
Section 11. Displays

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About This Section

This section contains information about the IBM Displays attached to the IBM 6151 System Unit. Use the contents list on the preceding page to find information about your display.

Pages in this section contain a 3-digit product code in the page number to make future updating easier.

IBM 5081 Color Graphics Display

Note: The information in this publication is for Models 16 and 19 of the IBM 5081. If you have another model of the IBM 5081, see the Maintenance Information Manual for your model.

The IBM 5081 Color Graphics Display is the same display used on the IBM 5080 Graphics System.

Internal parts of the IBM 5081 Color Graphics Display are field replaceable. Refer to the Maintenance Information Manual that was shipped with your display, for part numbers, removal procedures, and replacement procedures.

Specifications

Input voltage	Low voltage, 100 - 120 V ac High Voltage, 220 - 240 V ac
Input current	4.0 Amperes
Power frequency	50/60 Hz
Adapters	IBM Megapel Display Adapter

Removal Procedure

Use the Attached Device Removal procedure in Section 4.

Replacement Procedure

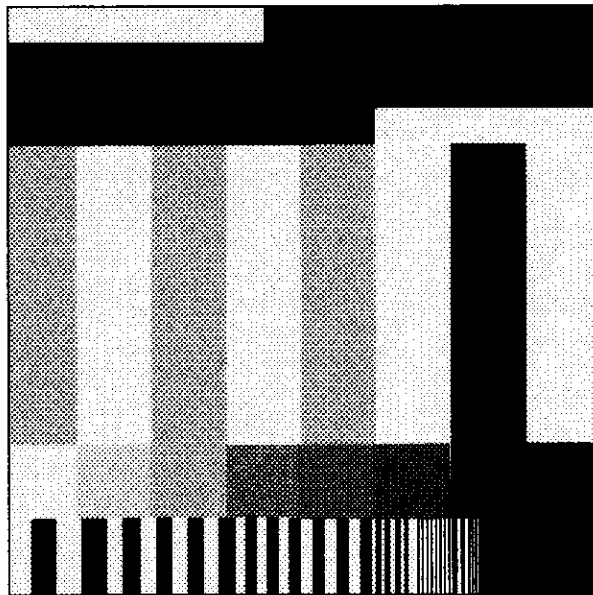
Use the Attached Device Replacement procedure in Section 4.

Test Patterns

You will be directed when to use the following Test Patterns while running the Display Checkout program.

Combination Color Bar Pattern

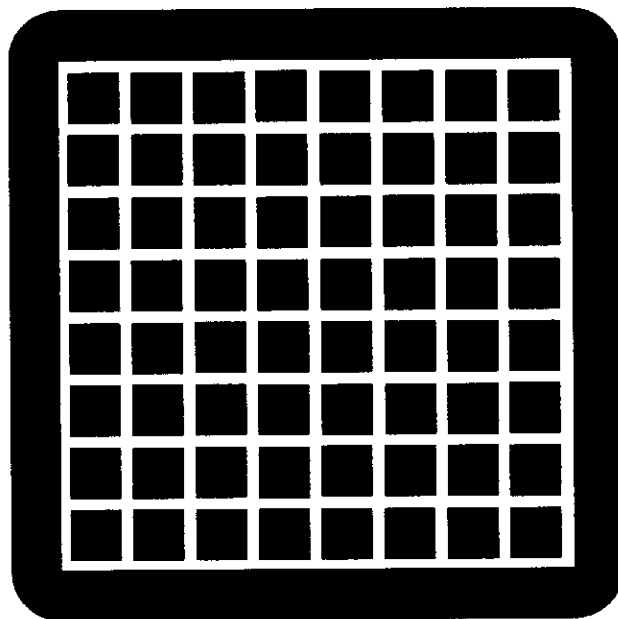
Left to right, the color bars are green, yellow, red, magenta, blue, cyan, black, and white.



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Crosshatch or Grid Pattern

This test pattern is used to check the convergence and the alignment on the IBM 5081. Use the alignment mask shipped with the IBM 5081 with this test pattern.



