

Description

The 738A Ademco Wireless Expansion Module allows you to interface Ademco 5881 wireless receivers with the DMP XR20 and XR200 Command Processor™ Panels. This module provides 32 supervised, programmable zones of Ademco wireless burglary and fire transmitters. The XR20 requires version 105 (2/10/98) firmware or higher. The XR200 supports the 738A with XR200 version 103 (3/9/98) firmware or higher.

The 738A now supports the Armed, Alarm, and Ready to Arm status LEDs on an Ademco 5804BD. This requires connecting an Ademco 5800™ to an XR20 with firmware version 107 (9/1/98) or higher. This feature will be supported in a future firmware version of the XR200.

DMP/Ademco Receiver Connection

For ease of installation, the 738A connects to the XR20 or XR200 panel 4-wire keypad data bus or to the XR200 LX-Bus™. If connecting to the LX-Bus™, an expansion card is required (Models 481, 472, 462P or 462N).

Mounting to walls

The 738A is shipped installed in a decorative, high impact plastic case that you can mount directly to walls, backboards, or other flat surfaces. Wire entrances are provided on the back and at each of the ends of the case for installation ease. The bottom half of the plastic case contains two screw holes for mounting the case on single-gang switch boxes or rings.

Mounting in enclosures

You can install the 738A in a medium (Model 349) or large (Model 350) enclosure using the 3-hole mounting configuration. See table below for enclosure information. Plastic standoffs are provided that snap into the 3 standoff holes on the board and plug into the enclosure mounting holes. See Figure 1.

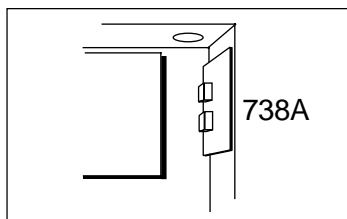


Figure 1: 738A Enclosure Mounting

Model	Description
349	Medium enclosure (12.25"W x 11.75"H x 3.125"D)
349A	Grade A medium enclosure (12.25"W x 11.75"H x 3.875"D)
350	Large enclosure (17.0"W x 13.0"H x 3.75"D)
XR20M	XR20 in medium enclosure
XR200M	XR200 in medium enclosure
XR200L	XR200 in large enclosure

DMP Bus Header (J1)

For connection to a keypad bus, connect the provided Four Wire Harness (Model 300) from the **DMP BUS** header (J1) to the Command Processor™ panel terminals marked Red (7), Yellow (8), Green (9), and Black (10). For connection to the LX-Bus™, connect the provided Four Wire Harness (Model 300) from the **DMP BUS** header (J1) to the four wires of the LX-Bus™.

Receiver Header (J3)

Connect the provided Four Wire Harness (Model 300) from the **RECEIVER** header (J3) to the Ademco wireless receiver and 5800™ transmitter harness based on the table provided in Figure 2.

PROG Header (J4)

When programming, connect the provided programming cable (Model 330) from the **PROG** header (J4) to any DMP alpha keypad.

PROGRAM Header (J2)

Place the provided jumper across the **PROGRAM** header (J2) to enter the 738A programming mode. Remove the jumper from the **PROGRAM** header (J2) when programming is completed and place it over one pin for future use.

Wiring Distance and Power Requirements

The maximum wire distance between any 738A and the DMP LX-Bus circuit is 2,500 feet. The maximum number of LX-Bus devices on any one 2,500 ft. circuit is 40. To increase the wiring distance and/or number of devices, you must install a DMP 710 Bus Splitter/Repeater Module. Refer to the 710 Module Installation Sheet (LT-0310) for complete information. The maximum wire distance between the Ademco wireless receiver and 5800TM transmitter is 3 feet. The power requirement for the 738A with an attached Ademco 5881 receiver and 5800TM transmitter is 12VDC @ 95mA .

