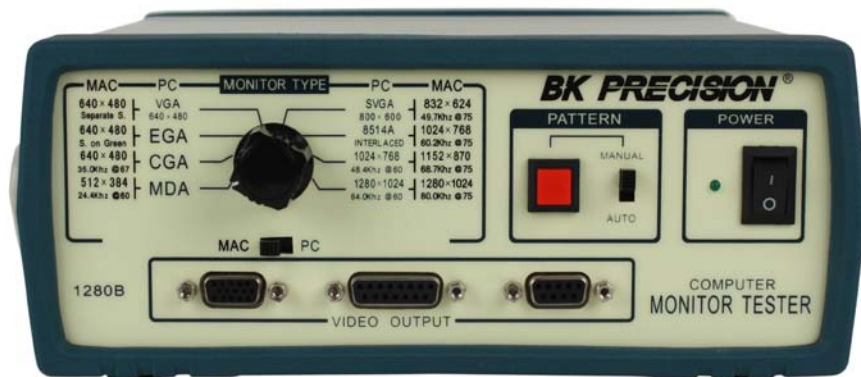


BK PRECISION®

Model: 1280B

Benchtop Computer Monitor Generator

USER MANUAL



**Test Equipment
Depot**
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Melrose, MA 02176
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Safety Summary

The following safety precautions apply to both operating and maintenance personnel and must be observed during all phases of operation, service, and repair of this instrument. Before applying power, follow the installation instructions and become familiar with the operating instructions for this instrument.

Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the instrument. B&K PRECISION assumes no liability for a customer's failure to comply with these requirements. This is a Safety Class I instrument.

GROUND THE INSTRUMENT

To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. This instrument is grounded through the ground conductor of the supplied, three-conductor ac power cable. The power cable must be plugged into an approved three-conductor electrical outlet. Do not alter the ground connection. Without the protective ground connection, all accessible conductive parts (including control knobs) can render an electric shock. The power jack and mating plug of the power cable meet IEC safety standards.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

KEEP AWAY FROM LIVE CIRCUITS

Instrument covers must not be removed by operating personnel. Component replacement and internal adjustments must be made by qualified maintenance personnel. Disconnect the power cord before removing the instrument covers and replacing components. Under certain conditions, even with the power cable removed, dangerous voltages may exist. To avoid injuries, always disconnect power and discharge circuits before touching them.

DO NOT SERVICE OR ADJUST ALONE

Do not attempt any internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

DO NOT SUBSTITUTE PARTS OR MODIFY THE INSTRUMENT

Do not install substitute parts or perform any unauthorized modifications to this instrument. Return the instrument to B&K Precision for service and repair to ensure that safety features are maintained.

WARNINGS AND CAUTIONS

WARNING and **CAUTION** statements, such as the following examples, denote a hazard and appear throughout this manual. Follow all instructions contained in these statements.

A **WARNING** statement calls attention to an operating procedure, practice, or condition, which, if not followed correctly, could result in injury or death to personnel.

A **CAUTION** statement calls attention to an operating procedure, practice, or condition, which, if not followed correctly, could result in damage to or destruction of part or all of the product.

WARNING: *Do not alter the ground connection. Without the protective ground connection, all accessible conductive parts (including control knobs) can render an electric shock. The power jack and mating plug of the power cable meet IEC safety standards.*

WARNING: *To avoid electrical shock hazard, disconnect power cord before removing covers. Refer servicing to qualified personnel.*

CAUTION: *Before connecting the line cord to the AC mains, check the rear panel AC line voltage indicator. Applying a line voltage other than the indicated voltage can destroy the AC line fuses. For continued fire protection, replace fuses only with those of the specified voltage and current ratings.*

CAUTION: *This product uses components which can be damaged by electro-static discharge (ESD). To avoid damage, be sure to follow proper procedures for handling, storing and transporting parts and subassemblies which contain ESD-sensitive components.*

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Specifications

Resolutions:

Type	Resolution	Horizontal (kHz)	Polarity	Vertical (Hz)	Polarity
MDA	720 x 350	18.4	+	50	-
CGA	640 x 200	15.8	+	60	+
EGA	640 x 350	21.8	+	60	-
VGA	640 x 480	31.5	-	60	-
SVGA	800 x 600	35.2	+	56	+
8514A	1024 x 384	35.5	+	87	+
VESA	1024 x 768	48.5	-	60	-
	1280 x 1024	64.0	+	60	+
MAC	512 x 384	24.4	-	60	- Composite Sync
	640 x 480	35.0	-	67	- Composite Sync
	640 x 480	35.0	-	67	- Sync on Green
	640 x 480	35.0	-	67	- Separate Sync
	830 x 624	49.7	-	75	- Composite Sync
	1152 x 870	68.7	-	75	- Composite Sync
	1280 x 1024	80.0	-	75	- Composite Sync

Connector Pin Assignments:

