CM-Juno Communications Module Installer Guide

This module is not intended for use with UL Listed Amplifiers For Fire Protection Signaling Systems or Control Units and Accessories for Fire Alarm Systems, Emergency Paging, Mass Notification or Life Safety to NFPA National Electric Code or NFPA 72 National Fire Alarm and Signaling Code.

General Safety Precautions

- Disconnect all electronics from the Juno Tower during installation of this module.

- Do not install or use the module near water or heat sources.

- Protect all cables from wear and damage from staples, foot traffic, doors, and other hazards.

- Use only accessories specified by FrontRow.

- Refer installation and service to qualified personnel.

- Follow all safety guidelines when using ladders.

- Observe all applicable building, electrical, and fire codes when installing any electrical equipment.

ESD Warning

The Juno Tower and/or expansion modules can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the devices are not damaged. Damage due to inappropriate handling is not covered by the warranty.

The following precautions must be taken when installing the expansion modules:

- Use a conductive wrist strap attached to a good earth ground.

- Always disconnect the power to the Juno from the power outlet.

- Always discharge yourself by touching the grounded bare metal surface or approved anti-static mat before picking up an ESD-sensitive electronic component.

- Use an anti-static mat to cover your work surface.

You will need the following to install this module:

- **If being connected to a network:** Enough CAT5 cable to connect between the CM-Juno Communications Module installed in the back of Juno and the network connection in the room.

- **If being connected to an RS232 AV device:** Included serial cable to connect between the CM-Juno Communications Module installed in the back of Juno and the AV device (projector, display)

- Base address of network where the Juno with CM-Juno Communications Module is being installed

- A computer and CAT5 cable to set the IP address of the CM-Juno Communications Module

- #1 Phillips, small slotted and T6 Torx screwdrivers

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**The installation steps MUST be completed in order.
Failure to do so may render your Juno Tower unusable.
Start here and continue on the other side of this sheet.**

STEP ONE: Check the Juno Tower firmware version and update if necessary

To check the firmware version, on the Tower LCD from the main screen press the settings button, then the About button. The firmware version will be displayed.

If the Juno Tower firmware version is **lower than 3.23**, it will need to be updated **before** installing the module and jumper board (see #5 on other side regarding jumper board). The firmware must be installed using Teacher Edition **version 1.1.0.51** or later.

1. Download the Juno Tower firmware from:
   gofrontrow.com/products/juno-communications-module

2. Install the Teacher Edition software application

   a. Download the application **gofrontrow.com/juno** under the Downloads section

   b. Install the application. When prompted, choose **Install with Juno Tower Support**

3. Update the Juno Tower firmware

   a. Connect the Juno Tower to the computer running the Teacher Edition software application using the supplied

USB cable and open the Teacher Edition application

b. Update firmware

   i. If you do not have a license when you open the application, you will see a button labeled **Update Juno Tower**. Click the button, then click **Update from File**. Locate the firmware file you downloaded in step one and follow the on screen prompts.

   ii. If you have a license when you open the application, click the device menu, then **Update from File**. Locate the firmware file you downloaded in step one and follow the on screen prompts.

c. After the firmware updates successfully, verify the update on the Tower LCD. Tap the **Tools** button, then tap the **About** button. The new firmware version should be displayed.

d. **Repeat step b-i/b-ii and c above** to create a backup firmware image. Failure to do this could result in the Juno Tower reverting to an older version of firmware not compatible with the communications module.

e. **Reset defaults on your Juno Tower** by tapping the **Tools** button on the LCD, then tap **Restore Defaults**, then tap **Confirm**.

STEP TWO: Install the module

1. Unplug the Juno Tower from the power outlet and unplug any other cables connected to the Juno Tower.

2. Lay the Juno Tower down on a flat surface with the back of the Tower facing up. Remove the 8 screws that attach the back panel to the case back and remove the back panel (See Image 1).

3. Locate the area on the lower PCB where the module will be installed (See Image 2).

4. Remove the module from the packaging (See Image 3).

5. **NOTE:** This step may not apply to your tower. No jumpers are needed on PCBs with revision D or later. If jumper board is needed, install on the Juno main PCB. (See Images 4 and 5).

