CS-Bus Commissioning Guide for Controllers and Keypads
(Using e-Node)
Date: October 6, 2013
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## Important Developer Links on the Converging Systems website

CS-Bus Device Driver Toolkit (for writing Ethernet and Serial device drivers)	http://www.convergingsystems.com/inres_programmingdesignkit.htm
e-Node Pilot Application*	http://www.convergingsystems.com/customerportal/1000/downloads.htm#anch4
e-Node Commissioning Guide (how to run Pilot)*	http://www.convergingsystems.com/customerportal/1000/installation.htm#anch3

Note: you may be requested for a user name and password on several occasions to access certain of these documents. Those credentials are as follows:

User name	**csidealer**
Password	**4212color**

Directions

a. First verify that the Pilot application can see your e-Node. Launch the Pilot Application and go to the **View Map** Page. Select the **Discover** e-Node button and determine (1) if you can see the e-Node's name within the left "**Map**" window (generally ENODE)and (2) if after you select that "E-NODE" entry within the left window with your mouse, if its IP address appears within the **Properties** box to the right of this **View Map** page (IP: 192.168.10.216 or other).
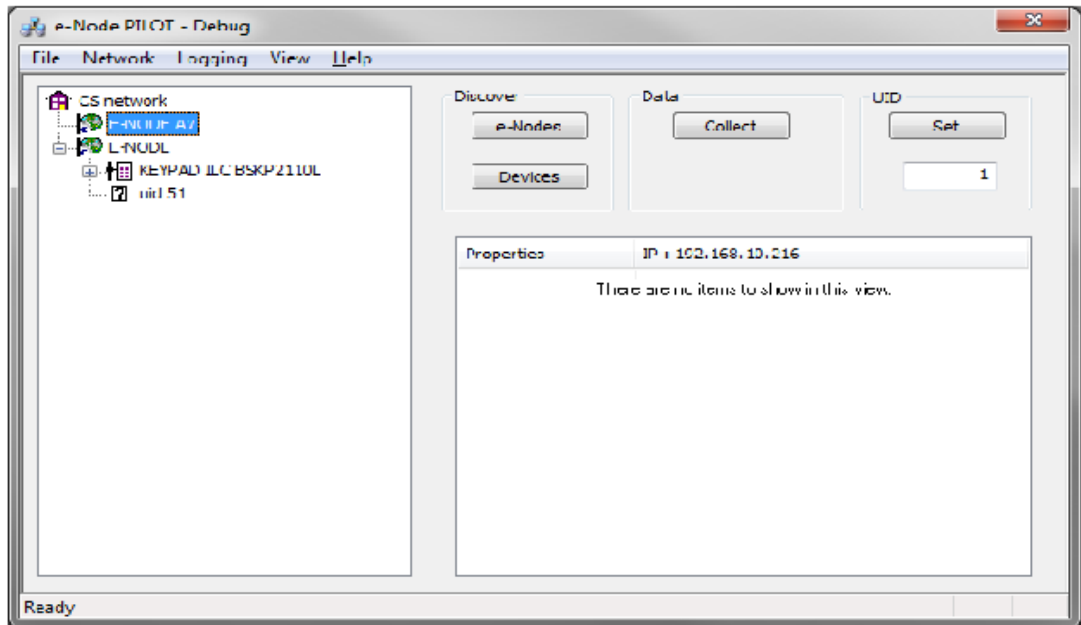
b. Now before commissioning, determine if your hardware wiring is all operation. There are a number of ways to perform this task.
   i. Method 1--Keypad Method. Depress the keypad's ON button (if the LEDs currently connected to powered ILC-100 are turned OFF) and see if all ILC-100s and their connected FLLA strips respond. Similarly depress the OFF button to turn all LEDs off. *This gives you a first pass verification that the CS-Bus is operational*.
   ii. Method 2-- Pilot command line Method. Go the View Traffic Window and type in the following command:

#0.0.0.LED=ON	or	#0.0.0.LED=OFF

   All operational ILC-100d and their connected FLLA strips should respond as appropriate.
   This test also gives you a first pass verification that the CS-Bus is operational.

c. You are now ready to commission a device which includes controllers and keypads. Commissioning is a step process. **ONE** is to give a unique UID address to each client on the CS-Bus, AND **TWO** is to change any particular addressing in the form of Zone/Group/Node (e.g. #2.1.1 type addressing)
   i. Assigning a UID. Go to the **View Map** view and under **UID Set** box, there is a window with a number (by default it is set to "1"). Type in a unique number other

