

A white circuit trace graphic consisting of several horizontal lines with small circles at various points, extending from the left towards the microchip icon.

CC422CS Hi-Def Video Scan Reverser

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Users' Manual

A decorative footer with a dark red background and a jagged top edge. It contains white circuit traces and icons, including a female symbol on the left and a microchip icon on the right.

Colorado Video

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.

If Your Unit Carries the Optional CE Mark:

Colorado Video Inc., Boulder CO, USA, declare under our sole responsibility that the Model DD422CS, if installed and operated in accordance with instructions, is in conformity with the following European, harmonized and published standards at date of this declaration:

Safety:

EN/IEC 60950-1:2001: safety of information technology equipment

Electro-Magnetic Compatibility:

EN 55022:1998: Electro magnetic *emissions:* Class A

EN 61000-3-2:1996: Harmonic current emissions

EN 61000-3-3:1995 Limitation of voltage fluctuations

EN 55024:1998: Product group *immunity* standard IT equipment:

EN 61000-4-2: electrostatic discharge (ESD) immunity

EN 61000-4-3: Radiated Electro-Magnetic field immunity

ENV 50204:1995: Digital radio telephones immunity

EN 61000-4-4:1995: Electrical fast transients (EFT) immunity

EN 61000-4-5:1995: Surge transient immunity

EN 61000-4-6: 1996: Conducted Radio-Frequency disturbances imm.

EN 61000-4-8: 1993: Power frequency magnetic field immunity.

EN 61000-4-11: 1994: Immunity to voltage dips and short interrupts

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SECTION I

GENERAL DESCRIPTION

1.1 PURPOSE OF EQUIPMENT

The Model CC422CS provides four selectable transforms for a Component Analog or VGA Video Picture: Left/Right Mirror, Top/Bottom Flip, Rotate 180^o, and Normal.

The CC422CS does not process audio..

1.2 DESCRIPTION OF EQUIPMENT

The Model CC422CS accepts Analog Component or VGA Video at its input, performs the user-selected transform, and provides a Analog Component or VGA Video output for display on a compatible monitor.

The CC422CS, constructed in an ABS plastic and aluminum chassis with an internal EMI shield coating, is free standing with a sloping face for bench top use. It requires an external power supply to provide 5 Volts DC regulated, 1 Amp, at its 5.5x2.5mm coaxial power connector.

The Input/Output connectors are compatible with male VGA cables. Passive adapters and cables to interconnect these VGA connectors to RGB or YUV Analog Component equipment are widely available.

1.3 SPECIFICATIONS

- Size:** 8.875"W x 6.5"L x 2.75"H sloping to 1.25"H
- Mounting:** Table Top
- Construction:** Solid-state, SMT PC Board, Optionally RoHSCompliant
- Power:** +5VDC, 1000mA regulated
- Input Signal:** Analog Component or VGA
- Output Signal:** Analog Component or VGA
- Controls(2):** Mode: Normal/Mirror/Flip/Rotate (pressing toggles through modes)
- Auto Align
- Indicators(5):** Power Video OK
Picture Normal
Picture Mirrored
Picture Flipped
Picture Rotated 180^O
- Connectors:** Video In & Out: 15-pin D-Sub Female
Power: Coaxial 5.5mm x 2.5mm

SECTION II

INSTALLATION AND OPERATION

Connect a camera or other source of a Component Analog or VGA video signal to the “input” connector on the rear of the CC422CS.

Connect a Component Analog or VGA video monitor to the “output” connector.

Connect the coaxial power input to a regulated 5VDC, >1000mA, center pin positive regulated power source. The “Power/Video OK” LED should appear steady. If the LED flashes, power is present but the signal at the video input is absent or incompatible.

Press the “**Auto Align**” button to cause the CC422CS to align its digital pixel sampling with the pixels underlying the Component Analog or VGA input. The picture will briefly go black during the alignment process.

To select Normal, Mirrored, Flipped, or Rotated Mode, press the button repeatedly until a green LED indicates the desired mode. The Mode setting will remain when the unit is powered down and up again.

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.