

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.

1	2	3	HH:MM:SS OUTPUT 1	13	14	15	HH:MM:SS OUTPUT 2	25	26	27	HH:MM:SS OUTPUT 3	37	38	39	HH:MM:SS OUTPUT 4
4	5	6		16	17	18		28	29	30		40	41	42	
7		8		19		20		31		32		43		44	
9	10	11	12	21	22	23	24	33	34	35	36	45	46	47	48

Figure 5 Default Video Wall Layout

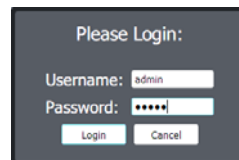
(Default monitoring: 1 to 24 router outputs; 25 to 48, router inputs.)

7) Edit Video Wall Layout and Configure Alarms

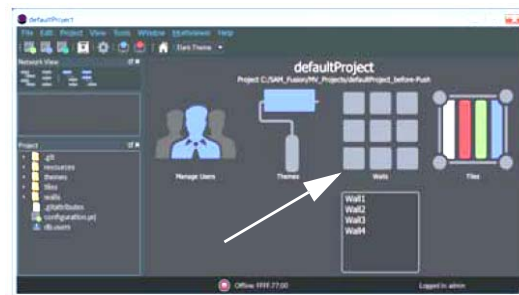
See the [Grass Valley web site](#) for Orbit and MV-830 user manuals. Perform the following steps to check basic functionality for the video wall, setting an alarm, and Orbit network connection:

Pull the default layout from the Multiviewer:

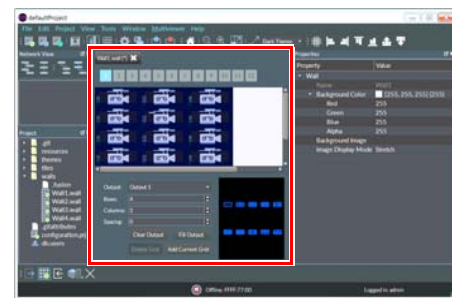
- Run **Orbit** on a PC.
(Orbit v2.1 or later)
- File > New Project**.
Click "**Connected Multiviewer Project**".
Browse to a PC folder where wall layout data will be stored. Folder must be empty. Click **Next**.
- Select a multiviewer unit from displayed list. Click **Choose**. (Remember to select **RollCall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



The Orbit Project Screen:



- 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:

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

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

Enable a Video Input Lost alarm:

- 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**.
- 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:

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

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

Provoking a 'Video Input Lost' alarm warning:

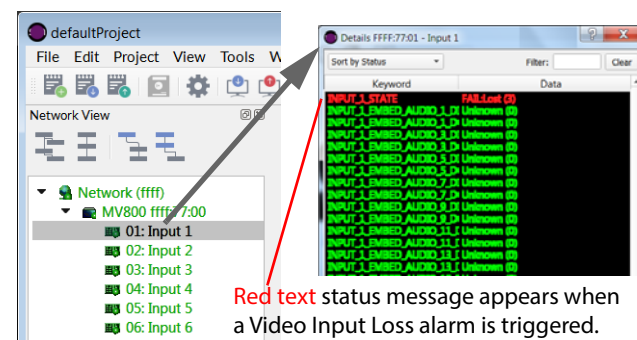
- Disconnect Video Input 1 at router input (source).

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:

- 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



Sirius 830



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**.

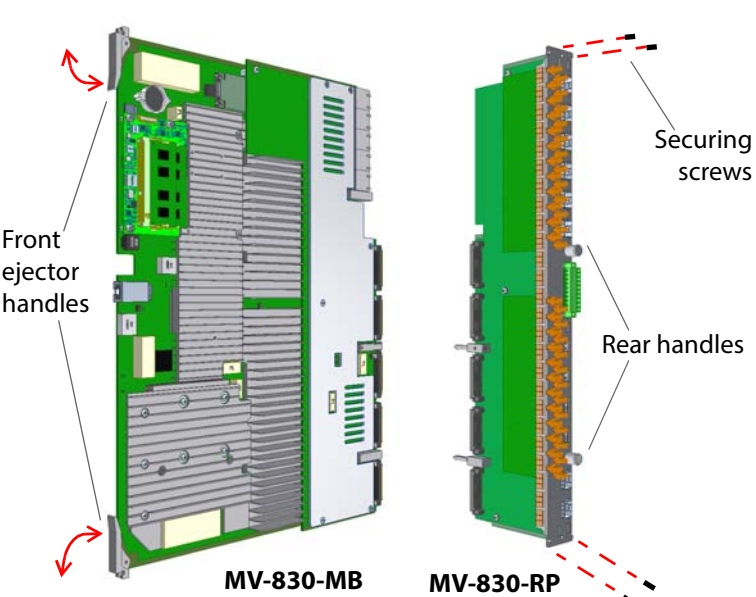


Figure 1 MV-830 Multiviewer Double-width Front and Rear Modules

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.

