts typical / power cord matches monitor color Monitor, attached tilt stand, Setup Guide, Safety and Warranty Information, CD with User's Guide and monitor installation files, analog signal cable (15-pin to 15-pin), and detachable 1.8 meter power cord</p>	
<p>Security</p>	<p>Security keyhole for attachment of optional cable lock</p>	
<p>VESA DDC1/DDC2B² VESA DPMS-compliant Power management Ergonomics Emission standards Environmental label</p>	<p>Yes Yes ENERGY STAR³ ISO 13406 Part 2¹ MPR-2 / MPR-3A / FCC B TCO 99</p>	
<p>Limited warranty⁴ Available date</p>	<p>3 year (includes backlight) September 2002</p>	
OPTIONS		<p style="text-align: center;">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • 3 year, on site exchange Mon-Fri 9-5 with next day response (ServicePac[®] 30L9179) • 3 year, on site exchange 7 day x 24 hr with 4 hour response (ServicePac 30L9183) • 4 year, on site exchange Mon-Fri 9-5 with next day response (ServicePac 69P9186) • 4 year, on site exchange 7 day x 24 hr with 4 hour response (ServicePac 69P9187) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴
<p>IBM Radial Arm⁹</p>	<p>19K4464</p>	

See footnotes for important warranty information
US models announced September 10, 2002

US models withdrawn from marketing effective May 2003 (6637-AW0) or August 2003 (6637-AB0)

IBM® T Series Flat Panel Monitors - US models	
<p>Name Case color Type-model Screen Viewable image size (diag) Pixel pitch (mm) Max view area (inches) Max view area (mm) Minimum viewing angle Video input Dual input</p>	<p>T750 LCD TFT Color Monitor Pearl White Stealth Black 6657-HW2 6657-HG2 Active Matrix TFT (Thin Film Transistor) 17.0" / 431.8mm .264 13.3" x 10.6" 337.9mm x 270.3mm 160° vertical, 160° horizontal Analog or digital (two separate connectors) Dual input (two different PCs attach to two different connectors; one PC shows image; select via button on monitor)</p>
<p>Frequency Max addressability Video input (maximum) Corresponding screen refresh Vertical frequency Horizontal frequency Display colors (maximum) Display modes</p>	<p>Multi-frequency 1280x1024 1280x1024 at 76Hz (135MHz maximum pixel rate) 1280x1024 at 76Hz 55 to 85Hz 31 to 81KHz 16.7 million simultaneous colors VGA: 640x480 at 60, 66, 72, 75Hz SVGA: 800x600 at 60, 72, 75Hz XGA: 1024x768 at 60, 75Hz SXGA: 1280x1024 at 70, 72, 76Hz Others: 640x350 at 70Hz 720x400 at 70Hz 832x624 at 75Hz 1152x864 at 75Hz 1152x870 at 75Hz 1152x900 at 66Hz</p>
<p>Display presets / user settings Brightness Contrast ratio Cell response time Scaling</p>	<p>Factory presets: 7; user settings: 21 200 nits or cd/m² (typical) 350:1 (typical) 35ms (typical) Can expand image of lower addressability to full screen of 1280x1024</p>
<p>On screen display (OSD) OSD user controls</p>	<p>On screen display with digital user controls Brightness and contrast (non lockable) Horizontal and vertical position Image setup (automatic setup (non lockable) or manual setup) Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (5 languages: US English, French, German, Spanish, and Italian) Information screen Image lock Reset of geometry and color point to factory default settings Image size to show normal or expanded format Input select (analog or digital) Lockable settings</p>
<p>Monitor connectors Signal cables</p>	<p>Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-I); select input via OSD Two cables: (1) detachable analog, 15-pin D-shell at each end, 1.8m, matches color of monitor (2) detachable digital, DVI-D at each end, 3.0m, matches color of monitor</p>
<p>Anti-reflective / anti-glare Dimensions with stand (HxWxD)</p>	<p>Anti-reflective / anti-glare 17.0 x 17.2 x 9.8" 431 x 436.2 x 248mm</p>
<p>Weight with stand Tilt and swivel stand Mounting features Power supply Security</p>	<p>15.4 lbs / 7.0 kg Tilting, 4° forward, 40° backward / swivel / detachable Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard Universal / external / 45 watts typical Security keyhole for attachment of optional cable lock</p>
<p>VESA DDC1/DDC2B² VESA DPMS compliant Power management Ergonomics Emission standards Environmental label</p>	<p>Yes Yes ENERGY STAR³ ISO 13406 Part 2¹ MPR-2 / MPR-3A / FCC B TCO 99</p>
<p>Limited warranty⁴ Available date</p>	<p>3 year (includes backlight) April 2001</p>
<p>The T750 is capable of accepting dual input. This can be one analog and one digital input or two analog inputs. Dual analog input requires a customer-supplied cable that has DVI-A connectors on both ends or it requires DVI-A on the monitor end and 15-pin D-shell on the system end. The cable will depend on the type of interface in the system unit.</p> <p>The T84H offers all of the capabilities of the T750 monitor with a larger viewing area.</p>	<p style="text-align: center;">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↔ 3 year limited warranty⁴ ↔ International Warranty Service⁵ ↔ IBM Express Maintenance at 1-800-772-2227 ↔ Replacement normally arrives in two business days, excluding holidays ↔ IBM pays all shipping costs for valid warranty claims⁶ ↔ Warranty service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (30L9179) • On site exchange 7 day x 24 hr with 4 hour response (30L9183) ↔ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴

See footnotes for important warranty information
US models announced April 17, 2001
US models withdrawn effective November 2002

IBM® T Series Flat Panel Color Monitors - US models

Name	T750 LCD TFT Color Monitor	<ul style="list-style-type: none"> • Exceptional flat panel design provides space savings. • IBM T750 17.0-inch hybrid flat-panel color monitor offers dual connectors that support either analog or digital system attachment. This attachment flexibility allows you to migrate from analog to digital attachment without having to acquire a new monitor.
Case color	Pearl White Stealth Black	
Type-model	6657-HW0 6657-HG0	<ul style="list-style-type: none"> • The T750 is capable of accepting dual input so it can be attached to two different systems concurrently. This can be from one analog and one digital connection or two analog connections. • Dual analog input requires a customer supplied cable. Depending on the system interface the cable must have DVI-A connectors on both ends or DVI-A on the monitor end and a 15-pin D shell connector on the system end.
Screen	Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	17.0" / 432mm	
Pixel pitch (mm)	.264	
Max view area (inches)	13.3" x 10.6"	
Max view area (mm)	338mm x 270mm	
Minimum viewing angle	170° vertical (+/-85 degrees), 170° horizontal (+/-85 degrees)	
Video input	Analog or digital (two separate connectors)	
Dual input	Dual input (two different PCs attach to two different connectors; one PC shows image; select via button on monitor)	
Frequency	Multi-frequency	
Max addressability	1280x1024	
Video input (maximum)	1280x1024 at 76Hz (135MHz maximum pixel rate)	
Corresponding screen refresh	1280x1024 at 76Hz	
Vertical frequency	55 to 75Hz	
Horizontal frequency	31 to 81KHz	
Display colors (maximum)	16.2 million simultaneous colors	
Display modes	VGA: 640x480 at 60, 66, 72, 75Hz SVGA: 800x600 at 56, 60, 72, 75Hz XGA: 1024x768 at 60, 70, 75Hz SXGA: 1280x1024 at 70, 72, 75Hz Others: 640x350 at 70Hz 720x400 at 70Hz 832x624 at 75Hz 1152x864 at 75Hz 1152x870 at 75Hz 1152x900 at 66Hz	
Display presets / user settings	Factory presets: 7; user settings: 15	
Brightness	250 nits or cd/m ² (typical)	
Contrast ratio	500:1 (typical)	
Cell response time	25 ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1280x1024	
On screen display (OSD)	On screen display with digital user controls	
OSD user controls	Brightness and contrast (non lockable) Horizontal and vertical position Image setup (automatic setup (non lockable) or manual setup) Color mode (color mode selection or color mode control (RGB)) User color settings (3 presets + 1 user) Language selection (5 languages: US English, French, German, Spanish, and Italian) Information screen Image lock Reset of geometry and color point to factory default settings Image size to show normal or expanded format Input select (analog or digital) Lockable settings	
Monitor connectors	Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-I); select input via OSD	
Signal cables	Detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor / for digital attachment, a video cable with DVI-D on both ends must be supplied by the customer	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions with stand (HxWxD)	17.0 H x 17.2 W x 9.8" D 431 x 436 x 248mm	
Weight with stand	15.4 lbs / 7.0 kg	
Tilt and swivel stand	Tilting, 4° forward, 40° backward / swivel +/-150° / detachable	
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard	
Power supply	Universal / external / 45 watts typical	
Ship group	Monitor, attached tilt/swivel stand, Setup Guide, Safety and Warranty Information, CD with User's Guide and monitor installation files, analog signal cable (15-pin to 15-pin), detachable 1.8 meter power cord, external power supply	
Security	Security keyhole for attachment of optional cable lock	
VESA DDC1/DDC2B ²	Yes	<p>LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-772-2227 ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁵ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • 3 year, on site exchange Mon-Fri 9-5 with next day response (ServicePac® 30L9179) • 3 year, on site exchange 7 day x 24 hr with 4 hour response (ServicePac 30L9183) • 4 year, on site exchange Mon-Fri 9-5 with next day response (ServicePac 69P9186) • 4 year, on site exchange 7 day x 24 hr with 4 hour response (ServicePac 69P9187) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴
VESA DPMS-compliant	Yes	
Power management	ENERGY STAR ³	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC B	
Environmental label	TCO 99	
Limited warranty ⁴	3 year (includes backlight)	
Available date	September 2002	
OPTIONS		
IBM Radial Arm ⁹	19K4464	

