QUICK-START INSTALLATION GUIDE

OMNIA.11 STEREO FM AUDIO PROCESSOR



THANK YOU FOR PURCHASING THE OMNIA.11 STEREO FM AUDIO PROCESSOR

We have made this Omnia System easy to set up and configure. This quick-start guide will take you through the basic steps to configure your new Omnia.11 to start delivering cleaner, clearer, louder, and more consistent sound. Before we get started, let's make sure you have what you need.

REQUIRED EQUIPMENT, CABLES, AND ACCESSORIES:

There are a few additional items required for a successful installation. Check the list below and make sure you have what you need.

Included items:

- Omnia.11 Audio Processor
- AC Power cable
- Ethernet cable
- 4 rack screws

Items you need to supply:

- Rack with four available EIA rack spaces for mounting
- Professional line-level analog or AES/EBU digital audio sources on standard XLR connectors
- Configured Ethernet switch



PHYSICAL INSTALLATION

RACK MOUNTING



1. Locate the release pin (A) on the inside top of each handle on the Omnia.11.



- 2. **Slide and hold** the release pins (A) outwards and then **pull** the handles (B) towards you until you hear a click. Make sure each handle is securely locked into the forward position.
- 3. Using the handles (B), lift and slide the Omnia.11 into the equipment rack and secure with all 4 rack screws.
- 4. Once installed into the rack, **locate** the release pin (A) on the inside top of each handle, **slide** the pin toward you and **fold** the handles (B) back to their normal position.

CONTINUE TO AUDIO CONFIGURATION

Your physical installation is complete. Continue to the "Audio Configuration" instructions.

AUDIO CONFIGURATION

AUDIO CONNECTIONS

1. Determine the inputs and outputs that are appropriate for your installation and follow the appropriate instructions.

AUDIO INPUT - Both analog and digital input sources may be connected simultaneously, however, only the input source that has been selected in the Input menu will be active. Input source selection will be covered later in this guide.



- a. For Analog audio, connect XLR audio cables to the left and right ANALOG INPUTS (C) jacks.
- b. For Digital audio, **connect** XLR audio cables to the AES INPUT (D) jack.
- c. For an existing Livewire system, the single Livewire Ethernet connection is all that is needed for audio I/O (except for the composite MPX outputs). **IMPORTANT: Do not connect an Ethernet cable at this time.**

INSTALLATION HELP

For more details about the Omnia.11, or to download the full manual please visit https://www.telosalliance.com/Omnia/Omnia11

If you have more questions, call the Telos Alliance 24/7 Support Team at **+1 (216) 622-0247**, or email us at **support@telosalliance.com**, we'd be happy to help you out.

AUDIO CONFIGURATION (CONT.)

AUDIO OUTPUT - All outputs are active simultaneously.



- a. For Analog audio, connect XLR audio cables to the left and right ANALOG OUTPUTS jacks (F).
- b. For Digital audio, connect XLR audio cables to the AES OUT 1/2 jacks (G).
- c. For a composite MPX connection to your STL or FM exciter, **connect** either one of the BNC analog (COMP1 or COMP2) jacks (H) or the Omnia Direct "AES COMPOSITE OUT" digital XLR jack (I) if your exciter or STL supports it. A MPX connection is always best and will take full advantage of the Omnia's superior built-in stereo generator and ensure the best possible overshoot performance and sound quality!"

Note: If you will be using conventional AES/EBU L/R digital audio to feed your STL or FM exciter, be sure any pre-emphasis and limiters (if present) are fully defeated in the exciter. The Omnia must be the only device providing the pre-emphasis so its own de-emphasis on the AES/EBU output being used must also be "Off". Also note that if the STL uses a codec (is not linear), the Omnia must be located at the transmitter site for best performance and sound quality.

d. For an existing Livewire system, the single Livewire Ethernet connection is all that is needed for audio I/O (except for the composite MPX outputs). **IMPORTANT: Do not connect an Ethernet cable at this time.**



- 2. Make sure that no cables are plugged into either Ethernet port.
- 3. Connect the Omnia.11 to AC Mains (J).
- 4. Once the system has booted up completely, connect one end of the Ethernet cable to the top Livewire/100BT port (K) on the back of the Omnia.11. Connect the other end of the Ethernet cable to a configured Ethernet switch (L) to allow access to the network.

CONTINUE TO NETWORK CONFIGURATION

Your audio connections are complete. Continue to the "Network Configuration" instructions.

NETWORK CONFIGURATION





NETWORK PARAMETER SETUP

- 1. **Touch** the "Setup" button (M). The Network configuration screen will be displayed (N).
- Touch the white field (O) to the right of IP Address label to enter a static IP address. Note: The Omnia.11 requires 2 free static IP addresses on your network (DHCP is not supported), the one that you enter and the one directly above the one that you enter. For example, if you enter 192.168.0.125 as the IP Address, both it and 192.168.0.126 need to be open on the network.
- The on-screen keyboard will pop up (P). Touch the "0-9*/=" button (Q) to shift the keyboard to number entry mode.
- Touch the backspace key to delete the current information digit by digit, then enter your desired IP address from the keyboard.
- 5. Touch OK (R) and the keyboard will no longer display.
- If your network requires changes to Subnet Mask or Gateway values, **touch** the white fields to the right of those labels to change the values via the pop-up keyboard.
- Once your values have been entered, touch the "APPLY" button (S). The system will display an option to either "Reboot Now" or Reboot Later". Touch "Reboot Now" to reboot the system and apply the new parameters.



