

6) Default Video Wall (Display Outputs 1 to 4)

A default video tile-grid is shown on head **Display Outputs 1 to 4**. All 48 video signals monitored by the multiviewer are shown. And 'HH:MM:SS' time and 'display output number' are also shown.

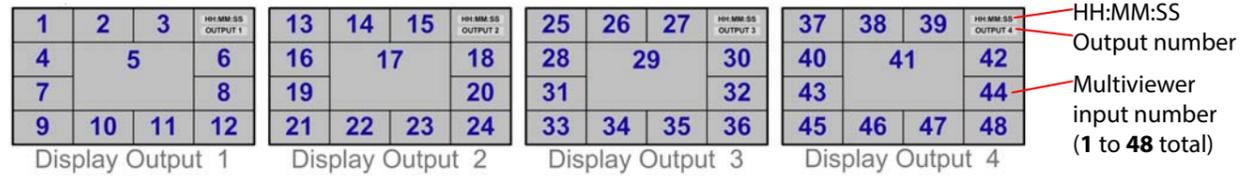


Figure 5 Default Video Wall Layout

(Default monitoring: 1 to 24 router outputs; 25 to 48, router inputs.)

7) Edit Video Wall Layout and Configure Alarms

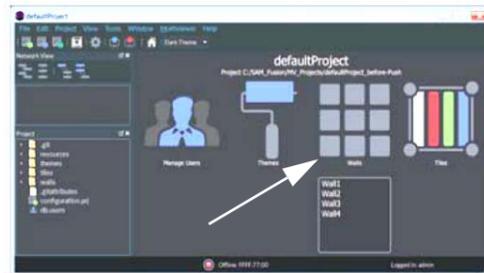
See the [Grass Valley web site](#) for Orbit and MV-830 user manuals. Perform the following steps to check basic functionality for the video wall, setting an alarm, and Orbit network connection:

Pull the default layout from the Multiviewer:

1. Run **Orbit** on a PC. (Orbit v2.1 or later)
2. **File > New Project**. Click "**Connected Multiviewer Project**". Browse to a PC folder where wall layout data will be stored. Folder *must be empty*. Click **Next**.
3. Select a multiviewer unit from displayed list. Click **Choose**. (Remember to select **RollCall Domain ID**)
4. Username **admin**, Password **admin**.
5. Click **Login**. The video wall layout is pulled from unit and read into Orbit.



The Orbit Project Screen:



6. Click the **Walls icon**. Click **Wall1** in drop-down list. The **Wall Editor** screen is shown for **Wall1**.



Make a visible change to the wall:

7. Click on a middle wall tile, to select it. **Tile Properties** are shown on the right.

8. Change Property **Tile Type** to **Analogue Clock**. The selected Orbit tile changes to a round clock face.
9. Click **File > Save File** to save this change.

Enable a Video Input Lost alarm:

10. Click **Multiviewer > Input Alarms**. A dialog is shown with tabs. On the:
 - **Input Tab** - Set **Selected Input** to **Input 1**.
 - **Alarm Tab** - Scroll down **Selected Alarm** box. Select **Video Input Lost**. Select **Alarm Enable**.
 - **Input Tab** - Click **Copy All**.
11. Click **OK**. Click **File > Save File** to save change.

Video Input Lost alarm is enabled on multiviewer inputs.

Push the modified project to the multiviewer:

12. Click **Project > Select Multiviewer**. Enter the **IP address** of the MV-830.
13. Click **Project > Push**.

The MV-830 adopts the new wall layout and an analogue clock is shown.

Provoking a 'Video Input Lost' alarm warning:

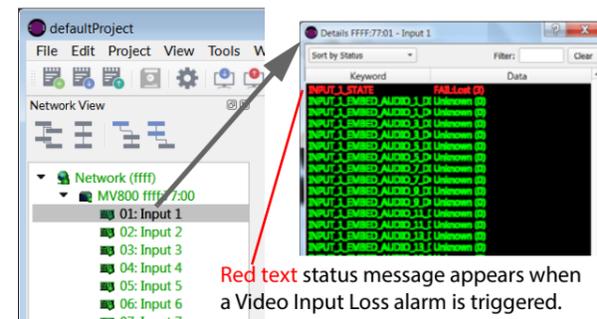
14. Disconnect Video Input 1 at router input (source).