See footnotes for important warranty information

US models announced September 10, 2002

US models withdrawn from marketing effective July 2003 (6657-AW0) or August 2003 (6657-AB0)

IBM® T Series Flat Panel Monitors - US models

Name	T860 LCD TFT Color Monitor			
Case color	Pearl white	Business black	Pearl white	Business black
Type-model	9494-HW0	9494-HB0	9494-HWN	9494-HBN
Stand	Stand included	Stand included	No stand	No stand
Screen	Active Matrix TFT (Thin Film Transistor)			
Viewable image size (diag)	18.1" / 460mm (diagonal)			
Pixel pitch (mm)	.28mm			
Max view area (inches)	14.1" x 11.3" (horizontal x vertical)			
Max view area (mm)	359mm x 287mm (horizontal x vertical)			
Minimum viewing angle	160° vertical, 160° horizontal			
Video input	Digital or analog (two separate connectors)			
Dual input	Dual input (two different PCs attach to two different connectors; one PC shows image; select via button on monitor)			
Frequency	Multi-frequency (supports sync on green)			
Max addressability	1280x1024			
Video input (maximum)	1280x1024 at 75Hz (135MHz maximum pixel rate)			
Corresponding scr refresh	1280x1024 at 75Hz			
Vertical frequency	55 to 75Hz			
Horizontal frequency	31 to 81kHz			
Display colors (maximum)	16.7 million simultaneous colors			
Preset display modes	VGA: 640x480 60, 75Hz 640x350 70Hz 720x400 70Hz SVGA: 800x600 60, 75Hz 832x624 75Hz XGA: 1024x768 60, 75Hz 1152x870 75Hz 1152x900 66Hz SXGA: 1280x1024 60, 75Hz			
Factory presets / user sett	Factory presets: 13 or 16 (effective June 2003, serial number 66-T0001 and after have 13 presets), user locations: 10			
Brightness	250 nits or cd/m ² (typical)			
Contrast ratio	300:1 (typical)			
Cell response time	50ms (typical)			
Scaling	Can expand image of lower addressability to full screen of 1280x1024			
On screen display	On screen display with digital user controls (5 languages)			
Control features	Brightness and contrast User color settings (3 preset + 1 user) Image horizontal and vertical position On Screen Display (OSD) language selection, menu position, display time Information screen; image setup; image size to show normal or expanded format Reset of geometry and color point to factory default settings; lockable settings			
Monitor connectors	Two connectors: (1) analog 15-pin D-shell, (2) Digital Visual Interface (DVI-I)			
Signal cable	Two cables: (1) detachable analog, 15-pin D-shell, 3.0m, matches color of monitor (2) detachable digital, DVI-D, 3.0m, matches color of monitor			
Anti-reflective / anti-glare	Anti-reflective / anti-glare			
Dimensions	13.6"H min lift (17.7" max lift) x 15.6"W x 10.2"D 346mm min lift (450mm max lift) x 397mm x 259mm		13.0"H x 15.6"W x 2.9"D 330mm x 397mm x 75mm	
Weight	19.5 lbs / 9.1 kg		12.0 lbs / 5.5 kg	
Viewing adjustments	Tilt: 30° back / lift: 4.1" / swivel / detachable stand			
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard			
Security	Security keyhole for attachment of optional cable lock			
VESA DDC2B ²	Yes			
VESA DPMS compliant	DPMS			
Power management	ENERGY STAR ³			
Ergonomics	ISO 13406 Part 2 ¹			
Emission standards	MPR-2 / MPR-3A			
Environmental label	TCO 99			
Ship group	Monitor, attached tilt stand (some models), User Guide, installation diskette (set-up test pattern, .inf, .icm files), analog signal cable, digital signal cable, power cord			
Power supply	Universal / integrated (no external brick-like power supply) / 55 watts typical			
Limited warranty ⁴	3 year (includes backlight)			
Avail / withdrawn date	Feb 2002 / Aug 2003	Feb 2002 / Apr 2004	January 2002 / February 2003	

- Exceptional flat panel design provides space savings.
- The T860 is a hybrid monitor. It has both an analog (15-pin D-shell) and digital or analog (Digital Visual Interface [DVI-I]) connector on the back of the monitor. This allows one monitor to connect to different types of graphics adapters.

FEATURES

- 18.1-inch viewable image area
- Ultra thin bezel (18mm)
- 1280 x 1024 addressability
- Integrated power (no external power supply)
- Scaling to allow viewing of full page images of resolutions
- Vertical lift for viewing comfort adjustment
- Tilt swivel
- Models with and without stand
- Analog or digital connectivity
- Lockable digital controls
- Models available in pearl white and business black

LIMITED WARRANTY

- ↪ **3 year limited warranty⁴**
- ↪ **International Warranty Service⁵**
- ↪ **IBM Express Maintenance at 1-800-772-2227**
- ↪ **Replacement normally arrives in two business days, excluding holidays**
- ↪ **IBM pays all shipping costs for valid warranty claims⁶**
- ↪ **Service upgrade options:⁷**
 - **On site exchange M-F 8-5 with next day response** (ServicePac® part number 30L9179)
 - **On site exchange 7 day x 24 hr with 4 hour response** (ServicePac part number 30L9183)
- ↪ **24x7⁸ day toll-free support for warranty issues during the warranty period⁴**

OPTIONS

IBM T860 Speaker/USB Hub

- Speaker and USB port solution
- Two one-watt stereo speakers with volume control
- Four downstream USB ports (Version 1.1) to connect four additional USB devices to computer
- Attaches to bottom bezel of T860
- Uses no desk space
- Volume control knob
- Headphone jack provides private listening
- Microphone jack
- Utilizes the existing power from the monitor
- Supported on T860 with serial numbers that begin with 66-Axxxx
- Business black color part number 19K1901
- Pearl white color part number 19K1902

See footnotes for important warranty information
US models announced November 27, 2001
US models withdrawn effective January 2003, August 2003, or April 2004

