LENNOX

L Connection NETWORK

**RETAIN THESE INSTRUCTIONS
FOR FUTURE REFERENCE**

Shipping and Packing List

Package 1 of 1 contains:

1- Notifact panel

1- 10-Foot communication cable

Check panel for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

General

These instructions are intended as a general guide and do not supersede local codes in any way. Authorities having jurisdiction should be consulted before installation.

⚠WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier

Application

The Notifact LN-1 (92L12) monitors L Series rooftop unit error codes and sends a wireless message indicating error status to a telephone, pager, fax machine or PC.

INSTALLATION INSTRUCTIONS

Notifact™ LN-1 Monitoring System

Notifact can monitor up to 10 units per network using a standard thermostat. When a Network Control Panel is used, Notifact can monitor up to 30 units per network (one Notifact for every 10 units).

Installation

Determine the best location for the panel by checking the strength of the cell signal. The panel can be installed indoors or outdoors.

Connect the Notifact black and red battery power connectors. See figure 1. Wait up to several minutes to allow the panel to complete a start-up routine. Move the Notifact panel to different areas of the building. The panel LED readout, ranging from 0 to 9, indicates cell strength. A signal strength less than 2 will not provide reliable message transmission. If an area with a good signal can not be found, install the panel directly on the unit or connect an optional remote antenna.
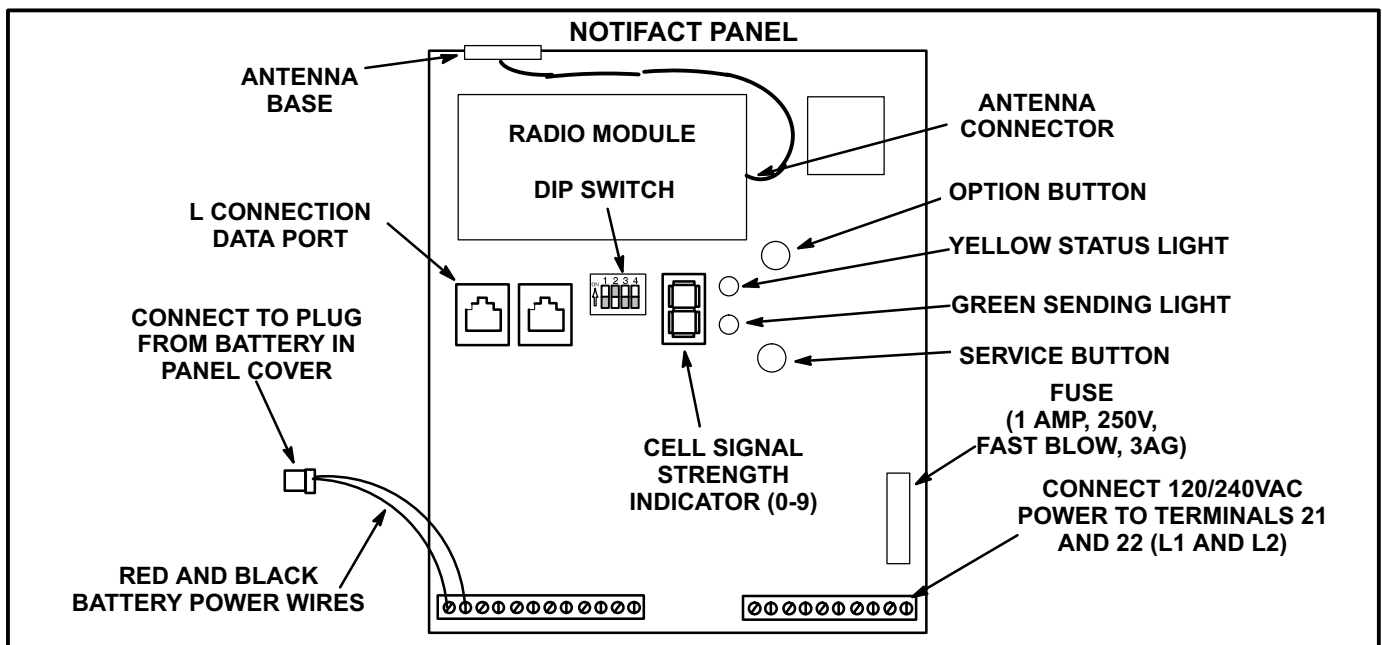

