SDI to Gen-Lock
SDI/HDMI Converter

GCON-SDI

OPERATION GUIDE
WARNING
To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, cause excessive heat or fire.
3. Do not connect multiple connectors to a single adapter. Exceeding the capacity may cause excessive heat or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. Do not drop the converter to avoid the damage or personal injury.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING
This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

PRECAUTION
This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.
6. Do not place conductive objects (e.g. screw drivers, coins, metal items, etc.) or containers filled with water on top of the converter. Doing so may cause personal injury due to fire, electric shock, or falling objects.

7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.

8. If any unusual smells or smoke come from the unit, stop using the product. Immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.

9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way.

10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.

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**PRECAUTION**

Please read this Operation Guide before installing and using the camera & retain this copy for your reference.

1. Always follow the instructions in the operation guide when applying power. Fire and equipment damage can occur if power is applied incorrectly. For the correct power supply, refer to the specifications page.

2. Do not use converter if fumes, smoke or a strange odor is emitted from the camera, or if it seems not functional correctly. Disconnect the power source immediately and consult with your supplier.

3. Do not use the converter in extreme environments where high temperatures or high humidity exists. Use the camera under conditions where temperatures are between 32°F ~ 104°F, and humidity is below 90%.

4. If installed close to a TV, radio transmitter, magnet, electric motor transformer or audio speakers the magnetic field generated may interfere with or distort the image.

5. To prevent damage, do not drop the converter or subject it to strong shock or vibration.
FEATURES

• 3G-SDI up to 1080p60 full HD Resolution Input.
• Simultaneous HDMI and SDI Loop Output.
• Highly compatible with Tri Level reference input SMPTE 292M & 424M Compliant and multi-video format including 59.94Hz.
• SMPTE 352M Ancillary Data supported.
• Embedded audio pass through via SDI & HDMI.
• Adjustable V-sync & H-sync phases.
• Divisional picture comparison.
• Built in Pattern Generator.
• Built in LCD menu screen.
• Built in menu control button.
• Versatile, compact, and rugged design.

MENU OPERATION

1. **Entering the main menu**
   Press Enter button three times to enter the main menu.

2. **Change the menu items**
   Use Right or Left menu to toggle through the menu.

3. **Select or enter the sub menu**
   Use Enter button.
OSD MENU

GEN-LOCK CONT.
- GEN ON/OFF
  GEN-RUN: [OFF], GEN-RUN: [ON], CANCEL(BACK)
- H_SYNC ADJUST
  H_SYNC: 0000, CANCEL(BACK)
- V_SYNC ADJUST
  V_SYNC: 0000, CANCEL(BACK)
- RETURN

PATTERN GEN.
- PTN ON/OFF
  PATTERN: [OFF], PATTERN: [ON], CANCEL(BACK)
- PTN TYPE
  PTN WHITE, PTN CROSS, PTN WHITE PTN HATCH
  PTN COLOR BAR, PTN WINDOW, PTN H RAMP
  PTN WH RAMP, PTN WV RAMP, PTN DIAGONAL
  PTN RED, PTN GREEN, PTN BLUE
- RETURN

MISC CONT.
- AUDIO CONT.
  AUDIO ON/ OFF: AUDIO: [OFF], AUDIO: [ON], CANCEL(BACK)
  AUDIO BITS : 24 BITS, 20 BITS, 16 BITS, CANCEL(BACK)
- PAYLOAD CONT. : 24 BITS, 20 BITS, 16 BITS, CANCEL(BACK)
  PAYLOAD ON/ OFF: PAYLOAD: [OFF], PAYLOAD: [ON], CANCEL(BACK)
- RETURN

DISPLAY CONT.
- LCD CONT.
  LCD BL ON/OFF: LCD [OFF], LCD: [ON], CANCEL(BACK)
  DISP TYPE: DYNAMIC ], STATIC, CANCEL(BACK)
- RETURN
- HD/3G CONT.
  2DIV COMPARE: 2DIV [OFF], 2DIV: [ON]
- RETURN
- RESET: REST RUN, RETURN
- EXIT
**GEN-LOCK CONT.**

**GEN ON/OFF**

External reference input can be turned ON or OFF from this menu.

By using Left or Right button,
Select GEN-RUN[ON] to enable external reference input.
Select GEN-RUN[OFF] to disable external reference input.
Select CANCEL(BACK) to go back to the previous menu.

* SDI input signal and reference signal needs to be matched.

**H_SYNC ADJUST**

H_Sync offset can be adjusted from this menu.

By using Left or Right button,
Select the right offset number on H_SYNC:0000
Press SELECT button to apply the changes and go back to the previous menu.

**V_SYNC ADJUST**

V_Sync offset can be adjusted from this menu.

By using Left or Right button,
Select the right offset number on V_SYNC:0000
Press SELECT button to apply the changes and go back to the previous menu.

**RETURN**

Press SELECT button to Return to the main menu.
**PATTERN GEN.**

Converter Menu
2. Pattern Gen..

