

# Bon Video Switcher

**BVS-100**



## User's Guide



**BON ELECTRONICS**  
<http://www.bon.co.kr>

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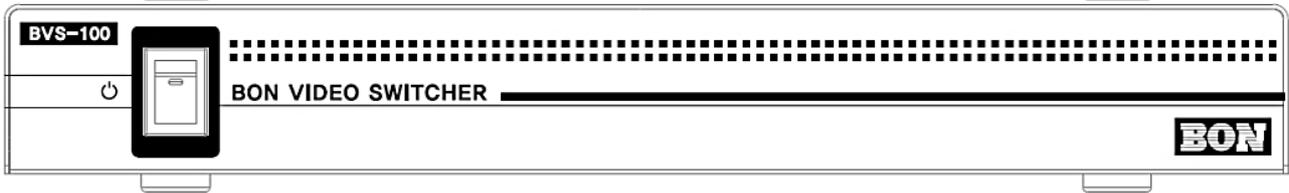
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## SAFETY INSTRUCTIONS

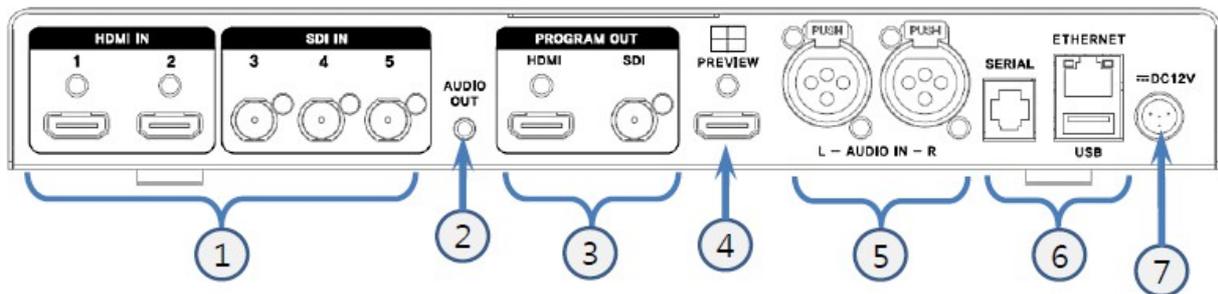
- Rough handling of product may cause physical damage or malfunction.
- Never insert anything metallic into the product openings. Doing so may create the danger of electric shock.
- To avoid electric shock, never touch the inside of the product. Only a qualified should open the product case.
- Openings in the product are provided for ventilation. To prevent overheating, these openings should not be blocked or covered.
- Put the device in a location with low humidity and a minimum of dust. Avoid places like damp basement or dusty hallways.
- Place the product on a solid surface and treat it carefully.
- Do not attempt to remove the product cover, as you will be exposed to a shock hazard. The cover should only be removed by qualified service personnel.
- If the product does not operate normally, or if there are any unusual sounds or smells coming from it, unplug it immediately and contact us.
- Please do not disassemble the product. No service will be provided in that case.

# APPEARANCE

## FRONT



## REAR



- 1) Input ports for HDMI and SDI.
- 2) Audio output.
- 3) Program output ports. HDMI and/or SDI can be used.
- 4) Preview monitor port. Connect a general LCD monitor with this HDMI port.
- 5) XLR Audio input.
- 6) Serial update port. Frequent update is not recommended but only if there's a significant reason. USB port is mainly for mouse or keypad connection, sometimes for update.
- 7) Power cable port (DC 12V/2A or 3.3A)

\* Please be aware of selection of your mouse. This device accepts only Logitech, Microsoft mice. The recommended input device is mouse but you can also use Cosy, Actto, Lenovo keypads. We apologize for your inconvenience.

## PREVIEW SCREEN



Preview screen is a quad-split screen that displays the current broadcasting program with a red rectangle.

### Changing the Program

To change the current program, double click on one of the four screens.

### Status Display

You can see the status at the bottom such as volume level and channel selection. To adjust such as volume level, click on the [+] or [-]. To mute the sound, click on [/] for example.

```
[+] Vol: 0db [-]  [/]:Mute On/Off  [*]:ALM On/Off  [.] :HDMI 1/SDI 5  
[6]: Effect_Wipe Right  [7]: Slow  [8]: Mixer Off(CG)
```

When you use keypad, the character [.] is the key to launch or activate the feature.

The status display can be turn on/off on the context menu which opens up by right clicking.

# MENU

## OUTPUT

OUTPUT	Video Format	
INPUT	Reference Source	1920*1080 60i
AUDIO	HDMI Mode	*1920*1080 59.94i
EFFECT/MIXER	Internal Pattern	1920*1080 50i
OSD	Audio Tone with Pattern	1280*720 60p
FUNCTION KEYS		1280*720 59.94p
SYSTEM		1280*720 50p
-----		NTSC(720*486)
Ver. 0.25_20		PAL(720*576)

### VIDEO FORMAT

You can select various output formats on the list.

\* 1920 x 1080 60i or 59.94i is usual selection.

### REFERENCE SOURCE

This is for SDI reference source for synchronization of an SDI and Black Burst signal for professionals. Usually you do not have to set this menu.

### HDMI MODE

This is for HDMI color mode selection, you don't need to set this menu unless you need a HDMI color mode change for professional purpose.