IBM® T Series Flat Panel Monitors - US models	
Name	T210 LCD TFT Color Monitor
Case color	Pearl White Stealth Black
Type-model	6659-HW2 6659-HG2
Screen	Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	20.8" / 528mm
Pixel pitch (mm)	.207
Max view area (inches)	16.7" x 12.5"
Max view area (mm)	423.9mm x 318.0mm
Minimum viewing angle	170° vertical, 170° horizontal
Computer video input	Dual input / digital or analog (two separate connectors)
Video input	TV video input (NTSC) via 1 of 2 connectors for picture in picture (PIP) utilization
Frequency	Multi-frequency
Max addressability	2048x1536
Video input (maximum)	2048x1536 at 60Hz (240MHz maximum pixel rate)
Corresponding screen refresh	2048x1536 at 60Hz
Vertical frequency	55 to 100Hz
Horizontal frequency	31 to 120KHz
Display colors (maximum)	16.7 million simultaneous colors
Display modes	VGA: 640x480 at 60, 66, 72, 75, 85Hz SVGA: 800x600 at 56, 60, 72, 75, 85Hz XGA: 1024x768 at 60, 70, 75, 85Hz SXGA: 1280x1024 at 60, 70, 75Hz QXGA: 2048x1536 at 60Hz Others: 720x350 at 60Hz 1600x1200 at 60Hz
Display presets / user settings	Factory presets: 7; user settings: 10
Brightness	235 nits or cd/m ² (typical)
Contrast ratio	300:1 (typical)
Cell response time	50ms (typical)
Scaling	Can expand image of lower addressability to full screen of 2048 x1536
On screen display (OSD)	On screen display with digital user controls
OSD user controls	Brightness and contrast (non lockable) Horizontal and vertical position Image setup Color mode (color mode selection or color mode control (RGB)) User color settings (3 preset + 1 user) Language selection (6 languages: US English, French, German, Spanish, and Italian) Information screen Image lock Reset of geometry and color point to factory default settings Image size to show normal or expanded format Input select (analog or digital) Picture in picture (PIP) Time Lockable settings
Monitor connectors	Two connectors: (1) Analog 15-pin D-shell, (2) Digital Visual Interface (DVI-I), (computer attachment)
Other connectors	Two connectors: (1) RCA composite video, (2) S-video (for PIP)
Signal cables	Two cables: (1) detachable analog, 15-pin D-shell at each end, 1.8m, matches color of monitor (2) detachable digital, DVI-D at each end, 3.0m, matches color of monitor
Anti-reflective / anti-glare	Anti-reflective / anti-glare
Dimensions with stand(HxWxD)	20.1 x 19.6 x 11.0" 510 x 497 x 280mm
Weight with stand	23.1 lbs / 10.5 kg
Tilt and swivel stand	Tilting, 5° forward, 20° backward / swivel / detachable
Mounting features	Wall or desk mounting using the IBM Radial Arm or third-party accessories meeting the VESA FPMPI standard
Power supply	Universal / external / 100 watts typical
Security	Security keyhole for attachment of optional cable lock
VESA DDC1/DDC2B ²	Yes
VESA DPMS compliant	Yes
Ergonomics	ISO 13406 Part 2 ¹
Emission standards	MPR-2 / MPR-3A / FCC B
Environmental label (TCO 95/99)	No
Limited warranty ⁴	3 year (includes backlight)
Avail / withdrawn date	April 2001 / February 2003
<p>The T210 is capable of accepting dual input. This can be one analog and one digital input or two analog inputs. Dual analog input requires a customer-supplied cable that has DVI-A connectors on both ends or it requires DVI-A on the monitor end and 15-in D-shell on the system end. The cable will depend on the type of interface in the system unit.</p> <p>The T210 supports the display of TV (NTSC) video within a picture in picture (PIP) frame. The video source attaches to the monitor via either an RCA composite video or S-video input.</p>	
<p style="text-align: center;">LIMITED WARRANTY</p> <ul style="list-style-type: none"> ↻ 3 year limited warranty⁴ ↻ International Warranty Service⁵ ↻ IBM Express Maintenance at 1-800-772-2227 ↻ Replacement normally arrives in two business days, excluding holidays ↻ IBM pays all shipping costs for valid warranty claims⁶ ↻ Warranty service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac® part number 30L9179) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) ↻ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴ 	

IBM Monitors (T Series / T220) - withdrawn

IBM® Flat Panel Color Monitors - US models

Name	T220 LCD TFT Color Monitor
Case color	Stealth Black
Type-model	9503-DG0
Graphics adapter included	Matrox® G200 MMS / 32-bit PCI adapter / 32MB SGRAM / 250MHz RAMDAC / monitor attached by two standard monitor cables to two 60-pin connectors on adapter
Orientation	Landscape only
Screen	Active Matrix TFT (Thin Film Transistor) Liquid Crystal Display
Viewable image size (diag)	22.2" / 564mm
Pixel pitch (mm)	.125
Max view area HxW (inches)	11.8" x 18.8"
Max view area HxW (mm)	298.8mm x 478.1mm
Viewing angle	170° vertical, 170° horizontal
Video input	Digital
Max addressability	3840x2400 (QUXGA-W)
Video input (native)	3840x2400 at 40.93Hz (104.78MHz maximum pixel rate)
Video input (DOS / VGA)	960x1200 at 55.74Hz (70.98MHz maximum pixel rate)
Vertical frequency	QUXGA-W: 40.93Hz (DOS / VGA: 55.74Hz)
Horizontal frequency	QUXGA-W: 99.22khz (DOS / VGA: 67.22khz)
Display modes	QUXGA-W: 3840x2400 at 40.93Hz (DOS / VGA: 960x1200) x 4 at 55.74Hz)
Display colors (maximum)	16.7 million simultaneous colors
Brightness	235 nits or cd/m ² (typical)
Contrast ratio	400:1 (typical)
Cell response time	50ms (typical)
Pixel density	204 pixel density per inch (80 per cm)
Total pixels	9,216,000 (9.2 million) total pixels / 3840 x 2400 = 9,216,000
On screen display (OSD)	None
User controls	Power, brightness, debug
Monitor connectors	Two LFH-60 60-pin connectors / each connector has two DVI-60-pin interfaces (not the industry standard DVI-D connector; a 60-pin connector with dual DVI signals)
Signal cables	Two DVI cables / DVI- 60-pin connectors / 1.8 meters in length, black color
Anti-reflective	Anti-reflective
Anti-glare	Anti-glare
Dimensions with stand (HxWxD)	17.2" x 21.5" x 7.7"
Weight with stand	437 x 547 x 196mm
Tilt stand	26.4 lbs / 12 kg
Security	Tilting, 5° forward, 30° backward / not detachable
Power supplies	Security keyhole for attachment of optional cable lock
VESA DDC2B ⁵	Two universal 16VDC 72 watt external AC adapters / 111 watts typical / 1.8 meter power cords (both needed to power monitor)
VESA DPMS-compliant	Yes
ISO 13406 Part 2 ²	No
Emission standards	Yes
TCO 95/99 environmental label	MPR-2 / MPR-3A / FCC class A
Ship group	No
Operating system support	Monitor, attached tilt stand, two detached signal cables, two external power supplies, two power cords, User's Guide, graphics PCI adapter, installation CD-ROM
Limited warranty ^{*,3}	Requires Microsoft® Windows® 2000
Available / withdrawn date	3 year (includes backlight) July 2001 / October 2001

- Crams 9.2 million pixels in a viewing area of two 8 1/2" x 11" pages
- High resolution of 3840x2400 (QUXGA-W) allows for large amounts of data to be displayed on the screen, almost 12 times more than on a 1024x768 (XGA) monitor
- Additional support for a 960x1200 strip DOS mode for setup and system debug
- 204 pixel per inch density, over 5.75 times more finely detailed than a 15-inch XGA monitor; allows very clear or precise images without line breakup or pixelation
- Wide screen 16:10 screen format for ergonomic viewing of images in a landscape orientation
- PCI graphics card (Matrox G200MMS base) included for ease of installation and connectivity in Intel-based systems with Microsoft® Windows® 2000
- The T220 with its superior resolution of 3840x2400 exceeds the capabilities of graphic adapters available today. The T220 overcomes this limitation by employing a four head graphics adapter. Each head scans one-fourth of the display area (960 horizontal x 2400 vertical pixels) with one-fourth of the total image. Each 960x2400 pixel area is paneled horizontally across the display area to form the complete image.