NOTIFACT PANEL

ANTENNA BASE

RADIO MODULE

DIP SWITCH

L CONNECTION DATA PORT

CONNECT TO PLUG FROM BATTERY IN PANEL COVER

CELL SIGNAL STRENGTH INDICATOR (0-9)

RED AND BLACK BATTERY POWER WIRES

ANTENNA CONNECTOR

OPTION BUTTON

YELLOW STATUS LIGHT

GREEN SENDING LIGHT

SERVICE BUTTON

FUSE (1 AMP, 250V, FAST BLOW, 3AG)

CONNECT 120/240VAC POWER TO TERMINALS 21 AND 22 (L1 AND L2)

FIGURE 1

Installation - Continued

The Notifact panel will automatically de-energize after 15 minutes of operation in battery mode. To resume another 15-minute period of battery mode, disconnect battery power wires, wait 10 seconds, and reconnect battery power wires.

1- Disconnect all power before installing panel.

2- Remove knock-outs in panel and route power and communication wire inside panel.

3- Position panel on flat surface and mark top keyhole mounting tab and two bottom mounting tabs. Drill holes and secure panel in place.

4- Open panel door and remove screws securing inside cover over electronics.

5- Install the antenna into the threaded base on top of the panel.

6- Route communication wiring between rooftop units and Notifact. Daisy chain the communication wires as shown in figure 2 for installations using a standard thermostat. See figure 3 for installations using a Network Control Panel. Set unit DIP switch addresses in the same order as the daisy-chained connections. See "Address Unit DIP Switches" section.
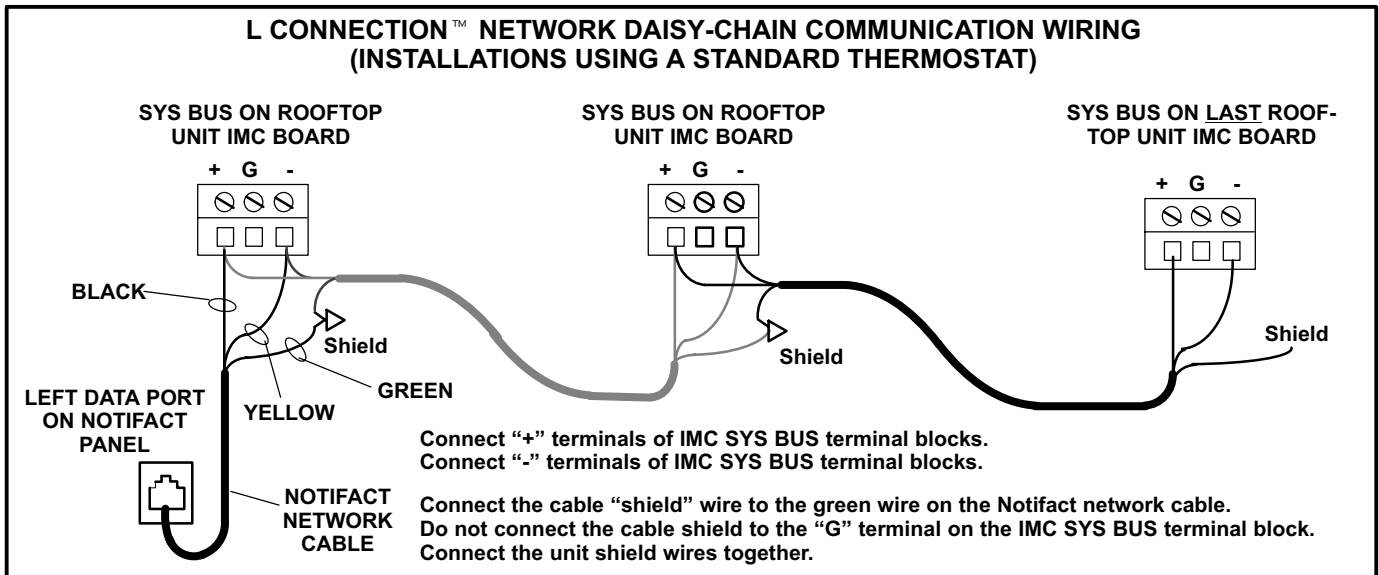

L CONNECTION™ NETWORK DAISY-CHAIN COMMUNICATION WIRING (INSTALLATIONS USING A STANDARD THERMOSTAT)

Connect "+" terminals of IMC SYS BUS terminal blocks.
Connect "-" terminals of IMC SYS BUS terminal blocks.