Pin No.	15-HD Function	15-DB Function	TTL 9-D Function
1	Red Video	Ground	Ground
2	Green Video	Red Video	Intensity
3	Blue Video	Hor./Comp Sync	Red Video
4	Not used	Not used	Green Video
5	Ground	Green/Sync	Blue Video
6	Ground	Ground	Intensity
7	Ground	Not used	Intensity
8	Ground	Not used	Hor. Sync
9	Not used	Blue Video	Ver. Sync
10	Ground	Not used	
11	Not used	Ground	
12	Not used	Ver. Sync	
13	Hor. Sync	Ground	
14	Ver. Sync	Ground	
15	Not used	Hor./Comp Sync	

General:

Power Source: AC 115Vac/230Vac, 50/60Hz ($\pm 10\%$)

Dimensions (HxWxD): 3.9" x 10.25" x 10.8" (99 x 260.3 x 274.3mm)

Weight: 3.1 lbs. (1.4 kgs.)

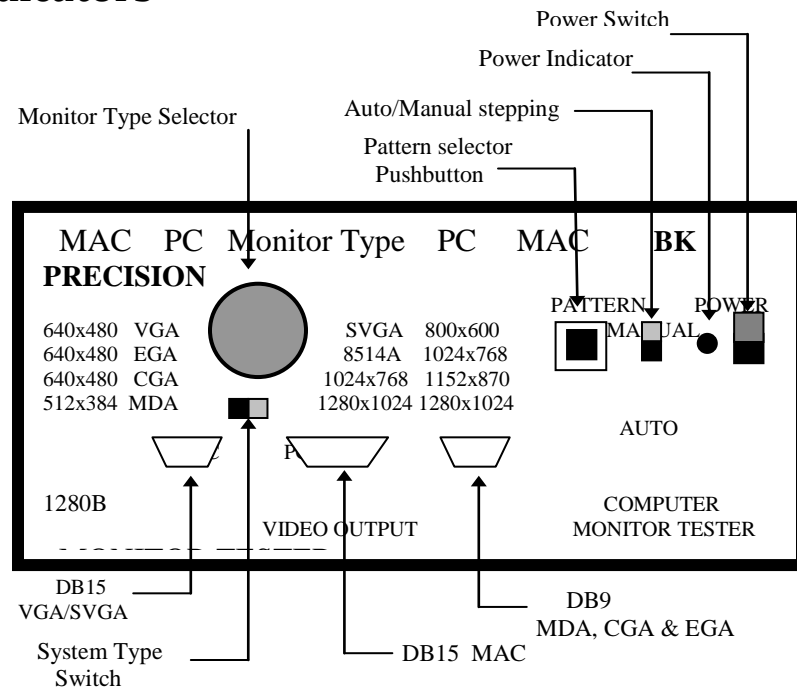
NOTE: Specifications and information are subject to change without notice.

Package Contents

The 1280B is shipped with:

- 1280B Instrument
- Printed Instruction Manual
- Line Cord

Controls and Indicators



Power -- Slide switch for power on or off.

Power Indicator -- LED to show when power is on.

System Type Switch -- Selects Mac or PC Columns

Monitor Type Selector -- Selects Monitor type/ Resolution

Video Pattern -- Step through Colorbar, Crosshatch, Dot, and Raster Push button.

MDA, CGA or EGA Connector

9 pin Female, D type

MAC Connector

15 pin Female, D type

VGA, SVGA, & 1814A Connector

15 mini-pin Female, D type

~ **BACK PANEL (not shown)** ~

AC Power Input

AC Voltage Selector

Fuse Holder -- Located directly under the AC Power Input

Four DB15 mini-pin Female Jacks -- Allows burn-in or testing of multiple Monitors

RGB BNC -- Red, Green and Blue video with sync on Green

H/HV & VBNC -- Horizontal and Vertical Sync outputs

FEATURES

- Tests MDA,CGA, EGA, VGA, SVGA, & MAC Monitors
- Resolution 720x350, 640x480, 800x600, 1024x768,
- 1280x1024, 512x384, 830x624, &1152x870
- Interlaced & Progressive
- Provides Color bars, Cross-hatch, Dots, Color
- Raster & Window
- Connectors are 9pin D(MDA, CGA & EGA), 15pin
- D(MAC), 15minipin D (VGA, SVGA, and 8514A)
- Single push button selectable patterns
- Multiple monitor testing or burn-in

BASIC OPERATION

1. Place the monitor type switches to the proper position for the type of monitor to be tested.
2. Connect the monitor to the proper video output connector.
3. Turn on the power to both the monitor and the test unit.
4. Press the video pattern push-button to step to the desired pattern*.

* Setting Auto Manual Switch to AUTO allows the output to scroll through the patterns automatically.

Use of Pattern Applications

The primary use of this pattern generator is to provide a quick check of the operating condition of a monitor and to allow for the adjustment of the external controls for the best performance.

CROSSHATCH or DOT ---- These patterns are used to check static and dynamic convergence, linearity and pin cushion settings.

COLOR BARS ---- The color bars are used to test the monitors ability to produce proper colors.

RASTER ---- Typically used to check the purity of the primary colors. When these are properly adjusted the white raster should appear pure white.