WARRANTY SERVICE SUPPORT

- ☞ **3 year limited warranty^{*,3}**
- ☞ **International Warranty Service⁸**
- ☞ **IBM Express Maintenance at 1-800-772-2227**
- ☞ **Replacement normally arrives in two business days (excluding holidays)**
- ☞ **IBM pays all shipping costs¹¹ for valid warranty claims**
- ☞ **Warranty service upgrade options:**
 - **On site exchange Mon-Fri 9-5 with next day response⁶**
 - **On site exchange 7 day x 24 hr with 4 hour response⁶**
- ☞ **24 hour x 7 day telephone¹⁴, electronic, and Internet support**

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227
US model announced June 26, 2001

No warranties are expressed or implied in this summary
(MT220) © IBM Corp. October 2001

IBM® T Series Flat Panel Monitors - US models	
Name	T221 LCD TFT Color Monitor
Case color	Business black
Type-model	9503-DG1
Graphics adapter included	Matrox® G200 MMS / 32-bit PCI adapter / 32MB SGRAM / 250MHz RAMDAC / monitor attached by two standard monitor cables to two 60-pin connectors on adapter
Orientation	Landscape (portrait supported with optional third party arms [attached to VESA mount])
Screen	Active Matrix TFT (Thin Film Transistor) Liquid Crystal Display
Viewable image size (diag)	22.2" / 564mm
Pixel pitch (mm)	0.125
Max view area HxW (inches)	11.8" x 18.8"
Max view area HxW (mm)	298.8mm x 478.1mm
Viewing angle	170° vertical, 170° horizontal
Video input	Digital
Max addressability	3840x2400 (QUXGA-Wide)
Video input (native)	3840x2400 at 40.93Hz (104.78MHz maximum pixel rate)
Video input (DOS / VGA)	960x1200 at 55.74Hz (70.98MHz maximum pixel rate)
Vertical frequency	up to 85Hz depending on mode
Horizontal frequency	up to 80kHz depending on mode
Display modes	VGA 640x480 to 3200x2400 after x5 scaling (to 85Hz) SVGA 800x600 to 3200x2400 after x4 scaling (to 85Hz) Matrox VGA 960x1200 to 1920x2400 after x2 scaling (to 55.7Hz) XGA 1024x768 to 3072x2304 after x3 scaling (to 85Hz) SXGA 1280x1024 to 2560x2048 after x2 scaling (to 75Hz) UXGA 1600x1200 to 3200x2048 after x2 scaling (to 60Hz) QUXAG-W to 3840x2400 (to 40.9Hz)
Display colors (maximum)	16.7 million simultaneous colors
Brightness	235 nits or cd/m ² (typical)
Contrast ratio	400:1 (typical)
Cell response time	50ms (typical)
Pixel density	204 pixel density per inch (80 per cm)
Total pixels	9,216,000 (9.2 million) total pixels / 3840 x 2400 = 9,216,000
On screen display (OSD)	Yes (brightness level, input type (single, dual, 4-vertical stripes), refresh/addressability)
User controls	Power, brightness, on screen display
Monitor connectors	Two LFH-60 60-pin connectors / each connector has two DVI-60-pin interfaces (not the industry standard DVI-D connector; a 60-pin connector with dual DVI signals)
Signal cables	Two DVI cables / DVI-60-pin connectors at each end
Signal cable length and color	1.8 meters in length, black color
Anti-reflective	Anti-reflective
Anti-glare	Anti-glare
Dimensions with stand (HxWxD)	17.2" x 21.5" x 7.7"; 437 x 547 x 196mm
Weight with stand	26.4 lbs / 12 kg
Tilt stand	Tilting, 5° forward, 30° backward / detachable
Mounting	Meets VESA Flat Panel Monitor Physical Mounting Interface Standard (FPMPMI®, 100mm x 100mm)
Security	Security keyhole for attachment of optional cable lock (Kensington® lock-compatible)
Power supply	One universal 160 watt external AC adapter / 135 to 150 watts typical / 1.8 meter power cord
VESA DDC2B ²	No
VESA DPMS-compliant	Yes
ISO 13406 Part 2 ¹	Yes
Emission standards	MPR-2 / MPR-3A / FCC class A
TCO 95/99 environmental label	No
Ship group	Monitor, attached tilt stand, two signal cables, external power supply, power cords, User's Guide, installation CD-ROM, (DG1 only: graphics PCI adapter)
Operating system support	Requires Microsoft® Windows® 2000 / compatible with Linux 2.2x kernels with ATI FireGL4 adapter in November 2001
Limited warranty ⁴	3 year (includes backlight)
Available date	October 2001 / Model 9503-DG1 withdrawn January 2003
<ul style="list-style-type: none"> • Crams 9.2 million pixels in a viewing area of two 8 1/2" x 11" pages • High resolution of 3840x2400 (QUXGA-Wide) allows for large amounts of data to be displayed on the screen, almost 12 times more than on a 1024x768 (XGA) monitor • Additional support for a 960x1200 strip DOS mode for setup and system debug • 204 pixel per inch (80 per cm) density, over 5.75 times more finely detailed than a 15-inch XGA monitor; allows very clear or precise images without line breakup or pixelation • Wide screen 16:10 screen format for ergonomic viewing of images in a landscape orientation • The T221 can be configured to driven from 1-, 2- or 4-headed graphics adapters. A single headed adapter (the configuration for most adapters) can drive it from 640x480 up to 1600x1200 depending on the adapter's capability (the modes are scaled up by the nearest integer value to fit on the screen; so 640x480 is scaled up by a factor of 5). A 2-headed adapter (such as the FireGL4) can drive the T221 as two vertical stripes, each 1920x2400, and a 4-headed adapter (such as the Matrox G200 MMS) can drive it as either 4 stripes each 960x2400 or 4 tiles, each 1920x1200). 	<p style="text-align: center;">LIMITED WARRANTY⁴</p> <ul style="list-style-type: none"> ⇒ 3 year parts and labor ⇒ International Warranty Service⁵ ⇒ IBM Express Maintenance at 1-800-426-7378 ⇒ Replacement normally arrives in two business days (excluding holidays) ⇒ IBM pays all shipping costs for valid warranty claims⁶ ⇒ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac® part number 21P2089) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 21P2090) ⇒ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴

See footnotes for important warranty information
US models withdrawn effective January 2003 or December 2004