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Flat Field Test Patterns

The following types of Flat Field Test Patterns are available using the Display Test procedure:

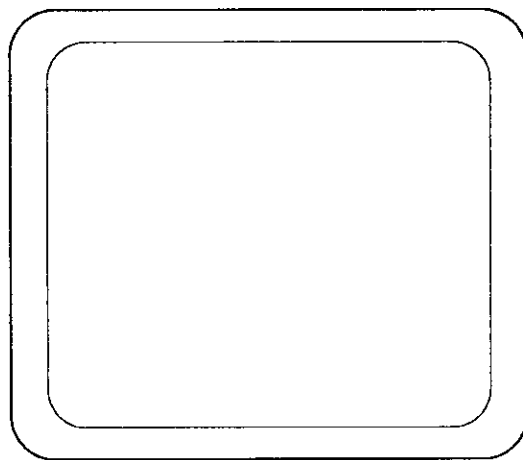
White Flat Field The red, blue, and green colors are at their full intensity to check color purity.

Black Flat Field All colors are off.

Red Flat Field The red color is on at full intensity.

Green Flat Field The green color is on at full intensity.

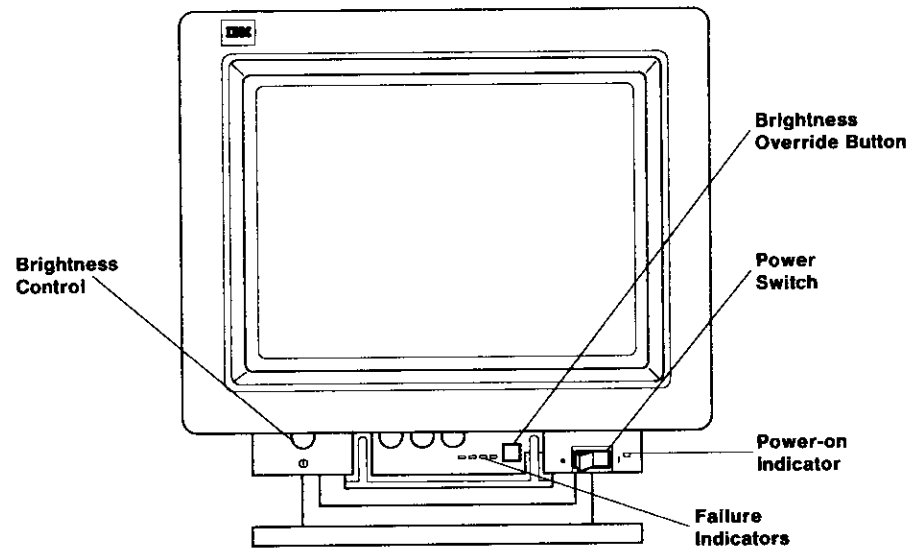
Blue Flat Field The blue color is on at full intensity.



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Parts Information

For the part numbers and descriptions, see the Maintenance Information Manual that was shipped with the IBM 5081 Color Graphics Display.



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IBM 5151 Personal Computer Display

The IBM 5151 Personal Computer Display is the same display used on the IBM Personal Computer.

The internal parts of the display are not field replaceable.

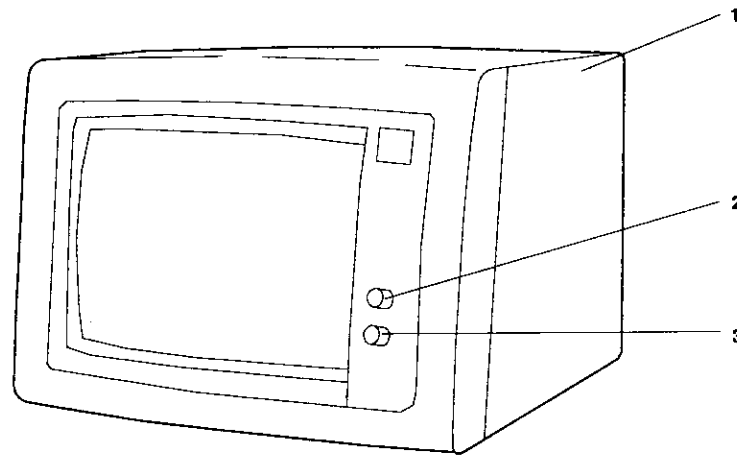
Specifications

Input voltage	Low voltage, 104 - 127 V ac High Voltage, 180 - 259 V ac
Power frequency	48 - 62 Hz
Adapters	IBM Monochrome Display and Printer Adapter and IBM PC Enhanced Graphics Adapter

Removal and Replacement Procedures

Use the Attached Device Removal and Replacement procedures in Section 4.

Parts Information



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Index Number	Part Number	Description
1	8529171	IBM 5151 display, low voltage
1	8529209	IBM 5151 display, high voltage
2	8529178	Contrast knob
3	8529177	Brightness knob
		For "Restricted Availability Parts" see the next page.

