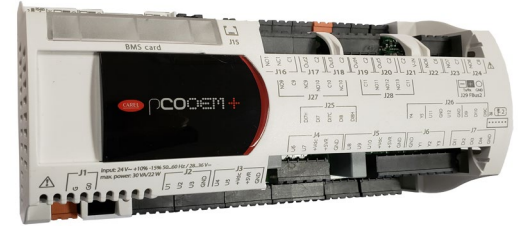


Modine Controls System Quickstart Guide

Indirect Fired Heating/Make-Up Air System Units (Model Series "D", "H", "I", "O")

⚠ WARNING

Installing, starting up and servicing heating, ventilation and air conditioning equipment poses significant hazards and requires specialized knowledge of Modine products and training in performing those services. Failure to have any service properly performed by, or making any modification to Modine equipment without the use of qualified service personnel could result in serious injury to person and property, including death. Therefore, only qualified service personnel should work on any Modine products.



pCOEM+ Medium Controller



pLDPRO and pGD1 User Interface Modules

IMPORTANT

These instructions must also be used in conjunction with the Installation and Service Manual (latest revision of 5-565, 5-594, or 5-572 depending on unit model number) and Controls Manual (latest revision of 74-510) that originally shipped with the unit, in addition to any other accompanying component supplier literature.

This guide is designed to walk through the basics of establishing unit setpoints and scheduling for an Indirect Fired Heating/Make-Up Air System Unit (Model Series "D", "H", "I", "O"). These settings are made using the unit mounted pLDPRO user interface module. The module features an integrated keypad and LCD graphical user interface screen. For cases where remote access is preferred, the optional pGD1 user interface module provides the same functionality as the pLDPRO on the unit. Refer to the latest revision of literature 74-543 for additional information.

Every unit with a Modine Controls System is designed for either standalone or networked operation. For units communicating on a BMS, the guide will also explain how to adjust your unit's device instance to allow proper communication.

1 Begin

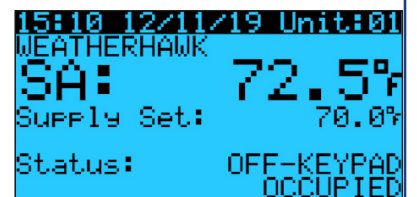
- Install unit in accordance with appropriate Modine Installation and Service Manual. **Note:** Controller will not be powered until unit has appropriate electrical connections and disconnect switch is in "ON" position.
- If the pGD1 remote user interface module will be used instead of the unit mounted pLDPRO interface module, follow the instructions in the latest revision of literature 74-543 for installation, wiring, and setup of the pGD1.

2 Navigating the Display Module Screen

Controller Buttons	Function	Description	Controller Buttons	Function	Description
	ALARM	When one or more alarms are active the ALARM button will blink/flash red. Pressing the ALARM button once will indicate information regarding any active alarms. Pressing the ALARM button twice will reset any active manual-reset alarms.		UP	Pressing the UP button can either: Scroll through the various display screens, provided the cursor is in the top left position. Increase the value of a setpoint adjustment.
	PRG	Pressing the PRG button will select the main navigation menu.		ENTER	Pressing the ENTER button will confirm any setpoint adjustments and move the cursor to the next available setpoint.
	ESC	Pressing the ESC button will return the user to the main display screen showing unit status.		DOWN	Pressing the DOWN button can either: Scroll through the various display screens, provided the cursor is in the top left position. Decrease the value of a setpoint adjustment.

3 Main Screen and System Status

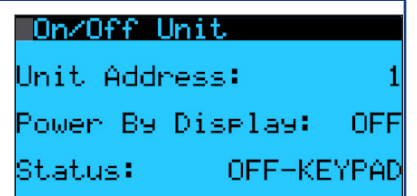
- The main screen (shown at right) is the default navigation page, and can always be recalled by pressing . This may need to be pressed more than once depending on which menu is active.
- By pressing you are able to scroll through the display screens which provide information about the current system operation (examples include temperatures, output status, and space demand).



4 Turning Unit On / Off

- Enter the main menu by pressing and scroll down to line 'A. On/Off Unit' and press .
- Press to move cursor, to 'Power By Display' line and or to change the value between 'ON' and 'OFF'. This parameter must be 'ON' for unit to have any functionality (shown at right).

Note: Units can be operated on a custom defined schedule. If this is desired, refer to Section 5 on the next page.



