

instruction manual

video picture rotator
model
NWN424CS

s/n _____

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 NVVN424CS Video Rotator.

1.2 PURPOSE OF EQUIPMENT

The Model NVVN424CS Video Picture Rotator rotates a real time video image 0, 90, 180, or 270 degrees . It can also multiply the picture size by 100%, 75%, or 133% so that a rotated rectangular picture (3:4) can fit on or fill a video screen (4:3). A freeze function is also provided.

1.3 DESCRIPTION OF EQUIPMENT

The Model NVVN424CS accepts composite video at a terminated input, rotates and magnifies the picture as desired, and provides a composite video output for display on a composite video monitor. Constructed of ABS plastic, it is free standing with a sloping face for bench top use.

1.4 SPECIFICATIONS

Size:	NVVN424CS: 6.9"W x 4.9"L x 2.4"H sloping to 1.4"H
Mounting:	Bench Top
Construction:	Solid-state, SMT PC Board
Power:	+5VDC, 1000mA regulated
Input Signal:	Video, composite NTSC, 1 V p-p, 75 Ω
Output Signal:	Video, composite NTSC, 1 V p-p, 75 Ω
Controls:	Lock/Unlock Size Controls & Hold to Save Settings Normal Rotate 90 degrees Rotate 180 degrees Rotate 270 degrees Size 1x Size .75x Size 1.33x Freeze
Indicators:	Locked Mode (size controls are locked when lit) Unlocked Mode (size controls are active when lit) Normal Rotate 90 degrees Rotate 180 degrees Rotate 270 degrees Size 1x Size .75x Size 1.33x Freeze
Connectors:	Video In: BNC Video Out: BNC +5 VDC Power: Coaxial 5.5mm x 2.5mm

SECTION II

OPERATING INSTRUCTIONS

2.1 INTRODUCTION

This section contains the general operating instructions and procedures for the Model NVVN424CS Video Rotator.

2.2 INSTALLATION AND OPERATION

Connect a camera or other source of a composite video signal to the “input” connector on the rear of the NVVN424CS. Connect a composite video monitor to the “output” connector.

Connect the coaxial power input to a regulated 5VDC, >900mA, center pin positive power source. The “Locked” LED should appear steady and the “Setup” LED should flash for about ten seconds while the unit boots. About two seconds after booting, the unit should function according to previously saved settings.

Locked/Unlocked: The Rotator can be toggled between two modes of operation by means of the Lock/Unlock button. Push the button briefly to change modes. In the **Locked Mode**, all picture size controls are locked. Size controls are active in the **Unlocked Mode**. Either mode can be used indefinitely.

To select a Picture Size, place the Video Scan Reverser in “Unlocked” mode by pressing the “Lock/Unlock” button until the “Unlocked LED is illuminated. Press the desired size button until a green LED indicates the desired mode. A separate picture size may be selected for each of the four rotation modes.

The unit can be left indefinitely in the “Unlocked” mode to allow the size controls to remain active. Use the “Lock/Unlock” button to toggle to “lock” mode in order to make the size controls inactive.

To select a Rotation Mode, press the desired rotate button until a green LED indicates the desired mode. A unique picture size may be selected for each rotation mode. Depending on your selections, picture size may change automatically when changing rotation mode.

The picture can be frozen by pressing the “Freeze” button. Pressing the button again or pressing the “normal rotation” button will unfreeze the picture.

Settings can be saved in order to preserve them while power is absent. While the unit is in “unlocked” mode, press and hold the “Lock/Unlock” button. Release the button once the “Unlocked” LED has extinguished (after about five seconds). Settings will be saved until this process is repeated for new settings.

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.