IBM® T Series Flat Panel Monitors - US model		POSITIONING
Name	T221 LCD TFT Color Monitor	<ul style="list-style-type: none"> • Performance—Advanced flat panel design features provides space savings and performance. • Precision graphics with possible uses of medical imaging, mapping, oil exploration, and graphic design
Case color	Business black	
Type-model	9503-DG5	<p style="text-align: center;">FEATURES</p> <ul style="list-style-type: none"> • Crams 9.2 million pixels in a viewing area of two 8 1/2" x 11" pages • High resolution of 3840x2400 (QUXGA-Wide) allows for large amounts of data to be displayed on the screen, almost 12 times more than on a 1024x768 (XGA) monitor • 204 pixel per inch (80 per cm) density, over 5.75 times more finely detailed than a 15-inch XGA monitor; allows very clear or precise images without line breakup or pixelation • Wide screen 16:10 screen format for ergonomic viewing of images in a landscape orientation • Depending on the adapter's capability, the T221 can be configured to be driven from 1-, 2- or 4-headed graphics adapters. Using a single DVI output, it can be driven in industry standard modes from 640x480 to 1600x1200 (the modes are scaled up by the nearest integer value to fit on the screen; so 640x480 is scaled up by a factor of 5) or it can be driven in it's native 3840x2400 resolution at up to 13Hz refresh rate. Two headed adapters, such as the NVIDIA® Quadro® FX 1000, by dividing the screen into two stripes, each 1920x2400, can drive the T221 at up to 25Hz refresh rate. A graphics card such as the NVIDIA FX 2000 or 3000 using a single, dual-link DVI output, can drive the T221 at up to 25Hz without needing to divide up the screen.
Graphics adapter included	None	
Orientation	Landscape (portrait supported with optional third party arms [attached to VESA mount])	
Screen	Active Matrix Thin Film Transistor (TFT) Liquid Crystal Display	
Viewable image size (diag)	22.2" / 564mm	
Pixel pitch (mm)	0.125	
Max view area (inches)	11.8" x 18.8" (HxW)	
Max view area (mm)	298.8mm x 478.1mm (HxW)	
Viewing angle	170° (+/- 85°) vertical, 170° (+/- 85°) horizontal	
Video input	Digital (dual-link DVI with converter box or up to 4 single-link DVI)	
Max addressability	3840x2400 (QUXGA-Wide)	
Video input (native)	3840x2400 at 48Hz (165MHz maximum pixel rate per DVI link)	
Vertical frequency	up to 85Hz depending on mode	
Horizontal frequency	up to 118kHz depending on mode	
Display modes	VGA 640x480 to 3200x2400 after x5 scaling (to 85Hz) SVGA 800x600 to 3200x2400 after x4 scaling (to 85Hz) XGA 1024x768 to 3072x2304 after x3 scaling (to 85Hz) SXGA 1280x1024 to 2560x2048 after x2 scaling (to 75Hz) UXGA 1600x1200 to 3200x2400 after x2 scaling (to 60Hz) QUXGA-W 3840x2400 (to 48 Hz)	
Display colors (maximum)	16.7 million simultaneous colors	
Brightness	235 nits or cd/m ² (typical)	
Contrast ratio	400:1 (typical)	
Cell response time	50ms (typical)	
Pixel density	204 pixel density per inch (80 per cm)	
Total pixels	9,216,000 (9.2 million) total pixels / 3840 x 2400 = 9,216,000	
On screen display (OSD)	Yes (brightness level, input type, information)	
User controls	Power, brightness, on screen display	
Monitor connectors	Two LFH-60 60-pin connectors / each connector has two DVI-60-pin interfaces (not the industry standard DVI-D connector; a single 60-pin connector with two, single-link DVI signals)	
Signal cables (four cables ship standard)	Two possible configurations from four standard cables: (a) dual-link DVI configuration requires std converter box, (b) single-link configuration does not require converter box (a) 1. Dual-link signal cable (PC to converter box; DVI-D at each end), 2.0 meters, black 2. Converter signal cable (converter box to monitor; DVI-60-pin at each end), 0.65 meters, black (b) 1. Single-link DVI to 60-pin cable (PC to monitor without converter box; DVI-D for PC attachment and DVI-60-pin for monitor attachment; the PC end has two single-link DVI connectors for a dual head card), 1.8 meters, black 2. Single-link DVI to 60-pin cable (same as above)	
Converter box	Standard converter box used with dual-link DVI configuration (the box contains a buffer to dis-interleave the dual-link DVI data, then assemble a line of data and transmits it to the T221 as left-half and right-half screen data which is the same format as the single-link DVI configuration which requires a dual head graphics adapter)	
USB interface	Converter box has a USB 1.1 connector for standard USB cable to use the Color Management Utility (downloadable from Web) and Firmware Update Utility	
Anti-reflective	Anti-reflective	
Anti-glare	Anti-glare	
Dimensions with stand	17.3" x 21.5" x 7.7"; 439 x 547 x 196mm (HxWxD)	
Weight with stand	25.1 lbs / 11.4 kg	
Tilt stand	Tilting, 5° forward, 30° backward / detachable	
Mounting	Meets VESA Flat Panel Monitor Physical Mounting Interface Standard (FPMPMI®, 100mm x 100mm)	
Security	Security keyhole for attachment of optional cable lock (Kensington® lock-compatible)	
Power supply	One universal 160 watt external AC adapter / 135 to 150 watts typical / 1.8 meter power cord	
VESA DDC2B ²	No	
VESA DPMS-compliant	DPMS	
Power management	ENERGY STAR ³	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC class A	
Environmental label	TCO 95	
Ship group	Monitor, attached tilt stand, four DVI signal cables, one external power supply, power cord, USB cable, converter box, T221 User's Guide, Converter Box User's Guide	
Operating system support	Microsoft® Windows® 2000 and XP / compatible with Linux 2.4x kernels and later	
Graphics adapter support	DVI-compliant adapters including ATI® FireGL4, NVIDIA Quadro4 900XGL or 980XGL, NVIDIA QuadroFX 1000 or 2000 or 3000	
Limited warranty ⁴	3 year (includes backlight)	<p style="text-align: center;">LIMITED WARRANTY⁴</p> <ul style="list-style-type: none"> ↪ 3 year parts and labor ↪ International Warranty Service⁵ ↪ IBM Express Maintenance at 1-800-426-7378 ↪ Replacement normally arrives in two business days (excluding holidays) ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • On site exchange Mon-Fri 9-5 with next day response (ServicePac® part number 21P2089) • On site exchange 7 day x 24 hr with 4 hour response (ServicePac part number 21P2090) ↪ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴
Available date	September 2003	

See footnotes for important warranty information
US model announced September 2, 2003
US model withdrawn effective December 2005

IBM® Flat Panel Monitors - US models

Name	L170 Flat Panel Monitor
Case color	Business black
Type-model	6734-AB0
US Govt model (TAA) ¹⁰	No
Stand	Tilt stand included
Screen	LCD Active Matrix TFT (Thin Film Transistor)
Viewable image size (diag)	17.0" / 432mm (diagonal)
Pixel pitch (mm)	.264mm
Max view area (inches)	13.3" x 10.6" (horizontal x vertical)
Max view area (mm)	338mm x 270mm (horizontal x vertical)
Minimum viewing angle	120° (+/- 60°) vertical, 140° (+/- 70°) horizontal
Video input	Analog
Dual input	No

Frequency	Multi-frequency
Max addressability	1280x1024
Video input (maximum)	1280x1024 at 75Hz (135MHz maximum pixel rate)
Corresponding scr refresh	1280x1024 at 60Hz
Vertical frequency	55 to 76Hz
Horizontal frequency	31 to 81kHz
Display colors (maximum)	More than 16 million simultaneous colors
Preset display modes	VGA: 640x480 60, 72, 75Hz 720x400 70Hz SVGA: 800x600 60, 72, 75Hz 832x624 75Hz XGA: 1024x768 60, 70, 75Hz 1152x864 75Hz SXGA: 1280x1024 60, 75Hz

Presets / user settings	IBM presets: 14; user settings: 15
Brightness	250 nits or cd/m ² (typical)
Contrast ratio	350:1 (typical)
Cell response time	25ms (typical)
Scaling	Can expand image of lower addressability to full screen of 1280x1024

On screen display	On screen display with digital user controls (5 languages)
Control features	Direct access (buttons on front) for auto adjustment and brightness; contrast; image horizontal and vertical position; user color settings (3 preset + 1 user); on screen display (OSD) language selection; menu position; information screen; image setup; image size to show normal or expanded format; reset of geometry and color point to factory default settings; lockable settings
Monitor connector	One connector: analog 15-pin D-shell [blue]
Signal cable	Analog cable, detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor
Anti-reflective / anti-glare	Anti-reflective / anti-glare
Dimensions	16.2"H x 15.7"W x 8.6"D / 411mm height x 400mm width x 218mm depth
Weight	11.7 lbs / 5.3 kg
Viewing adjustments	Tilt: 40° back, 4° forward / detachable stand
Mounting features	Wall or desk mounting using the IBM Radial Arm ⁹ or third-party accessories meeting the VESA FPMPI [®] std (100mm)
Security	Security keyhole for attachment of optional cable lock (Kensington [®] lock-compatible)