6. Remove terminal block from the module (See Image 6).

7. Connect the 24-pins on the CM-Juno Communications Module to the 24 pin connector on the Tower PCB. Make sure the module board is seated all the way down. Verify that the 24-pins and the 4 mounting holes are properly aligned. Attach the module to the Tower PCB using the four included screws (See Image 7).

8. Remove the access panel from the back panel by pressing in on the two tabs (See Image 8). Then replace the back panel and screws (See image 9).

9. Insert the microphone element in the slot on the back of the access panel (See Image 10) and replace the access panel on the back panel by inserting the side with the single tab first, then press down on the side with the two tabs until it snaps into place (See Image 11).

STEP THREE: Connect Cables

1. Connect the CAT5 cable to the LAN port on the CM-Juno Module (See Image 3). Connect the other end to the network jack. Place a clamp-on ferrite over the cable (See Image 12).

2. If using with an RS232 connected AV device, connect the RS232 serial cable to the module's COM port (See Image 3). Depending on the AV device, the white and red wires will be alternatively TX (transmit) or RX (receive). Connect the red and white wires to the appropriate terminals. Connect the black wire to GND (ground). Connect the other end of the serial cable to the AV device (projector, display).

3. If using with a FrontRow CB75 or CB85 microphone, connect it to the intercom jack on the module using an ethernet cable (See Image 3). Place a clamp-on ferrite over the cable (See Image 12).
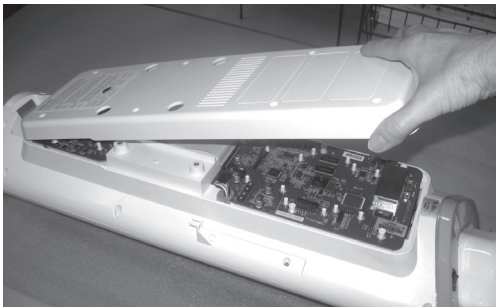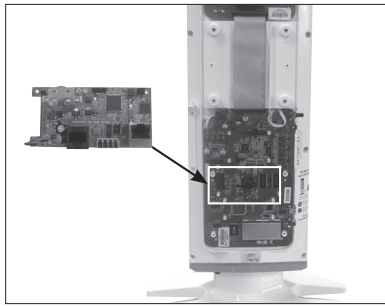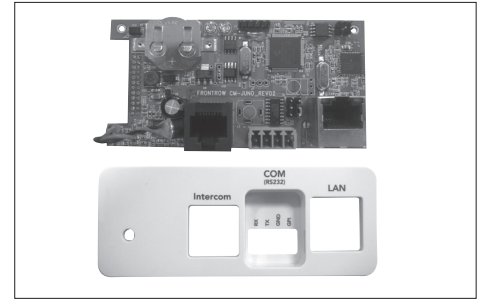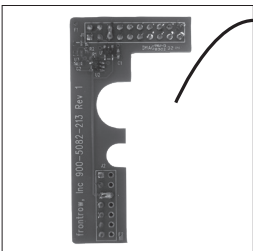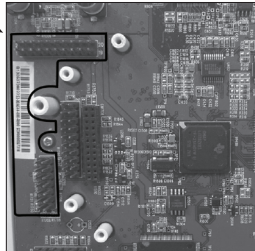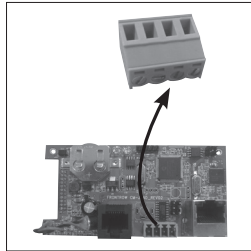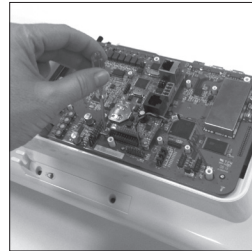
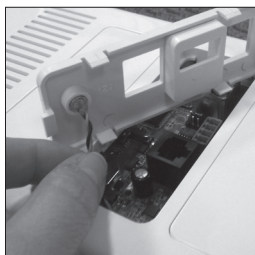Image 1

Image 2

Image 3

Image 4

Image 5

Image 6

Image 7

Image 8

Image 9

Image 10

Image 11

Image 12

For configuration information, visit gofrontrow.com/juno