Restricted Availability Parts

Index Number	Part Number	Description of the Restricted Availability Parts
	8529179	Logo/label kit, 120 V
	8654205	Logo/label kit, 220/240 V -Kits consist of: front and rear name plates, FCC label, caution label
	8529229	Front panel
	8529230	Back cover
	8529231	Upper cover plug
	8529232	Foot
	8529176	Power cord holder
	8529173	Signal cable
	8529235	Transformer, 120 V
	8654206	Transformer, 220/240 V
	8529237	Control support
	8529236	Transformer support
	8529175	Fuse, 0.75 Amp for 120 V
	8654204	Fuse, 0.50 Amp for 220/240 V
	8529233	Analog card
	8529234	PC card
	8529174	Power cord 120 V
	8654203	Power cord 220/240 V
	8529180	Misc. hardware kit -Kit consists of: CRT mounting screw, transformer screw, CRT mounting support, CRT bracket to front panel, transformer support to front panel, rubber bushing screw, rubber bushing nut, cable restraint screw, star washer

IBM 5154 Enhanced Color Display

The IBM 5154 Enhanced Color Display can display up to 64 colors depending on the mode selected and the software used.

The display is a single field-replaceable unit.

Specifications

Input voltage	Low voltage, 90 - 137 V ac High voltage, 180 - 259 V ac
Power frequency	48 - 62 Hz
Modes	Mode 1, 16 color - 15.75 kHz Mode 2, 64 color - 21.80 kHz
Vertical sync pulse	Mode 1, positive Mode 2, negative
Adapter	IBM PC Enhanced Graphics Adapter

Removal and Replacement Procedures

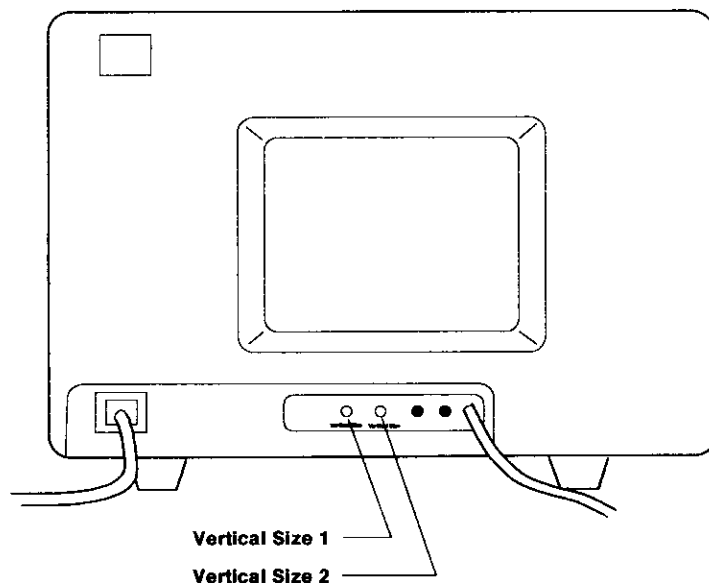
Use the Attached Device Removal and Replacement procedures in Section 4.

Adjustments

The Adjustments are on the rear panel of the display. Use the following descriptions to set the controls.

Vertical Size 1

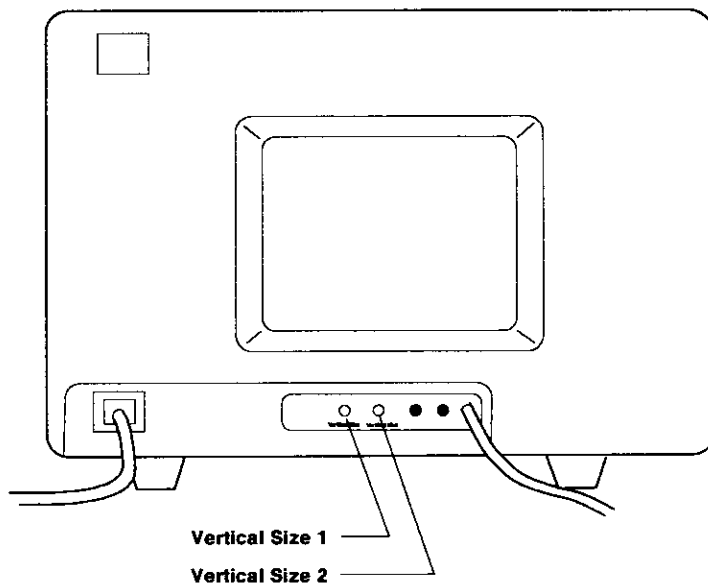
1. Set the power switch on the system unit to Off.
2. Set the power switch on the display to On.
3. Turn the Brightness control fully clockwise.
4. Adjust the Vertical Size 1 control counterclockwise until a black area appears at the top and bottom of the screen. Then, turn the control clockwise until the black areas disappear.
5. Set the Brightness control to the desired setting.



