

instruction manual
x-y indicator model 620D

s/n_____

boulder, colorado

WARNING

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications.

It has been tested and found to comply with the limits for a class A computing device pursuant to subpart of J of part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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SECTION I

GENERAL DESCRIPTION

1.1 INTRODUCTION

This instruction manual is to be used as a guide to the installation, adjustment, operation and maintenance of the Colorado Video Model 620D X-Y Indicator.

1.2 PURPOSE OF EQUIPMENT

The Model 620D X-Y Indicator is used to generate X and Y coordinates (cross hairs) on a television screen. It allows rapid alignment of subject material with a predetermined location when used in conjunction with a standard TV camera and monitor.

1.3 DESCRIPTION OF EQUIPMENT

The Model 620D accepts composite video at a looping (Hi Z or terminated) input, adds a full raster cross lines to the video and provides a composite video output of the video/lines combination for display on a standard TV monitor. The position of the lines can be varied by 95% of the raster by means of front panel controls adjustable with a small screwdriver. A switch allows selection of black or white line display.

The unit is free standing (rack mounting optional) and of a size suitable for placing under most small (5, 9, 11 inch diagonal) monitors.

1.4 SPECIFICATIONS

| | |
|----------------------------|---|
| Size: | 1 2/3" X 8" X 8" |
| Mounting: | Free standing (1 3/4" X 19" rack mount optional) |
| Construction: | Solid-state, PC Board |
| Power: | 117 VAC, 60 Hertz |
| Input Signal: | Video, composite, 1 V p-p, 75 Ω, |
| Output Signal: | Video, composite, 1 V p-p, 75Ω |
| Setup Controls: | Termination, 75 Ω/Hi Z |
| Operating Controls: | AC Power: On/Off |
| | H and V Position (4): $\pm 95\%$ of raster height and width : front panel, screwdriver accessible |
| Blk/wht: | Selects black, off, or white line display |
| Indicators: | AC Power |
| Connectors: | BNC |

SECTION II

OPERATING INSTRUCTIONS

2.1 INTRODUCTION

This section contains the general operating instructions and procedures for the Model 620D X-Y Indicator.

2.2 INSTALLATION AND OPERATION

Connect a camera or other source of a composite video signal to one of the VIDEO IN connectors on the rear of the 620D. If this signal is not looped on to another device that terminates the cable, the termination switch should be placed in the 75 position. Connect a video monitor to the VIDEO OUT connector.

Apply power to the camera, monitor and the 620D. Set the front panel switch for white lines. The monitor should display the subject viewed by the camera with white lines superimposed.

Adjust line positions as desired using the four screwdriver accessible front panel controls.

2.3 CONTROLS

2.3.1 OPERATING CONTROLS

| <u>Control</u> | <u>Location</u> | <u>Function</u> |
|-----------------|-----------------|--------------------------|
| Power Switch | Front | Turns unit On/Off |
| Black/Off/White | Front | Selects cross hair color |

| <u>Control</u> | <u>Location</u> | <u>Function</u> |
|----------------|-----------------|---|
| VERT (2) | Front | V position adjustment of horizontal cursor lines. |
| HORIZ (2) | Front | H position adjustment of vertical cursor lines. |

2.3.2 **Internal Controls - Factory Set**

| <u>Control</u> | <u>Function</u> |
|-------------------|--|
| H Line Length (2) | Adjusts length of H lines at right end |

warranty

Colorado Video, Incorporated warrants the equipment of its manufacture to be free of defects in material and/or workmanship under normal use and service. Colorado Video, Incorporated's obligation under this warranty is limited to making good at its laboratories any part or parts thereof, which shall within one (1) year after delivery to the original purchaser be returned to Colorado Video, Incorporated at its laboratories, with transportation charges prepaid, and which Colorado Video, Incorporated's examination shall disclose to its satisfaction to have been defective.

This warranty is expressly in lieu of all other warranties and representation, express or implied, and of all other obligations or liabilities on the part of Colorado Video, Incorporated. In no event shall Colorado Video, Incorporated be liable for damages of any kind connected with the use of its equipment or its failure to function properly.

This warranty shall not apply to any equipment which shall have been repaired or altered outside of Colorado Video, Incorporated's laboratories so as to, in Colorado Video, Incorporated's judgement, affect its use, function, reliability, or which shall have been subject to misuse, alteration, improper installation, negligence, or accident.

Before any equipment is returned to Colorado Video, Incorporated for repairs or adjustments, shipping instructions should be obtained from Colorado Video, Incorporated. Colorado Video, Incorporated assumes no responsibility for unauthorized returns.