Connect the cable "shield" wire to the green wire on the Notifact network cable.
Do not connect the cable shield to the "G" terminal on the IMC SYS BUS terminal block.
Connect the unit shield wires together.

FIGURE 2

L CONNECTION™ NETWORK DAISY-CHAIN COMMUNICATION WIRING (INSTALLATIONS USING A NETWORK CONTROL PANEL)

Connect + terminals of NCP to + terminals on the IMC SYS BUS terminal block.
Connect - terminals of NCP to - terminals on the IMC SYS BUS terminal block.

Do not connect the cable shield to the "G" terminal on the IMC SYS BUS terminal block. Connect the shield wire to the NCP "SHIELD" terminal only; connect unit shield wires together.

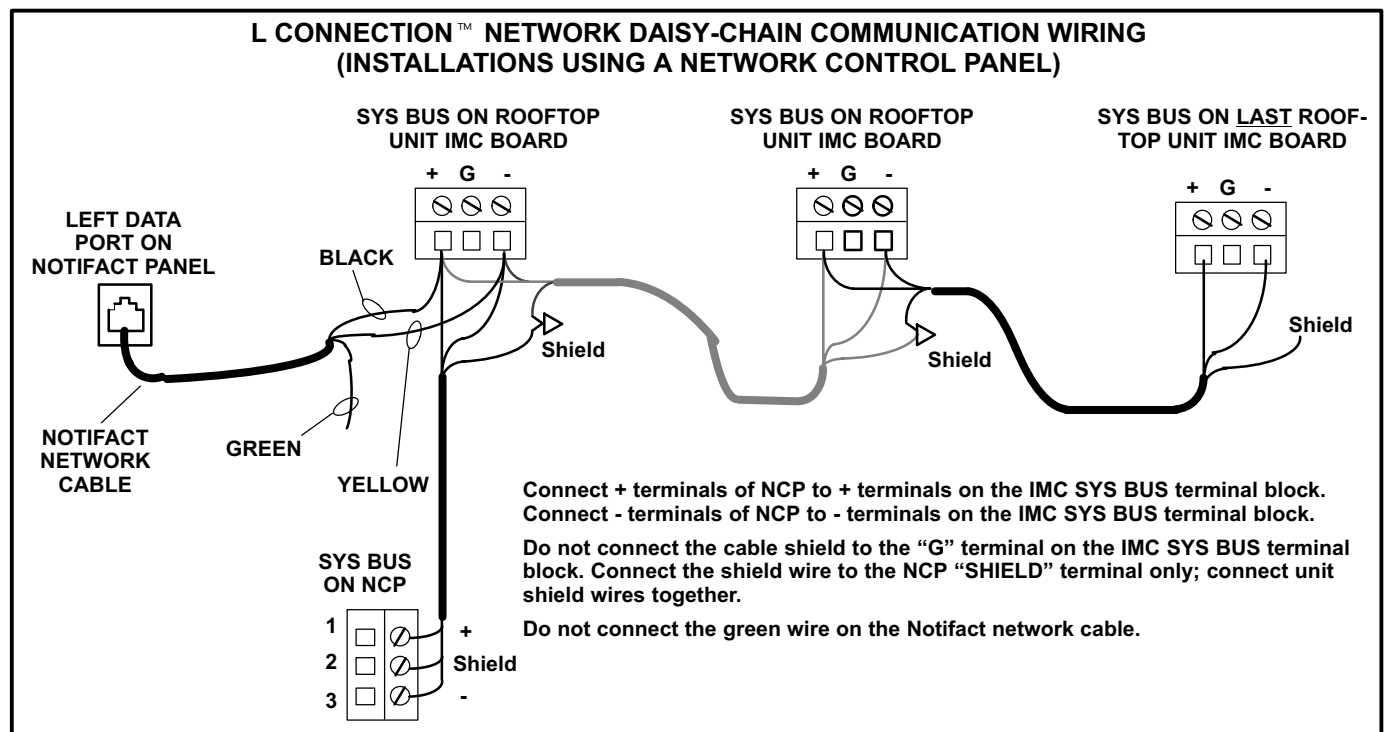Do not connect the green wire on the Notifact network cable.

