

manual

# ez-Pro VS6 6CH Switcher





## ez-Pro VS6 Manual

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## Installation Precautions

This page states the safety measures the users must take to avoid circumstances where the system may occur physical damages or injuries. Please THOROUGHLY go over this page before the system installation/operation.

## General Precautions

- Maintain dust FREE condition during and after System Installation/Operation.
- Please place the system cover in a safe location when opened.
- Securely stow tools and cables away from the passages.
- Avoid wearing loosened clothes or accessories during installation/Operation.
- Avoid any unnecessary actions that may damage/harm system or personnel.
- Do NOT open the system unless advised by Lumantek representative. Lumantek takes no responsibility on units with broken RMA seals.

## Power Precautions

- Please check cable overload before connecting the system to the power supply.
- Avoid wearing metal accessories (Rings, Earrings) connecting system to the power source.
- Avoid operating on wet floors. Make sure power extension cables, floors, and instruments are grounded and in a safe operating condition.



- Please discharge static electricity by touching grounding metals before starting hardware installation. The grounding parts must be disassembled last. Manufacture takes no responsibilities on Direct/Indirect losses or damages due to use of inappropriate parts or services by unauthorized service provider
- Supplying power during the system installation may cause damages to the system and personnel.

## AC Power Precautions

- This unit utilizes AC power, the cord comes with a grounding function.
- Please connect the system to the power socket with groundings.
- Use Green/Yellow 0.75mm<sup>2</sup> (18AWG) or higher grade grounding cables.
- Do NOT block power sockets with tools or boxes. Please keep it clear at all times.



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## Matrix Switcher ez-PRO (VS6)

6 HD-SDI Input / 4 HD-SDI Output Switcher

### 1. Introduction

ez-LiveShow is a Video/Audio brand which is dedicated to small studio solution, created by combination of Lumantek's AV encoding and Video switching technology.

ez-Pro VS6 is a flagship device, which has 6 media/camera SD/HD-SDI inputs and 4 outputs. We applied a frame sync for each input. Simple control on board Panel or remote control with console. S/W Fill & Key option brings the features you could find only in the high-end system. The video is processed with 4:2:2 10 bit predecessor, embedded analogue audio and external Stereo XLR is supported. All channel videos and audios are separately controlled.

### Features

- ① 6 SDI inputs, 4 SDI outputs.
- ② 1 Separate SDI Input for Key.
- ③ One extra SDI output for PGM Monitoring..
- ④ Physically 7 SDI inputs and 5 SDI output .
- ⑤ ez-PRO (VS6) supported resolutions are;  
'1080i60/1080i59.94/1080i50/720p60/720p59.94/720p50/625i(576i)/525i(480i)' .
- ⑥ HDMI output is related to system resolution and supported resolutions are;  
'1080p60/1080p50/720p60/720p50'/576P/480P.



## 2. VS6 Interface

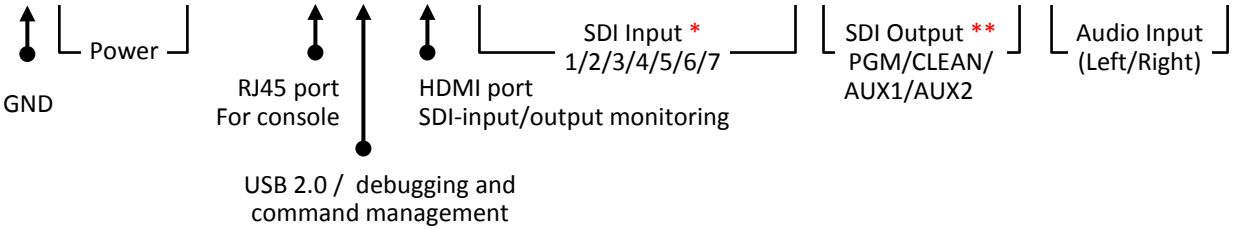
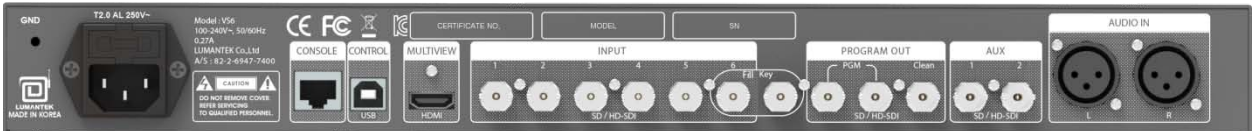
### 2.1 System Information.