VESA DDC2B ²	Yes
VESA DPMS compliant	DPMS
Power management	ENERGY STAR ³
Ergonomics	ISO 13406 Part 2 ¹
Emission standards	MPR-2 / MPR-3A / FCC Class B
Environmental label	TCO 99
Ship group	Monitor, attached stand, Setup Guide, Safety and Warranty Information, CD with multilingual User's Guide and monitor installation files, analog signal cable, 1.8m black power cord
Power supply	100-240Vac (universal) / integrated (no external brick-like power supply) / 45 watts typical (3 watts for "active off")
Limited warranty ⁴	3 year (includes backlight)
Available date	May 2003 September 2003

POSITIONING
<ul style="list-style-type: none"> • Essential—Exceptional flat panel design that provides space savings • TFT essential models offer space savings and IBM quality at entry-level prices
FEATURES
<ul style="list-style-type: none"> • All-purpose 17-inch flat panel LCD monitor incorporates IBM ThinkVantage Design that enhances usability and complements the system design • Addressability of 1280x1024 provides crisp screen images • Stand tilts for comfortable viewing • Direct access for automatic image setup and brightness • Quick and easy monitor adjustments using new designed on-screen-display • Matching design to IBM systems • A great replacement for a 17" or 19" CRT monitor • Scaling allows full screen viewing of resolutions less than 1280x1024 • Integrated power supply eliminates the bulky power adapter for improved cable management • Lockable digital controls • Integrated cable management in stand for clutter-free desktop • Replacement for the IBM T710 Monitor

LIMITED WARRANTY
<ul style="list-style-type: none"> ↔ 3 year limited warranty⁴ ↔ International Warranty Service⁵ ↔ IBM Rapid Replacement Service at 1-800-IBM-SERV (426-7378) ↔ Replacement normally arrives in two business days, excluding holidays ↔ IBM pays all shipping costs for valid warranty claims⁶ ↔ Service upgrade options:⁷ <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac[®] part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9186) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9187) ↔ 24x7⁸ day toll-free support for warranty issues during the warranty period⁴

OPTIONS				
<table border="0"> <tr> <td>IBM Radial Arm⁹</td> <td style="text-align: right;">19K4464</td> </tr> <tr> <td>Kensington[®] MicroSaver[®] Security Cable Lock</td> <td style="text-align: right;">73P2582</td> </tr> </table> <p>Other options at ibm.com/pc/us/accessories</p>	IBM Radial Arm ⁹	19K4464	Kensington [®] MicroSaver [®] Security Cable Lock	73P2582
IBM Radial Arm ⁹	19K4464			
Kensington [®] MicroSaver [®] Security Cable Lock	73P2582			

See footnotes for important warranty information
US models announced April 22 or August 12, 2003
US models withdrawn effective August 2004
(L170) © IBM Corp. August 2004

IBM® Flat Panel Monitors - US models

Name **L170 Flat Panel Monitor**
 Case color **Business black**
 Type-model **9818-AC0**
 US Govt model (TAA)¹⁰ **No**
 Stand **Tilt stand included**
 Screen **LCD Active Matrix TFT (Thin Film Transistor)**
 Viewable image size (diag) **17.0" / 432mm (diagonal)**
 Pixel pitch (mm) **.264mm**
 Max view area (inches) **13.3" x 10.6" (horizontal x vertical)**
 Max view area (mm) **338mm x 270mm (horizontal x vertical)**
 Minimum viewing angle **135° (+75°/- 60°) vertical, 150° (+/- 75°) horizontal**
 Video input **Analog**
 Dual input **No**

Frequency **Multi-frequency**
 Max addressability **1280x1024**
 Video input (maximum) **1280x1024 at 75Hz (135MHz maximum pixel rate)**
 Corresponding scr refresh **1280x1024 at 60Hz**
 Vertical frequency **55 to 76Hz**
 Horizontal frequency **31 to 81kHz**
 Display colors (maximum) **More than 16 million simultaneous colors**
 Preset display modes

VGA: 640x350 70Hz
 640x480 66 (Mac), 60, 72, 75Hz
 720x400 70Hz
 SVGA: 800x600 60, 72, 75Hz
 832x624 75Hz (Mac)
 XGA: 1024x768 60, 70, 75, 75 (Mac) Hz
 1152x864 75Hz
 1152x870 75Hz
 1152x900 66Hz
 SXGA: 1280x1024 60, 72, 75, 76 (Sun) Hz

Factory presets / user sett **Factory presets: 21; user locations: 15**
 Brightness **300 nits or cd/m² (typical)**
 Contrast ratio **500:1 (typical)**
 Cell response time **13ms (typical)**
 Scaling **Can expand image of lower addressability to full screen of 1280x1024**

On screen display **On screen display with digital user controls (5 languages)**
 Control features **Direct access (buttons on front) for auto adjustment and brightness; contrast; image horizontal and vertical position; user color settings (3 preset + 1 user); on screen display (OSD) language selection; menu position; information screen; image setup; image size to show normal or expanded format; reset of geometry and color point to factory default settings; lockable settings**
 Monitor connector **One connector: analog 15-pin D-shell [blue]**
 Signal cable **Analog cable, detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor**
 Anti-reflective / anti-glare **Anti-reflective / anti-glare**
 Dimensions **16.2"H x 15.7"W x 8.6"D / 411mm height x 400mm width x 218mm depth**
 Weight **13.2 lbs / 6.0 kg**
 Viewing adjustments **Tilt: 40° back, 4° forward / no swivel / no lift / detachable stand**
 Mounting features **Wall or desk mounting using the IBM Radial Arm⁹ or third-party accessories meeting the VESA FPMPII® std (100mm)**
 Security **Security keyhole for attachment of optional cable lock (Kensington® lock-compatible)**

VESA DDC2B² **Yes**
 VESA DPMS compliant **DPMS**
 Power management **ENERGY STAR³**
 Ergonomics **ISO 13406 Part 2¹**
 Emission standards **MPR-2 / MPR-3A / FCC Class B**
 Environmental label **TCO 99**
 Ship group **Monitor, attached stand, Setup Guide, Safety and Warranty Information, CD with multilingual User's Guide and monitor installation files, analog signal cable, 1.8m black power cord**
 Power supply **100-240Vac (universal) / **integrated** (no external brick-like power supply) / 40 watts typical (<2 watt for "active off")**
 Limited warranty⁴ **1 year (includes backlight)**
 Available date **May 2004**

• This small and medium business (SMB) model is part of the IBM US Think Express Program

POSITIONING

- Essential—Exceptional flat panel design that provides space savings
- TFT essential models offer space savings and IBM quality at entry-level prices

FEATURES

- All-purpose 17-inch flat panel LCD monitor incorporates IBM ThinkVantage Design that enhances usability and complements the system design
- Addressability of 1280x1024 provides crisp screen images
- Stand tilts for comfortable viewing
- Direct access for automatic image setup and brightness
- Quick and easy monitor adjustments using new designed on-screen-display
- Matching design to IBM systems
- A great replacement for a 17" or 19" CRT monitor
- Scaling allows full screen viewing of resolutions less than 1280x1024
- Integrated power supply eliminates the bulky power adapter for improved cable management
- Lockable digital controls
- Integrated cable management in stand for clutter-free desktop
- Replacement for the IBM T710 Monitor