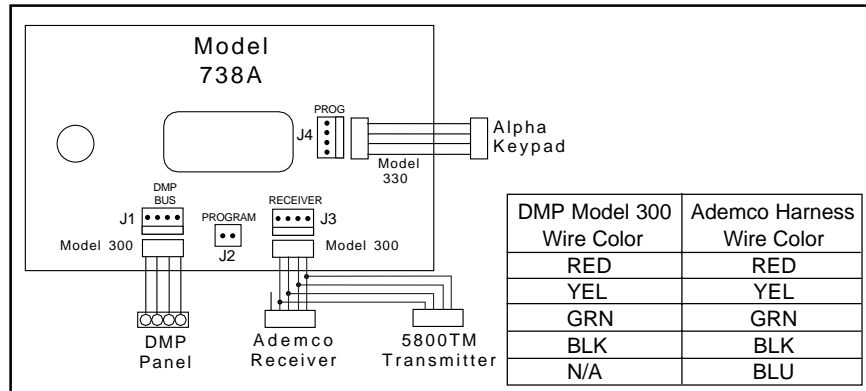


Figure 2: 738A Wiring

Ademco Wireless Transmitters Supported

Supervised	Unsupervised
5802MN Miniature Panic Button	5802 Panic Button
5808 Smoke Detector	5803 Three Button
5816 Window/Door	5804 Four Button
5816MN Miniature Window/Door	5804BD Wireless Four Button
5817 Three Point	
5890 Motion Detector	

Ademco Wireless Receivers Supported

The number of wireless zones available through the 738A is 32. The 738A can deliver all 32 zones to a DMP panel regardless of the number of points assigned by the Ademco wireless receiver model number. For example, a Model 5881L 8-Point receiver will deliver 32 wireless zones to the 738A.

Receiver Model Number	XR20/738A	XR200/738A
5881L 8 - Point Receiver	16 Zones	32 Zones
5881M 16 - Point Receiver	16 Zones	32 Zones
5881H 32 - Point Receiver	16 Zones	32 Zones

Note: The DIP switches on the 5881 series receiver must be set to zero.

Ademco 5800TM Transmitter Module

The 738A now supports the Armed, Alarm, and Ready to Arm status LEDs on an Ademco 5804BD. This requires connecting an Ademco 5800TM to an XR20 with firmware version 107 (9/1/98) or higher. This feature will be supported in a future firmware version of the XR200. When a 5800TM is connected as shown in Figure 2, the Armed, Alarm, and Ready to Arm status of the panel is displayed by the LED and sounder of an Ademco 5804BD Wireless Key. Refer to the **Ademco 5804BD Installation Instructions** for proper button operation.

LED	LED Condition	Sounder	System Status
Red	ON Steady	2 Beeps	Armed Away
	ON Steady	3 Beeps	Armed Stay or Instant
	Flashing	Pulsing	Fire Alarm
	Flashing	Steady	Armed, Burglary Alarm
Green	ON Steady	1 Beep	Disarmed, Ready to arm
	Flashing	Silent	Disarmed, Not ready to arm

Ademco 5804BD Panic Buttons

Buttons A and C of the 5804BD are used to send a panic signal to the DMP panel. Press the A and C buttons at the same time for two seconds. The panel will send a Zone 19 Panic signal to the Central Station receiver. The zone name information sent to the receiver will contain the first address number that the 738A is answering.

738A Installation Sheet

738A

Programming

Connect a programming cable (Model 330) from the **PROG** header (J4) to any DMP alpha keypad. Place the provided jumper across the **PROGRAM** header (J2). The 738A will immediately enter the programming mode. Press the COMMAND key to continue. **NOTE: While in the programming mode, all communication to the panel stops.**

INIT ALL? NO YES

Initialization

Select **YES** to reset all programming options to the factory default. A **NO** selection maintains all programming options at their current settings.

BUS: *KYPD LX

Panel Bus Type

Enter a choice of either the Keypad bus or the LX-Bus connection. Press the COMMAND key to accept the selection. An asterisk appears to the left of the bus type selected.

HOUSE ID: 01

House ID

Select a number from 01 to 31 for the House ID. A leading zero must be entered for numbers below ten. The factory default is 01. The same House ID number must be programmed into any 5804BD Wireless Key transmitters to receive Armed, Alarm, and Ready to Arm status. Refer to the **Ademco 5804BD Installation Instructions** for the procedure to enter the House ID.

ZONE? TEST ADD

Zone Test or ADD

Select **ADD** to program new zones into the system or select **TEST** to perform a zone test on existing zones. When performing a Zone Test, the signal gain of the 5881 receiver is reduced by 50%. When adding new zones to the system, select **TEST** after adding zones to perform the Zone Test on new zones.

TRIPS: _ _ _ END

Zone Test Trips Counter

Displays the number of times any programmed zone is tripped (alarm/short) during the Zone Test. The keypad buzzer sounds for 1 second each time a programmed zone trips.

