IL1162
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Tek-CARE3000
Nurse Call System

Audio-Visual Nurse Call System

Quick Start Guide

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Tek-CARE3000 Nurse Call System Quick Start Guide

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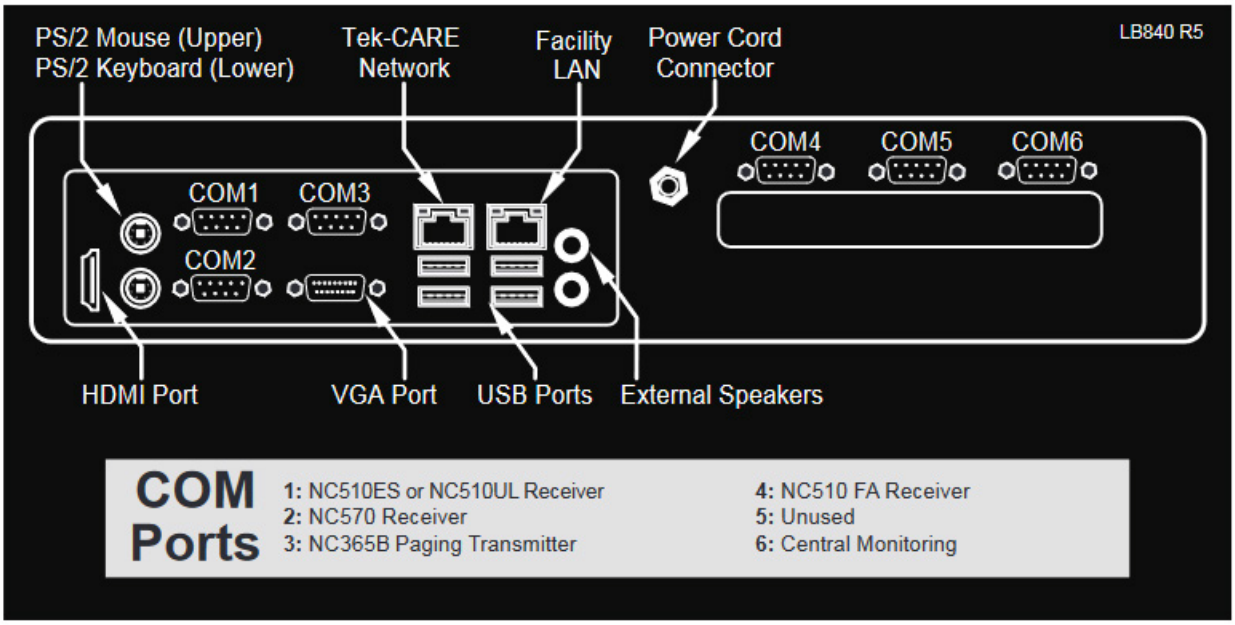
Tek-CARE3000 Physical Installation

1. Run CAT6 cable in accordance with the system layout. Use 8P8C T568B Ethernet cable pinout for terminations. Keep in mind that every NC331 Hub will have a homerun to an NC554/15 PoE Network Switch, so more than one switch may be needed throughout the facility. See **Tek-CARE3000 Wiring Diagram on page 17** for illustration.

2. Install the NC475 Tek-CARE Central Equipment. Connect the Tek-CARE network port of the NC475 to one of the ports on the NC554/15. Connect the ports of any other NC554/15 so each one is on the Tek-CARE network.

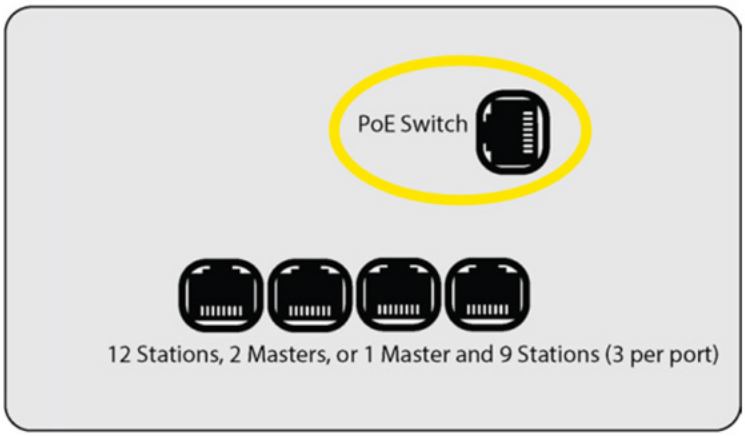
Figure 1 - NC475 Connections

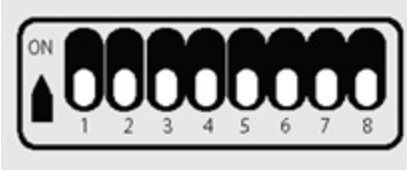


3. Install the NC331 in the location best suited to cover its field devices. Every NC331 needs a unique address within the range of 1-250. Set the address using the binary DIP switch on the NC331. Connect the “PoE Input port” of the NC331 to a port the NC554/15.

   NOTE: it is critical to document the location of hubs for ease of troubleshooting. See the **Tek-CARE3000 Addressable Programming Worksheets on page 18** for a template.

Figure 2 - NC331 Hub Connections and DIP switch (from GR048E)





Address Bit 1 (Value 1)

Address Bit 2 (Value 2)

Address Bit 3 (Value 4)

Address Bit 4 (Value 8)

Address Bit 5 (Value 16)

Address Bit 6 (Value 32)

Address Bit 7 (Value 64)

Address Bit 8 (Value 128)

4. Connect stations and masters to the NC331 Hub:
   a. Masters only: There can be only 1 master per port and up to 2 masters per hub. Every master should be addressed 0 with its EOL on; this is achieved by turning on **only** DIP switch 5 on the master DIP switch bank. Masters will not work on the system until their port has been assigned as “master” in the LS450 ConfigTool.