FIGURE 3

7- Write each unit address, model number, and serial number into the Equipment Information table in the back of this manual. It is important to set unit addresses in the same sequence as the daisy chain because a Notifact device I.D. is automatically assigned in sequence.

All wiring must be in accordance with national electric codes and local codes.

NOTE - Make sure total run of communication wiring does not exceed 4000 feet.

8- Connect power wiring (85-240V) to terminals 21 and 22 on panel bottom right terminal block. See figure 1.

9- Replace inside cover.

Address Unit DIP Switches

Assign a different address to each rooftop unit. DIP switches are located on the IMC (M1 or A55) board in each rooftop unit. Refer to the IMC manual provided with each unit.

Individual switches on the DIP unit address switch are labeled 1, 2, 4, 8, or 16. The unit address is the sum of the switches set to the ON position. See figure 4.
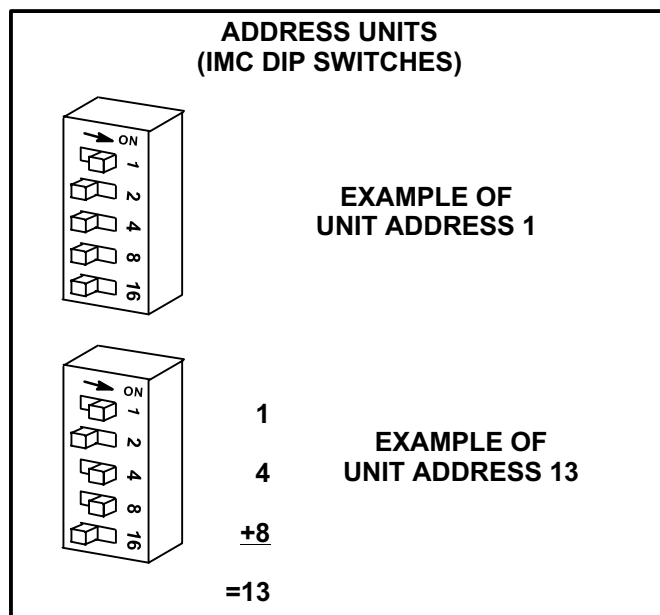

**ADDRESS UNITS
(IMC DIP SWITCHES)**

**EXAMPLE OF
UNIT ADDRESS 1**

1
4
+8
=13

**EXAMPLE OF
UNIT ADDRESS 13**

FIGURE 4

Notifact Panel DIP Switch Setting

Installations which use standard thermostats should set Notifact DIP switches #3 and #4 to "Bus Master" as shown in figure 5. Figure 5 also shows switch #1 set to transmit critical messages only. DIP switch #2 requires no adjustment.
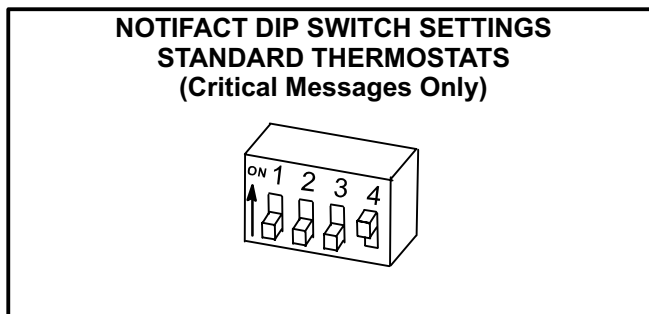