than 0 for each new device to be assigned a UID. Perform this task in its entirety one device at a time. For each device once you are happy with your entry under the "**Set**" button, press the **"Set"** button and gently press the device's Reset button with a small paperclip (the ILC-100) or the "*" button on the BSKP-2110L keypad or the similar discovery button on any other supported device. Once you press this Reset/Discovery button for approximately 0.5 seconds, the device's on-board LED will flash and the device's name will appear under the left window of the **View Map** window as below:
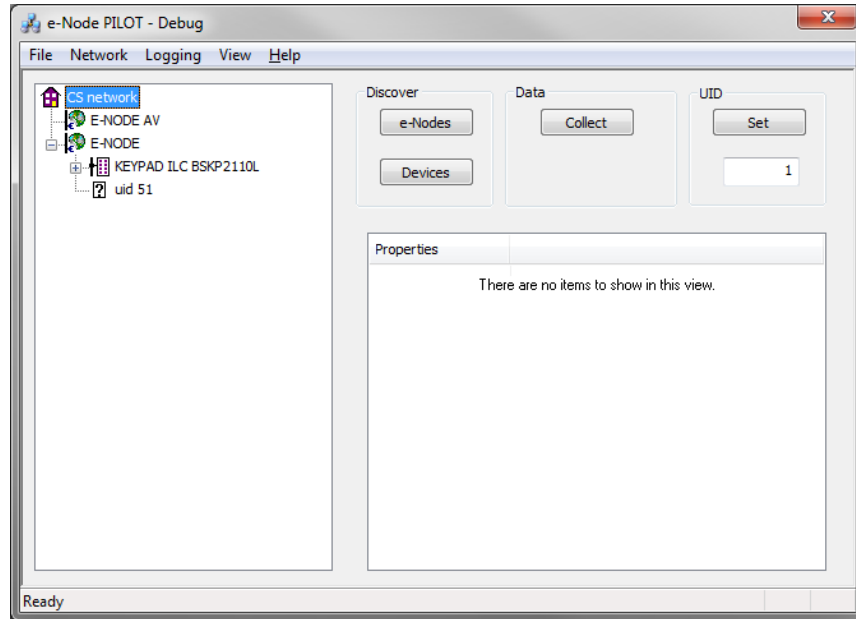
ii.   Adding Addresses to a Discovered and UID identified device. Adding a UID entry to a device allows you to alter its attributes—NO UID no CUSTOMIZATION.

Assuming that you want devices to be organized into subsets that you can control separately, you should determine a good addressing strategy for your purposes. See Exhibit "A" for proposed settings for your installation (if provided). If you happy with your addressing scheme, go to the next step to update that targeted address into a targeted device. All devices (ILC-100 controllers, keypads, etc.) that you want to work with each other must be programmed unless you are happy with the factory default of 2.1.0 for all devices.

(a)   *Add/Change an Address to an ILC-100 controller*. Go the View Map window and determine if you can see the ILC-100 that you first want to address. Expand the hierarchy by clicking on the **+** icon in front of the targeted device. Look for the entry within the left window called **Bus**. Click on that entry. You should see the following.
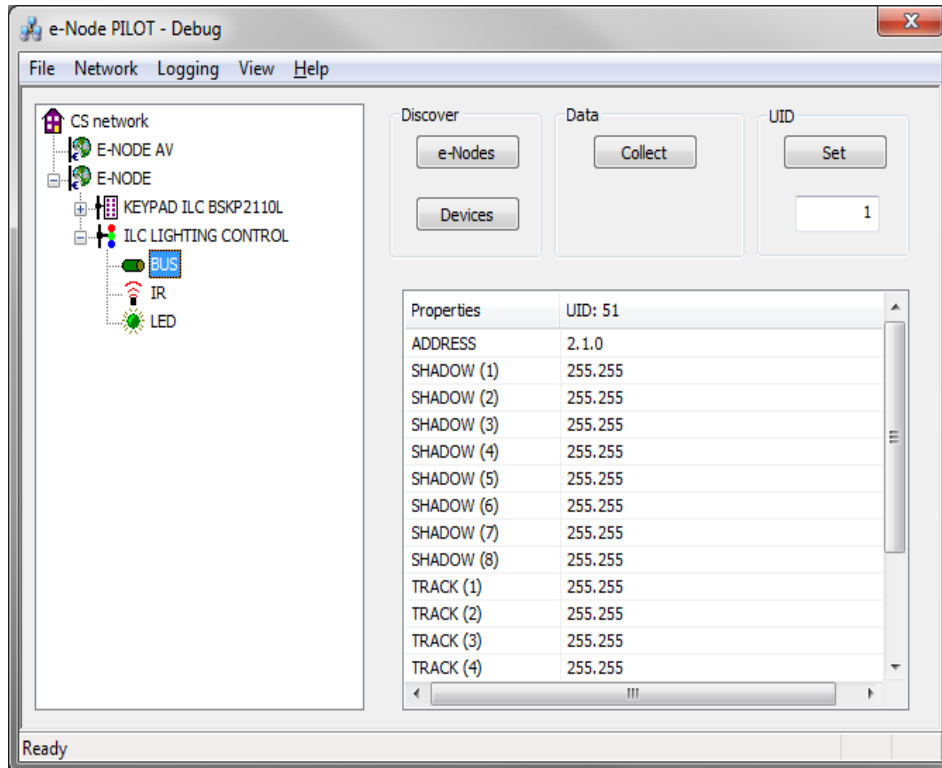
Note the entry within the right window called **ADDRESS**. It is here that the factory address (or previously set ADDRESS will be found). To change it simply highlight it and enter your new address. Make sure that each new device to be entered has a unique address (e.g. do not have two 2.1.1 entries, but you may have a 2.1.1, up to a 254,254,254 or any number in between. Pay particular attention to the proper use of Periods—no not use Commas.