Figure 3 - NC415G3 Connections (from GR021)

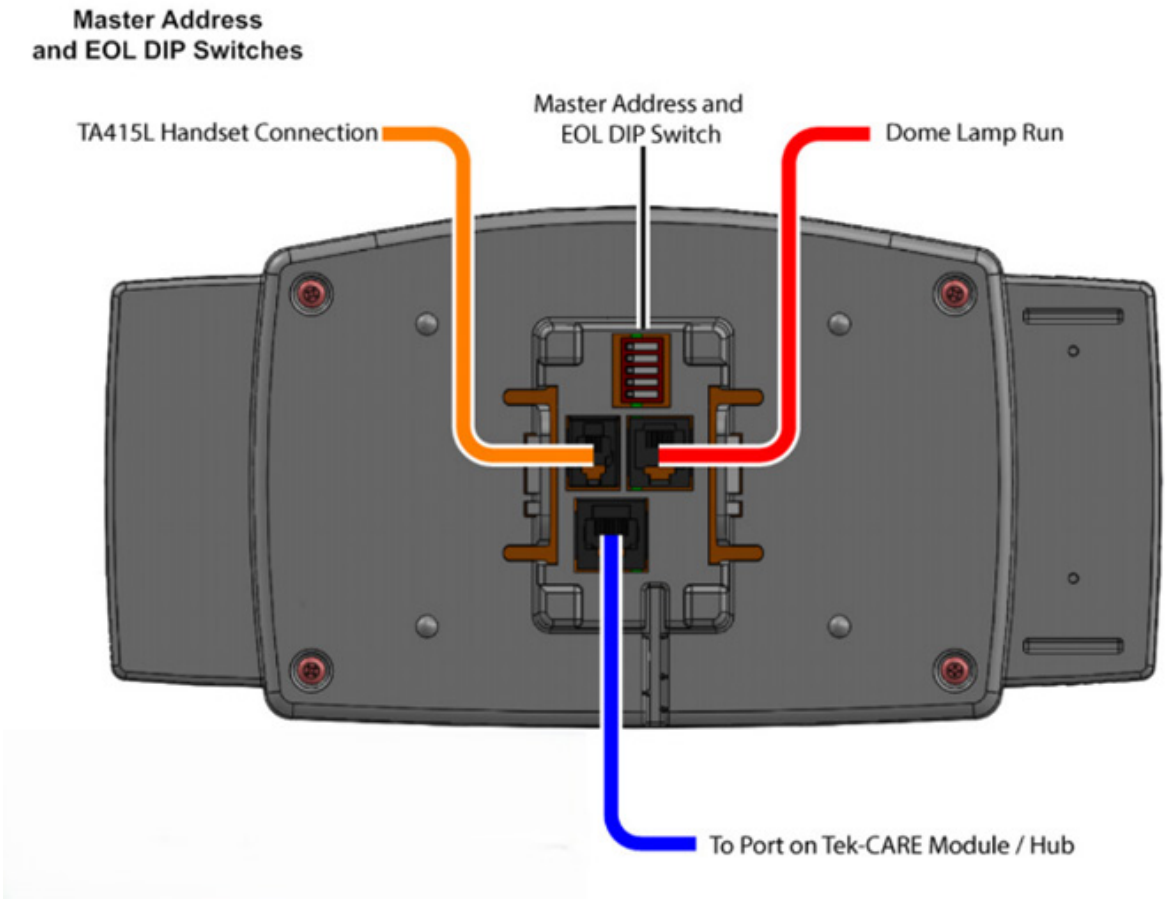
