738T WIRELESS TRANSLATOR
Installation Guide
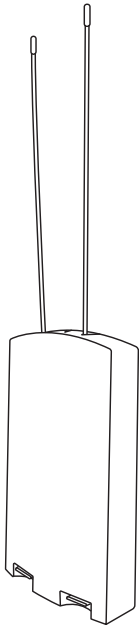

Figure 1: 738T Wireless Translator

1 MOUNT AND ASSEMBLE THE 738T

Mount the 738T Wireless Translator in a central location to the system's wireless sensors. Keep in mind, the translator must be wired to the panel's keypad bus.

1. Open the 738T housing by pushing the tabs at the bottom of the device and lifting the cover off.

2. Remove the PCB by dis-engaging the PCB clips and lifting the PCB out of the base.

3. Use the included screws in the mounting hole locations to secure the 738T to the wall or other flat surface. See Figure 2.

4. Snap the PCB back in to the base.

5. Insert the included antennas into the **Antenna** terminals at the top of the PCB. See Figure 3. Tighten the screws until the antennas are secured in place.
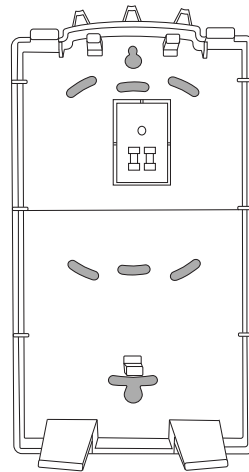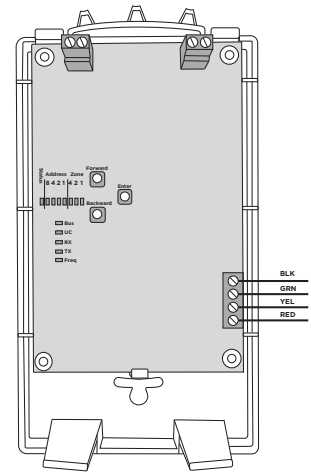

Figure 2: Mounting Holes

Figure 3: PCB Features and Wiring Connections

2 WIRE THE 738T

Use 18 to 22 gauge wire to connect the 738T directly to the keypad bus of an XT30/XT50 Series panel. This connection allows the translator to communicate with the panel and receive 12VDC power. DMP recommends a 2,500 foot maximum wiring distance.

1. At the panel, connect the wires to the corresponding keypad bus terminals.

2. Connect the wires to the 738T's terminals. See Figure 3.

   a. Connect the red wire to the **+12(R)** terminal.
   b. Connect the yellow wire to the **OUT(Y)** terminal.
   c. Connect the green wire to the **IN(G)** terminal.
   d. Connect the black wire to the **GND(B)** terminal while pressing the Enter button. See Figure 4. This clears the 738T's memory and prepares it for programming.

3 PROGRAM THE 738T

Before you learn the system's existing wireless transmitters into the 738T, determine what frequency they are using by identifying the panel's manufacturer.

The 738T allows you to easily switch between 319.5 and 345 MHz by pressing the **Enter** button on the PCB. Use the **Freq** LED to determine which frequency is currently selected. See Figure 3 for the button and LED locations.

- One flash = 319.5 MHz
- Two flashes = 345 MHz

If you have access to a list of the existing wireless transmitters, you can use it to keep track of which transmitters have been successfully learned into the system. Otherwise, you can use the panel's programming sheet to take note of each successfully learned in transmitter.

Learn In Transmitters

Follow the steps below to learn transmitters into the 738T. Keep in mind that any addresses that have a zone programmed will be unavailable for use with other devices (e.g. zone expanders).

1. Get the 738T ready to learn in transmitters by pressing the **Forward** and **Backward** buttons at the same time. See Figure 4. The **Address** LEDs will light displaying an address. The default is address 5.

2. Select the appropriate address by pressing **Enter** and then using the **Forward** and **Backward** buttons to move through the numbers. When you're on the right address, press **Enter** again.

3. Press the **Forward** button to select the zone number. The **Zone** LEDs will light to indicate which zone is currently selected.

   📝 **Note:** If the **Status** LED lights when you select a zone, that means a transmitter is already programmed into the 738T for that zone.

4. Trip the appropriate transmitter's tamper to learn it into the 738T. The **Status** LED will light when the transmitter is successfully enrolled in the displayed zone.

5. Press the **Forward** button to move to the next zone. Repeat steps 4 and 5 until all the transmitters are learned in to the 738T.

   📝 **Note:** If you are learning in multiple transmitters, keep track of their zone information. You'll need it to program the zones into the panel.

6. Finish learning in transmitters by pressing the **Forward** and **Backward** buttons at the same time. The 738T will also time out after two minutes. The address and zone LEDS turn off to indicate that the 738T has returned to normal operation.