b. *Add an Address to a Keypad*. Go the **View Map** window and determine if you can see the Keypad (BSKP2110L, or other keypad) that you first want to address. Expand the hierarchy, by clicking on the **+** icon in front of the targeted device. Look for the tab within the left window called **KEY**. Click on that entry. You should see the following:
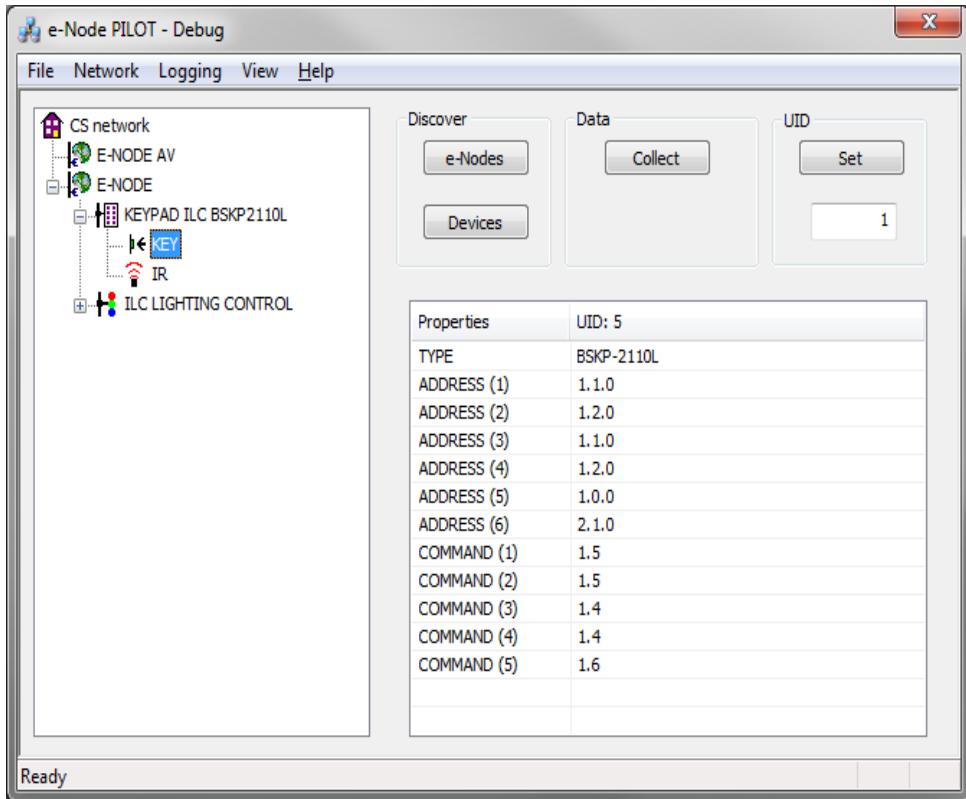
Note the entry within the right window after ADDRESS (6). **This is the relevant address to which this targeted keypad will transmit.** This is also in the format of a Zone/Group/Node entry with "0" acting as wildcards for all other accepted numbers within that field. Therefore, if you had previously assigned ILC-100 controllers as

| 2.1.1 |
| 2.1.2 |
| 2.1.3 |
| 2.1.4 |
| 2.1.5 |
| ~ to some higher number |

Then the proper entry into this keypad would be

| 2.1.0 |

Continue through each device until you have completed your process.

EXHBIT "A"
Proposed Addressing-Sample Project

Controller Addressing

1. First Bank of Devices (that you want to separate from another bank of devices

Controllers	Addresses
1st one	2.1.1
2nd one	2.1.2
3rd one	2.1.3
4th one	2.1.4
Nth one	2.1.n (where n is a number between 5 and 254)

2. Second Bank of Devices (that you want to separate from another bank of devices

Controllers	Addresses
1st one	2.2.1
2nd one	2.2.2
3rd one	2.2.3
4th one	2.2.4
Nth one	2.2.n (where n is a number between 5 and 254)

3. Third Bank of Devices (that you want to separate from another bank of devices

Controllers	Addresses
1st one	2.3.1
2nd one	2.3.2
3rd one	2.3.3
4th one	2.3.4
Nth one	2.3.n (where n is a number between 5 and 254)

Keypad Addressing

Keypad	Targeted bank of devices that you wish it to control*		
	1st bank	2nd bank	3rd bank
1st keypad	2.1.0	2.2.0	2.3.0
2nd keypad	2.1.0	2.2.0	2.3.0

You can see from this that any keypad can address any bank of devices provide the entire network is connected together. It is often wise to think about future requirements when setting addresses before starting to program any keypads.

Note: these addresses entered below should be entered within the ADDRESS (6) entry within the targeted keypad