**NOTIFACT DIP SWITCH SETTINGS
STANDARD THERMOSTATS
(Critical Messages Only)**

FIGURE 5

Installations which use a Network Control Panel should set Notifact DIP switches #3 and #4 to "Listen Only". DIP switch configuration depends on the number of units in the installation. A Notifact panel is required for each 10 rooftop units installed. See figure 6 for the appropriate DIP switch setting.
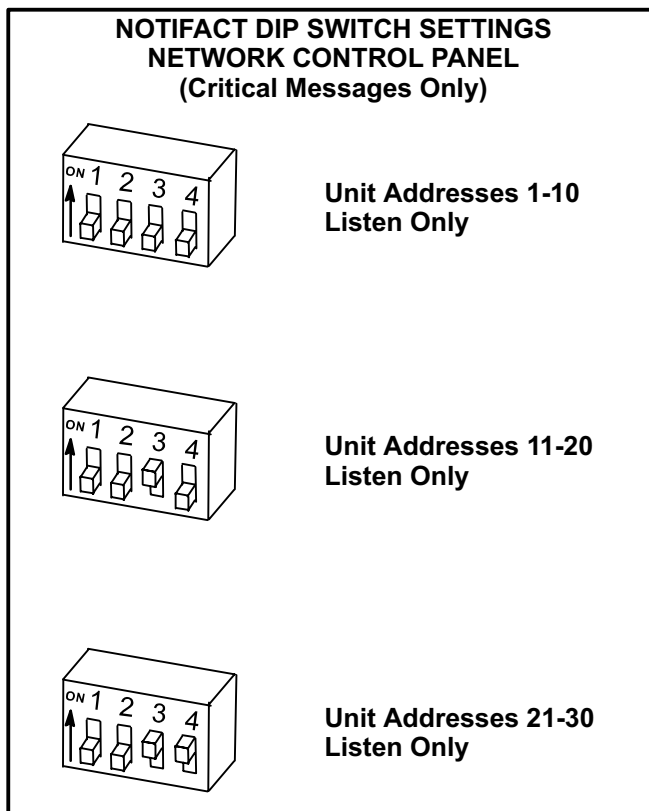

**NOTIFACT DIP SWITCH SETTINGS
NETWORK CONTROL PANEL
(Critical Messages Only)**

**Unit Addresses 1-10
Listen Only**

**Unit Addresses 11-20
Listen Only**

**Unit Addresses 21-30
Listen Only**

FIGURE 6

Error Messages

Critical Messages

Set DIP switch #1 on the Notifact panel to "OFF" to transmit only critical messages. See DIP switch #1 in figure 5. Critical messages will result in unit shut-down or lock-out of a specific function. See table 1 for a description of critical messages.

IMPORTANT - It is highly recommended that the DIP switch be set to send only critical messages.

All Messages

Set DIP switch #1 on the Notifact panel to "ON" to transmit all error messages. A description of all error codes can be found affixed to the rooftop unit or in the IMC manual provided switch each unit.

TABLE 1
CRITICAL MESSAGES

IMC Error #	Description
04	Smoke alarm
05	Airflow loss
10	24V Power (TB35-1) loss on A55 board
11	24V power (TB34-1) loss on A55 board
13	Multiple hi, press. trips on Compressor 1
15	Multiple hi, press. trips on Compressor 2
17	Multiple hi, press. trips on Compressor 3
19	Multiple hi, press. trips on Compressor 4
21	A42 input tripped several times
23	Multiple low press. trips on Compressor 1
25	Multiple low press. trips on Compressor 2
27	Multiple low press. trips on Compressor 3
29	Multiple low press. trips on Compressor 4
33	Multiple freezestat trips on Compressor 1
35	Multiple freezestat trips on Compressor 2
37	Multiple freezestat trips on Compressor 3
39	Multiple freezestat trips on Compressor 4
44	Gas valve 1 energized but no demand
45	Gas valve 2 energized but no demand
46	24V power loss on A60 board K9–5 input
47	24V power loss on A58 board, TB35–1 input
48	24V power loss on A61 board TB34–1 input
49	24V power loss on A59 board, TB35–1 input
51	Multiple gas heat 1 primary limit trips
53	Multiple gas heat 1 secondary limit trips
55	Multiple roll out switch or el. heat limit 1 trips
57	Multiple comb. air proof switch or el. heat limit 1 trips
58	Gas valve 1 not energized after demand
61	Multiple gas heat 2 primary limit trips
63	Multiple gas heat 2 secondary limit trips
65	Multiple roll out switch 2 trips
74	Zone sensor (A2) problem
75	Outdoor temp, (RT17) sensor problem
77	Discharge air temp. sensor (RT6) problem
78	Return air temp. sensor (RT16) problem
79	Major communication problem between IMC boards
83	IMC configuration error
84	Add–on board did not respond to main board
86	Thermostat input conflict
87	Unit (equipment type) DIP switch changed.
93	System mode changed because of A2 sensor problem
Aux Link Trouble	
Input 1 Activated	
Input 2 Activated	
Input 3 Activated	
Input 4 Activated	
Input 5 Activated	
Input 6 Activated	
Input 7 Activated	
Input 8 Activated	
Low Battery	
Open Battery	
Power Fail	
Power Restored	
Power Up	
SBUS Communications Loss	
Service Button	
Weak Radio Signal	

Start-Up

1- Apply power to Notifact panel and rooftop units. Allow 5 minutes for equipment to stabilize and Notifact to poll all addresses.