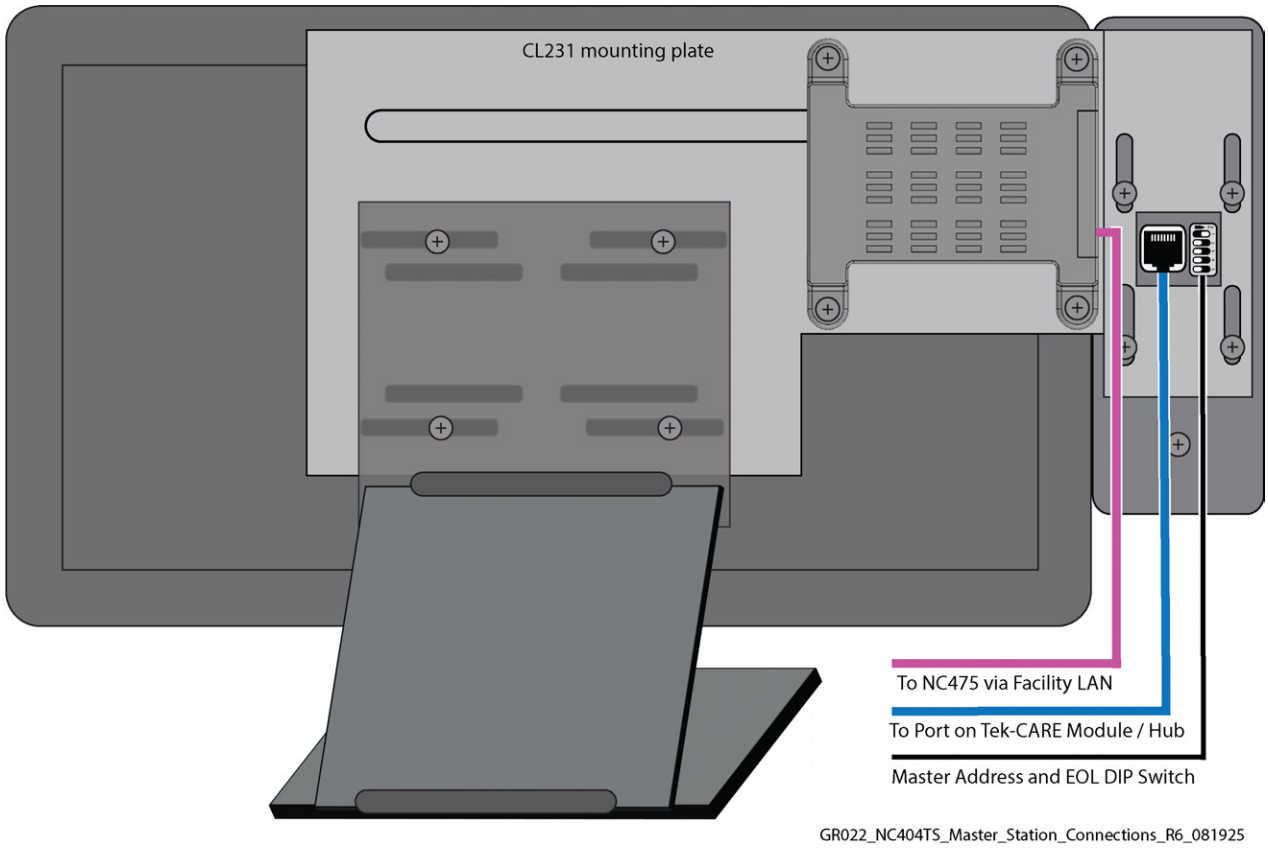
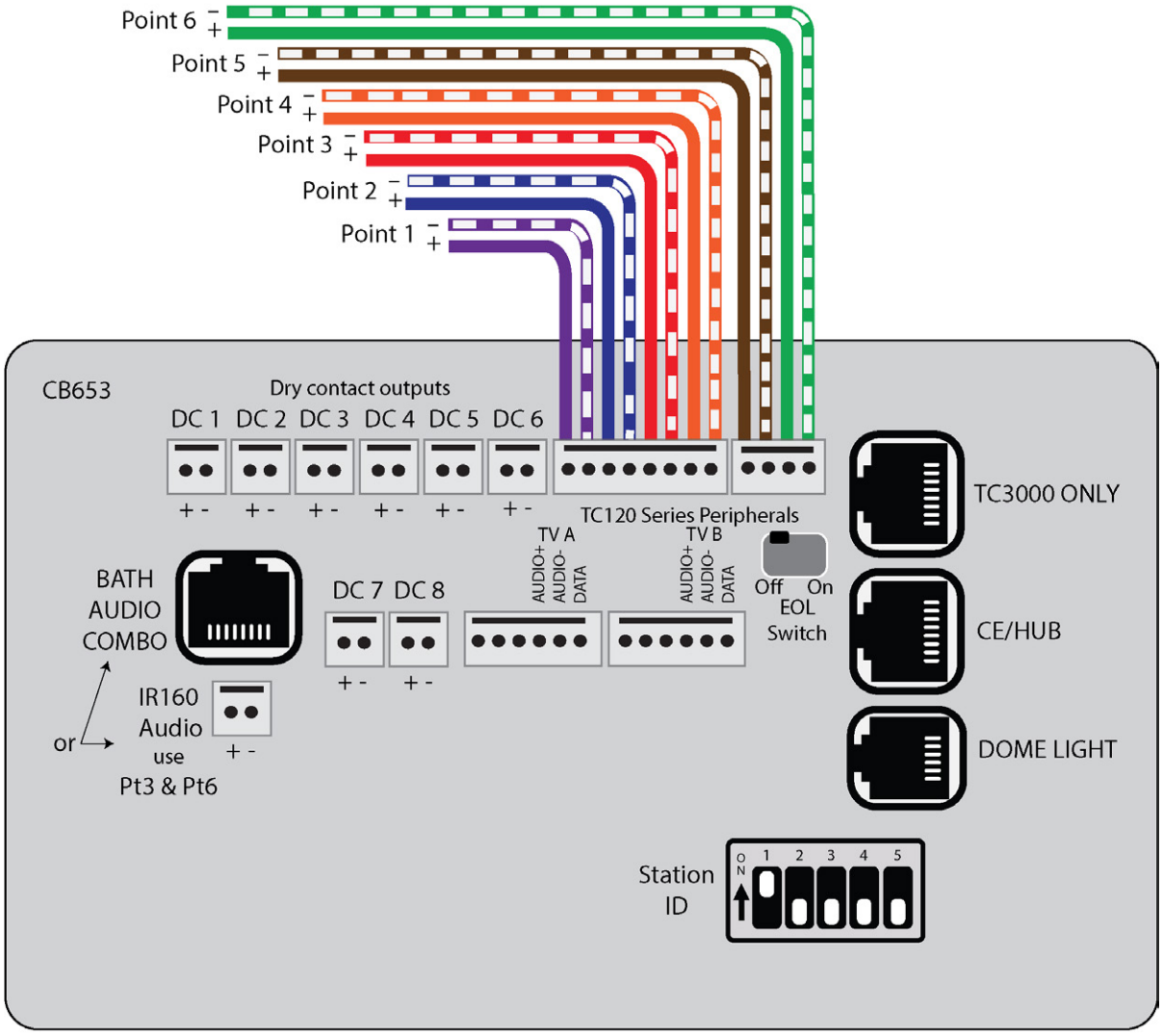