Booting: After the front module is fitted, the MV-830 begins to boot up. Booting up lasts for approximately 1 to 2 minutes. During boot-up:

- 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.

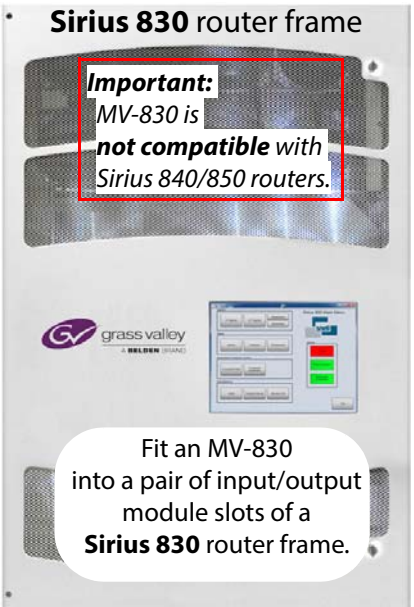


Figure 2 Sirius 830 Router

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

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**.

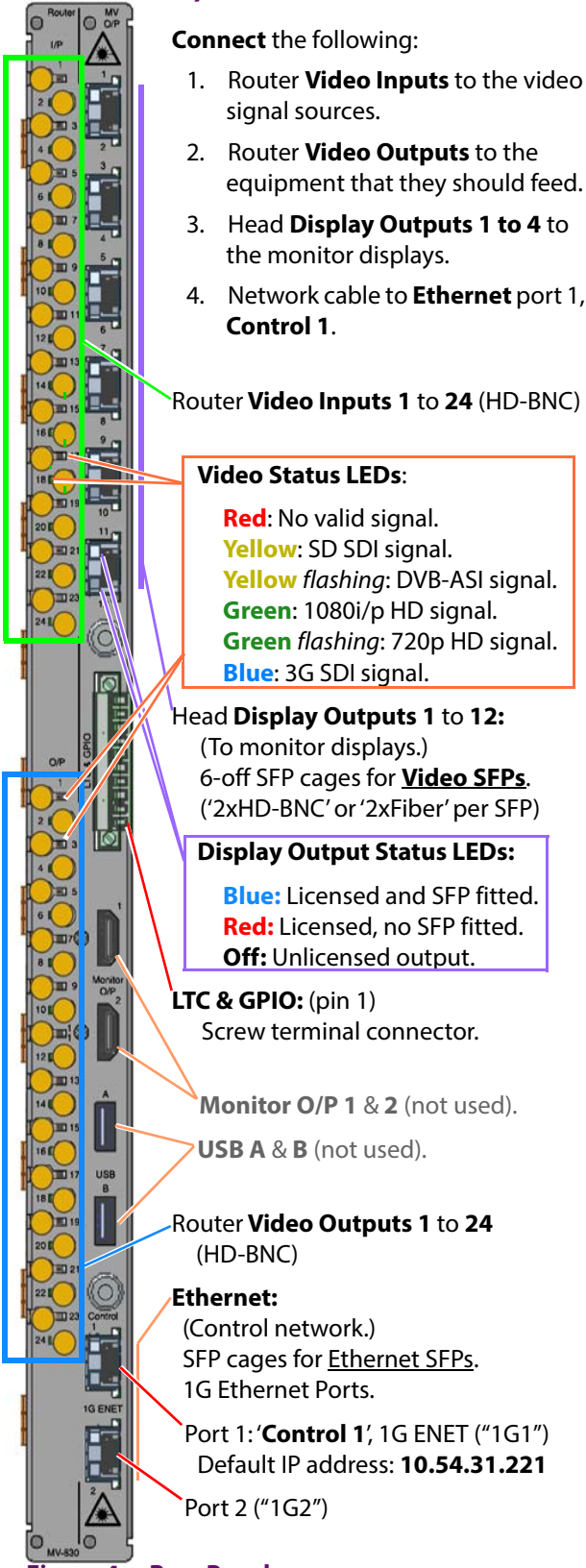


Figure 4 Rear Panel

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).

3) MV-830-MB Front Module Indicators

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

LED	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.

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