

# ADDRESSING DEVICES & MULTIPLE DEVICE RESOLUTION

Technical Bulletin SDC05-003 emphasized the importance of clearing up all multiple device issues prior to sending the configuration. Most issues encountered on a Cheetah Xi installation have been due to the "Multiple Device" trouble. This bulletin is issued to detail different methods for addressing devices, to remind each installer to make sure all "Multiple Device" troubles are resolved prior to sending the configurations to the devices AND to provide some troubleshooting tips for resolution of these troubles.

Note: The Cheetah Xi has an auto-address feature that is always ON. It is becoming OPTIONAL in V1.5. See technical Bulletin SDC06-003 for complete description of V1.5 changes.

#### METHODS FOR ADDRESSING DEVICES:

- 1. Install Devices and use auto-address or change address of devices with IR while connected to panel.
  - ✓ This method is used primarily for general building alarm systems where the specific address is not important.
  - ✓ This method is the least time consuming the idea is to attach all addressable devices that are preloaded with their Loop 0, Address 0 default address, and let the panel take care of the resetting device address on power up for a single zone alarm system.
  - ✓ While this method is ideal for smaller systems, it has drawbacks for larger installations. Multizone systems typically prefer addresses in each zone segregated sequentially. The panel does not know the wiring order, so the addressing is random and due to device serial numbers.

#### 2. Pre-address all devices prior to device installation.

- ✓ This can be accomplished via an IR tool, sensor base and 24V power supply or Fike Control panel.
- ✓ This method is more time consuming, but ideal for installations where as-built drawings are required, design drawings show pre-determined addresses, AND there are multiple zones with address gaps in the installation (i.e. Zone 1 contains addresses 1-45; Zone 2 contains addresses 60-72, etc.)

## Using the 24V power supply:

NOTE: Do this BEFORE connecting to the panel. If the device is connected to the panel, the panel will immediately turn OFF the IR to conserve power. It is also possible to then re-enable the IR and remove the device from the loop and it would work with the power supply.

- $\checkmark$  Connect the power supply output to the device loop + and inputs respectively.
- ✓ Connect only ONE device at a time
- ✓ Use only the '1. Write Loop/Add' function. Note: The other IR functions do not work with this method.

Using the Control Panel loop with its auto-address feature:

- 1. Start with an empty loop wired to an empty base and two wires out connected to jumpers. (To remove supervised devices, perform a "Learn all" with nothing connected to loop)
- 2. Connect device desired for Loop 1, Address 1 (If sensor, connect sensor to the base. If device connect jumpers to the loop input of the module)
- 3. The panel's auto-address feature will automatically address the device to the first available address on the loop where it is connected as soon as the panel displays the NEW DEVICE message.
- 4. Label and Remove Address 1 device and connect the desired address #2 device. Continue this process for all devices.



1/13/06 · SDC06-002 Page 1 of 4

#### 3. Combination approach.

- ✓ This method is the quickest if specific addresses are required and gaps in addresses are not required.
- ✓ Install all modules and bases only as they will be required for installation to the Cheetah Xi.
- ✓ Use the IR Tool to change the address of each module as required per the prints.
- ✓ Install the first sensor at the actual location of the lowest address (typically zone 1). The panel will address it to the first available address on the loop. Install the second sensor with the second lowest address. It will be the second available address. Note that the devices in each zone will be in sequential order in the order that they are installed.

After all addresses are set as with the preferred method perform a "Learn All" to let the panel know what addresses to supervise.

#### Re-cap of configuration steps from bulletin SDC05-003:

- 1. Write configuration.
- 2. Set device addresses (using IR tool) to match configuration.
- 3. Perform a "LEARN ALL" at the control panel.

Fix any "MULTIPLE DEVICE" troubles. \*\*\*VERY CRITICAL STEP \*\*\* ! Use the Device Diagnostic screen to light device LED's and locate devices to fix address errors. The 'Assign Device Address' diagnostic C-Linx menu can also be very helpful. Perform a "LEARN ALL" again, once all errors are fixed.

#### **Troubleshooting Tips:**

We are finding that the C-Linx software 'Assign Device Address' Diagnostic screen has been the most helpful for locating multiple device troubles, especially if one of the multiple devices are active:

#### C-Linx Assign Device Address Diagnostic Screen

- 1. Open C-Linx software.
- 2. Click on 'Diagnostics', then click 'Assign Device Address'.