Figure 4 - NC404TS Connections



b. Stations only: There can be up to 3 stations per port and up to 12 stations per hub. Stations sharing a run must be daisy chained together using their two available ports. Stations sharing a run must be addressed 0, 1, and 2 using binary DIP switch addressing. The last station on every run should have its EOL turned on (located above the DIP switch bank).

> **NOTE**: only addresses 0, 1, and 2 are valid. Any other address will give an invalid address fault. Stations sharing a run cannot have the same address as this will lead to data faults.



GR048B 3000 Station Connections R1 070725

c. Station/Master Combination: There can be 1 master and up to 9 stations (3 stations per port) per hub. Follow the instructions in 4a and 4b for addressing. The LS450 ConfigTool will be used to assign which port has a master.

5. Connect dome lamps and peripherals if applicable. For peripherals, take note of which points are being used for which functions.

Point 1		Point 2		Point3		Point 4		Point 5		Point 6	
+	-	+	-	+	-	+	-	+	-	+	-
Purple	Purple White Stripe	Blue	Blue White Stripe	Red	Red White Stripe	Orange	Orange White Stripe	Brown	Brown White Stripe	Green	Green White Stripe
											
SF121		SF123		SF123		SF123		PM123		IR160	
ROUTINE-A		CODE		BATH		EMERGENCY		AUX 1A/1B		SPEAKER	

GR041A Points Table GEN3 Stations R2 112923

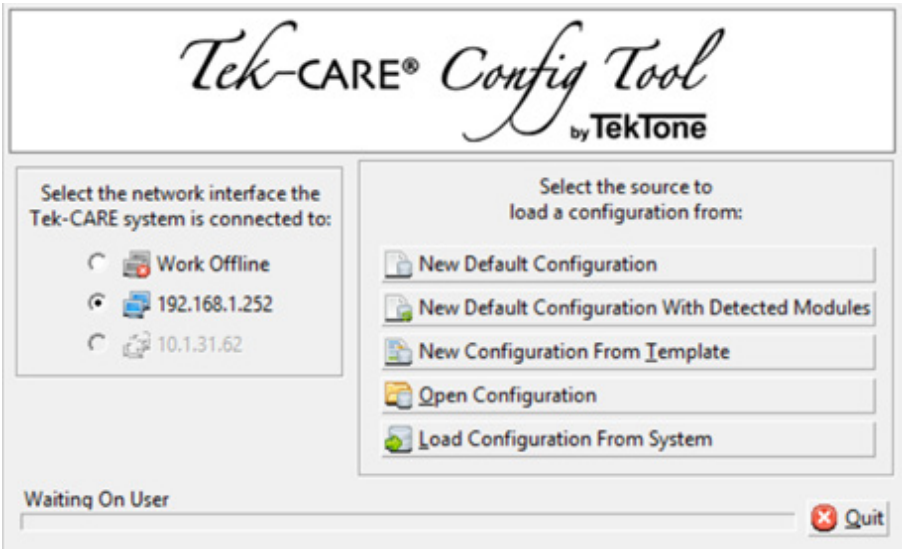
6. Repeat steps 3 through 5 to install all hubs and their connected devices, then move on to the programming phase.

Programming

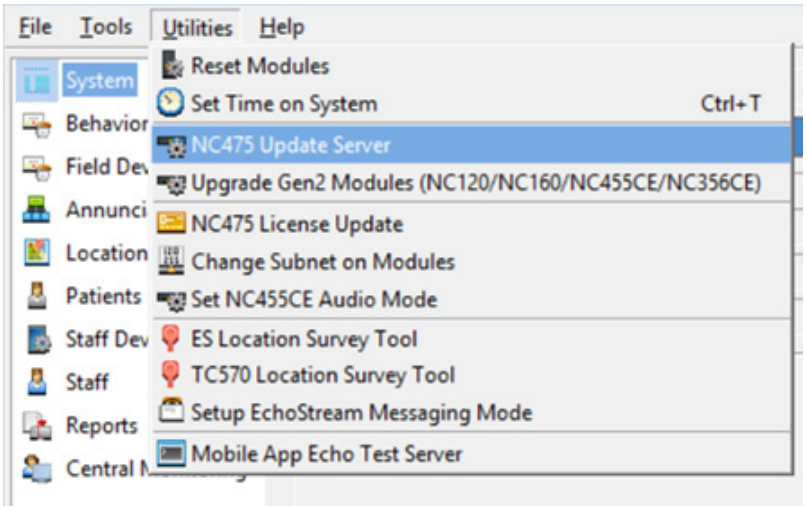
1. Download the latest Tek-CARE 2 software onto the programming laptop from: www.tektone.com/resources.
2. Connect the programming laptop to a Tek-CARE network port and ensure the proper network settings. Refer to our TekTone Network Settings video for help: https://youtu.be/4g1xJfaeSyM.

Figure 5 - TekTone Network Settings Video

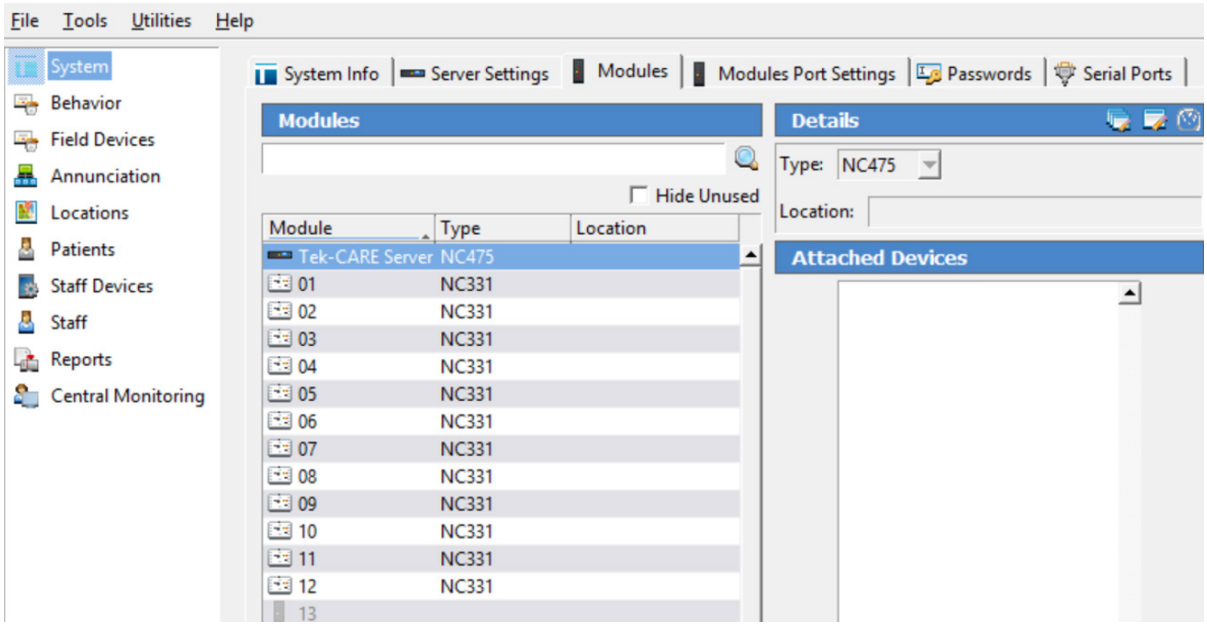
3. Open the LS450 ConfigTool and select “Load Configuration From System”.