< VS6 Main frame – Front >



Power LED

< VM6 main frame – Rear >



\* SDI Input

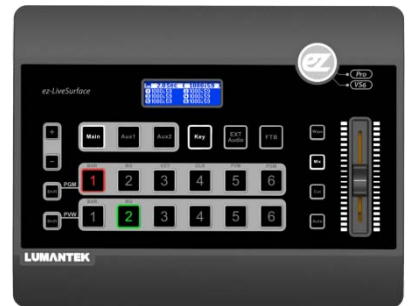
If you use Fill/Key feature use 6<sup>th</sup> /7<sup>th</sup> SDI port.  
If you do not use Fill/Key feature , do not use 7<sup>th</sup> SDI port

\*\* There are two SDI PGM Outputs. (two exactly same signals)

### 2.2 Components.



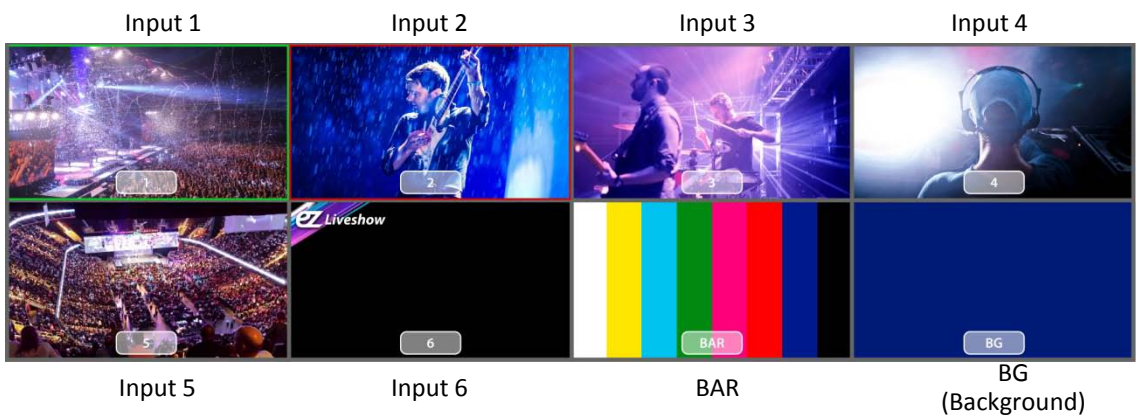
VS6 Main Frame



Console (Optional)



