



LG DFS-04

KEY TAKE AWAYS:

- **LVN AIR HANDLERS:**

- 1) Units ship ready for Up-Flow or Horizontal left. Horizontal right requires flipping the coil and down flow requires an additional kit that is not shipped with the unit.
- 2) Unit does not ship thermostat ready. If using an LG thermostat, you must disconnect the “ribbon” wire that runs from the large circuit board to the small circuit board. If you are using a third-party thermostat, you must flip on dip switch 4. Please note: when using a third-party thermostat you will reduce the modulation to a maximum of 60%!
- 3) Zoning for the LG LVN air handler is only supported by AirZone.
- 4) Optional supplemental electric heater for all LVN models.

- **LG ELECTRIC HEAT OPTION FOR LVN AIR HANDLERS:**

Dip switch #6 must be turned ‘on’ in the LVN Air Handler

Electric heater will be energized when the following occurs in this order:

- 1) Outdoor ambient temperature must be below 52°F
- 2) The LVN air handler coil must have an inlet pipe temperature below 95°F or 108°F depending on the model. (this can be seen with the LGMV tool)
- 3) Room temperature must be 2°F below set point. (Ex. Room temperature is 66°F and thermostat is set at 68°F)

***Please note that the electric strip heater is not considered a “back up” heater and is in fact intended to be “supplemental” heat. When the electric heater is energized, the heat pump will continue to operate. Once one of the above criteria changes, the electric strip heat will be de-energized. The electric strip heater is intended to “help” the heat pump when it is out of design conditions



- **WIRING AND ELECTRICAL CONSIDERATIONS:**
 - 1) ALWAYS be sure your electrician knows what is expected!
 - 2) 14-4 stranded wire only from ODU to IDU.
 - 3) Never splice wires!
- **MINIMUM AND MAXIMUM LINE SET LENGTHS:**
 - 1) Different from unit to unit – always verify line set lengths for the unit you are installing!
 - 2) Branch box maximum line set lengths is standard: ODU-BDU 180’ and BDU-IDU 49’.
 - 3) Refrigerant “trim charge” needs to be calculated for all installations where you have exceeded the factory pre-charge length. The amount of refrigerant varies by unit, always confirm the equipment you are working on.
 - 4) Remember we have a “Long Line Set” option with lengths up to 164’! Sorry, wall unit only. Model number ends in HLV3 and is also available in the Multi VS line.
- **HIGH WALL MOUNTED UNITS:**
 - 1) When the unit is mounted higher than a “normal” ceiling you may need to setup the unit for “high wall” using the remote control. You may also use a wall mounted hard wired LG thermostat instead of the remote control which is preferred.
- **BRANCH BOXES or BDU:**
 - 1) With Multi F systems using two branch boxes the branch boxes MUST be connected individually to the ODU on the correct “A/B” terminals.
 - 2) Branch boxes MUST be installed indoors. If this is not possible branch box must be installed in an approved NEMA box.
- **LOW STATIC CONSIDERATIONS:**
 - 1) These systems are intended for a minimal amount of duct work.
Example: small room or master suite.
 - 2) Three supply runs, typically 7” or 8”.
 - 3) Flex duct is not recommended.
 - 4) 10’ MAXIMUM run for each branch.
 - 5) We stock all required duct connectors in square to round.



- **MISC. ITEMS:**

- 1) To set WiFi mode on wall units press and hold the 'Jet Cool' & 'Fan Speed' buttons on the remote control.
- 2) Remember to set the thermostat "Dead Band" to $-1/1^{\circ}$. Using a wired thermostat from Code 15 change the Value to 04.
- 3) 'Red' units ship with the pan heater installed in the ODU. Adding a pan heater in non-Red units is recommended in cold climates.
- 4) Wind baffle is required on ODU for Low Ambient applications or high wind applications.
- 5) Dip Switch in ODU to disable heating mode.
- 6) The LGHVAC service app can help you diagnose your trouble codes.



LG THERMOSTAT FUNCTION CODES:

*Function codes are the same for all LG thermostats. Default settings are fine for most applications with the exception of the following. Before changing any other settings always consult the manual supplied with the thermostat or check with us.

Code No.	Function Name	Value	Description
4	Temperature sensor setting	01 : Use wired remote controller sensor (Default) 02 : Use indoor unit return sensor 03 : 2TH sensor - Cooling : higher sensor value is used - Heating : lower sensor value is used	Select the thermistor value that will be used to control room temp.
15	Heating thermal on/off setting	0 : Default. Each indoor unit has different value with product type. 1 : +8 °F/+12 °F (+4 °C/+6 °C) 2 : +4 °F/+8 °F (+2 °C/+4 °C) 3 : -2 °F/ +2 °F (-1 °C/+1 °C) 4 : -1 °F/ +1 °F (-0.5 °C /+0.5 °C) *Option 4 is available under fahrenheit unit use condition of code12.	It can adjust the heating thermal on / off temperature according to the field environment in preparation for over heating or heating claim.
35	Cooling thermal off fan operation	00 : Fan low (Default) 01 : Fan off 02 : Previous fan setting	Set the fan speed operation during cooling thermal off

*****PLEASE NOTE:** It may be necessary to switch all thermostats to the 'off' position before switching from 'heat' to 'cool'.