Video loss is detected. A slow-flashing, **red rectangular border** appears around the corresponding video wall tile.



The alarm may also be seen in a separate **Orbit** window:

15. Expand the **Network View Pane** MV-830 item and **right-click** on the **Input 1** item. A **Details** text window shows **Input 1** status.



Red text status message appears when a Video Input Loss alarm is triggered.

MV-830

Integrated Multiviewer

Quick Setup Guide



Thank you for purchasing a new **MV-830 Integrated Multiviewer** module. This Quick Setup Guide will help you get the module running as quickly as possible.

An MV-830 module combines a router input and output module with a 48 input multiviewer. One or more MV-830 modules fit into a Sirius 830 router, each replacing a Sirius 830 input module and adjacent output module.

Upon Receipt of your MV-830 Multiviewer:

The product is supplied in dedicated packaging provided by Grass Valley:

- Do not accept it if delivered in inferior or unauthorized materials.
- Unpack the MV-830 product carefully and check components against the packing list. If anything is incorrect, please notify your Grass Valley Partner or notify Grass Valley directly. (<https://www.grassvalley.com/support/sam/>).
- Check all component items have not been damaged in transit, including the MV-830 front and rear modules. If any damage has occurred, notify your Grass Valley Partner (or Grass Valley directly) and the carrier immediately. Have your order details ready.
- Retain the original packing materials because they could be useful for future transporting or shipping.

The MV-830 User Manual can be downloaded from <https://www.grassvalley.com/products/mv-830/>

Safety Information:

Caution: MV-830 Multiviewer products should only be serviced by qualified service personnel.

Caution: Take anti-static precautions when handling MV-830 modules, or when inserting or removing the modules.

Warning: To reduce the risk of electric shock, do not expose this equipment to water or moisture.

Warning: The MV-830 can be equipped with optical outputs which contain low-power laser beams. Do not look into an optical output. Laser radiation can cause irreversible and permanent damage of eyesight.

Warning: Do not look at the end of an optical fiber to see if light is coming out. Use optical instrumentation.

Warning: Unused optical outputs should be covered, to prevent direct exposure to the laser beam.

1) Fitting an MV-830 into a Sirius 830 Router

Router Power Supplies: Sirius 830 routers have powerful power supplies. In most cases, these are sufficient for powering MV-830(s). Grass Valley recommends checking your router power supply configuration with Grass Valley support before fitting MV-830(s) into the router. (For contact details, see <https://www.grassvalley.com/support/sam/>)

MV-830: This is a double-width Sirius 830 module, comprising double-width Rear & Front modules. See **Figure 1**.