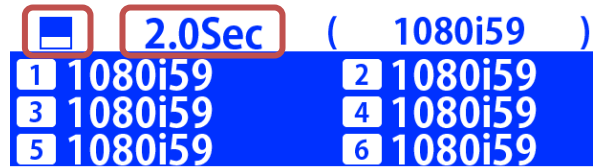
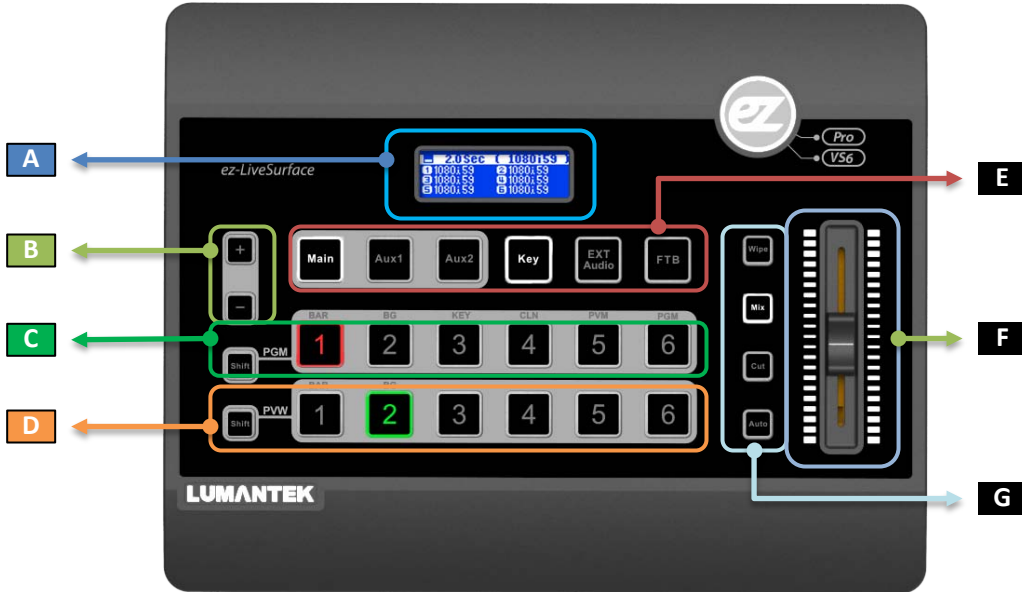
### 2.3 HDMI Multiview Interface







2.4 Console Interface



**A** LCD Screen

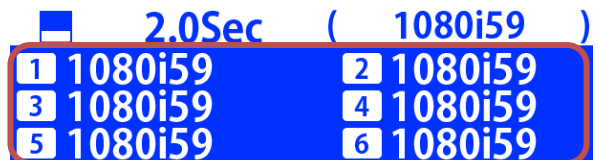
- ① Display the selected transition effect and duration time on VS6 system
  - Selected screen transition effect [Wipe ↑ ↓ ←→, Mix].
  - Display 'Transition time' when you select 'Auto' function.



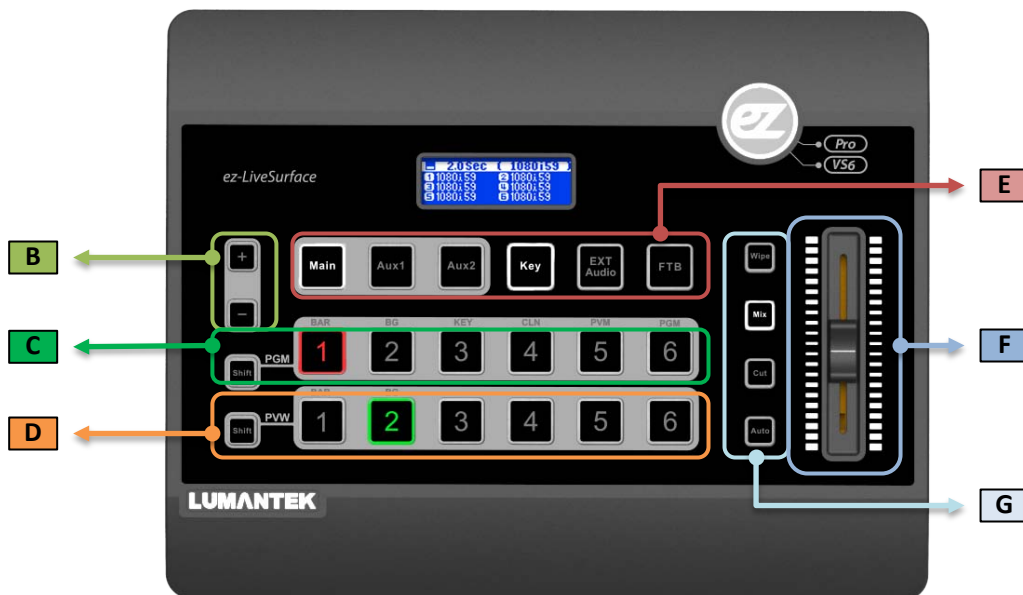
- ② Display system resolution of VS6.

