AIDA IMAGING

HDMI to Gen-Lock SDI/HDMI Converter

GCON-HDMI

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.
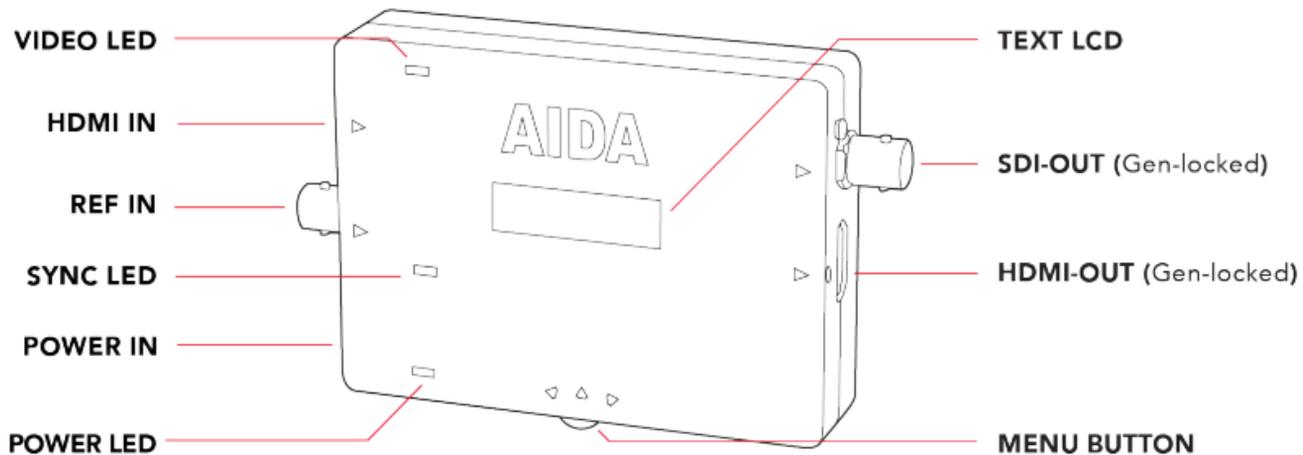5. Do not drop the converter to avoid the damage or personal injury.

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.

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.

VIDEO LED

HDMI IN

REF IN

SYNC LED

POWER IN

POWER LED

AIDA

TEXT LCD

SDI-OUT (Gen-locked)

HDMI-OUT (Gen-locked)

MENU BUTTON

- HDMI up to 1080p60 full HD Resolution Input.
- Simultaneous SDI and HDMI 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

L- Left | **U-** Select | **R-** Right

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.

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)
  RETURN
- **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**

```
Converter Menu
1.Genlock Cont.
```

```
[Genlock Menu]
1.Gen   On/Off
```

```
[Genlock On/Off]
>Genrun : [ON]
```

```
[Genlock ON/OFF]
>Genrun : [OFF]
```

```
[Genlock ON/OFF]
>Cancel (BACK)
```

```
[Genlock Menu]
2.H_Sync Adjust
```

```
[Genlock H_Sync]
>H_Sync : 0000
```

```
[Genlock H_Sync]
>H_Sync : 0007
```

```
[Genlock Menu]
3.V_Sync Adjust
```

```
[Genlock V_Sync]
>V_Sync : 0000
```

```
[Genlock V_Sync]
>V_Sync : 0007
```

```
[Genlock Menu]
4.Return
```

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.

```
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 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 Menu]
2.Ptn Type
```
▶
```
[Pattern Type]
1.Ptn White

[Pattern Type]
14.Return
```

PATTERN TYPE

Converter provides thirteen different patterns.
By using Left or Right button,
By using Left or Right button, select the proper pattern type.
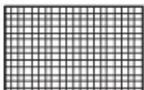
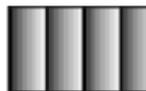01. White   02. Cross   03. Hatch   04. Color-bar   05. Gray   05. Window   06. H_Ramp