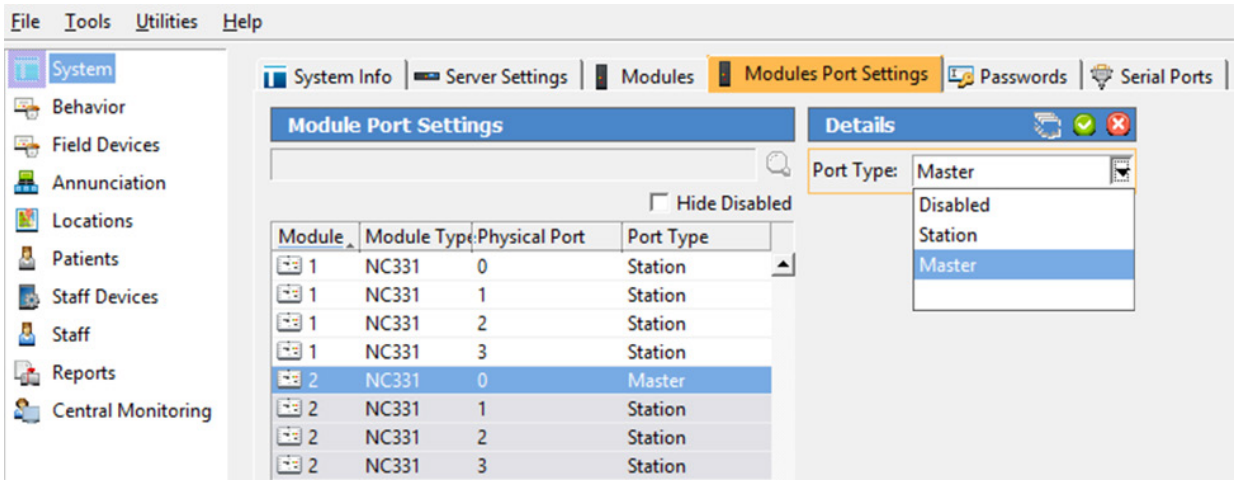
4. To ensure the system matches the ConfigTool software, select Utilities→NC475 Update Server. The NC475 may or may not update depending on if the NC475 has the latest software. Close the update screen when complete.



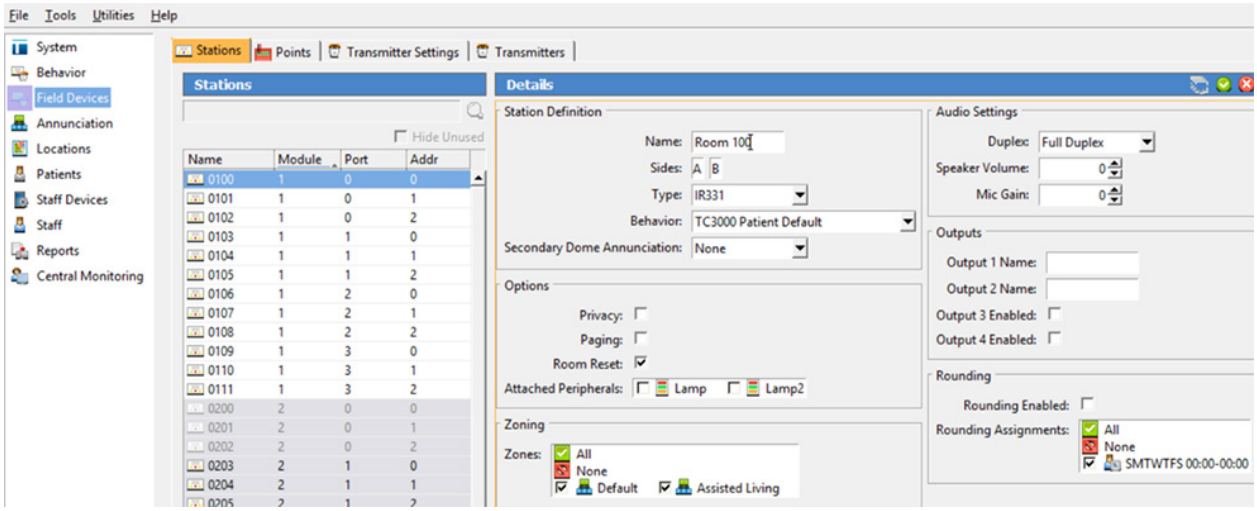
5. On the **System** page, select the **Modules** tab, then verify that all installed NC331 Hubs have auto-populated on the list of modules.



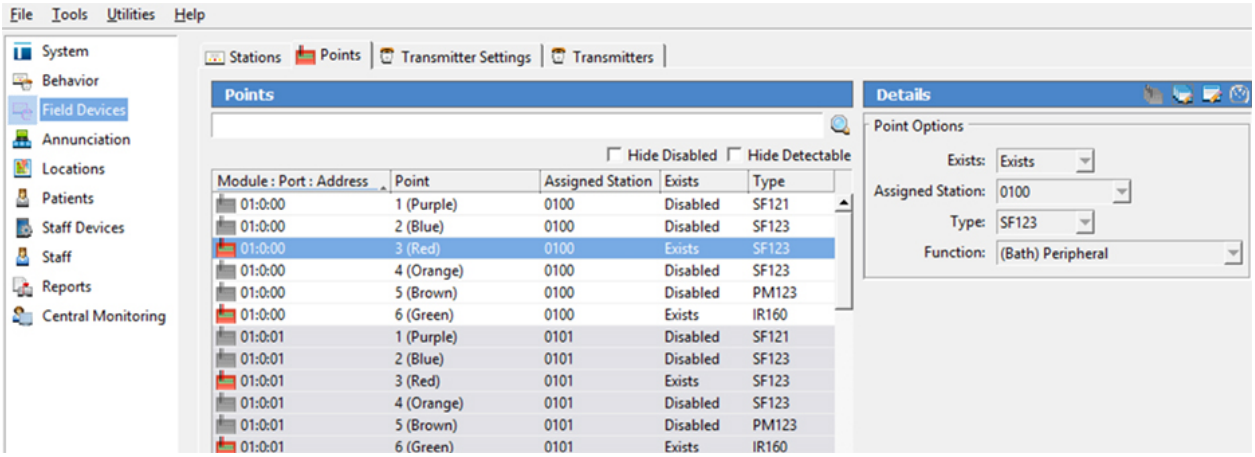
6. Select which hub ports have masters. On the **System** page, select the **Modules Port Settings** tab. For the ports that have a master, select the port, then select the **Edit** icon. Select **Master**from the **Port Type** drop-down, then select the green check mark.