Supported resolution are ;  
 1080i60/1080i59.94/1080i50/720p60/720p59.94/720p50/625i/525i.  
 You can change resolution on VS6 Main Frame.

- ③ Displays the resolution of input channels 1/2/3/4/5/6.







#### **B** Transition effect duration control

- ① Adjusting transition effect duration function.

#### **C** PGM (Program)Control

- ① Select input channel '1/2/3/4/5/6/BAR/BG' for Output [Main] and display current selected input channel.
- ② Select input channel '1/2/3/4/5/6/BAR/BG/KEY/CLN/PVW/PGM' for Output [AUX1,AUX2] and display current selected input channel.

#### **D** PVW (Preview)Control

- ① Select input channel '1/2/3/4/5/6/BAR/BG' for output [Main] or display the prepared input channel on PVW

#### **E** Output control/Key/EXT Audio/FTB(Fade to Black) control

- ① Select Output Channel 'Main/Aux1/Aux2'.
- ② Selected Output [Main], and apply 'Key' feature 'On/Off' .
- ③ Selected Output[Main/Aux1/Aux2], and apply external audio feature 'On/Off'.
- ④ Selected Output[Main], and apply 'FTB' feature 'On/Off'.

#### **F** T-BAR

- ① Transition effect [T-BAR] and position on [Main].

#### **G** Screen Transition effects

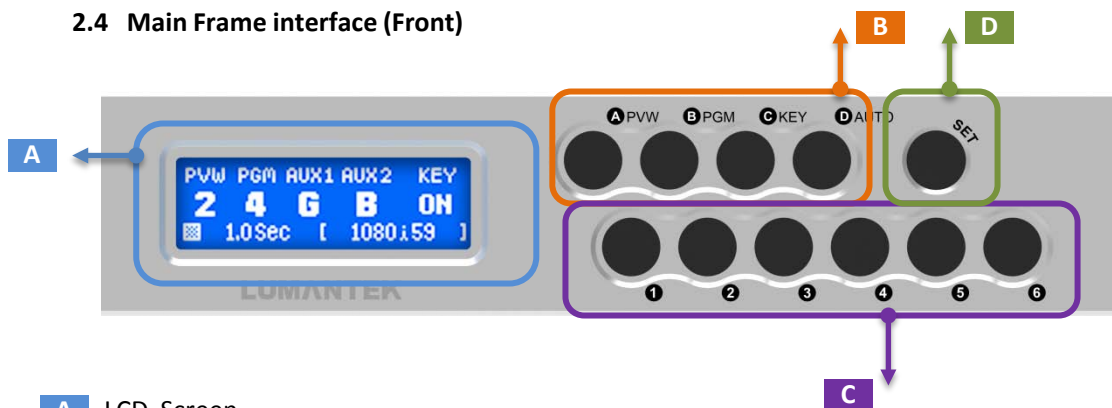
- ① Transition effect 'Wipe/Mix/Cut/Auto' on [Main].

\* VS6 Main Frame and console are connected via Direct cable.

\*\* Do not use crossover cable.



## 2.4 Main Frame interface (Front)



### A LCD Screen

- ① Display output channel of PVW/PGM/AUX1/AUX2.
- ② Display KEY feature 'on' and 'off'.
- ③ Display Duration of Transition effect.
- ④ Display system resolution

### B Select Output

- ① Select the PVW or sub-menu 'A'.
- ② Select the PGM or sub-menu 'B'.
- ③ Select the KEY 'On/Off' or sub-menu 'C'.
- ④ Select AUTO to enable auto transition or sub-menu 'D'.

### C Select Input

- ① Select output channel '1/2/3/4/5/6' or select sub-menu '1/2/3/4/5/6'.

### D Select Menu

- ① Push hold 'SET' button to enter sub-menu.
- ② Push 'SET' button to move menu.
- ③ Push and hold 'SET' button to exit from sub-menu..