Unlearn Transmitters

Follow the steps below to have the 738T unlearn transmitters:

1. Press the **Forward** and **Backward** buttons at the same time to enter programming.

2. Press **Forward** to navigate to and select the zone number. The **Status** LED will be illuminated if a transmitter is learned into the selected zone.

3. Press the **Enter** button to unlearn the transmitter from the 738T. The **Status** LED turns off when the transmitter is unlearned.

4. Navigate to the next zone you would like to unlearn or press the **Forward** and **Backward** buttons simultaneously to exit programming.
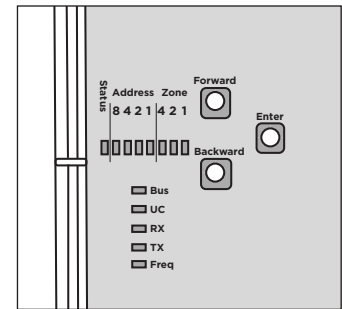

Figure 4: Learn In LEDs and Buttons

Figure 5: Address and Zone LED Combinations

4 PROGRAM THE PANEL

Because the 738T is acting as a translator for the wireless transmitters, each transmitter needs to be programmed into the panel as a hard wired zone. Refer to the panel programming guide as needed.

1. Reset the panel.
2. Enter **6653** (PROG) at a keypad and navigate to **ZONE INFORMATION**.
3. Enter the **ZONE NO** of the first transmitter that was learned into the 738T and press **CMD**. Ensure the zone numbers in the panel correspond to the zone numbers programmed in the 738T.
4. Enter the **ZONE NAME**.
5. Select the **ZONE TYPE**.
6. Select the **AREA**.
7. At the **WIRELESS? NO YES** prompt, select **NO**.
8. At the **NEXT ZN?** prompt, select **YES** if you are finished programming the zone. Select **NO** if you would like to access additional programming options.
9. Repeat steps 3 through 7 for the remaining transmitters.
10. Save the panel's programming by navigating to **STOP** and pressing **CMD**.

5 TEST THE 738T

Perform a Standard Walk Test to confirm that all of the transmitters are communicating with the 738T and the 738T is communicating with the panel.

1. Reset the panel.
2. At a keypad, enter **8144** (WALK) and select **STD**.
3. Trip each zone on the system. The keypad will annunciate each time a zone is tripped and display the number of zones successfully tripped.
4. Press the fourth select area or key to end the walk test.

ADDITIONAL INFORMATION

Transmitter Low Battery Operation

If a transmitter indicates a low battery, the 738T illuminates the **Status** LED and the corresponding **Zone** and **Address** LEDs. A **LOBAT** message for the transmitter's zone number will also display at the keypad.

If a transmitter has a low battery, refer to the manufacturer's documentation for information on how to replace the battery and then follow the steps below to perform a Sensor Reset to clear the **LOBAT** message.

Sensor Reset to Clear LOBAT

When the battery needs to be replaced, a LOBAT message will display on the keypad. Once the battery is replaced, a sensor reset is required at the system keypad to clear the LOBAT message.

1. On a Thinline keypad, press and hold "2" for two seconds. On a graphic touchscreen keypad, press **RESET**.
2. Enter your user code if required.
3. The keypad displays **SENSORS OFF** followed by **SENSORS ON**.

LED Operation

LED	STATUS
Bus	The Bus LED flashes when the 738T is communicating to the panel's keypad bus.
UC	The UC LED flashes when the 738T's processor is operating.
RX	The RX LED flashes when the 738T is receiving an RF transmission.
TX	The TX LED is not used.
Freq	The Freq LED indicates in which frequency the 738T is operating. One flash for 319.5 MHz, two flashes for 345 MHz.
Status	In learn operation, the Status LED lights when a zone with a transmitter learned in is selected. When the 738T is operating normally, the Status LED flashes when a transmitter has not sent any messages to the panel for four hours. Also during normal operation, the Status LED lights steady when a transmitter has a low battery.

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be located or operated in conjunction with any other antenna or transmitter.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INDUSTRY CANADA INFORMATION

This device complies with Industry Canada Licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. *l'appareil ne doit pas produire de brouillage, et*
2. *l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General Population limits.

L'exposition aux radiofréquences de ce système a été évaluée selon la norme RSS-102 et est jugée conforme aux limites établies par le Code de sécurité 6 de Santé Canada. Le système doit être installé à une distance minimale de 7.87 pouces (20 cm) séparant l'antenne d'une personne présente en conformité avec les limites permises d'exposition du grand public.

738T WIRELESS TRANSLATOR

Specifications

Frequency Range	319.5 or 345 MHz
Current Draw	50 mA
Dimensions	4.0" W x 7.5" H x 1.5" D
Operating Temperature	32º to 122º F (0º to 50º C)
Humidity	95% RH Maximum

Accessories

738T/300	300 Series 4-Wire Harness

Certifications
FCC ID: 2ABBZ-RF-RXTX-319
IC ID: 11817A-RFRXTX319

Patents
U. S. Patent No. 7,239,236