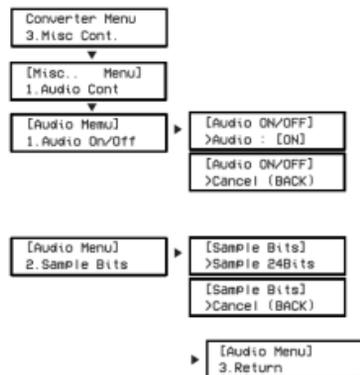07. WH_Ramp   08. WV_Ramp   09. Diagonal   10. Red   11. Green   12. Blue

```
[Pattern Menu]
3.Return
```

RETURN

Press SELECT button to Return to the main menu.

```
Converter Menu
3.Misc Cont.
      ↓
[Misc.. Menu]
1.Audio Cont
      ↓
[Audio Menu]      →    [Audio ON/OFF]
1.Audio On/Off         >Audio : [ON]

                       [Audio ON/OFF]
                       >Cancel (BACK)

[Audio Menu]      →    [Sample Bits]
2.Sample Bits          >Sample 24Bits

                       [Sample Bits]
                       >Cancel (BACK)

                  →    [Audio Menu]
                       3.Return
```

AUDIO CONT

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.

```
Converter Menu
3.Misc Cont.
      ↓
[Misc Menu]
2.Payload Cont
      ↓
[Payload Menu]    →    [Payload ON/OFF]
1.Payload On/Off       >Payload : [ON]

                       [Payload ON/OFF]
                       >Cancel (BACK)

                  →    [Payloado Menu]
                       3.Return
```
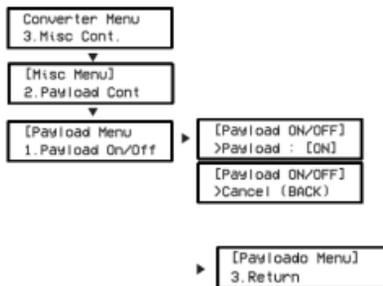
PAYLOAD CONT

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

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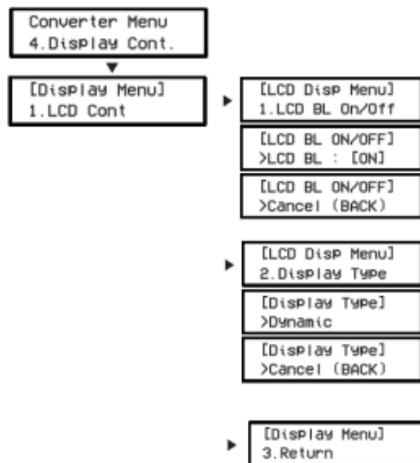 By using Left or Right button,
- Select PAYLOAD[ON] to enable Payload ID.
- Select PAYLOAD[OFF] to disable Payload ID.
- Select CANCEL(BACK) to go back to the previous menu.

RETURN

Press SELECT button to Return to the main menu.

```
Converter Menu
4.Display Cont.
```

```
[Display Menu]
1.LCD Cont
```

```
[LCD Disp Menu]
1.LCD BL On/Off
```

```
[LCD BL ON/OFF]
>LCD BL : [ON]
```

```
[LCD BL ON/OFF]
>Cancel (BACK)
```

```
[LCD Disp Menu]
2.Display Type
```

```
[Display Type]
>Dynamic
```

```
[Display Type]
>Cancel (BACK)
```

```
[Display Menu]
3.Return
```

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.

```
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)
```
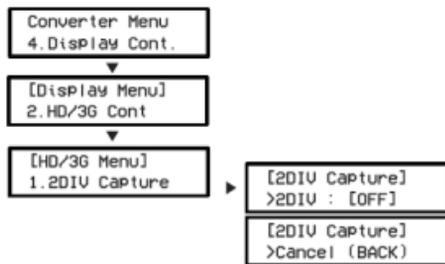
HD/3G CONT

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.
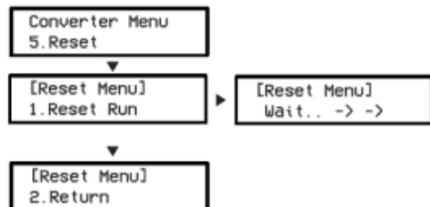   The other half of the screen is the live video.