5 Schedule (optional)

Units can be setup to operate on a schedule, although not required. The following explains custom schedule setup.

a. Customizing the 7-Day Schedule

- For units running without BMS communication, the controller has a preset 7-day schedule defined by the internal timeclock. The unit will run in occupied mode from 6:00am to 4:00pm, Monday through Friday, with no holidays.
- Enter the main menu by pressing and scroll to line 'C. Clock/Scheduler' (shown at right) and press .
- The first screen displays the current date and time. If this is not correct press to highlight the field that needs to be changed. Use or to adjust the number as needed.
- Press to move through adjustable setpoints until cursor is at the upper left corner of the screen. Use to scroll to the next page.
- Select the amount of schedules desired by pressing to highlight 'Number of Schedules' field and adjust the number. Press until cursor is at the upper left corner of the screen. Use to scroll to the next page.
- The screen to the right will be the first programmable schedule.
- Highlight the fields and adjust as needed to schedule the time and days of desired unit operation. To move to the next time period, highlight the 'Schedule #' field and adjust this number by pressing .

```
Clock/Scheduler L1
Day: Wednesday
Date: 12/11/19
Hour: 15:13
```

```
Clock/Scheduler L4
Schedule #: 1
Time On: 6:00
Time Off: 16:00
Days Enabled: MTWTF**
```

b. Customizing Holiday Schedules

- Scroll to the 'Holidays' screen in the 'Clock/Scheduler' menu. Use or to adjust the number of holidays as needed up to 16.
- Press to move the cursor to each date range and use or to adjust the number as needed. If not all four holiday ranges are required, the unused ranges can be left as '0/0-0/0'.

6 Changing Setpoints

- Enter the main menu by pressing and scroll down to line B. Setpoint and press .

b. Occupied Setpoints without Space pAD

- Press to highlight 'Neutral Air'. Use or to adjust the setting as needed. This setting will reflect the temperature of the Supply Air entering the space.

c. Occupied Setpoints with Space pAD

- Press until cursor is at the upper left corner of the screen. Use to scroll to the 'pAD Thermostat' page.
- Press to highlight the 'Temperature'. Use or to adjust the setting as needed. This setting will reflect the space cooling setpoint. The space heating setpoint is determined by a default heating/cooling band of 4°F. (For example, if the temperature is set at 74°F, the heating setpoint will automatically be set to 70°F.) Refer to publication 74-511 for additional adjustments.

d. Unoccupied Setpoints (requires Space pAD)

- Press until cursor is at the upper left corner of the screen. Use to scroll to the 'pAD Thermostat' page.
- Press to highlight 'Unoccupied Cool'. Use or to adjust the setting as needed.
- Press to highlight 'Unoccupied Heat'. Use or to adjust the setting as needed.

e. Additional Setpoints for Cooling (requires a unit with cooling option)

The controller setup includes many other settings that are dependent on the unit configuration. Refer to the latest revision of the Controls Manual 74-510 for additional information.

Note: The occupied and unoccupied settings can be changed from the Space pAD as well.

```
Setpoints S1
Neutral
Air Setpoint: 70.0%
```

```
Setpoints S8
Supply Air
Occupied
Heating Reset: 100.0%
Neutral Air: 70.0%
```

```
Setpoints S4
Space pAD
Unoccupied
Heat Setpoint: 62.0%
```

```
Setpoints S8
Supply Air
Occupied
Heating Reset: 100.0%
Neutral Air: 70.0%
Cooling Reset: 55.0%
```

7 Service

- Enter the main menu by pressing and scroll down to line 'G. Service' and press . This menu allows access to several parameters for advanced setup or control. This includes BMS Setup, Control Settings such as temperature lockouts or stage delays, and Manual Control of controller inputs/outputs.
- Refer to the latest revision of the Controls Manual 74-510 for additional information.

8 BMS Setup

- Units can utilize one of three different BMS system protocols; LonWorks® FTT-10, BACnet® MS/TP, and BACnet® TCP/IP. Please refer to the BMS Manual 74-530 for installation instructions and the Controls Manual 74-510 for additional information.

9 Advanced Information

- The manufacturer menu provides access to parameters not typically required to be changed in the field. These parameters include unit configuration, controller input/output configuration, and reboot sequences. Please contact Modine Technical Service for assistance if required.

10 Viewing / Clearing Alarms

- If the unit is sending an alarm signal, the alarm icon on the display module will flash continuously:
 - Press to display the active system alarms. If there are multiple alarms, they may be viewed by pressing or .
 - Details of the unit's running conditions when the alarm occurred may be viewed by pressing after reaching the end of the alarm list.
 - Pressing and holding the button will clear the flashing icon and all active alarms, and indicate there are no active alarms in the system.
 - The alarm log can be viewed by pressing . Press to return to the main screen. If an alarm persists, the alarm light will flash again.



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