### INTERNAL PATTERN

Displays various color bars or a solid color to test the screen. Be careful not to display internal pattern when you want to see the actual input.

### AUDIO TONE

Select an audio tone to test audio.

## INPUT

<b>OUTPUT</b>		
<b>INPUT</b>	<b>Video Format</b>	<b>*2 HDMI + 2 SDI</b>
<b>AUDIO</b>	<b>No Signal Display</b>	<b>1 HDMI + 3 SDI</b>
<b>EFFECT/MIXER</b>		
<b>OSD</b>		
<b>FUNCTION KEYS</b>		
<b>SYSTEM</b>		
-----		
Ver. 0.xx_xx		

User can select 4 channels from 5 input ports as below.

2 HDMI + 2 SDI (Input port number 1, 2, 3, 4 are shown on preview)

1 HDMI + 3 SDI (Input port number 1, 3, 4, 5 are shown on preview)

\* The position of the screen is cannot be switched between each other.

User can choose "No Signal" picture, color bars, or blue screen when there is no signal or the signal is unrecognized.

\* Please check the input/output formats that the device accepts. Unrecognized video signal cannot be displayed.

### Input :

1080p/i(50/60/59.94/24/23.98), 720p(50/60/59.94), NTSC, PAL

### Output :

1080i,720p(50/60/59.94), NTSC, PAL

## AUDIO

OUTPUT		
INPUT		
AUDIO	Input 1 Level	0db
EFFECT/MIXER	Input 2 Level	0db
FUNCTION KEYS	Input 3 Level	0db
SYSTEM	Input 4 Level	0db
-----	Input 5 Level	0db
Ver. 0.25_20	Analog XLR Input	0db
	PGM Output Level	-1db
	-----	
	Audio Level Meter	On

Each audio input level can be adjusted by user in the range of -38db to +24db. To adjust master audio level, adjust PGM output level.

## EFFECT/MIXER

OUTPUT		
INPUT		
AUDIO		
EFFECT/MIXER	Effect Type	Cut
FUNCTION KEYS	Effect Speed	Fade
SYSTEM	CG Fill Input	Wipe Right
-----	CG Key Input	WIPE Left
Ver. 0.25_20		Wipe Down
		WIPE Up
		Wipe Right-Down
		WIPE Left-Up
		Wipe Square-In
		WIPE Square-Out

### Effect Type

Transition effect when switching between screens. For no effect, select 'Cut'.

### Effect Speed

The transition speed is selectable from slow to fast.

### CG Fill Input / CG Key Input

A character generator can be connected and recognized by the switcher by setting Fill and Key channels. Any of input port can be set as a fill or a key.

The CG key color can be set among Y, U, V (or R,G,B).

\* This feature needs knowledge about CG. If you are not familiar with CG mixing, ignore this feature.

To overlay characters on a current program, click on Mixer on the status box in the main preview screen.

**Luma Setting**

To overlay a PC screen such as Microsoft PowerPoint graphics, set luma key here.

**Luma Key Input**

Select the input channel to use as a luma key.

**Threshold Level**

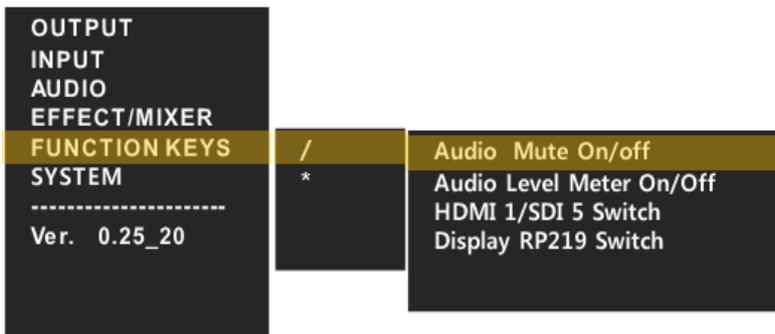
Set the luminance level in the middle to filter.

**Upper Value & Lower Value**

Set the upper and lower luminance level limitation to filter.

\* If your picture is flickering, you need to check if the formats between the luminance key input and picture input.

## FUNCTION KEYS



User can select a preferred function for /, \*, Del key when a keypad is used. For a mouse, user should click on the function on the status box at the bottom of the screen.

## KEYPAD KEY ASSIGNMENT

Menu Movement	←, →, ↑, ↓
Channel Selection	1, 2, 3, 4
Function Keys	/, *, Del, Home, PgUp
Menu On/Off	Insert
Audio Level Up/Down	+, -

## RECOMMENDED COMPATIBLE KEYPADS



*Cubeternet Keypad*



*Sungwoo Wireless Keypad*

## RECOMMENDED COMPATIBLE MICE



*Logitech B100*



*Microsoft Compact Optical Mouse 500*

## **Warranty Information**

### **Free Service**

If the product needs to be repaired in 12 months from the purchase.

### **Exceptions**

- damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes
- damage caused by service performed by anyone who is not an authorized service provider
- damage to a product that has been modified or altered without the written permission of BON

### **Paid Service**

If the product needs to be repaired after 1 year and before 4 years from the purchase.

## **Probable Modification of Product**

Dimensions, specifications or design of the product are subject to change without prior notice for product improvement.



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