Live Image
2DIV OFF

Live Image   *Captured image*
2DIV ON

RETURN
Press SELECT button to Return to the main menu.

```
Converter Menu
5.Reset
```

```
[Reset Menu]
1.Reset Run
```

```
[Reset Menu]
Wait.. -> ->
```

```
[Reset Menu]
2.Return
```

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	HDMI 1.3
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	8 Channels Embedded HDMI 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.

GCON-HDMI

GCON-SDI

HDMI

SDI

Matrix Switch
w/ Ref. In

Genlocked SDI

Genlocked HDMI

Reference Signal

Reference Signal

Genlocked SDI

Sync Generator
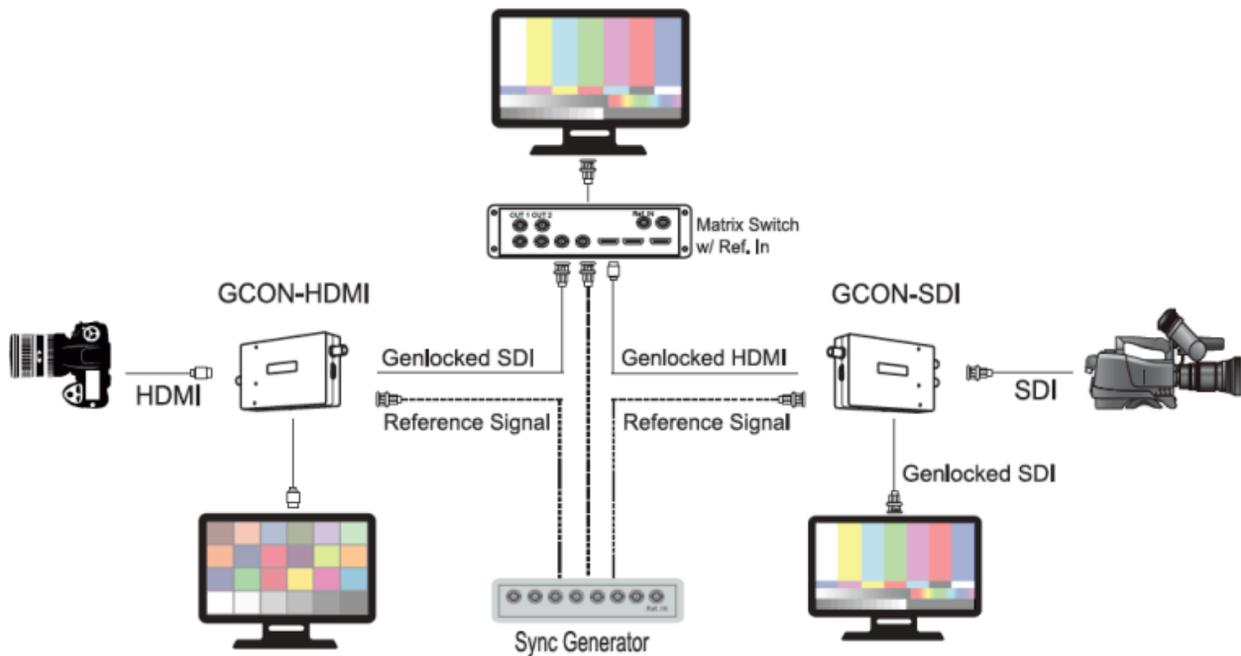
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