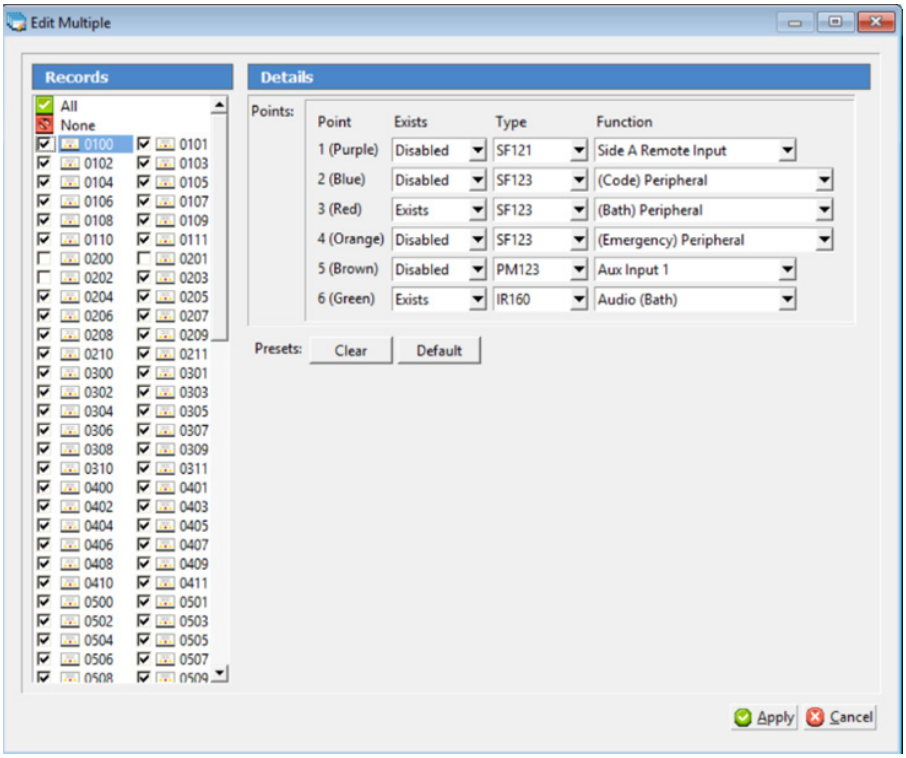


7. On the **Field Devices** page under the **Stations** tab, all the connected stations will be listed under the **Stations** pane. Their default names have been assigned based on their module (hub), port, and DIP switch address. Highlight the station and select the **Edit** icon to enter an appropriate name for the facility, then select the green check mark. Repeat this process for all active stations. Remember to save the config file periodically throughout the editing process.

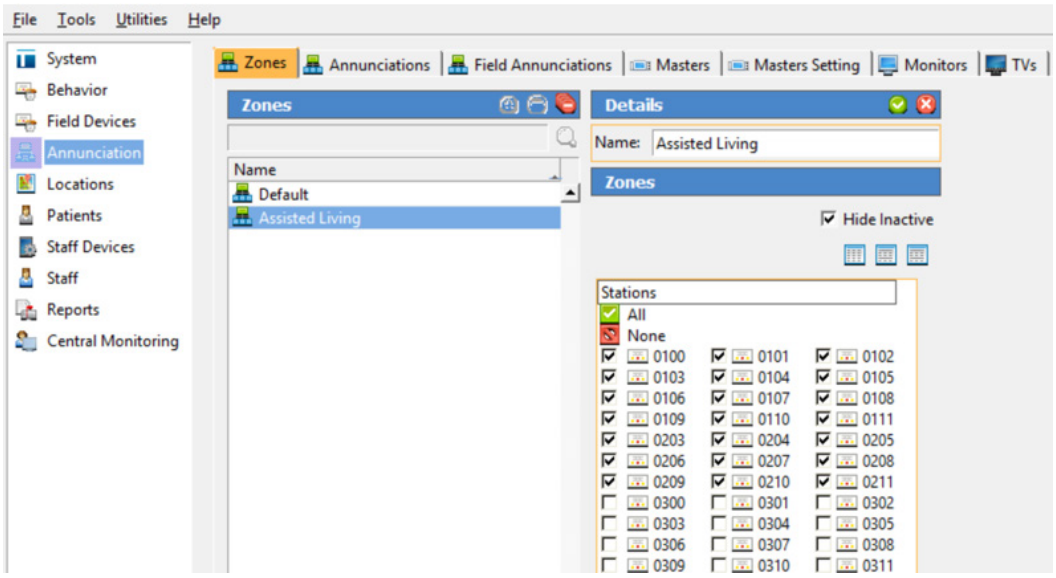


8. If peripherals were added, move to the **Points** tab on the **Field Devices** page. If all added peripherals were wired the same way on the points area of the stations, it is efficient to use the **Edit Multiple** option instead of editing each one individually. Ensure that each peripheral in use is marked as "Exists" on its appropriate point and that it's assigned the correct **Type** and **Function**. When all existing points are complete, check the grey box to mark all "Detectable" points as "Disabled". Save the config file.

