

# Technical Note

## Directions to Change Personality of Connected CS-Bus Device Using Pilot

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### Required accessory devices:

- eNode Ethernet to CS Bus Firewall
- eNode Pilot Software Application

Converging Systems manufacturers a hardware device which can be used to perform additional customization on many CS-Bus devices. This device is called the eNode. Simply it is an Ethernet to CS-Bus Firewall and adapter. In addition, there is an accompanying piece of application software, referred to as the eNode Pilot Application, which is required to make these settings. The pair of products is especially useful if addresses or specific features need to be changed from those which have been preset from the factory. Provided you have both of these components, you may proceed.

If you desire to change the programmed settings of one or more CS-Bus devices that are connected to the CS-Bus (hereinafter referred to as a “**Device**”) *other than the e-Node*, then please follow the below instructions under section “A.” These instructions assume that you have an e-Node which can be used to interface between the CS-Bus and your PC or network (the e-Node shall be referred to as simply the e-Node herein and not to as a Device). If you wish to make changes directly to the eNode, follow the instructions found in section “B” below.

### **A. DIRECTIONS TO CHANGE PARAMETERS ON MOST CS-BUS DEVICES (EXCEPT FOR THE eNODE)**

The easiest way to connect e-Node to a PC and program one or more Devices with relevant "personality" changes is as follows:

**Note:** Each device shipped from the factory comes without a factory-preset UID setting. Therefore, if you want to program a device using UID numbers, you must set a UID number for the targeted device.

- 1.0 Connect unpowered e-Node to your network using CAT5 cable (or CAT5e or CAT6).
- 2.0 Next, connect unpowered Device(s) to e-Node with straight RJ-25M to RJ-25M cable (using middle 4 pins or all 6 pins one-to-one). You can plug in the RJ-25 cable into either of the two ports on e-NODE.
- 3.0 Power on e-Node and Device(s). (You will need to use 12v to 20vDC transformer with polarity as shown on label on e-Node.)
- 4.0 Open up Pilot (application). Once Pilot opens, you may receive a message on your computer if you have a firewall installed if you would like to continue “blocking” or not. Select “unblock” to continue. This action opens several ports on your computer that are used to communicate with e-Node.
- 5.0 Within the Pilot application, you will see a window in the upper left-hand corner entitled “E-Nodes Found.” Place your cursor within this window and right click and select "refresh"
- 4.0 You should see an e-node called "xxx ENODE" appear within the “E-Node Found” window, and the messaging that comes back from that e-Node in the right message window.

Note: By default, "Time Stamp" and "Show IP" are set on within "View." If you are utilizing the default settings, you will see within the Right Message Window the actual traffic messages that are coming from your discovered e-Node which is preceded by (i) time of transmission and (ii) the IP address of the discovered e-Node. Then after the headers you will see the name of the e-Node found.

- 5.0 Hit the "View" tab on the top and select "View Map"
- 6.0 You should see a box called SCAN. Select that box and if you have a pre-preprogrammed Device (already discovered within Pilot) it will appear under the CS Network box. ***However, if the Device is set to factory defaults, you will NOT see any activity under "CS Network" for it does not have a UID address set.*** In this case you will need to set the UID address for each device connected on the CS-Bus. Proceed to the next step to program individual UID addresses.
- 7.0 Type in the desired UID address within the open box to the left of the "Set UID" box for the first Device.

**Note:** Each UID to be set should be unique from all others. It is recommended that you start at 1 and proceed upwards in a sequential manner.

- 8.0 After you type in the desired UID address for the first Device, hit the button "Set UID" and you will be instructed to depress the "Discovery Button on the targeted Device. After you hit the Discovery Button, the UID for that device will have been set.
- 9.0 If you additional devices connected on the CS-Bus that you wish to identify with a unique UID address simply follow Step #8 above for each subsequent device. When you have programmed all Devices, proceed to Step #10 below.
- 10.0 Now select the "Scan button" within Pilot and all the programmed UID addresses that you programmed Steps #8.0 and #9.0 above will be appear under the CS-Network window on the left hand side of the "View Map" window.
- 11.0 Now if you wish to update a particular variable for any Device found under the "CS Network" window, click on that Device and expand its "map" by hitting the "+" mark in front of that Device. Now you can move through all available variables that can be set and within the lower-right window under "View Map" you can make any changes required.
- 12.0 Verify that all the changes that you have made have been stored before exiting this application, there is nothing else you have to do to make sure these changes have been made.

## **B. DIRECTIONS TO CHANGE PERSONALITY OF CONNECTED eNODE**

If you desire to change the programmed settings of one or more parameters within a connected e-Node, then please follow the below instructions.

The easiest way to connect e-Node to a PC (either directly or through a network) and program one or more variables within an e-Node Device is as follows:

**Note:** Each e-Node shipped from the factory comes without the same "name." If you have more than one e-Node on a network and you wish to change the parameters within a single e-Node, it is often easier if you change the name or alias assigned to each e-Node to make programming easier. You may however, choose to leave the names of all e-Nodes all the same and just differentiate between various e-Nodes by simply referring to their unique IP address.

- 1.0 Connect unpowered e-Node to your network using CAT5 cable (or CAT5e or CAT6).
- 2.0 If you already have Devices connected to particular e-Node units, you may leave them connected. Now proceed to the next step to change parameters within a specific e-Node device.
- 3.0 Power on e-Node and any Device(s) connected. (You will need to use 12v to 20vDC transformer with polarity as shown on label on e-Node.)

Note: by default e-Node units are set to dynamic DHCP addressing. If you wish to change the default addressing to static, please refer to the e-Node instruction manual for more information here.

- 4.0 Open up Pilot (application). Select the menu tab “View e-Nodes” and double-left click on the CS-network icon in the left window.
- 5.0 Next will appear all e-Nodes discovered within Pilot. If you have only one e-Node connected, you should see that device. If you have more than one e-Node on your network, you should see all devices connected. Now, right click on any e-Node name in within the “Properties” box you should see all the parameters set within the particular e-Node selected.
- 6.0 Now if you wish to update a particular variable for any Device found under the “CS Network” window, click on that Device and expand its “map” by hitting the “+” mark in front of that Device. Now you can move through all available variables that can be set and within the lower-right window under “View Map” you can make any changes required.
- 7.0 Verify that all the changes that you have made have been stored before exiting this application, there is nothing else you have to do to make sure these changes have been made.