LIMITED WARRANTY

- ↪ **1 year limited warranty⁴**
- ↪ **International Warranty Service⁵**
- ↪ **IBM Rapid Replacement Service at 1-800-426-7378 (customer mail-in service)**
- ↪ **Replacement normally arrives in two business days, excluding holidays**
- ↪ **IBM pays all shipping costs for valid warranty claims⁶**
- ↪ **Service upgrade options:⁷**
 - **1 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac® part number 29R5148)
 - **1 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 29R5152)
 - **2 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac part number 29R5149)
 - **2 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 29R5153)
 - **3 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac part number 29R5150)
 - **3 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 29R5154)
 - **4 year, on site exchange, Mon-Fri 9-5 with next day response** (ServicePac part number 29R5151)
 - **4 year, on site exchange, 7 day x 24 hr with 4 hour response** (ServicePac part number 29R5155)
- ↪ **24x7⁸ day toll-free support for warranty issues during the warranty period⁴**

OPTIONS

IBM Radial Arm⁹ 19K4464
 Kensington® MicroSaver® Security Cable Lock 73P2582

Other options at ibm.com/pc/us/accessories

See footnotes for important warranty information
 US model announced May 11, 2004
 US model withdrawn effective May 2005

IBM® Flat Panel Monitors - US models	POSITIONING
<p>Name L180p Flat Panel Monitor Case color Business black Type-model 9180-HB9 US Govt model (TAA)¹⁰ No Stand Tilt/swivel and height adjustable stand included Screen LCD Active Matrix TFT (Thin Film Transistor) Viewable image size (diag) 18.1" / 460mm (diagonal) Pixel pitch (mm) .2805mm Max view area 14.8" x 11.8" / 359mm x 287mm (horizontal x vertical) Minimum viewing angle 170° (+/- 85°) vertical, 170° (+/- 85°) horizontal Video input Digital or analog (two separate connectors) Dual input Dual input (two different PCs attach to two different connectors; one PC shows image; select via button) Bezel width 17mm (left and right sides)</p>	<p>• Performance—Advanced flat panel design features provides space savings and performance. • TFT performance models offer tilt, swivel, and height adjustments, plus analog and digital system attachments.</p>
<p>Frequency Multi-frequency (supports sync on green) Max addressability 1280x1024 Video input (maximum) 1280x1024 at 75Hz (135MHz maximum pixel rate) Corresponding scr refresh 1280x1024 at 60Hz Vertical frequency 55 to 75Hz Horizontal frequency 31 to 81kHz Display colors (maximum) More than 16 million simultaneous colors Preset display modes VGA: 640x480 60, 66, 75Hz 640x350 70Hz 720x400 70Hz SVGA: 800x600 60, 75Hz 832x624 75Hz XGA: 1024x768 60, 70, 75Hz 1152x870 75Hz 1152x900 66Hz SXGA: 1280x1024 60, 75Hz Presets / user settings IBM presets: 15; user settings: 10 Brightness 250 nits or cd/m² (typical) Contrast ratio 350:1 (typical) Cell response time 30ms (typical) Scaling Can expand image of lower addressability to full screen of 1280x1024</p>	<p>DESCRIPTION</p> <p>• The L180p is a hybrid monitor. It has both an analog (15-pin D-shell) and digital or analog (Digital Visual Interface [DVI-I]) connector on the back of the monitor. This allows one monitor to connect to different types of graphics adapters; this can be from one analog input and one digital or analog input (it can accept two analog inputs).</p>
<p>On screen display On screen display with digital user controls (6 languages) Control features Direct access (buttons on front) for auto adjustment, brightness, and input select; contrast; image horizontal and vertical position; user color settings (3 preset + 1 user); on screen display (OSD) language selection; menu position; information screen; image setup; image size to show normal or expanded format; reset of geometry and color point to factory default settings; lockable settings Monitor connectors Two connectors: (1) analog 15-pin D-shell [blue], (2) Digital Visual Interface (DVI-I) for digital or analog attach [white] Signal cables Two cables: (1) detachable, 15-pin D-shell at each end (for analog connector), 3.0 meter, matches color of monitor (2) detachable digital, DVI-D at each end (for digital connector), 3.0 meter, matches color of monitor Anti-reflective / anti-glare Anti-reflective / anti-glare Dimensions (with stand) 13.8"H min lift (17.7" max lift) x 15.6"W x 10.2"D / 350mm min lift (450mm max lift) height x 396mm width x 259mm depth Weight 16.5 lb / 7.5kg Viewing adjustments Tilt: 30° back, 0° forward / lift: 3.9" (100mm) / swivel: +/-135° / detachable stand Mounting features Wall or desk mounting using the IBM Radial Arm⁹ or third-party accessories meeting the VESA FPMPI[®] std (100mm) Security Security keyhole for attachment of optional cable lock (Kensington[®] lock-compatible)</p>	<p>FEATURES</p> <ul style="list-style-type: none"> • All-purpose 18.1-inch flat panel LCD monitor incorporates IBM ThinkVantage Design that enhances usability and complements the system design • Ultra narrow bezel of 17mm minimizes distance between screen images in a multiple monitor environment • Built-in handle for quick and easy mounting • Addressability of 1280x1024 provides crisp screen images • Ergonomic stand swivels, tilts and provides height adjustment for comfortable viewing • Direct access for automatic image setup, brightness and input selection • Matching design to IBM systems • A great replacement for a 17" or 19" CRT monitor • Scaling allows full screen viewing of resolutions less than 1280x1024 • Integrated power supply eliminates the bulky power adapter for improved cable management • Integrated cable management in stand for clutter-free desktop • Replacement for the IBM T860 monitor
<p>VESA DDC2B² Yes VESA DPMS compliant DPMS Power management ENERGY STAR³ Ergonomics ISO 13406 Part 2¹ Emission standards MPR-2 / MPR-3A / FCC Class B Environmental label TCO 99 Ship group Monitor, attached stand, Setup Guide, Safety and Warranty Information, CD with multilingual User's Guide and monitor installation files, analog signal cable, digital signal cable, 1.8m black power cord Power supply 100-240Vac (universal) / integrated (no external brick-like power supply) / 55 watts typical (3 watts for "active off") Limited warranty⁴ 3 year (includes backlight) Available date March 2004</p>	

LIMITED WARRANTY	OPTIONS
<p>↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Rapid Replacement Service at 1-800-IBM-SERV (426-7378) ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷</p> <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac[®] part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9186) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9187) <p>↪ 24x7⁹ day toll-free support for warranty issues during the warranty period⁴</p>	<p>IBM Radial Arm⁹ 19K4464 Kensington[®] MicroSaver[®] Security Cable Lock 73P2582</p> <p>IBM ThinkVision L180p/T860 Speaker/USB Hub 19K1901</p> <ul style="list-style-type: none"> • Speaker and USB port solution • Two one-watt stereo speakers with volume control • Four downstream USB ports (Version 1.1) to connect four additional USB devices to computer • Attaches to bottom bezel of monitor • Uses no desk space • Volume control knob • Headphone jack provides private listening • Microphone jack • Utilizes the existing power from the monitor • Stealth black color

See footnotes for important warranty information
 US model announced March 9, 2004
 US model withdrawn effective December 2004

