

Quick Start Guide MULTI-TEC®/LC6000 Air Conditioning System

This quick start guide is designed to lead an installer through the steps necessary for setting up a Bard air conditioning system composed of MULTI-TEC wall-mount units paired with an LC6000 controller. See the latest versions of MULTI-TEC/LC6000 System Installation Instructions 2100-726, MULTI-TEC Service Instructions 2100-725 and LC6000 Service Instructions 2100-669 for more detailed information on the installation, service and maintenance of this Bard air conditioning system.

The TEC-EYE[™] hand-held diagnostic tool and LC6000 controller will both be used in this installation. The TEC-EYE diagnostic tool is shipped inside the controller and a cable is included to connect it to the wall-mount unit control board.

NOTICE

It is important to check the software version during installation to ensure that the latest version has been installed. Current software versions, change log and installation instructions are available on the Bard website at <u>http://www.bardhvac.com/</u> <u>software-download/</u>

SYSTEM SET-UP

Set up and configuration must be done to each MULTI-TEC wall-mount unit using the TEC-EYE hand-held diagnostic tool. Use the LC6000 controller for the remaining steps.

IMPORTANT: When working with circuit board components, Bard recommends the use of an anti-static wrist strap to prevent static electricity shorts to electronic controls.

Address each wall unit and select unit zone and unit of measure (TEC-EYE)

The address of the unit being set up will be listed in the upper right hand corner on the status screen. The available addresses are 1-14.

- 1. Remove outer and inner unit control panel doors.
- 2. Connect TEC-EYE to wall-mount unit control board.
- 3. Press MENU key to access the Main Menu screen.
- 4. Press UP/DOWN/ENTER keys to enter password 1313.
- 5. Press UP/DOWN keys to scroll to **Sys Config**; press ENTER key.
- 6. Press ENTER key to scroll to **Unit Address.**
- 7. Press UP/DOWN keys to change address to value between 1 and 14.

- **NOTE:** Each unit must have a unique address for the communication to work properly. Bard also recommends labeling each unit for ease in identification.
- 8. Press ENTER key to save and scroll to Zone.
- 9. If desired, press UP/DOWN keys to change the value to the desired zone (1, 2 or 3).
- 10. Press ENTER key to scroll to UOM (unit of measure).
- 11. Press UP/DOWN keys to change the value from **USA** to **SI**, **NC**, **LON**, **CAN** or **UK**. Units are preconfigured for each selection.
- 12. Press ENTER key to save.

Execute a run test on each unit to verify the equipment is functioning correctly (TEC-EYE)

- 1. Use UP/DOWN keys to scroll to Run Test A11.
- 2. Press ENTER key to scroll to **Run Test Enable** parameter.
- 3. Use UP/DOWN key to change value to **ON**. The run test will begin.

See most recent version of Installation Instructions 2100-726 if additional information on run testing units is needed.

Clear unit alarm logs on each unit (TEC-EYE)

Units may have alarms logged due to testing. Unit alarm logs must be cleared at time of installation. To clear the wall-mount unit alarm logs:

- 1. Press MENU key to go to the Main Menu screen.
- 2. Use UP/DOWN/ENTER keys to enter password 1313.
- 3. Press UP/DOWN keys to scroll to **Settings**; press ENTER key.
- 4. Press UP/DOWN keys to scroll to **Initialization**; press ENTER key.
- 5. Press ENTER key to scroll to Delete alarm logs?.
- 6. Press UP/DOWN key to change value to **YES**; press ENTER key.

After first unit has been set up and configured, follow the above steps to set up and configure the remaining units.

The LC6000 controller will be used for the remaining steps in the set-up process.

Set LC Controller Date/Time (LC Controller)

- 1. Press MENU key to access the Main Menu screen.
- 2. Use UP/DOWN/ENTER keys to enter password 1313.
- 3. Press the UP/DOWN keys to scroll to the **Settings** menu; press ENTER key.
- 4. Press UP/DOWN keys to scroll to **Date/Time** menu; press ENTER key.