3. The computer will display the following window:

su Assign Device Address								
SLC	Loop	Address	Device Type	Serial Number				

1/13/06 · SDC 06-002 Page 2 of 4

4. Click on 'Diagnostics', then click 'Connect to Panel'.

C> C-Linx										
File Configuration	Diagnos	tics W	indow	Help						
Project Explo					ire	hess				
👗 🗈 🛋 🗙	Conn	Connect to Panel				Device Type	Serial Number			
PC Devices	Refre	ish Addr	ess List							
🖃 📈 Cheetah Xi	Rese	t Panel (	with Lear	n All	H					
FAP Main B	bard									
Addres:	sable Lo									
Suc Address	sable Loi									
Addres:	able Lo									
PER Periphe	ral Devic									
Air Sam	pling Ve									
					_					

C-Linx will then inform you to connect the cable to the P3 computer jack and ask for the password.

5. The computer will now check each loop on the controller and begin to display every address found on every loop (similar as shown below). If it does NOT display the devices, it may be that a multiple device is active and one is normal and they are clogging the loop traffic. To obtain priority communication to the loop, temporarily unplug the loop and then plug it back in while in this menu.

ac Assign Device Address									
SLC	Loop	Address	Device Type	Serial Number					
1	1	008	Pull Station Module	01 00 00 08 94					
1	1	007	Control Module	01 00 00 0A 20					
1	1	006	Relay Module	01 00 00 08 43					
1	1	005	Monitor Module	01 00 00 09 6D					
1	1	004	Mini Monitor Module	01 00 00 09 98					
1	1	003	Photo/Heat Sensor	01 00 00 0B 0F					
1	1	002	Heat Sensor	01 02 FA F0 83					
1	1	001	Photo Sensor	01 00 00 0C 1C					
L									
L									
L									
L									
L									
L									
L									
-									
1									
1.00	)6 Relay	Turn LED ON							
Nev	v Loop	1 🗧 🖻	New Address 6 🔹	Change Address					

- 6. Check to make sure every loop found matches the loop number of the device. If they do not match, use the diagnostic to change the loop number of the device connected.
- 7. Check to make sure that any two devices on the same loop do not have the same address. If they do, you can use this screen to light the LED of each address for locating out in the field. Find the multiple devices that are lit. Turn the LED's back OFF on the address. Go to one and re-assign the address to a temporary empty address on the loop. Light the LED and see which one lit. Determine the desired address then change it to that address and turn OFF the LED.
- 8. When all device addresses are correct, Click on Diagnostics then select Reset with Learn All (or perform a Learn All from the main controller).

#### Device Diagnostic Screen to light device LED's and locate devices -

- 1. Press F1 Config; F5 Password and enter your level 3 password. Press Escape.
- 2. Press F3 Diag (diagnostics)
- 3. Press F1 Device. Locate the Device loop and address desired.

-																			
L	0	0	Ρ	:	Ν		А	D	R	:	0	0	1	-	0	2	0		D
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
С	0	Ν	F	Ι	G	U	R	Ε	D		D	Ε	V		Т	Y	Ρ	Ε	
Р	R	Е	S	Ε	Ν	Т		D	Е	V	Ι	С	Ε		Т	Y	Ρ	Е	

### **Device Diagnostic Menu**

Line 1 Loop number represented by 'N', position cursor under the value and press +/- to change to desired loop (1-4)

Displays devices in groups of 20; Position cursor under the first digits (001 in this case), press +/- to increment/decrement the group selection

The very last position in this line is D or L. D is intended for displaying the device types in the  $3^{rd}$  and  $4^{th}$  line. L is intended for light the LED for the device (red/green flash). To light the device LED set this location to L using the +/- button then move the cursor to the desired address on the  $4^{th}$  line. Toggle the LED status by pressing the +/- button at the specific address location.

- Line 2 Displays the place holders for the 3<sup>rd</sup> and 4<sup>th</sup> lines.
- Line 3 Displays the type of device programmed in the configuration for the specific address displayed:

P = Photo	U = Photo/Heat	H = Heat	- = Unknown
D = DUCT	T = Pull Station	M = Monitor, 4"	I = Ion
Y = Relay	C = Control	m = Mini Monitor	
R=Release Control			

Line 4 Displays the type of device present/found connected on the addressable loop at the specific address displayed. Same device types as shown in line 3 description above.