IBM® Flat Panel Monitors - US models		POSITIONING
Name	L190p Flat Panel Monitor	<ul style="list-style-type: none"> Performance—Advanced flat panel design features provides space savings and performance. TFT performance models offer tilt, swivel, and height adjustments, plus analog and digital system attachments.
Case color	Business black	
Type-model	2704-HB7	DESCRIPTION <ul style="list-style-type: none"> The L190p is a hybrid monitor. It has both an analog (15-pin D-shell) and digital (Digital Visual Interface [DVI-D]) connector on the back of the monitor. This allows one monitor to connect to different types of graphics adapters; this can be from one analog input and one digital input (it can not accept two analog inputs).
US Govt model (TAA) ¹⁰	No	
Stand	Tilt/swivel and height adjustable stand included	FEATURES <ul style="list-style-type: none"> All-purpose 19-inch flat panel LCD monitor incorporates IBM ThinkVantage Design that enhances usability and complements the system design Addressability of 1280x1024 provides crisp screen images Ergonomic stand swivels, tilts and provides height adjustment for comfortable viewing Direct access for automatic image setup, brightness and input selection Quick and easy monitor adjustments using new designed on-screen-display Matching design to IBM systems A great replacement for a 17" or 19" CRT monitor Scaling allows full screen viewing of resolutions less than 1280x1024 Includes dual input connection for attachment to two systems concurrently (analog and digital) Integrated power supply eliminates the bulky power adapter for improved cable management Integrated cable management in stand for clutter-free desktop
Screen	LCD Active Matrix TFT (Thin Film Transistor)	
Viewable image size (diag)	19.0" / 483mm (diagonal)	
Pixel pitch (mm)	.294mm	
Max view area (inches)	14.8" x 11.8" (horizontal x vertical)	
Max view area (mm)	376mm x 301mm (horizontal x vertical)	
Minimum viewing angle	170° (+/- 85°) vertical, 170° (+/- 85°) horizontal	
Video input	Digital or analog (two separate connectors)	
Dual input	Dual input (two different PCs attach to two different connectors; one PC shows image; select via button)	
Frequency	Multi-frequency (supports sync on green)	
Max addressability	1280x1024	
Video input (maximum)	1280x1024 at 76Hz (135MHz maximum pixel rate)	
Corresponding scr refresh	1280x1024 at 60Hz	
Vertical frequency	55 to 76Hz	
Horizontal frequency	31 to 81kHz	
Display colors (maximum)	More than 16 million simultaneous colors	
Preset display modes	VGA: 640x480 60, 66 (Mac), 72, 75Hz 640x350 70Hz 720x400 70Hz SVGA: 800x600 60, 72, 75Hz 832x624 75Hz XGA: 1024x768 60, 70, 75 (Mac), 75Hz 1152x864 75Hz 1152x870 75Hz 1152x900 66Hz SXGA: 1280x1024 60, 72, 75, 76 (Sun) Hz	
Presets / user settings	IBM presets: 21; user settings: 15	
Brightness	250 nits or cd/m ² (typical)	
Contrast ratio	500:1 (typical)	
Cell response time	25ms (typical)	
Scaling	Can expand image of lower addressability to full screen of 1280x1024	
On screen display	On screen display with digital user controls (5 languages)	
Control features	Direct access (buttons on front) for auto adjustment, brightness, and input select; contrast; image horizontal and vertical position; user color settings (3 preset + 1 user); on screen display (OSD) language selection; menu position; information screen; image setup; image size to show normal or expanded format; reset of geometry and color point to factory default settings; lockable settings	
Monitor connectors	Two connectors: (1) analog 15-pin D-shell [blue], (2) Digital Visual Interface (DVI-D) for digital (not analog) attach [white]	
Signal cables	Two cables: (1) detachable, 15-pin D-shell at each end (for analog connector), 1.8 meter, matches color of monitor (2) detachable digital, DVI-D at each end (for digital connector), 2.0 meter, matches color of monitor	
Anti-reflective / anti-glare	Anti-reflective / anti-glare	
Dimensions	15.2"H min lift (18.4" max lift) x 17.4"W x 9.3"D / 387mm min lift (467mm max lift) height x 441mm width x 237mm depth	
Weight	16.8 lb / 7.6kg	
Viewing adjustments	Tilt: 30° back, 0° forward / lift: 3.2" (80mm) / swivel: +/- 135° / detachable stand	
Mounting features	Wall or desk mounting using the IBM Radial Arm ⁹ or third-party accessories meeting the VESA FPMPI [®] std (100mm)	
Security	Security keyhole for attachment of optional cable lock (Kensington [®] lock-compatible)	
VESA DDC2B ²	Yes	
VESA DPMS compliant	DPMS	
Power management	ENERGY STAR ³	
Ergonomics	ISO 13406 Part 2 ¹	
Emission standards	MPR-2 / MPR-3A / FCC Class B	
Environmental label	TCO 99	
Ship group	Monitor, attached stand, Setup Guide, Safety and Warranty Information, CD with multilingual User's Guide and monitor installation files, analog signal cable, digital signal cable, 1.8m black power cord	
Power supply	100-240Vac (universal) / integrated (no external brick-like power supply) / 40 watts typical (3 watts for "active off")	
Limited warranty ⁴	3 year (includes backlight)	
Available date	November 2003	

LIMITED WARRANTY	OPTIONS
<ul style="list-style-type: none"> ↪ 3 year limited warranty⁴ ↪ International Warranty Service⁵ ↪ IBM Rapid Replacement Service at 1-800-IBM-SERV (426-7378) ↪ Replacement normally arrives in two business days, excluding holidays ↪ IBM pays all shipping costs for valid warranty claims⁶ ↪ Service upgrade options:⁷ <ul style="list-style-type: none"> • 3 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac[®] part number 30L9179) • 3 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 30L9183) • 4 year, on site exchange, Mon-Fri 9-5 with next day response (ServicePac part number 69P9188) • 4 year, on site exchange, 7 day x 24 hr with 4 hour response (ServicePac part number 69P9189) ↪ 24x7⁹ day toll-free support for warranty issues during the warranty period⁴ 	<ul style="list-style-type: none"> IBM Radial Arm⁹ 19K4464 Kensington[®] MicroSaver[®] Security Cable Lock 73P2582 <p>Other options at ibm.com/pc/us/accessories</p>

See footnotes for important warranty information
US model announced November 18, 2003
US model withdrawn effective December 2004

Availability: All offers subject to availability. IBM reserves the right to alter product offerings and specifications at any time, without notice. IBM is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept JDJA/B203. IBM makes no representation or warranty regarding third party products or services.

- ¹ **ISO-compliant:** Compliance with ISO 9241 Part 3, ISO Part 7, ISO Part 8, and/or ISO 13406 Part 2 is dependent on a complete ISO-capable platform of a system unit, monitor, video subsystem, operating system and fonts.
- ² **VESA:** Requires attachment to suitably configured system with similarly enabled operating system.
- ³ **ENERGY STAR:** As an ENERGY STAR partner, IBM has determined that this product meets the ENERGY STAR guidelines for energy efficiency. Requires attachment to suitably configured system.
- ⁴ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ⁵ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
- ⁶ **IBM pays all shipping costs** for warranty repairs during limited warranty period.

⁷ **These services** are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. If the machine problem turns out to be a Customer Replaceable Unit (CRU), IBM will express ship the part to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations.

⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, IBM will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For IBM machines with EasyServ or Courier service, IBM will attempt to diagnose and resolve the problem remotely before sending a courier.

⁹ **Radial Arm Kit:** Designed for business environment; radial arm must be installed in accordance with instructions provided.

¹⁰ **TAA:** Monitor is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.



Trademarks: IBM and ThinkVision are trademarks and registered trademarks of International Business Machines Corporation in the United States and/or other countries. Microsoft and Windows are registered trade marks of Microsoft Corporation. Other company, product, or service names may be trademark or service marks of others.

This publication was developed for products and services offered in the United States. IBM may not offer the products, services or features discussed in this document in other countries. IBM may withdraw an offering at any time. Information is subject to change without notice. Consult your local IBM representative for information on offerings available in your area.

IBM reserves the right to alter specifications and other product information at any time without prior notice. IBM is not responsible for photographic or typographical errors. IBM PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions; therefore this disclaimer may not apply to you. This publication was developed in the US. IBM may not offer the products, services, or features discussed in this publication in other countries.

As an ENERGY STAR Partner, IBM has determined that this product meets the ENERGY STAR guidelines for energy efficiency. ENERGY STAR is a U.S. registered mark.

Visit ibm.com/pc/safecomputing periodically for the latest information on safe and effective computing

© Copyright International Business Machines Corporation, 2005.
All rights reserved

IBM Personal Computing Division
Department WY3A
3039 Cornwallis Road
Research Triangle Park, NC 27709

May 2005
mwbook.pdf