- 5. Press UP/DOWN keys to scroll to **Date/Time change**.
- 6. Press ENTER key to scroll to the desired value to be changed.
- 7. Press UP/DOWN keys to change the value.
- 8. Press ENTER key to save and scroll to top of screen.
- 9. Press UP/DOWN keys to scroll to **Timezone** (if applicable). Follow steps 6-8 to change timezone.
- 10. Press the ESCAPE key several times to return to Main Menu screen.

Configure sensors (LC Controller)

One remote temperature/humidity sensor is included with the controller. An additional remote indoor temperature sensor can be installed in Zone 1. Additional remote temperature/humidity sensors or temperature-only sensors (one per zone) can be installed in Zones 2 and 3 (if applicable). One optional outdoor temperature/humidity sensor can also be installed. The controller must be configured to match the installed sensors. The Zone 1 Indoor Humidity and Zone 1 Indoor Temperature sensors are enabled by default. The additional humidity and temperature sensors are disabled by default.

See Installation Instructions 2100-726 for information on configuring (enabling/disabling) sensors. If necessary, the sensors can be calibrated at this time too. For information on calibrating the sensors, see manual 2100-726.

See LC6000 Service Instructions manual 2100-669 for information on setting up emergency off, emergency ventilation and generator relays (if applicable).

Enter total number of units (LC Controller)

- 1. Press MENU key to go to the Main Menu screen.
- 2. Use UP/DOWN/ENTER keys to enter password 1313.
- 3. Press UP/DOWN keys to scroll to **Sys Config**; press ENTER key.
- 4. Press UP/DOWN keys to scroll to **General**; press ENTER key.
- 5. Press ENTER key to scroll to Total Units.
- 6. Press UP/DOWN keys to adjust value to correct number of units.
- 7. Press ENTER key to save.

Verify units are online (LC Controller)

Once a unit is uniquely addressed, communication can be verified at the LC controller.

With the correct number of units set at the LC controller, each unit can be remotely viewed from the LC Information screens.

To view these screens:

- 1. Press ESCAPE key to view the Status screen. (May need to be pressed more than once.)
- Press UP/DOWN key until the Quick Menu in the lower right corner of the screen displays the Information icon (); press ENTER key.

 Press UP/DOWN keys to scroll through the Information screens until the desired unit Information screen appears.

In addition to being able to remotely view the units, an alarm will be generated on the LC controller for units not communicating.

Select economizer type for each zone (LC Controller)

Each zone can be configured to operate the economizers with different considerations. For more information on the different economizer choices, reference MULTI-TEC Service Manual 2100-725. The type of consideration can be changed to none, dry bulb, temperature and humidity or enthalpy. These settings will be communicated to the wall units while connected to the LC6000 to ensure all units operate the same.

To select free cooling type for each zone:

- 1. Press MENU key to go to the Main Menu screen.
- 2. Use UP/DOWN/ENTER keys to enter password 1313.
- 3. Press UP/DOWN keys to scroll to **Sys Config**; press ENTER key.
- 4. Press UP/DOWN keys to scroll to **Zone 1**, **Zone 2** or **Zone 3**; press ENTER key.
- Press UP/DOWN keys to scroll to Zone FC Settings A2-4 (Zone 1), Zone FC Settings A3-4 (Zone 2) or Zone FC Settings A4-4 (Zone 3).
- 6. Press ENTER key to scroll to **Type**.
- 7. Press UP/DOWN keys to change economizer type to None, Drybulb, TempHum or Enthalpy.
- 8. Press ENTER key to save.

Clear controller alarm logs (LC Controller)

The LC6000 may have alarms logged due to bench testing. Controller alarm logs must be cleared at time of installation. To clear the LC controller alarm logs:

- 1. Press MENU key to go to the Main Menu screen.
- 2. Use UP/DOWN/ENTER keys to enter password 1313.
- 3. Press UP/DOWN keys to scroll to **Settings**; press ENTER key.
- 4. Press UP/DOWN keys to scroll to **Initialization**; press ENTER key.
- 5. Press ENTER key to scroll to Delete alarm logs?
- 6. Press UP/DOWN key to change value to **YES**; press ENTER key.
- 7. Press ESCAPE key several times to return to Main Menu screen.

Once all the installation steps have been completed, all alarms and alarm logs have been cleared and system verification and run test results were satisfactory, the installation can now be considered "complete".