- [Pattern Menu]
  1. Ptn On/Off

  - [Pattern On/Off]
  > Pattern : [OFF]

  - [Pattern On/Off]
  > Pattern : [ON]

  - [Pattern On/Off]
  > Cancel (BACK)

- [Pattern Menu]
  2. Ptn Type

  - [Pattern Type]
    1. Ptn White

  - [Pattern Type]
    14. Return

**PATTERN ON/OFF**

Both SDI and HDMI outputs will generate patterns and input video will be disabled. When GEN-LOCK is enabled, generated pattern will contain gen-lock signal.

By using Left or Right button,
Select PATTERN[ON] to enable pattern generation.
Select PATTERN[OFF] to disable pattern generation.
Select CANCEL(BACK) to go back to the previous menu.

**PATTERN TYPE**

Converter provides thirteen different patterns.
By using Left or Right button,
By using Left or Right button, select the proper pattern type.

- 01. White
- 02. Cross
- 03. Hatch
- 04. Color bar
- 05. Gray
- 05. Window
- 06. H_Ramp
- 07. WH_Ramp
- 08. WV_Ramp
- 09. Diagonal
- 10. Red
- 11. Green
- 12. Blue

**RETURN**

Press SELECT button to Return to the main menu.
MISC. CONT AUDIO

Audio can be turned ON or OFF, and AUDIO Sample Rate can be adjusted.

• AUDIO ON/OFF
  By using Left or Right button,
  Select AUDIO[ON] to enable AUDIO to be passed through to SDI and HDMI outputs.
  Select AUDIO[OFF] to disable AUDIO.
  Select CANCEL(BACK) to go back to the previous menu.

• SAMPLE BITS : 16 BITS, 20 BITS, 24 BITS

RETURN
Press SELECT button to Return to the main menu.

MISC. CONT PAYLOAD

Payload ID can be turned ON or OFF can be adjusted.

• PAYLOAD ON/OFF
  By using Left or Right button,
  • Select PAYLOAD[ON] to enable Payload ID.
  • Select PAYLOAD[OFF] to disable Payload ID.
  • Select CANCEL(BACK) to go back to the previous menu.

RETURN
Press SELECT button to Return to the main menu.
LCD CONT
This menu can control built in LCD display.

• LCD BL ON/OFF
  LCD display back-light can be turned ON or OFF from this menu.
  By using Left or Right button,
  Select LCD[ON] to enable LCD back-light.
  Select LCD[OFF] to disable LCD back-light.
  Select CANCEL(BACK) to go back to the previous menu.

• DISPLAY TYPE : DYNAMIC, STATIC
  LCD display type can be adjusted from this menu.
  Select DYNAMIC to display the current input status of SDI and external reference.
  Select STATIC to display the current external reference input and video output status.

RETURN
Press SELECT button to Return to the main menu.
DISPLAY-CONT. 2DIV

Converter Menu
4. Display Cont.

[Display Menu]
2. HD/3G Cont

[HD/3G Menu]
1. 2DIV Capture

[2DIV Capture]
>2DIV : [OFF]

[2DIV Capture]
>Cancel (BACK)

HD/3G CONT
2 division comparison provides still image and live image for image quality comparison

• 2DIV CAPTURE
Converter will capture the left half of the live image.
The other half of the screen is the live video.

RETURN
Press SELECT button to Return to the main menu.

RESET
Converter setting can be defaulted to the factory setting from this menu.

• RESET RUN
Select this menu to load factory default setting.

• RETURN
Press SELECT button to Return to the main menu.
VIDEO
Video Input 3G-SDI / HD-SDI
Resolution/Rate
1080 60p/59.94p/50p/30p/29.97p/ 25p
1080 60i/59.94i/50i
720 60p/59.94p/50p/30p/25p
Color Space 4:2:2 (YCbCr) 10bit
Video Output Gen-locked HD-SDI/3G-SDI
Gen-locked HDMI 1.3a

FUNCTION
Gen-lock Control ON/OFF
H Sync & V Sync Adjustment
Audio Control Audio Bits (16, 20, 24 Bits)
Payload ID ON/OFF
Pattern Generate Thirteen Patterns

AUDIO INPUT
Audio Input 16 Channels Embedded SDI Audio

STANDARD
SMPTE SMPTE 292M, SMPTE 424M

SYNCHRONIZATION
Gen-lock External Tri-Level Input

PHYSICAL
Control OSD Button & Text LCD
Operation Temp 32° F - 104° F
Dimension 130mm x 75m x 24mm / 5.11” x 2.95” x 0.94”
Weight 173g / 0.38lbs
Power 6W at 12VDC (+9 - +15VDC)

*Specification are subject to change without notice.
Visit us:
www.aidaimaging.com/support

E-mail us:
support@aidaimaging.com

Give us a Call:
Toll Free: 844.631.8367  |  Tel: 909.333.7421
Operating Hours: Mon-Fri  |  8:00am – 5:00pm PST
Disposal of Old Appliances

1. When this crossed-out wheel bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream in accordance to laws designated by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.