HOW TO ENTER LG THERMOSTATS TO CHANGE SETTINGS

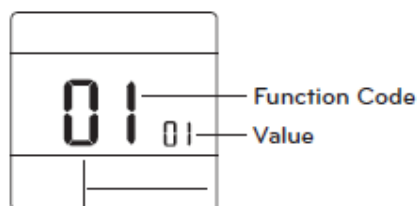
PREMTC00U "SIMPLE STAT"





INSTALLER SETTING

How to enter installer setting mode



- 1 Press  button and  button simultaneously for 3 seconds to enter the installer setting mode.
- 2 When you enter the setting mode initially, function code is displayed on the LCD screen.



- 3 Press  button to select function code.
- 4 Press  button to change value.
- 5 Press  button to set value.
- 6 Press  button and  button simultaneously for 3 seconds to exit installer setting mode.

CAUTION

Installer setting mode is to set the detail function of the remote controller. If the installer setting mode is not set correctly, it can cause problems to the product, user injury or property damage. This must be set by a certificated installer, and any installation or change that is carried out by a non-certificated person should be responsible for the results. In this case, free service cannot be provided.

PREMTBVC “CRC THERMOSTAT”

Installer Configuration Screens

These screens are more commonly used during installation, system configuration, or troubleshooting than by an end user. There is no icon on the Home screen to access these configuration screens. You must press and hold the area of the screen indicated on the diagram below to access the first screen.

If a configuration / installer password is activated to prevent unauthorized access to the configuration menu parameters, a password entry prompt will appear to prevent access to the device configuration components.





Configuration Main Screens

There are two main configuration screens as shown below. Press the left and right arrow buttons to move between these two screens. Press a button on a screen to display the parameter selections for that item.

Option	Description
Building Manager	Enter Display, Date & Time, Filter, Setpoints, Override, Setback and Outdoor Unit configuration
Installer	Enter General, Temperature, Fan and Heat settings and Accessories configuration
BMS Config	Enter BACnet settings
Basic Diagnostic	View Diagnostic parameters
Password Setup	Setup a password to restrict/allow access to the thermostat
Factory Default	Reverts all controller control settings back to default values.

Note: Users will be given the option to confirm that they wish to proceed. Once in the Factory Default screen, if user proceeds with this step, all schedules and current controller settings including time and date will be cleared. Settings cannot be recovered after a Factory Default has been performed.

Building Manager Screens

There are two main configuration screens as shown below. Press the left and right arrow buttons to move between these two screens. Press a button on a screen to display the parameter selections for that item.

Customize Home View

Hide On/Off, Mode, Schedule, More, Set Temp, Space Temp, Fan and Humidity options on home screen.

Code Search

Use the Up and Down arrows to choose an available Function Code and select the Code Search button to navigate to the screen where that function code resides.

Codes can be found in brackets next to a parameter throughout all menus. This function is used for quicker menu navigation.

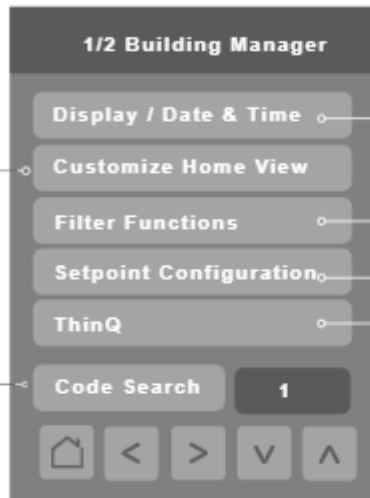
Override Setup

If controller is in the unoccupied mode then the controller enters Override mode when the user taps the screen the first time.

Select this control to configure settings for Override including set points, system mode, fan speed and duration of override.

Outdoor Unit Control

Manage outdoor unit functions through the Controller's interface.



Display Basic Settings – Date / Time, Display Color, Standby Brightness (and delay timing), Night Backlight level, Standby Screen).

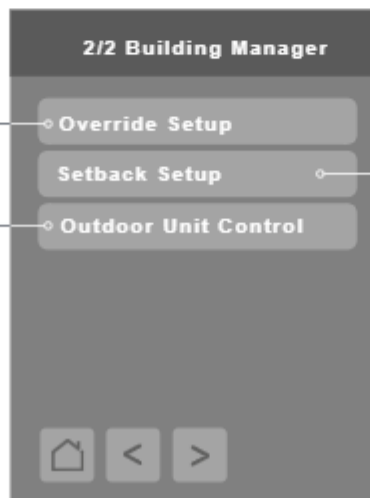
Filter Functions – Clear Filter Alarm, Remaining Time, Lower/Raise Grill, Robot Cleaning

Setpoint Configuration

Choose between Single/Dual set point(s) and configure set point max/min limits and deadband.

Note: Available functions/features may differ based on the connected system.

Smart ThinQ – Displays the Smart ThinQ screen. Allows pairing of the controller and the Smart ThinQ smartphone app. The Smart ThinQ app allows air conditioner control from the smartphone.



Setback Setup

Setback settings are configurable with this control including set points, system mode and fan speed.



- **HELP IS ONLY A PHONE CALL AWAY:**

LG Tech Support 1-888-346-1923

API of Manchester 1-603-668-7810 (ask for parts)

Bryan Feather LG Sales/Tech Support Cell 1-401-640-8953

Nick Pantazelos LG Sales/Tech Support Cell 1-603-247-6797

Jason LeBlanc LG Training/Tech Support Cell 1-603-703-8525

***Please have the model number(s) of the equipment you are working on ready and be prepared to give us information from the LGMV tool!