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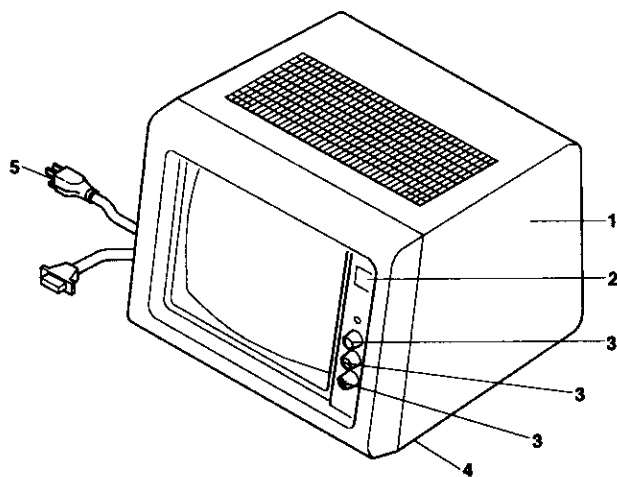
Vertical Size 2

1. Be sure the display is attached to an IBM PC Enhanced Graphics Adapter and the mode switches are set for enhanced mode. If needed, see Section 9.
2. Set the power switch on the system unit and display to On.
3. Turn the Brightness control fully clockwise.
4. Adjust the Vertical Size 2 control until the black areas are equal on all sides, then return the Brightness control to the desired setting.



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Parts Information



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Index Number	Part Number	Description
1	6321035	IBM 5154 display, Model 001, low voltage
1	6321049	IBM 5154 display, Model 002, high voltage, Northern Hemisphere
1	6321036	IBM 5154 display, Model 003, high voltage, Southern Hemisphere
2	6321061	Logo and label kit -Kit consists of: back logo, bottom cover warning labels (five languages)
3	6321056	Knob and cover cap kit -Kit consists of: on/off knob, contrast knob, brightness knob, cover cap (2), rear knob (2),
4	6323319	Rubber feet kit -Kit consists of: rubber feet (4), washers (4), screws (4)
5		Power cable, see Section 5
For "Restricted Availability Parts" see the next page.		

Restricted Availability Parts

Index Number	Part Number	Description of the Restricted Availability Parts
	6321050	Front cover
	6321051	Rear cover
	6321052	Main PC board assembly, chassis, CRT drive card
	6321053	Power supply with cover
	6321054	Video amplifier assembly, RGB cable and connector
	6321055	Front control assembly
	6321057	Power-on indicator
	6321058	Rear control panel assembly, strain relief
	6321059	Signal cable
	6135903	Degaussing coil
	6321064	Miscellaneous hardware kit -Kit consists of: CRT rubber mounting washers (4), plastic drive board shield, plastic shield retainers (2), CRT and deflection yoke assembly with wires, ground band, CRT warning label
	6321060	Model 001, model 002
	6321063	Model 003

IBM 6153 Advanced Monochrome Graphics Display

The IBM 6153 Advanced Monochrome Graphics Display displays black characters on a white background.

The display is a single field-replaceable unit.

The IBM 6153 display has a *raster test* position on the Brightness and Raster Test control. When the Brightness and Raster Test control is turned fully clockwise to the raster test position the display screen is lighted.

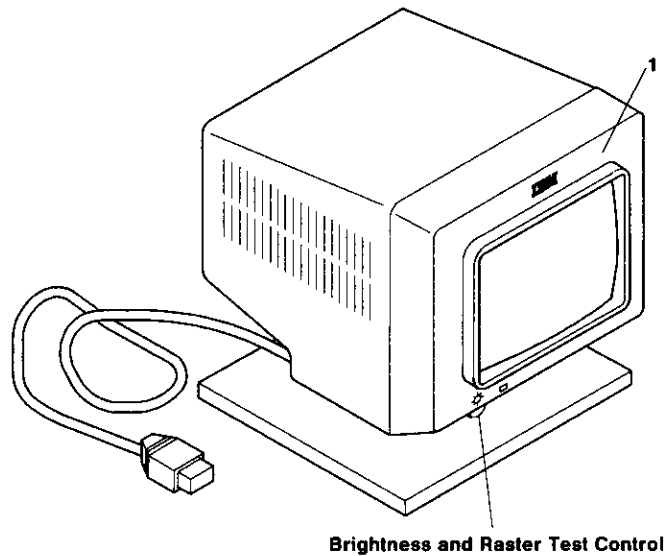
Specifications

Input voltage	Low voltage, 90 - 137 V ac High Voltage, 180 - 259 V ac
Power frequency	48 - 62 Hz
Adapter	RT PC Advanced Monochrome Graphics Display Adapter

