

## **D2012 Keypad Diagnostics**

# Putting the Keypad into the Diagnostics Mode

The panel sends SERVICE START and SERVICE END messages upon entering and exiting Diagnostics Mode.

- 1. Lock the D2012's Standby Switch down.
- 2. Press the [1] key on the keypad.
- 3. Enter your "Installer" passcode. The default Installer passcode is 6 5 4 3 2 1. The default passcode length is three, so if you have not changed the default entries, press 6 5 4.

If the passcode you've entered is valid, the keypad's display scrolls the functions that are available.

### Now that you're in...

When you select a function, the system displays messages informing you of test status. Once inside a function, press the [Clear] key to return to the previous level.

#### **Bell Test**

The Bell Test powers the external bell with the burglar pattern for 2 seconds.

Press the [1] key. The display shows:

#### **TESTING BELL**

The Bell Test times out after 2 seconds.

### **Battery Test**

The Battery Test causes the panel to run on the battery only, for 4 minutes. During this time, if the voltage drops below 12.2, the trouble tone sounds and the low battery condition appears in the Check System mode (Key 4).

When the Battery Test is started, a Low Battery report or a Missing Battery report will be sent, if programmed.

• Press the [2] key. The display shows:

## TESTING BATTERY MAY TAKE 4 MIN.

The test times out in approximately 4 minutes, and the results are displayed. If the battery is good, the display shows:

## BATTERY TEST PASSED

Press the [Clear] key to return to the main menu.

If the battery is bad, the display shows:

## BATTERY TEST FAILED

Press the [Clear] key to return to the main menu.

#### Communication Test

The Communication Test sends a test report to the receiver. If the report fails to be acknowledged after all dialing attempts, the D2012 goes into Communications Failure.

Press the [3] key. The display shows :

TESTING PHONE MAY TAKE 10 MIN.

The test times out in approximately 10 minutes, and the results are displayed. If the phone line is good, the display shows:

## PHONE TEST PASSED

Press the [Clear] key to return to the main menu. If the phone line is bad, the display shows:

## PHONE TEST FAILED

Press the [Clear] key to return to the main menu.

#### **Point Status**

The Point Status function displays the electrical state of all points. The state of each point is shown in the system's display. Points that are not programmed are displayed as normal.

 Press the [5] key. The display shows the status of points 1 and 2:

## POINT 1 NORMAL POINT 2 OPEN

 Press the [\*] key repeatedly to scroll the remaining points. Points may be Normal, Open, or Short:

#### POINT 3 SHORT POINT 4 OPEN

3. Press the [Clear] key to exit this test.

### Relays

The Relays function can activate either of the two external relay outputs.

1. Press the [6] key to enter the Relays function.

- Hold the [1] key to turn on relay 1. The relay stays on as long as key 1 is held down. Follow the same procedure to test relay 2.
- 3. Press the [Clear] key to exit this test.

### Power Supply Status\*

The Power Supply Status function performs four different tests on the power supply and battery.

Obtained readings are + or - 200mA / 200mV.

1. Press the [7] key. The display shows:

#### **POWER SUPPLY**

### ...To display Fire Alarm Load

- 2. Disconnect the battery.
- 3. Press the [1] key.

The bell and external relays activate and the display shows:

#### FIRE ALARM LOAD LESS THAN ### MA

 Use the following scale to verify that the current consumption is less than 860mA:

Maximum Fire Alarm Load	860mA
	732mA
	605mA
	477mA

Max Normal Supervisory Load	350mA
	222mA
	95mA

5. If current consumption is more than 860mA, the display will show:

## FIRE ALARM LOAD MORE THAN 860 MA

- 6. Press the [Clear] key.
- 7. Reconnect the battery.

### ...To display the Minimum Battery Voltage

- 2. Make sure the battery is connected.
- 3. Press the [2] key.

The D2012 automatically disconnects AC, and the display shows the lowest battery voltage during the test and gives an acknowledge tone after 1 minute:

## MIN BATT VOLTAGE ##.# VOLTS

4. Verify that the battery does not drop below 13.2 volts within the minute.

	13.7 Volts
Minimum Battery Voltage after 1 Minute	13.2 Volts
	12.7 Volts
Read Battery Voltage	12.2 Volts
	11.7 Volts
	11.2 Volts
	10.7 Volts
	10.2 Volts

5. Press the [Clear] key.

### ...To Read Battery Voltage

- 2. Make sure the battery is connected.
- 3. Press the [4] key. The battery voltage displays:

#### BATT VOLTAGE ##.# VOLTS

- 4. Verify that the battery is above 11.7 volts.
- 5. Press the [Clear] key.

### ... To display Normal Supervisory Load

- 2. Disconnect the battery.
- 3. Press the [5] key. The display shows:

#### NORMAL LOAD LESS THAN ##.# AMPS

- Verify that the current consumption is less than 350mA.
- 5. Press the [Clear] key.
- Reconnect the battery.

To exit the Power Supply Status function, press the [Clear] key again.

### **Programming**

Function 8 is the Keypad Programming Mode. For complete instructions on programming from the keypad, see the *D2012 Control/Communicator Program Entry Guide* (P/N 35121).

### **System Trouble**

This diagnostic check is available in the user's Check System (Key 4) mode.

1. Press the [Clear] key to d€it the Diagnostic

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