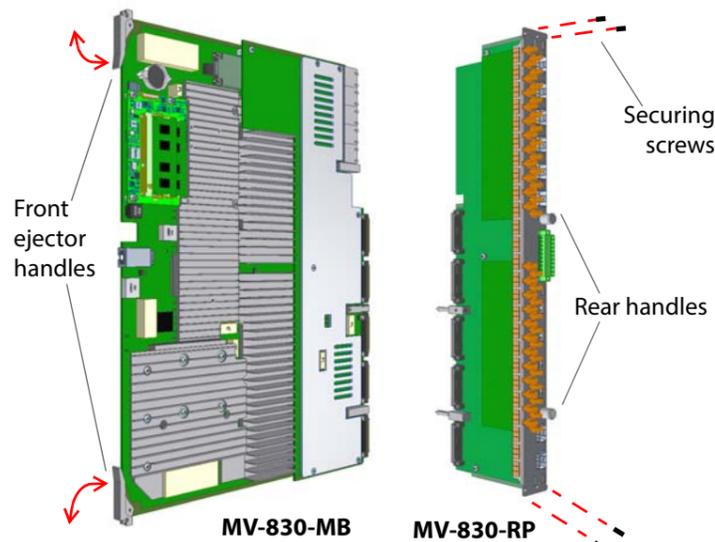


Figure 1 MV-830 Multiviewer Double-width Front and Rear Modules

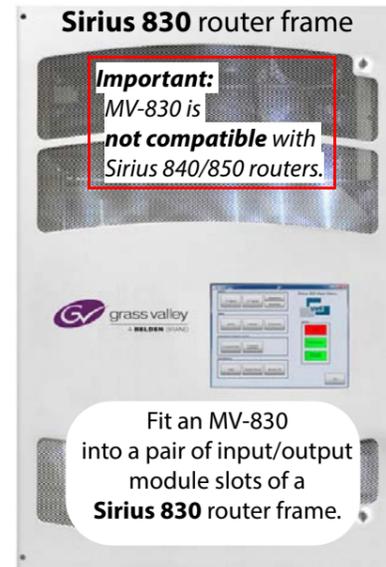


Figure 2 Sirius 830 Router

Fitting instructions:

1. If SFP modules are supplied separately, fit them to the MV-830-RP.

An MV-830 module occupies a pair of (front and rear) router input/output slots. For example: slot-pairs 1 & 2; or 11 & 12.

Note: From the front of the router, slots are numbered from left to right. From the rear, numbering is right to left.

Input/output slot numbering and slot-pairs for MV-830, (slot-pairs):

- From *front* of router: (1 2) | (3 4) | (5 6) | (7 8) | (9 10) | (11 12) | (13 14) | (15 16) | (17 18) | (19 20) | (21 22) | (23 24)
- From *rear* of router: (24 23) | (22 21) | (20 19) | (18 17) | (16 15) | (14 13) | (12 11) | (10 9) | (8 7) | (6 5) | (4 3) | (2 1)

2. Ensure a vertical 'slot-pair' of router module slots are available and empty.

MV-830 modules may be hot-plugged.

Go to the rear of the router:

3. Remove any blanking plate already covering the router rear slots.
4. Fit the MV-830-RP rear module. Secure with four screws.

Go to the front of the router:

5. Open the router front outer door and the lower router fan door.
6. Insert the MV-830-MB front module. Push the module into the slots with the module ejector handles. Ensure the module is pushed fully into the slots with module ejector handles pushed fully inwards.
7. Close the router's fan door and front outer door.

Caution: Always keep router fan doors closed to ensure correct unit ventilation and operation. Only open a router fan door for a maximum of 2 minutes.

Operating Environment	5°C to 30 °C ambient. 10 to 90% (non-condensing)
MV-830 Weight	MV-830-MB: 3.5 kg (~7.7lb). MV-830-RP: 1 kg (~2.2lb).
Power Consumption	250 W

Table 1 MV-830 Specification



Figure 3 MV-830 Splash Screen

8. A splash screen appears on each active multiviewer head display output. Connect a monitor to each. See **Figure 3**. IP addresses are shown.
9. After booting, each multiviewer head display output shows a default video wall. See **Figure 5** on page 3.

2) Rear Connections

Connect the following:

1. Router **Video Inputs** to the video signal sources.
2. Router **Video Outputs** to the equipment that they should feed.
3. Head **Display Outputs 1 to 4** to the monitor displays.
4. Network cable to **Ethernet port 1, Control 1**.