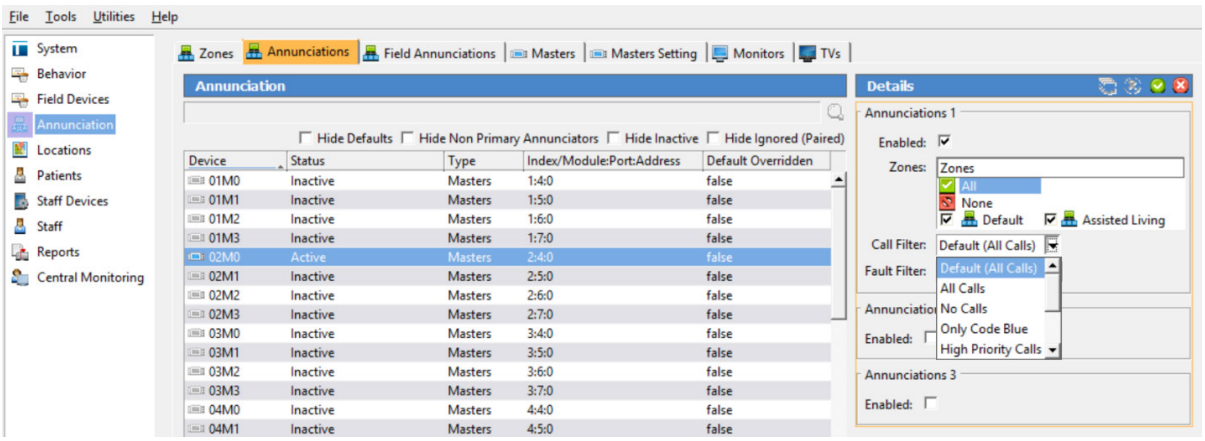




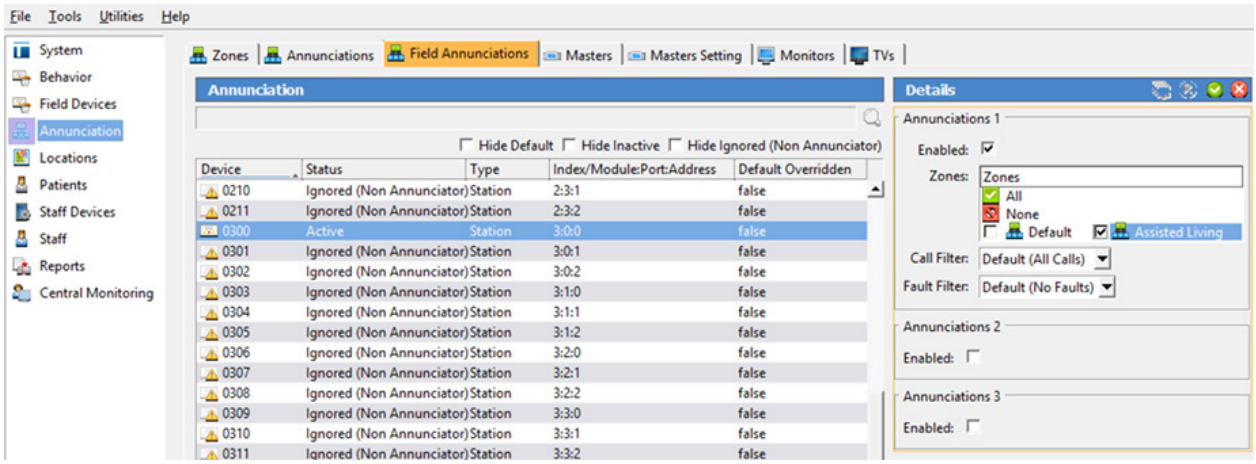
9. Create zones for groups of stations if needed on the **Annunciation** page, under the **Zones** tab.



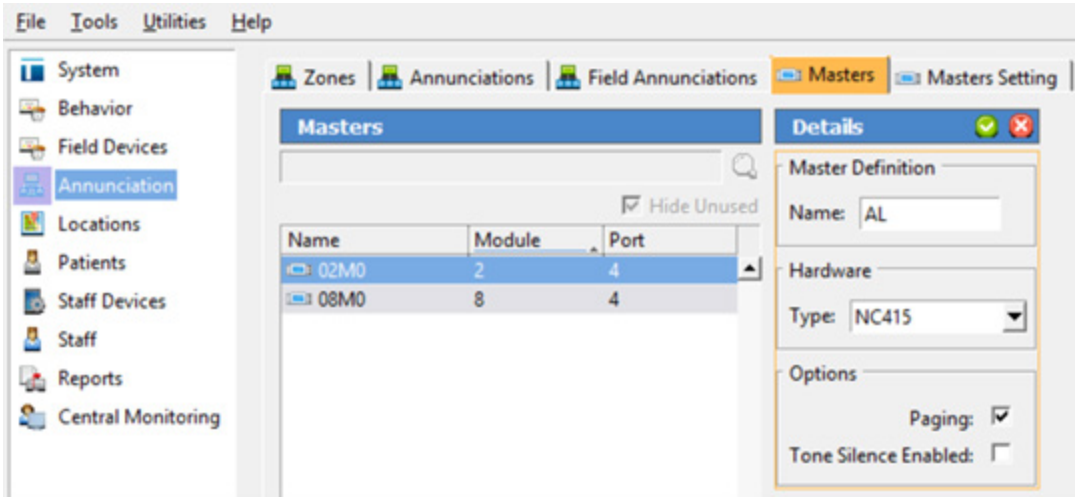
10. Add annunciations to masters or monitors on the **Annunciation** page, under the **Annunciations** tab. Highlight an active master, select **Edit**, and check the **Enabled** box to add an annunciation. The default for masters is to annunciate for all zones, but here you can make edits to watch specific zones and filter for certain calls or faults as needed. Select the green check mark when finished editing an annunciation.



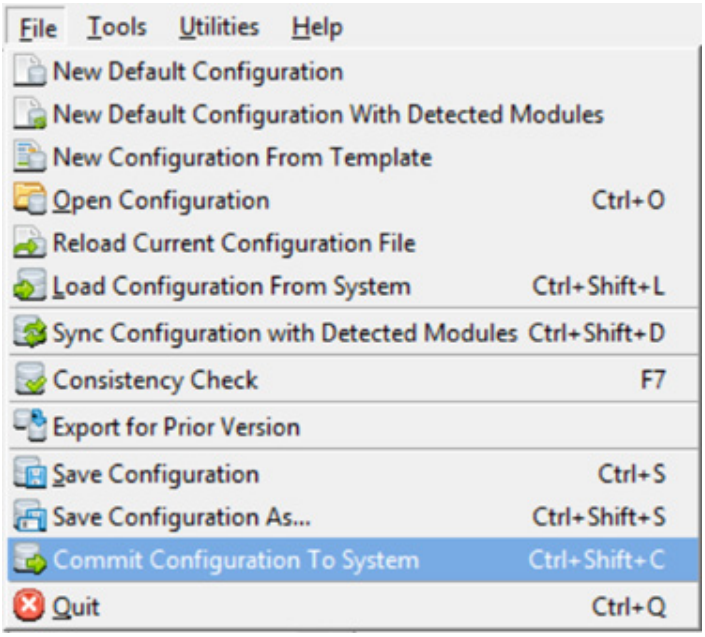
11. Use the **Field Annunciation** tab to enable annunciation for duty stations or zone domes, using the same editing process as with masters. Highlight an active duty station or zone dome, select **Edit**, and check the **Enabled** box to add an annunciation.