\* LCD screen configuration - example



Boot the VS6 main unit



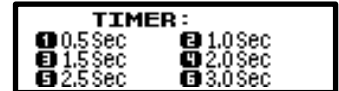
Main Display

Push & Hold SET button to enter 'Menu'

Push & Hold SET button to exit from the 'Menu'



Press 'SET' Button



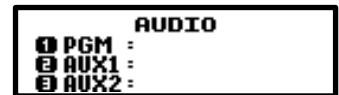
Press 'SET' Button



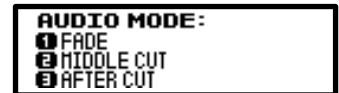
Press 'SET' Button



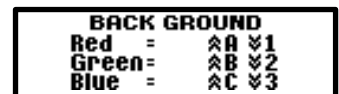
Press 'SET' Button



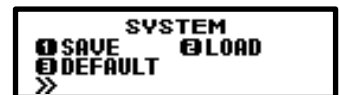
Press 'SET' Button



Press 'SET' Button



Press 'SET' Button

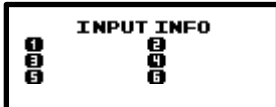




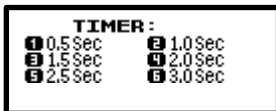
**\*\* LCD Screen Description**



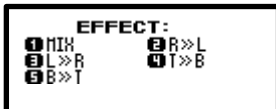
- Display Input channel of PVW/PGM/AUX1/AUX2.
- Display KEY feature 'On' and 'off'.
- Display Transition effect duration.
- Display system resolution.



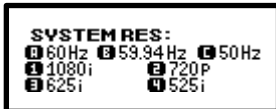
- Display resolution information of Input Channel '1/2/3/4/5/6'.



- Select transition duration time on Output channel [PGM].



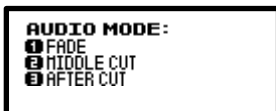
- Select Transition effect.



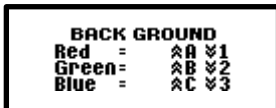
- Select VS6 System Resolution.  
 Resolutions of Input channels '1/2/3/4/5/6' should be identical to the system supported resolutions below.  
 '1080i60 / 1080i 59.94 / 1080i 50 / 720p 60 / 720p 59.94 / 720p 50 / 625i / 525i'.



- Select between 'input channel Audio or external Audio' for Output channel [PGM/AUX1/AUX2].



- Select the Audio transition effect for Program [PGM].



- Select BG color.



- Save System Configuration.
- Load saved System Configuration.
- Reset to factory default.



## 2.6 System Specification

### ez-Pro 6x4 Switcher(model:VS6)

#### Input

Video Input: SD/HD-SDI(BNC 75Ω) x6

Fill Input(Optional): SD/HD-SDI(BNC 75Ω) x1

Key Input(Optional): SD/HD-SDI(BNC 75Ω) x1

Audio Input: Stereo XLR x2

#### Output

Video Output: SD/HD-SDI(BNC 75Ω) x4

Multiview Output: HDMI x1, (1080P @60/50, 720p @ 60/50, 576P @50, 480P @60)

Internal Processing: 4:2:2 10bit

#### Resolution supported

1920 x 1080i @ 59.94/60/50

1280 x 720p @ 59.94/60/50

720 x 576i @ 50 (625i)

720 x 480i @ 59.94 (525i)

#### Management

Control Buttons @ Front: Input select x6, Output select x4, Menu select x1

LCD @ Front: Status & Control

Large 'L' logo LED @ Front: Easy to Identify Device Status

USB @ Rear: Easy to use GUI application, Firmware Update

#### Physical

Dimension:44(H) X 483(W) X 240(D)(excluding connectors)

Power Input: 115~240VAC @ 50/60Hz, Operation Temperature: 0~40 °C

Power Consumption: 30W(max.), Weight: 3.1 kg