



**NETWORK  
TECHNOLOGIES  
INCORPORATED**

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## RACKMUX® Series

# SPLITMUX-3GSDI-9

## 3G-SDI Screen Splitter/Multiviewer, 9-Port

### Installation and Operation Manual

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**SPLITMUX-3GSDI-9 (Front and Rear View)**

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**CHANGES**

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## INTRODUCTION

The SPLITMUX® 3G/HD/SD-SDI Screen Splitter/Multiviewer allows video from up to nine different SDI sources to be simultaneously displayed in real-time on a single monitor. It is capable of displaying the video sources in full screen, quad screen mode, 9-picture screen mode, or custom mode on one HDMI monitor and one SDI monitor at the same time. In custom display mode, each picture can be adjusted to any size and positioned to any location on the display, such as to mimic Picture-in-Picture, dual screen, or triple screen display modes.

- Full screen, quad screen, 9-picture screen, or custom display mode.
  - Custom Display Mode: **the size, position and selection of any or all windows are customizable.**
    - Mimic Picture-in-Picture (PiP), dual screen, or triple screen display modes with this method.
    - Maintain input aspect ratio if desired – no stretching necessary.
- Independent video-in to video-out resolution.
- Display the same video output configuration on two monitors at the same time with one SDI output and one HDMI output.
- Supports HDTV resolutions to 1080p.
- Fluid, real-time video performance with 60 frames per second (fps) in all nine segments.
- Control the multiviewer through front panel buttons, IR remote, or Graphical User Interface (GUI) which can be connected via RS232 serial port or Ethernet.
- Backup and restore multiviewer configurations.
- Built-in default EDID configuration tables.
  - Supported output resolutions can be selected.
- 1RU mounting kit included.

## MATERIALS

### Materials supplied with this kit:

- NTI SPLITMUX-3GSDI-9 3GSDI Screen Splitter/Multiviewer
- Line cord, country specific
- URL slip with path to this manual
- IR Remote Control

### Materials *Not* supplied but **REQUIRED**:

An HDMI male-to-male cable to connect an HDMI monitor (if used)- order HD-xx-MM where xx = up to 50 feet long).

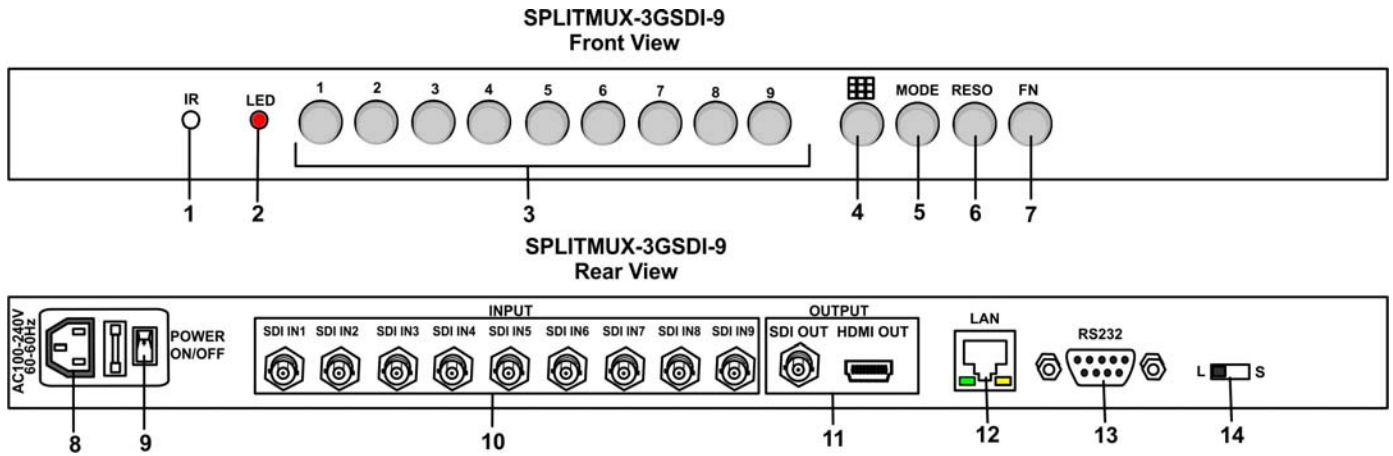
Use DVI-HD-xx-MM cable to connect a DVI display up to 50 feet.

Interface cables between the video sources/displays and the multiviewer- RG6 75 Ohm coaxial cable terminated with BNC connectors is recommended for use.

- Extend 1080p up to 197 feet (60 meters) and 1080i/720p up to 328 feet (100 meters)

*HDMI and DVI Cables can be purchased from Network Technologies Inc by calling (800) 742-8324 (800-RGB-TECH) in the US and Canada or (330) 562-7070 (worldwide).*

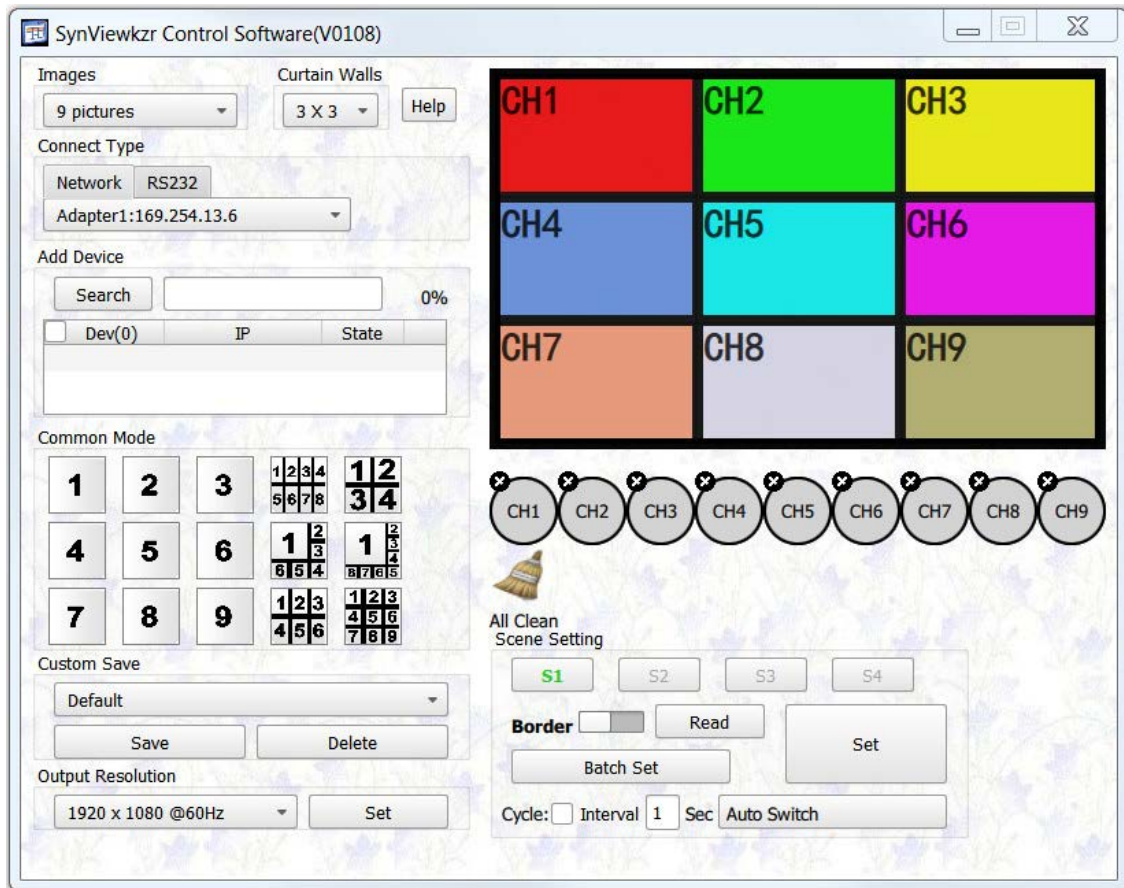
## FEATURES AND FUNCTIONS



#	LABEL	CONNECTOR/LED	DESCRIPTION
1	IR	IR Sensor	To receive signal from IR remote control
2	LED	Red LED	Status indicator-illuminates when switch is working normally
3	1-9	Buttons	For single screen mode for each video input
4	Segmented square	Button	For switching to 9-screen mode
5	MODE	Button	For selecting a custom screen mode
6	RESO	Button	For switching between available supported output resolutions
7	FN	Button	Not used- saved for future
8	None	IEC C14	Connect power cable here
9	Power ON/OFF	Power Switch	Toggle power ON/OFF
10	INPUT (SDI INx)	BNC Connector	Connect SDI coax cables from video sources
11	OUTPUT	BNC and HDMI Female	Connect SDI coax cable from 3G/HD/SD SDI display and/or HDMI cable from HDMI display
12	LAN	RJ45 Female	For connection of Ethernet cable to PC for controlling the graphic user interface
13	RS232	DB9 Female	For connection of RS232 cable to PC for controlling the graphic user interface
14	L/S	Slide switch	Not used in this model.

## SOFTWARE CONTROL METHODS

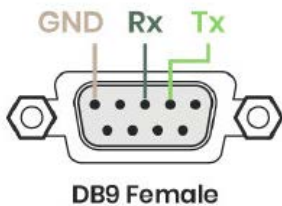
A connected computer can configure the SPLITMUX-3GSDI-9 SDI Processor in real time through an RS232 serial port or Ethernet port using an [application](#) available from the NTI website. Use the application under Microsoft Windows 98, 2000, XP, Vista, or 7 through the web interface or RS-232 serial control. Use the application to control the switch and change the display modes between full screen, quad screen, 9-picture screen mode and custom mode screens.



### RS232

Connect a serial cable between the RS232 port on the SPLITMUX-3GSDI-9 and a computer. Open the application, and select the "RS232" tab under "Connect Type". Choose the port you are connected through. Click "Open".

You are now ready to control the display mode of the SPLITMUX.



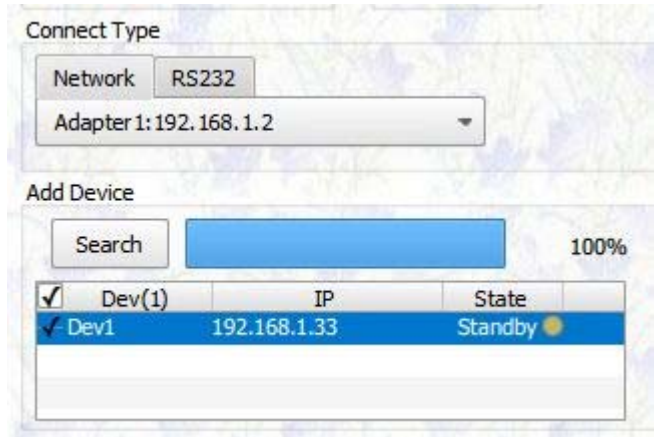
RS232(DB9 Female)	
Pin	Definition
Pin 2	TX
Pin 3	RX
Pin 5	GND

### Ethernet

Connect an Ethernet cable, wired straight through, between the "LAN" port on the SPLITMUX and an Ethernet port on a computer. Open the application, and select the "Network" tab under "Connect Type". Click the "Search" button under "Add Device", and double click the IP address of the SPLITMUX.

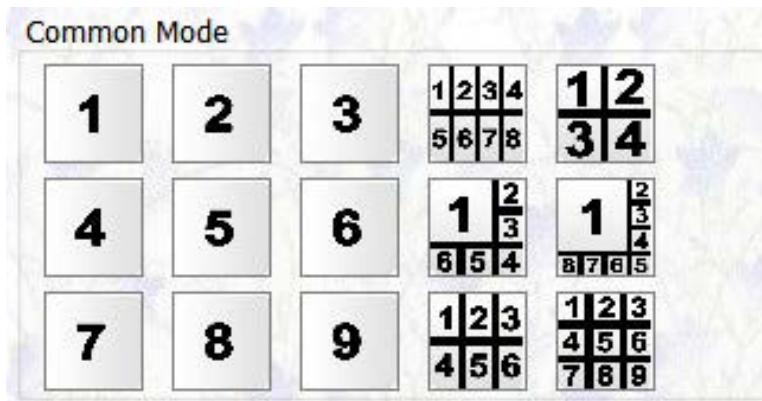
A connection to the SPLITMUX will be made.

You are now ready to control the display mode of the SPLITMUX.



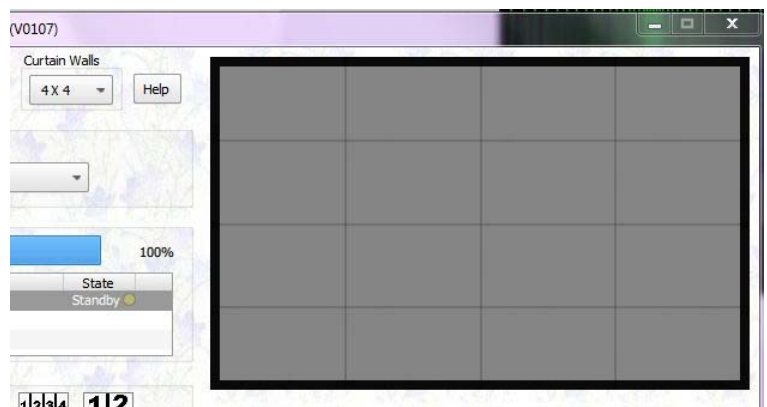
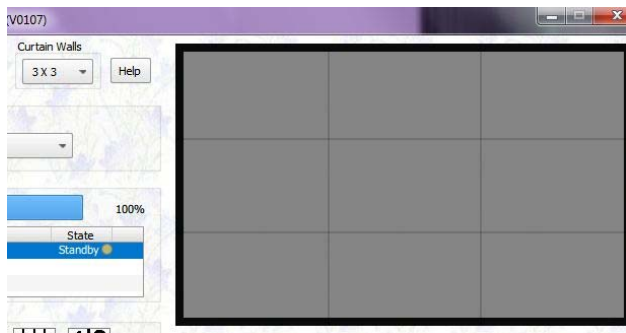
### Modes

Select between the display modes available under "Common Mode". Choose between inputs 1 through 9, or any of 6 other pre-determined combinations.



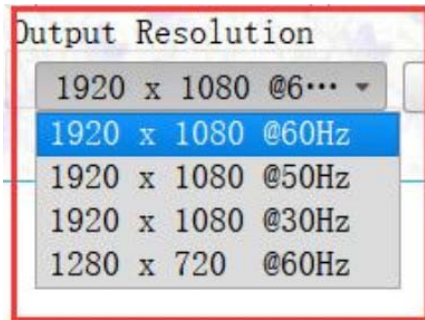
If a custom mode is desired, select between S1 - S4, and then drag the inputs you want to view, CH1 -CH9, up into the display box. Stretch the Channel borders to the way you want to view it. Once you have applied all of the Channels for your custom layout, click Save and that layout will be saved as the S# you have selected. Going forward, anytime you want to see that layout, click that S#. To delete that layout, click "Delete".

To help with positioning, you can select 3X3 or 4X4 curtain walls to provide an outline to assist in placing your channel borders.



**Output Resolutions**

Output Resolutions for the video output can be selected between 1920x1080p@60Hz, 1920x1080p@50Hz, 1920x1080p@30Hz or 1280x720p@60Hz.

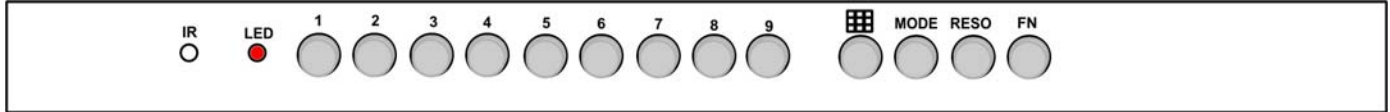




## HARDWARE CONTROL METHODS

### Front Panel Interface

Use front panel buttons to locally change ports, select a display mode, or change resolutions.



### Infrared Remote Control

Use to change ports, select a display mode, or change resolutions.

**Note:** Remote requires two AAA batteries (not included).



**THE REMAINING BUTTONS HAVE NO FUNCTIONS**

## TECHNICAL SPECIFICATIONS

Video Input/Output	<ul style="list-style-type: none"> <li>• Nine female 75 ohm BNC connectors for 3G/HD/SD-SDI video input.</li> <li>• One female 75 ohm BNC connector for 3G/HD/SD-SDI display.</li> <li>• One female HDMI connector for HDMI display.</li> </ul>
Video Resolution	<ul style="list-style-type: none"> <li>• Input: Supports 576x480@60Hz through 1920x1080@60Hz</li> <li>• Output: Supports 1920x1080@30/50/60Hz and 1280x720@60Hz</li> </ul>
Operating environment temperatures and RH	<ul style="list-style-type: none"> <li>• Operating temperature: 32 to 113°F (0°C to 45°C).</li> <li>• Storage temperature: -4 to 149°F (-20°C to 65°C).</li> <li>• Operating and storage relative humidity: 0 to 90% non-condensing RH.</li> </ul>
Power	<ul style="list-style-type: none"> <li>• Input: 100 to 240 VAC at 50 or 60 Hz via IEC connector. (Country-specific power supply cable included.)                             <ul style="list-style-type: none"> <li>○ Power consumption: 12.6W.</li> </ul> </li> </ul>
Size (In.) WxDxH	17.31x9.50x1.75 (440x236x44 mm)
Approvals	RoHS, FCC

### Cables

- Interface cables between the video sources/displays and the multiviewer are required for proper operation.
- RG6 75 Ohm coaxial cable terminated with BNC connectors is recommended for use.
  - Extend 1080p up to 197 feet (60 meters) and 1080i/720p up to 328 feet (100 meters).
- Use HD-xx-MM cable to connect an HDMI display up to 50 feet.
- Use DVI-HD-xM-MM to connect a DVI display up to 5 meters.
- Cables not included.

## WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at <http://www.networktechinc.com> for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.