

SD/HD/3G-SDI to CVBS Conversion Box

AVLINK™



3SC-02MW

USER MANUAL 3SC-02MW

V1.0

Package Contents-

- 1 3SC-02MW Unit
- 1 User manual
- 1 Power adapter DC 12V
- 2 Screws
- 4 foot pads
- 1 Terminal Block

Any thing missed, please contact with your vendor.

Introduction

The 3SC-02MW Component SD-SDI·HD-SDI or 3G-SDI to CVBS and S-video of conversion box.

Features

- Support SD /HD /3G-SDI standard formats.
- Equalized Looping SD/HD/3G-SDI output.
- Additional 2 Channel RCA jack audio output.
- AUTO SD/HD/3G-SDI input detection.
- Analog and Coaxial audio output supports.

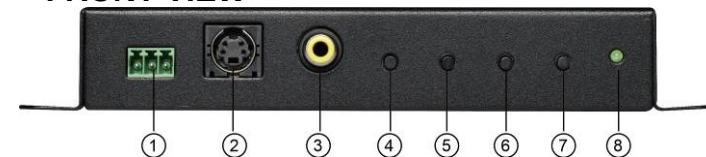
Specifications

SDI Input	1 x BNC
SDI Output	1 x BNC
CVBS Output Connector	1x RCA
S-Video Output Connector	1 x mini-DIN 4 Female
Analog Audio Connector	2 x RCA
Coaxial (S/PDIF) Audio Connector	1 x RCA
RS-232 Connector	1 x 3-pin Terminal Block
Select Switch	4
Input SDI support	525i@59.94 625i@50 720p@50/59.94/60 1080i@50/59.94/60 1080p@23.98/24/25/29.97/30 1080p@50/59.94/60
Output video support	525i@59.94 (NTSC) 625i@50 (PAL)
Analog audio support sample rate	48kHz
Digital audio support sample rate	48kHz
SDI Cable Distance (Single end)	100m (Max.) for input port 10m for output port
Input Signal Type	Standard SD/HD/3G-SDI Signal
Power Adapter (Min.)	DC 12V
Housing	Metal
Weight	480g
Dimensions (LxWxH)	171x119x25mm

Note:

Different cable quality might effect upon the maximum resolution and cable distance.

FRONT VIEW



1. RS232 control Port
Rx pin: connect the RxD pin of the RS232 from PC
Tx pin: connect the TxD pin of the RS232 from PC
GND pin: connect the GND pin of the RS232 from PC
2. "S-Video Out" Port
3. "CVBS Out" Port
4. OSD "MENU" Button (start / close OSD)
5. OSD "DOWN" Button
6. OSD "UP" Button
7. OSD "ENTER" Button
8. Power LED

REAR VIEW



1. 3G-SDI Input port
2. 3G-SDI output port
3. Coaxial audio output port
4. Analog audio output port
5. Input Power Jack

Installation

1. Connect the 3SC-02MW video input BNC connector with SDI cable from different audio/video equipment.
2. Connect the RCA cable between the monitor and the "CVBS" port of 3SC-02MW; or connect the S-Video cable between the monitor and the "S-Video" port of 3SC-02MW.
3. Connect the power cord and turn on the 3SC-02MW.
4. Turn on the SDI video source device.

Input Video Support Mode

Analog	Resolution	Frequency(Hz)
525i(NTSC)	1440x480	59.94
625i(PAL)	1440x576	50
720p	1280x720	50/59.94/60
1080i	1920x1080	50/59.94/60
1080p	1920x1080	23.98/24/25/29.97/30
1080p	1920x1080	50/59.94/60

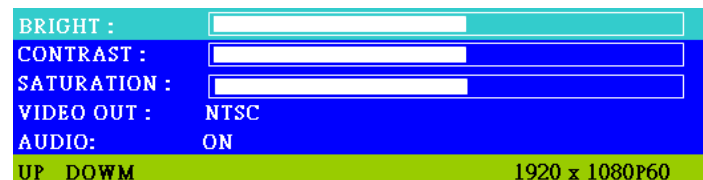
Operation

The 3SC-02MW will detect input video resolution automatically and scale the video to the assigned video output resolution. (NTSC/PAL)

The user can change the output resolution in the OSD

OSD operation

After the user press the “MENU” button, the 3SC-02MW will pop-up the OSD screen.



“BRIGHT” setting:

The user can adjust the video brightness here.

“CONTRAST” setting:

The user can adjust the video contrast here.

“SATURATION” setting:

The user can adjust the video saturation here.

“VIDEO OUT” setting:

The user can change the video output resolution to NTSC or PAL.

“AUDIO” setting:

The user can enable or disable both the analog and coaxial audio output.

“Enter” button:

- To enter the “EDIT” mode of the parameter where the selection bar located.
- After change the value by “up” or “down”, you can back to select other setting by pressing “menu” button.

“UP” or “DOWN” button:

- The user can select various functions by pressing “up” or “down” button in the front panel to move the selection bar.
- In “EDIT” mode, pressing “up” or “down” button can change the value of selected function.

“MENU” button:

- Start the “OSD” in the screen by pressing the “menu” button.
- Pressing the “menu” button again will close the OSD and save all the video setting.

RS232 control protocol

BAUD rate: 4800bps, 8-bit data, 1 stop bit

After the Server sends the one command to 3SC-02MW, 3SC-02MW will response the result or the information required from the server by the command.

Server => 3SC-02MW command Format

Command byte	Data byte	checksum byte
Byte#0	Byte#1	Byte#2

*Checksum byte: check sum from Byte#0~Byte#2

Server => 3SC-02MW command list

Command byte	Data byte	ACK type (from 3SC-02MW)	Function
0xa0	0x00	B	Get model name
	0x01	B	Get possible output resolution number
	0x02	B	Get adjustable video parameter number.
	0x03	B	Get does support audio control.
0xa1	0x00~0xff	A	Brightness Default: 0x80
0xa2	0x00~0xff	A	Contrast Default: 0x80
0xa3	0x00~0xff	A	Saturation Default: 0x80
0xb0	0x00 /0x01	A	Output resolution 0:NTSC 1:PAL Default: 0x00
0xb1	0x00 /0x01	A	Audio enable 0:off / 1:on Default: 0x01

Example: set the brightness to be the value 0x02

Server sends: 0xa1, 0x02, 0x5d

3SC-02MW reply: 0xa5, 0x96

3SC-02MW => Server command

Type “A” format

Ack byte	checksum byte	note
0xa5	0x5b	Means: “ACK”, 3SC-02MW receives an available command
0x6a	0x96	Means: “NAK”, 3SC-02MW receives unknown command or data byte exceeds the range.

Type “A” ACK format

Ack byte	checksum byte	note
0xa5	0x5b	Means: “ACK”, 3SC-02MW receives an available command
0x6a	0x96	Means: “NAK”, 3SC-02MW receives unknown command or data byte exceeds the range.

Type “B” ACK format

	ACK byte	Length byte	Data byte	checksum byte
Order	Byte#0	Byte#1	Byte#2~Byte#N	Byte#N+1
value	0x5a	N+2	0x00~0xff	0x00~0xff

*Checksum byte: check sum from Byte#0~Byte#N+1

Example: get model name of 3SC-02MW

Server sends: 0xa0, 0x00, 0x60

3SC-02MW reply: 0x5a, 0x0a, '3', 'S', 'C', '-', '0', '2', 'M', 'W', 0xa0

© C&C TECHNIC TAIWAN CO., LTD. All rights reserved.

Trademarks:

All the companies, brand names, and product names referred to this manual are the trademarks or registered trademarks belonging to their respective companies.