12. Change the names of masters under the **Masters** tab.



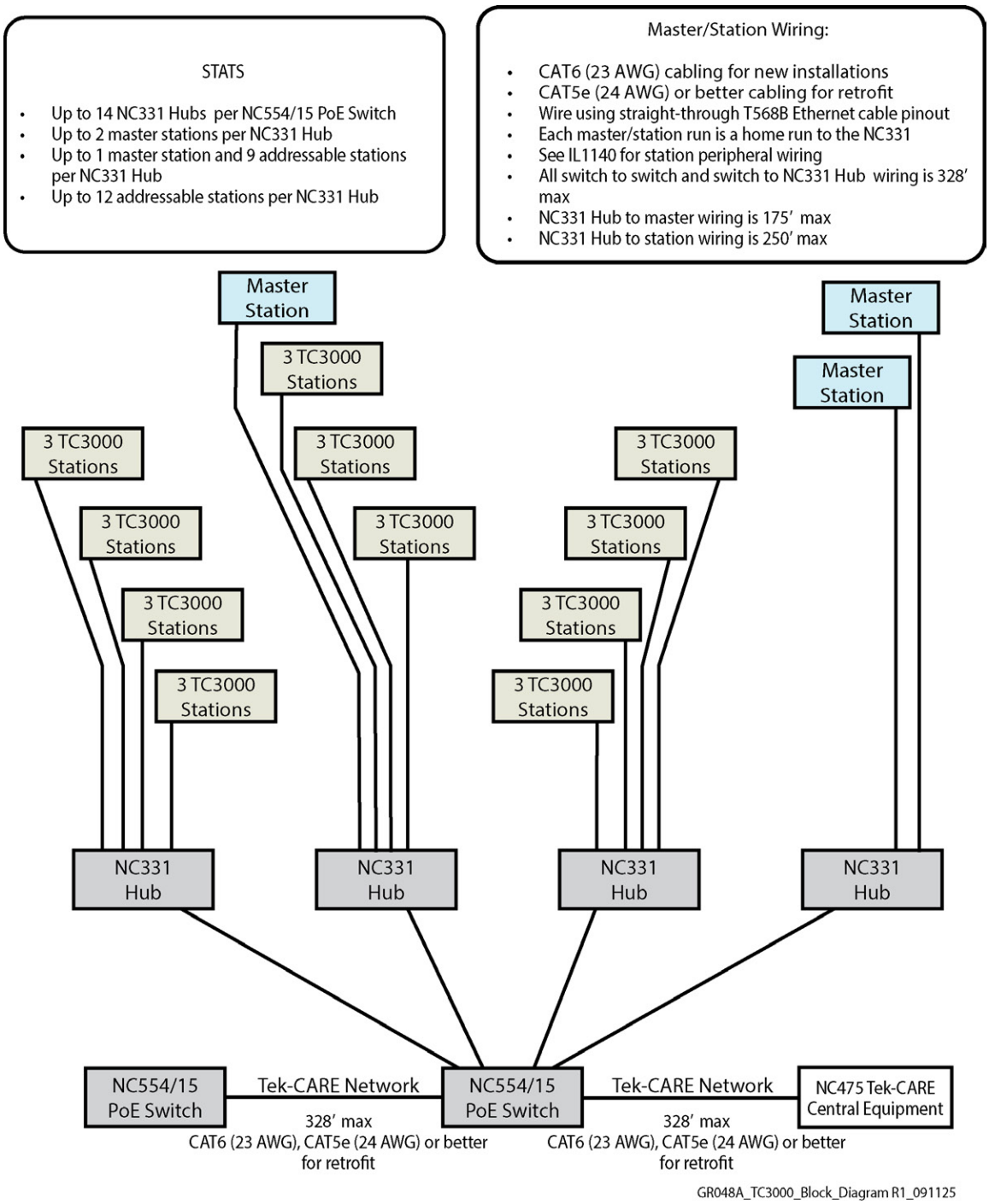
13. Save this configuration file, then commit it to the system by selecting **File→Commit Configuration To System**.



14. **Perform a full system test** to ensure everything within the system works as intended. For more configuration details and integration options, refer to IL1150 LS450 Tek-CARE 2 ConfigTool manual.

Tek-CARE3000 Wiring Diagram

Figure 6 - Tek-CARE3000 Block Wiring Diagram



Tek-CARE3000 Addressable Programming Worksheets

3000 Programming Worksheet		
NC331 Hub Address:	**NC331 Hub Address:**	**NC331 Hub Address:**
Station ☐ Master ☐	Station ☐ Master ☐	Station ☐ Master ☐
Port:	Port:	Port:
Type:	Type:	Type:
Behavior:	Behavior:	Behavior:
Default Name:	Default Name:	Default Name:
Location:	Location:	Location:
Point 1: Point 2:	Point 1: Point 2:	Point 1: Point 2:
Point 3: Point 4:	Point 3: Point 4:	Point 3: Point 4:
Point 5: Point 6:	Point 5: Point 6:	Point 5: Point 6:
Zones:	Zones:	Zones:
NC331 Hub Address:	**NC331 Hub Address:**	**NC331 Hub Address:**
Station ☐ Master ☐	Station ☐ Master ☐	Station ☐ Master ☐
Port:	Port:	Port:
Type:	Type:	Type:
Behavior:	Behavior:	Behavior:
Default Name:	Default Name:	Default Name:
Location:	Location:	Location:
Point 1: Point 2:	Point 1: Point 2:	Point 1: Point 2:
Point 3: Point 4:	Point 3: Point 4:	Point 3: Point 4:
Point 5: Point 6:	Point 5: Point 6:	Point 5: Point 6:
Zones:	Zones:	Zones:

3000 Programming Worksheet		
NC331 Hub Address:	**NC331 Hub Address:**	**NC331 Hub Address:**
Station ☐ Master ☐	Station ☐ Master ☐	Station ☐ Master ☐
Port:	Port:	Port:
Type:	Type:	Type:
Behavior:	Behavior:	Behavior:
Default Name:	Default Name:	Default Name:
Location:	Location:	Location:
Point 1: Point 2:	Point 1: Point 2:	Point 1: Point 2:
Point 3: Point 4:	Point 3: Point 4:	Point 3: Point 4:
Point 5: Point 6:	Point 5: Point 6:	Point 5: Point 6:
Zones:	Zones:	Zones:
NC331 Hub Address:	**NC331 Hub Address:**	**NC331 Hub Address:**
Station ☐ Master ☐	Station ☐ Master ☐	Station ☐ Master ☐
Port:	Port:	Port:
Type:	Type:	Type:
Behavior:	Behavior:	Behavior:
Default Name:	Default Name:	Default Name:
Location:	Location:	Location:
Point 1: Point 2:	Point 1: Point 2:	Point 1: Point 2:
Point 3: Point 4:	Point 3: Point 4:	Point 3: Point 4:
Point 5: Point 6:	Point 5: Point 6:	Point 5: Point 6:
Zones:	Zones:	Zones: