

p-LAN PROGRAMMING FOR THE PCO3 CONTROLLER AND PGD3 DISPLAY (System 2200+3L With Graphical Display)

SET THE UNIT ID NUMBER FOR MASTER UNIT

MASTER UNIT ID # 1

- 1. Turn the power **OFF**
- 2. Verify the connection between the PCO3 Controller and the PGD3 (graphical display).
- 3. Turn the power **ON**
- 4. Hold down the Up + Enter + Down buttons after "Starting Up, please wait..." screen appears



Figure 1 - PCO3 controller

5. Select Network Configuration



Figure 2 - Network selection

6. Set Terminal Address = --



Figure 3 - p-LAN ID setting

Follow on screen direction to make changes



- 7. Turn the power **OFF**
- 8. Turn the power **ON** and immediately press and hold down both the **Up + Alarm** buttons(about 10 seconds) after the "Starting up, Please wait..." screen appears



Figure 4 - P-LAN ID setting screen

- 9. Release both buttons when you see "Self-test" screen
- 10. Use the Up/Down button to set the **ID=1** then press enter. The screen will go blank and may look like a fault occurred but, this is normal.



Figure 5 - p-LAN ID addressing



Figure 6 - p-LAN blank screen

- 11. Turn the power **OFF**
- 12. Turn the power **ON** again and immediately press **Up+Enter+Down** buttons as shown in **Figure 1**
- 13. Select Network Configuration as shown in Figure 2
- 14. Set the Terminal Address=17 and press ENTER. The controller will select the I/O board address : 1 and high light the setup button





Figure 8 - Setup master display

15. Select Setup for I/O board as shown in Figure 8 and tap Setup.



Follow on screen direction to complete the setting. Make changes to the display to resemble
Figure 10. The controller will ask if the change is OK, select YES and press enter key to complete the setting.



Figure 9 - Terminal Setting



Figure 10 - Terminal setting for Master Unit



SET THE UNIT ID NUMBERS FOR SLAVE UNITS

SLAVE UNIT ID # 2

- 1. Turn the power **OFF**
- 2. Verify the connection between the PCO3 Controller and the PGD3 (graphical display).
- 3. Turn the power ON
- 4. Hold down the **Up + Enter + Down** buttons as shown in **Figure 1**
- 5. Select Network configuration as shown in Figure 2
- 6. Set Terminal Address = -- as shown in Figure 3
- 7. Turn the power **OFF**
- 8. Turn the power **ON** and immediately hold down the **Up + Alarm** buttons(about 10 seconds) as shown in **Figure 4**
- 9. Release the buttons when you see "Self-test" screen
- 10. Use the Up/Down button to set the **ID=2** then press **ENTER**. The screen may looks like fault occurred but this is normal



Figure 11 - Slave Unit ID addressing



Figure 12 - Blank screen

- 11. Turn the power **OFF**
- 12. Turn **ON** the power and immediately press **Up+Enter+Down** buttons as shown in **Figure 1**
- 13. Select Network Configuration as shown in Figure 2
- 14. Set the Terminal Address=18





Figure 14 - Setup terminal for Slave Unit

15. Select Setup for I/O board as shown in Figure 14



16. Follow on screen direction to complete the setting.



Figure 15 - Terminal configuration



Figure 16 - Terminal configuration for Slave Unit

Note: for unit # 3 and up, use **SLAVE UNIT** setup instructions and increase the Address ID by 1 and terminal ID by 1 as illustrated below.

<u>Controller ID</u>	<u>Terminal ID</u>	<u>Note</u>
01	17	Master Unit #1
02	18	Slave #2
03	19	Slave #3
04	20	Slave #4
05	21	Slave #5
06	22	Slave #6
07	23	Slave #7
08	24	Slave #8
09	25	Slave #9
10	26	Slave #10
11	27	Slave #11
12	28	Slave #12
13	29	Slave #13
14	30	Slave #14
15	31	Slave #15
16	32	Slave #16



Network Setup

The controller supports up to 16 units working together as single unity in a p-LAN network. A P-LAN network composes of one (1) master unit with up to fifteen (15) slave devices. Proper unit identification is required prior to proceeding. See P-LAN setup section for more information.

The following must be configured from the **Master Unit #1**. This option is not available on the Slave Units. Use password **"1798"** without quote as needed.

From the main screen, tap on **"SET UP"->"Technician"->"Network"** and make changes similar to the following screen. Use the **UP/DOWN** arrow to navigate to the **Next/Previous** screen as needed.

	Setup - Network 1	1
	Total Units: 1 Standby Units: 0	*
	Use Only U1 Sensors NO	+
18	Time Rotation: NO	Ø
-		
		11
	Force Rotation: NO $\leftarrow \rightarrow \uparrow$	14

Figure 17 - Network Setup



Figure 18 - Network Assist

Note: A P-LAN network has a minimum of two units and a maximum of sixteen units. Only one master is allowed. The Network Setup screen is accessible by the master unit ID=1. This option is not available on the slave unit.

Define a Network

lcon	Function
Total Units	Total number of units on one p-LAN network including the master unit
Standby Units	Number of units that will be in standby mode on the p-LAN network
Use U1 Sensors	Use the sensor of master unit to control all units on the network
Time Rotation	Number of days to rotate the unit status from ACTIVE to STANDBY and
	time to rotate
Force Rotation	Force the standby unit to become active
	Table 1 Setting a p I AN network

Table 1 - Setting a p-LAN network

Network Assist

In a p-LAN network, all standby units are capable of assisting the active unit in cooling, heating, dehumidifying, and humidifying mode. If you select network assist mode to be ON, the stand by units will be available to assist the active units for the selected modes. The dead band of each individual mode can be set according to **Figure 18**. The delay of assistance is set to 600 seconds by default. After 600s, standby units become active and assist only if the active unit is unable to maintain the set points in the elapsed time. Once the set points are satisfied, standby units return to standby and the active unit shall run as a normal.



Alarm Setup

The controller supports a general alarm or global alarm for the following events. Each individual alarm can be configured to be part of a global arm. R2 is the second relay which is connected to a normally opened dry contactor. Consult the electrical wiring diagram for more information.



Figure 19 - Alarm configuration

Note: Not all systems are equipped with a general alarm or global alarm. Setting the SW=ON will shut the current active unit down and switch the operation over to standby unit.

Available Alarms

Alarm	Function
Temperature H/L Alarm	High low alarm set under Setpoint
Humidity H/L Alarm	Humidity high/low set under setpoints
Compressor Alarm	Compressor fail
Air Flow Alarm	Air flow loss
Smoke Detect Alarm	Smoke is detected in the system
Dirty Filter Alarm	Filter is dirty, need replacement
Fire Stat Alarm	Temperature reaches 125°F
	Table 2 - Global alarms

The alarm status is notated by its current setting. To set the alarm, change the setting to either "ON/OFF" by tapping the screen and toggling via the virtual keyboard.





Figure 20 - Alarm delays

Figure 21 - Alarm switch over

The PCO3 controller implements time out sensor delays to insure smooth operation. Each delay is dictated in second unless otherwise noted.

125.0°F

Default Setting

•	RMT/OAH Sensor:	0s	
•	FC/OAT/B10:	Os	
•	Fire Stat:	ON	Temp:
•	Fire Stat Alarm Delay:	Os	
•	Offline Alarm Delay:	60s	

- Offline Alarm Delay: 60s
- Alarm Buzzer: OFF
- T/H Alarm Delay: 15M
- All Alarm Switchover: OFF
- Disc Cool/Heat: 0.2°F 0s