NETWORK CONFIGURATION (CONT.)



LIVEWIRE CONFIGURATION

- Once the system has rebooted, touch the "Setup" button (T).
- 2. **Touch** the Livewire button (U). The Livewire configuration screen will be displayed (V).
- If you do not have a Livewire system, make sure the 2 Livewire output channels are disabled. The 2 "Enable" buttons (W) will be white if Livewire is disabled and green when enabled. To disable Livewire, touch each of the two green "Enable" buttons (W) to turn them white.
- If you do have a Livewire system, enable Livewire by touching each of the two "Enable" buttons (W) to turn them green.
- If you have a Livewire system, touch the white fields (X) next to the Output #1 and #2 and enter the appropriate channel value via the pop-up keyboard (Y).
- 6. **Touch** the "APPLY" button (Z) under the Outputs.
- Touch the white fields (AA) next to the Input #1 and #2 to enter the appropriate channel value via the pop-up keyboard (Y).
- 8. Touch the "APPLY" button under the Inputs (BB).

CONTINUE TO SYSTEM CONFIGURATION

Network configuration is complete. Your system is ready for system configuration. Continue to the "System Configuration" instructions.

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SYSTEM CONFIGURATION

INPUT CONFIGURATION

- 1. Touch the "ADJ" icon (CC) to return to the initial System screen.
- Touch the "Input" icon (DD). The Input Configuration screen will be displayed. If the "Basic" tab (EE) is not active, touch to select it.



- 3. From the "Input Source" drop-down (FF), **select** the Analog, AES/EBU or Livewire input as appropriate for your installation. If your audio source is providing an audio feed you should **see** meter activity on the bargraph meters (GG).
- 4. While driving the inputs with typical program material at normal operating level, **adjust** the appropriate "Master" Input Gain control (HH) for your installation until the peak-reading input bar graph meters are reading just "into the yellow" (about –15 to –12 dBFS or so). If the left/right audio levels coming into the Omnia.11 are somewhat unbalanced, you can **adjust** the "Right Trim" control (HH) to change the level of the right channel alone over a limited range.

OUTPUT CONFIGURATION

1. **Touch** the "Output" icon (JJ). The Output Configuration screen will be displayed. If the "Basic" tab is not active, touch to select it.



SYSTEM CONFIGURATION (CONT.)

- Touch the "FM Options" button (KK) on the left side of the Menu Area and ensure that the Pre-Emphasis, Diversity Delay (if present) and BS-412 settings are correct for your system and your location.
- 2. Touch the appropriate button (LL) above the "FM Options" button to select the group of output controls for the output you will be using. All outputs are active simultaneously. Note: If you are using a conventional AES/EBU L/R digital output to feed an FM exciter or linear STL, touch the "AES/EBU" button and be sure the "Output Selection" is set to "FM" and the "De-emphasis" is turned "OFF" for the output being used. For access to the composite MPX stereo generator output level and stereo pilot controls, touch the "Composite" button. Note that these controls simultaneously adjust the Omnia Direct output levels as well. Finally, adjust the appropriate control so that the peak output/modulation level is correct for the equipment that follows the Omnia.11.
- 3. Touch the "FM" icon button (MM) at the top of the screen and then touch the "Preset" tab (NN) to display the list of factory processing presets. If the preset list is locked (grayed-out), touch the "padlock" icon to unlock it. Once unlocked, simply touch the desired preset name in the list and it will be put directly "on the air". We recommend listening to all factory presets to get a feel for their differences and then select one to start with.
- Touch the "Quick Setup" tab (OO) and adjust the following controls to set the basic loudness, bass and brightness sound desired.
- 5. Adjust the "Clipper Drive" control (PP) as low as possible for the loudness needed. This controls the primary loudness vs. distortion tradeoff. Turning it up makes the sound louder (but more distorted) while turning it down makes the sound cleaner but not as loud. It should always be set as low as possible for the level of loudness required.
- Set the overall amount of bass using the "Bass" control (QQ). At higher settings of the "Bass Thump" (RR) control, the "kick" or "Thump" action of bass material is emphasized.
- 7. Set the basic brightness of a preset by using the "Presence" (SS), "Treble" (TT) and "Sparkle" (UU) controls. Note that these three controls only boost the brightness. A setting of "0.0" is "flat" or the minimum amount of boost for the particular preset that is currently selected. Reducing brightness can be done, for one example, by reducing the higher bands of the AGC or Limiter mixers.

YOUR SETUP IS COMPLETE!

That's it! You are now ready to experience the Omnia.11 for sound like never before.