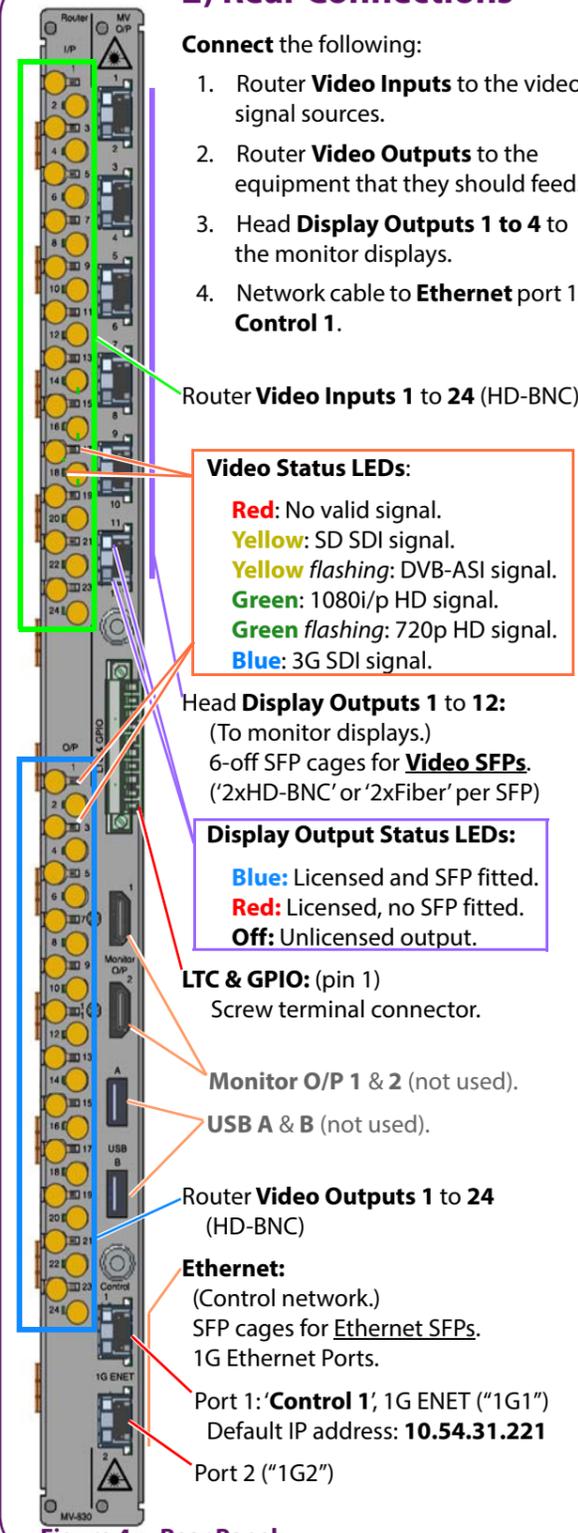


Figure 4 Rear Panel

3) MV-830-MB Front Module Indicators

LEDs along the MV-830-MB module's front edge are:

LED	Status	
	OK	Fault
ACT	Flash	-
ERR	Off	On, error
WRN	Off	On, warning
OK	On	Flash, comms fault
LOCAL CMD OK	Flash, On or Off	-
LOCAL CMD ERR	Off	Flash, message error
REMOTE CMD OK	Flash, On or Off	-
REMOTE CMD ERR	Off	Flash, message error

4) Network Configuration

1. Start Grass Valley **RollCall Control Panel** (v4.17.1 or later) on a laptop PC. Click the **Build Network** icon.
2. Enter the MV-830 Ethernet port 1 default IP address, 10.54.31.221. RollCall connects to the MV-830.
3. Navigate to the RollCall **System-Setup** screen.
4. Set up **Network Settings** relevant to your house network (IP address, Subnet mask, etc).
5. In **RollCall Settings**, set up **Unit** number (default = 01) and **Domain ID** (default = 100) for the MV-830.

Note: Unit number must be unique for each unit. Typically, 'Domain ID' is the same for each unit.

Restart:

6. In RollCall **System-Setup** screen: Click **System Reset**; then click **Confirm**. The MV-830 boots up and a splash screen shows the unit's IP address and other details (see **Figure 3**).

After MV-830 has restarted, initial network configuration is complete.

7. Disconnect MV-830 Ethernet port 1 from laptop PC. And connect the port to the house network.

5) Router Configuration

Both of the router slots used by the MV-830 must be set up in the router configuration. See items shown in **Table 2**.

Default Multiviewer Monitoring Mode:

All MV-830's router video outputs and inputs (48 total) are monitored by the multiviewer when slot configuration items **Redundant Crosspoint Enable** and **Main Output Follow** are all enabled (default).

Module Type - Input slot	MV830Input
Module Type - Output slot	MV830Output
Input and Output Ports	MV830
Logical Sources	VideoSource
Logical Destinations	VideoDest
Router Frame Number	14
EmbeddedTimecodeEnable	True

Table 2 Configuration Items