Removal and Replacement Procedures

Use the Attached Device Removal and Replacement procedures in Section 4.

Parts Information



AJZB207

Index Number	Part Number	Description
1	6299240	IBM 6153 display, low voltage
1	6299241	IBM 6153 display, high voltage

IBM 6154 Advanced Color Display

The IBM 6154 Advanced Color Display is a color graphics display.

The internal parts of the display are not field replaceable.

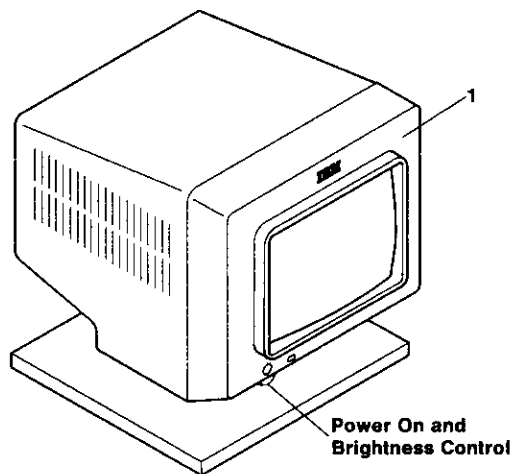
Specifications

Input voltage	Low voltage, 90 - 137 V ac High Voltage, 190 - 259 V ac
Power frequency	48 - 62 Hz
Adapters	RT PC Advanced Color Display Adapter

Removal and Replacement Procedures

Use the Attached Device Removal and Replacement procedures in Section 4.

Parts Information



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Index Number	Part Number	Description
1	6848113	IBM 6154 display, low voltage group 1
1	6848114	IBM 6154 display, low voltage group 2
1	6848115	IBM 6154 display, low voltage group 3
1	6848116	IBM 6154 display, high voltage group 1
1	6848117	IBM 6154 display, high voltage group 2
1	6848118	IBM 6154 display, high voltage group 3
1	6848119	IBM 6154 display, high voltage group 4 Power cable, see Section 5.

IBM 6155 Extended Monochrome Graphics Display

The IBM 6155 Extended Monochrome Graphics Display displays black characters on a white background.

The display is a single field-replaceable unit.

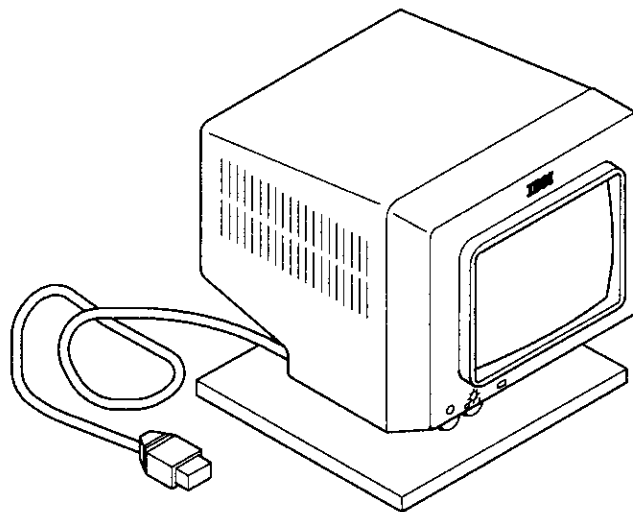
Specifications

Input voltage	Low voltage, 90 - 137 V ac High Voltage, 180 - 259 V ac
Power frequency	48 - 62 Hz
Adapter	RT PC Extended Monochrome Graphics Display Adapter

Removal and Replacement Procedures

Use the Attached Device Removal and Replacement procedures in Section 4.

Parts Information



AJZB210

Index Number	Part Number	Description
1	6848215	IBM 6155 display, low voltage
1	6848216	IBM 6155 display, high voltage
		Power cable, see Section 5.