Select **END** to stop the Zone Test and display any failed zones. The signal gain of the 5881 automatically returns to 100%. **Note: If the DMP alpha keypad is removed from the 738A, the signal gain of the 5881 receiver automatically returns to 100%.**

ZONE: x x - FAIL

Zone Test Fail

The zone number of any zone that failed to trip at least once during the test is displayed for four seconds and the buzzer sounds for one second. The next failed zone is displayed. Press the COMMAND key to advance to the next failed zone. x x = zone number.

ZONE: _ _

Zone Number

Enter a transmitter zone number to be programmed into the 738A. This zone number must correspond to a zone number programmed into the panel. A leading zero must be entered for zone numbers less than 10. Press the COMMAND key to accept the zone number. The following table illustrates the possible 738A zone numbers.

Keypad Bus			
ADDR	738A Zone	Panel Zones	XR Panels
1	11-14	11-14	20 or 200
2	21-24	21-24	20 or 200
3	31-34	31-34	20 or 200
4	41-44	41-44	20 or 200
5	51-54	51-54	200
6	61-64	61-64	200
7	71-74	71-74	200
8	81-84	81-84	200

LX-Bus™			
LX-Bus 1 zones/addr	LX-Bus 2 zones/addr	738A zones	XR Panel
101	201	01	200
102	202	02	200
103	203	03	200
104	204	04	200
105	205	05	200
.	.	.	200
116	216	16	200
117	217	17	200
.	.	.	200
132	232	32	200

When connected to the keypad bus and wireless input zones for a particular address are programmed (Ex: 11-14 = Addr 1), the 738A will respond for this address and other devices such as keypads may not use this address. When all four wireless zones for an address are not programmed, the 738A will not respond to that address and other devices may be programmed for that address. When the 738A is connected to an XR20 panel, address 5 on the panel is activated as an unsupervised address.

UN	*RF	UR	BR
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Transmitter Type

Enter a transmitter type by pressing one of the top four select keys that correspond to the type of transmitter used. **Refer to the installation instructions provided with the Ademco transmitter to determine its type and operation.** Default is UN. An asterisk appears to the left of the transmitter type chosen. Press the COMMAND key to accept selection.

UN = Unused Zone

UR = Unsupervised Transmitter

RF = Supervised Transmitter

BR = Button Transmitter

When a wireless transmitter's reed switch, contact, or button is in a faulted condition, then the corresponding panel zone will be **SHORTED**. When a wireless transmitter's tamper is in a faulted condition, the corresponding panel zone will be **OPEN**. A supervised transmitter must report to the 738A at least once every 12 hours or that zone will be indicated as missing to the DMP panel.

LEARN ID?	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Transmitter Identification Number

Select **YES** to enter the learn mode programming. The keypad displays **TRANSMIT NOW**. For the 738A to learn the transmitter identification number the transmitter input (reed switch or contact) must be activated (tripped) and restored. The first activation beeps the program keypad once. Within 4-8 seconds after the first activation the transmitter input must be tripped and restored a second time. The program keypad beeps twice. The keypad displays the "learned" transmitter identification number (ID). To accept this number press the COMMAND key.

TRANSMIT NOW

ID: _ _ _ _ _ _ _

Select **NO** to manually enter the transmitter identification number. The keypad displays **ID: _ _ _ _ _ _ _**. Enter the seven digit transmitter number by pressing the appropriate number keys on the keypad. This number is found below the bar code on the label attached to your Ademco transmitter. Press the COMMAND key to accept the number.

INPUT: _

Transmitter Input Number

Enter a number (1 to 4) to identify the transmitter input zone. When the transmitter ID is "learned", the keypad displays the zone input number. Refer to the Ademco Transmitter installation instructions for zone input information. Default is 1. Press the COMMAND key to accept the number. The display returns to **ZONE:** for programming the next transmitter.

ALREADY ZONE: x x

Transmitter Already Learned

Indicates that the transmitter has previously been learned as a zone. This message is continuously displayed until the Back Arrow or COMMAND key is pressed. When the Back Arrow key is pressed, programming returns to **TRANSMIT NOW** to allow a different transmitter to be learned. When the **COMMAND** key is pressed, programming returns to **ZONE** number. (xx = zone number)

Exit Programming

Remove the jumper from the **PROGRAM** header (J2) to exit the 738A programming mode and place it over one pin for future use. Remove the Model 330 cable and the DMP alpha keypad from the **PROG** header (J4). After exiting the programming mode, all zone states will report to the panel as NORMAL. **Test and verify all zones for proper communication.**

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