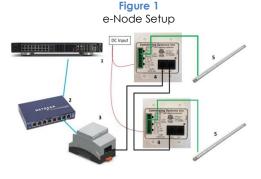


## e-Node<sup>™</sup> Wi-Fi Option Quick Reference Installation Guide (for e-Node<sup>™</sup> and e-Node<sup>™</sup> MKIII SKUs)

The Converging Systems e-Node communication hubs for Converging Systems Intelligent Lighting (ILC-x00 family) and Intelligent Motor (IMC-x00 family) controllers have the option now for wireless (WI-FI) communication in addition to the standard IP-wired control provided. This feature allows all the functionality of the e-Node to become available through a WI-FI connection to a host automation and lighting systems or even a smartphone with built-in web browser. Full Installation Manuals are available for e-Node models can be found at http://www.convergingsystems.com/lighting\_install\_library.php

IT IS HIGHLY RECOMMENDED THAT YOU ORDER THIS OPTION TO BE FACTORY INSTALLED. Should the need arise to retrofit an existing e-Node in the field, please follow the directions in Figures 5 and 6 below. Please be advised that Converging Systems will not bear any responsibility for any damage or failures resulting from field installation of the WI-FI e-Node option.

INITIAL SETUP (using a wired IP connection initially)



e-Node Bus connections. Interconnect Port 0 of the CS-BUS connector on the e-Node to an available/unused CS-Bus on the first or last ILCx00 or IMC-x00 controller using a fabricated CAT 5(or better) cable wired as per the CS-Bus Wiring Standard.

Note: For e-Node/dmx connections, connect an RJ-45 to Port 2 of the e-Node/dmx and run that wire to the first targeted DMX fixtures. Please refer to the e-Node/dmx manual for wiring instructions for DMX fixtures (they are all different).

e-Node Power connections. The e-Node requires low-voltage DC power to operate. If your e-Node is configured with the POE option (coming 2<sup>nd</sup> qtr. 2018), it is necessary to connect the e-Node to remote DC power using either the optional e-Node 12vdc power supply or a dealer-installed wired connection to an external 12v~24vdc sources (90ma min). Select one of these options to power up the e-Node and proceed to the next Figure.

Figure 2 e-Node WI-FI Commissioning Process

The e-Node supports the popular uPnP discovery protocol available on PCs. Therefore you need to use a PC for this step.

Launch Windows Explorer. After launching Explorer, any connected e-Node will be displayed. Double click on the device that you wish to commission. You may have other e-Nodes within your network controlling other devices—make sure you select the correct device that contains the WI-FI option.



Enter Web Page for e-Node. Double click on the uPnP discovered e-Node. Depending upon the model, you will see a splash screen that may appear similar to this. Click on the Converging Systems' logo to proceed. Unless you changed the default password, enter **ADMIN** to continue.

e-Node (E-NODE MkIII)



Figure 4 Completion of Setup

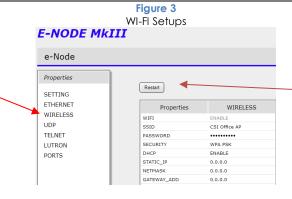
Restart

once again (see Figure 1) as a wireless device.

This final step is very important.

Select the Restart button shown in Figure 3 and IMMEDIATELY unplug the network cable running to the e-Node. Upon reboot the e-Node will search for the SSID programmed in Figure 3. Provided the network cable is disconnected, the e-Node will be accessible through uPnP

Note: if you plug in a network cable subsequently, the e-Node will revert to a wired connection (even though there is a WI-FI module setup). If you subsequently desire WI-FI connectivity, you must remove the wired Ethernet wire and power off and back on the unit once again.



<u>Access Point (AP) Linkage.</u> Under the **Properties** window, click on **Wireless** Tab to expose the Wireless Setup Menu. Manually enter the SSID of the Access Point to which the e-Node will link (auto-scanning for SSID is WIP). Typically, you should select an appropriate AP that is in proximity to the e-Node to enable the best communication.

Password. Enter a pre-configured AP Password here to enable the e-Node to obtain authentication with the AP.

Security. Select from the pulldown menu the type of AP security programmed within the AP.

**<u>DHCP/Static Addressing.</u>** Most all lighting and automation systems require a static IP address for the e-Node. If you choose Static IP addressing, enter the **STATIC\_IP** intended address, the **Netmask** (typically 255.255.255.0) and finally the address for your Gateway. After these new settings have been made, select **DHCP** Disabled to enable the programmed Static IP address after a reboot



Again and as specified in the header of this Quick Start Guide, these steps should be followed at your own risk in the event you have not ordered a factory-installed version of your WI-FI module.

Figure 5
e-Node Preparation



Prepare e-Node for WI-FI module connection. If your e-Node did not come from the factory with the WI-FI module installed, remove all power and communication cables connected to the device and with the e-Node placed on its side, CAREFULLY insert a small flathead screwdriver into the slot just below the exposed black squares and CAFEFULLY attempt to widen the gap between the top beige top piece and the black bottom piece. To do this, pry the beige piece initially upwards and then away from the black bottom piece by about 1mm only. Repeat this same action on the other tab on the first side and then repeat for both tabs on the other side. Once you have released the top from the bottom by about 1mm, you can now lift the beige cover off from black base.

**Figure 6**Wi-Fi Module Installation



Module Installation. Remove WI-FI module from its protective bag and using proper ESD precautions (grounding strap, etc.) insert the module into the e-Node at the marked Wireless module location. Be careful not to bend the interconnect pins. After the module is plugged in and snuggly resting on the e-Node's main PCB, reposition the beige top piece such that FCC logo is closest to the 3 RJ black connectors AND that the two black vertical fins jutting out from the black base slide easily into the beige top piece. Gently press down on the top piece until it snaps into place. Make sure you press evenly so that the top piece engages with the four (black square) tabs at precisely the same moment.