2- The yellow status light will flash approximately once every second when service is available. The green transmission light should NOT be on. See table 2.

3- Press and release the service button to simulate sending a message. The yellow status light will will be "on", but not flashing. The green transmission light will flash several times during message transmission followed by rapid flashing which indicates the message transmission was successful. The yellow status light will return to flashing approximately once a second and the green light will be off once the transmission is complete.

TABLE 2
NOTIFACT PANEL STATUS LIGHTS

LIGHT	STATUS	INDICATES
Yellow	Off	No Notifact service available.
Green	Off	
Yellow	Flashing (once a second)	Service available, ready to transmit.
Green	Off	
Yellow	On steady	Transmitting message.
Green	Flashes several times	
Yellow	On steady	Successful message transmission.
Green	Flashes rapidly for 2 seconds	

4- Press the option button three times to read unit addresses. A dash appears before the list of unit addresses and after the last unit address on the same network.

5- Locate Notifact device I.D. number inside the Notifact panel. The device I.D. number is assigned to the first unit in that network and should correspond to the unit address set on the IMC unit DIP switch. Add 1 to the Notifact device I.D. to determine the device I.D. for the second unit in the network. Device I.D.'s increase sequentially for units 3 through 10.

6- Record Notifact device I.D. number in Equipment Information table in the back of this manual. See example table 3. The example Equipment Information table uses three Notifact panels with 10 units daisy-chained in each network.

Account Set-Up

An account must be set-up with Notifact to configure the transmitter. Refer to the Notifact instructions and www.notifact.com.

TABLE 3
EXAMPLE EQUIPMENT INFORMATION

Company:_Lennox Industries_____

Street Address:__2100 Lake Park   Richardson, TX 75080_____

Site Contact Name:____John Doe_____Telephone Number:___1-800-555-1212_____

Noti-fact	Unit IMC Ad-dress	Device I.D.	Unit Model No.	Unit Serial No.
1	1	289*	LGA120HH1Y	XXXXXXXXX
	2	290	LGA240HH1Y	XXXXXXXXX
	3	291	LGA180HH1Y	XXXXXXXXX
	4	292	LGA120HH1Y	XXXXXXXXX
	5	293	LCA180HN1Y	XXXXXXXXX
	6	294	LCA180HN1Y	XXXXXXXXX
	7	295	LCA180HN1Y	XXXXXXXXX
	8	296	LGA120HH1Y	XXXXXXXXX
	9	297	LGA120HH1Y	XXXXXXXXX
	10	298	LGA120HH1Y	XXXXXXXXX
2	1	166*	LGA180HH1Y	XXXXXXXXX
	2	167	LGA180HH1Y	XXXXXXXXX
	3	168	LGA120HH1Y	XXXXXXXXX
	4	169	LGA120HH1Y	XXXXXXXXX
	5	170	LGA240HH1Y	XXXXXXXXX
	6	171	LGA240HH1Y	XXXXXXXXX
	7	172	LGA240HH1Y	XXXXXXXXX
	8	172	LGA180HH1Y	XXXXXXXXX
	9	173	LGA180HH1Y	XXXXXXXXX
	10	174	LGA120HH1Y	XXXXXXXXX
3	1	244*	LGA120HH1Y	XXXXXXXXX
	2	245	LGA120HH1Y	XXXXXXXXX
	3	246	LGA120HH1Y	XXXXXXXXX
	4	247	LCA120HH1Y	XXXXXXXXX
	5	248	LCA240HH1Y	XXXXXXXXX
	6	249	LCA240HH1Y	XXXXXXXXX
	7	250	LGA240HH1Y	XXXXXXXXX
	8	251	LCA240HH1Y	XXXXXXXXX
	9	252	LGA240HH1Y	XXXXXXXXX
	10	253	LGA120HH1Y	XXXXXXXXX

*The device I.D. is printed on the inside of the Notifact panel.

EQUIPMENT INFORMATION
To Be Completed By Installer

Company Name:_____

Street Address:_____

Site Contact Name:_____Telephone Number:_____

Noti-fact	Unit IMC Ad-dress	Device I.D.	Unit Model No.	Unit Serial No.