

SDC-101

SERIAL DIGITAL VIDEO COLOR CORRECTOR WITH TWO CONTROL PANEL OPTIONS



Our unique digital color corrector, the SDC-101, lets you correct picture errors inexpensively and alter video levels in component serial digital video. Ten-bit digital processing guarantees optimum signal quality, and it does it all without relying on expensive outside services.

FEATURES

- Editor and PC interface for easy system integration
- All common “analog” video parameters may be adjusted by the user
- Color corrections and enhancements happen in real-time
- 50 user-defined memories
- 100% digital processing assures no signal degradation
- Affordable and cost effective with the controls you demand
- EDH input is checked and new EDH is added to the output
- RGB legalizer built-in
- Editor control
- Standards available: 525/60 and 625/50

Options

- Choice of two remote control units: rack mountable or desktop
- Editor Interface

PRODUCT DETAILS

The SDC-101 is a Serial Digital Video Color Corrector that accepts a SMPTE 259M-C input and produces an output of the same format. It provides the user with real-time control over common video parameters for the purpose of correcting or enhancing video signals. Familiar and understandable analog terms give the user the look and feel of a traditional analog color corrector. Corrections include gain-to-total video, color gain, hue shift, brightness adjustments, gamma, white clip and soft clip as well as black clip and stretch. The corrections may be applied to total video or selected components (RGB or YCBCR) as appropriate for desired results.

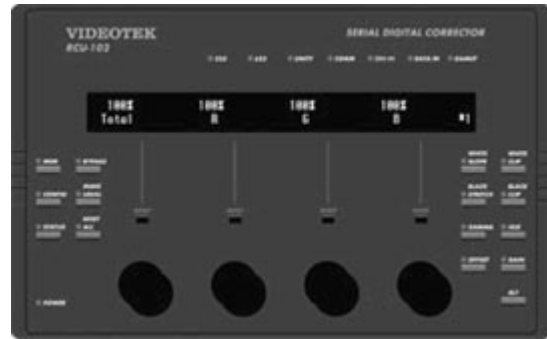
The SDC-101 is easily controlled by any combination of editors, GPIs, simple timecode triggers, or an optional RCU-101 or RCU-102 Remote Control Unit. The RCU-101 is a rack mountable, 1RU, remote control unit providing control for up to eight SDC-101s. This remote control unit communicates via individual serial ports that are selectable through front panel controls, built-in LEDs indicate the selected SDC-101 frame. Other intuitive front panel displays and controls provide full feature control. The

RCU-102 is a desktop model providing control for up to four SDC-101s.

RCU 101 Remote Control Unit



RCU-102 Optional Remote Control Unit



IMAGES/DIAGRAMS

Back Module



SPECIFICATIONS

Specifications and designs are subject to change without notice.

Inputs

Video	1 serial digital, non-looping per SMPTE 259M-C, 4:2:2, 270 Mb/s, 525/60 and 625/50
Connector	BNC 75 ohms female
Return Loss	≤ -18 dB, 5 MHz to 270 MHz
Level	800 mV p-p with equalization for up to 150m (typical) of 8281
Timecode	LTC per SMPTE 12M
Level	0.5 to 4.5V p-p
Connector	XLR, female

Outputs

2 serial digital, same format as input with one providing power failure bypass

Connector	BNC 75 ohms female
Return Loss	≤ -18 dB, 5 MHz to 270 MHz
Level	800 mV p-p \pm 10% into 75 ohms load
Offset	<0.5V
Rise and Fall Time	0.4 to 1.5 ns, typical, at 20/80%
Throughput Delay	6.3 μ s nominal

Controlled Functions and Corrections

Gain

Total Gain, Color Gain, R Gain, G Gain, B Gain, Y Gain, CB Gain, CR Gain

Hue Shift Brightness (DC Offset)

Total Offset, R Offset, G Offset, B Offset, Y Offset, C_B Offset, C_R Offset Selectable also to Black Level (Black Gain)

White Clip (White maximum level set)

Total White Clip, R White Clip, G White Clip, B White Clip, Y White Clip, C_B White Clip, C_R White Clip

White Slope (Soft clip or white knee)

Total White Knee, R White Knee, G White Knee, B White Knee

Gamma (50% point offset)

Total Gamma, R Gamma, G Gamma, B Gamma

Black Clip (Black minimum level set)

Total Black Clip, R Black Clip, G Black Clip, B Black Clip, Y Black Clip, C_B Black Clip, C_R Black Clip

Black Stretch (Soft clip or black knee)

Total Black Knee, R Black Knee, G Black Knee, B Black Knee

Interfaces

PC	RS-232 interface on back panel capable of driving up to 90 feet Baud Rate: Configurable by front panel to 1200, 2400, 4800, 9600, 19.2k, 38.4k bps
Connector	9-pin D-sub, female
RCU	RS-422 Interface, capable of driving up to 1000 feet (304m)
Connector	9-pin D-sub, female
Edit	RS-422 Interface, capable of driving up to 1000 feet (304m) (Editor control requires optional EI-SDC)
Connector	9-pin D-sub, female
GPI	Contact closure output
Connector	9-pin D-sub, female

Power Requirements

Input	90 to 260 VAC, 50/60 Hz, nominal
Consumption	65 VA, typical

Mechanical

Dimensions	Height: 1.75" (4.45 cm) Width: 19" (48.26 cm) Depth: 16" (40.64 cm)
Weight	11.5 lbs (5.2 kg)

Environmental

Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Humidity	90% maximum, non-condensing

Standard Accessories

Instruction and Service
Manual
Rackmount Kit
Power Cord

Options

EI-SDC Editor Interface

RCU-101 Remote Control
Unit
RCU-102 Remote Control
Unit

RCU-101 (OPTIONAL) SPECIFICATIONS**Power Requirements**

Input	5 VDC 120 VAC adapter included
Consumption	20 VA, typical
Connection	Locking, center positive

Mechanical

Dimensions	Height: 1.75" (4.45 cm) Width: 19.0" (48.26 cm) Depth: 3.3" (8.38 cm)
Weight	2.61 lb (1.18 kg)

Connectors

Eight 9-pin D-sub, male, for individual RS-422 connection to SDC-101 units.
Capable of driving up to 1,000 feet (304m).
One 9-pin D-sub, male, for GPI (unit control selection)

Environmental

Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Humidity	90% maximum, non-condensing

Standard Accessories

Operators Handbook
34.2 ft. (10m) cable with 9-pin D-sub connectors, male to female

RCU-102 (OPTIONAL SPECIFICATIONS)**Power Requirements**

Input	90 to 260 VAC, 50/60 Hz, nominal
Consumption	35 VA, typical

Mechanical

Dimensions	Height: on desktop: 2.78" (7.06 cm) Note: This becomes depth when unit is mounted in a rack frame
Width	8.46" (21.48 cm)

Depth (front to back when on desktop) 5.07" (12.89 cm)

Note: This becomes the height when unit mounted in a rack frame Angle of control panel on desktop: 20°

Connectors

One 9-pin D-sub, male, for multi-drop RS-422 connection for up to 4 SDC-101 units. Capable of driving up to 1,000 feet (304m).

Environmental

Operating Temperature 0°C to 50°C
Storage Temperature -20°C to 70°C
Humidity 90% maximum, non-condensing

Standard Accessories

Instruction and Service Manual
Rackmount Kit
34.2 ft. (10m) cable with 9-pin D-sub connectors, male to female

Option

DRC-2A Double Rackmount Case