i O N
SECURITY

Installation Instructions

GENERAL INFORMATION
The iON MICRA recessed transmitter is a reed switch magnetic contact transmitter that provides concealed protection for a window. The transmitter is powered by a long-life lithium battery that is easily replaceable when a low battery is indicated by the control.

Programming the ID Number
Each iON MICRA has its own unique identification code (serial number) permanentry assigned during manufacturing.

The control unit is required to "enroll" the transmitter's ID during installation of the alarm system.

PRELIMINARY CONSIDERATIONS
Read all of this and the next section before installing the unit.
1. Select a location for the transmitter on the frame of the window.
Do not use on metal frame doors or windows.

iON MICRA TRANSMITTER
The iON MICRA transmitter will require a 3/4" diameter hole (using a 3/4" Forstner bit) drilled into the edge of the window frame no more than 1/3" deep.
BEFORE DRILLING ANY HOLES, SEE ITEM 2 BELOW AND MOUNTING SECTION ON THE NEXT PAGE.

FOR VINYL SLIDING WINDOWS the preferred direction of mounting is vertical.
FOR HUNG WINDOWS the iON MICRA must be mounted horizontally in the window sill with the accompanying surface mount magnet in the lower window sash. (see Step 1 - Measure & Drill in Figure 1)

2.Before drilling any holes, tape the transmitter and magnet in their approximate locations (with battery installed and unit together as described under BATTERY INSTALLATION / REPLACEMENT (see page back) and conduct Go/No Go tests (see control's instructions)to verify adequate signal strength. Reorient or relocate the transmitter if necessary.

Make sure that no more than a 1/2" gap will be present between the faces of the transmitter and the magnet cases when they are installed and set. Also make sure the 'iON' graphic on the transmitter is perpendicular to the length of the magnet as per Step 3.

When installed, an alarm signal must be obtained before a clear space of 2" is reached as the window is opened.

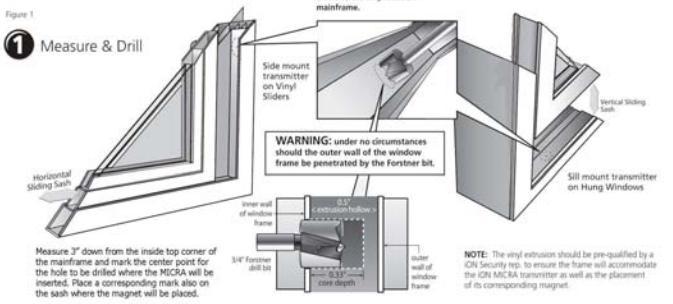
3. For door applications, the alternate Plunger package can be used. In this case, the 3/4" hole is drilled into the door frame on the hinge side, and should be 1.00" deep, with a smaller hole drilled further into the frame to accomodate the wire antenna. The electronics are identical, however with the plunger package, the magnet is captive in the plastic housing, and does not require a separate magnet on the door itself. This makes the installation easier, and minimizes the gap require between the door and the door frame.

⚠ WARNING:
Under no circumstances should the outer wall of the window frame be penetrated by the Forstner bit.

iON MICRA
Recessed Transmitter

Figure 1

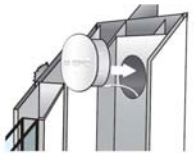
1 Measure & Drill



Measure 3" down from the inside top corner of the mainframe and mark the center point for the hole to be drilled where the MICRA will be inserted. Place a corresponding mark also on the sash where the magnet will be placed.

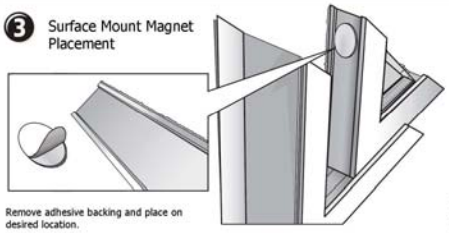
NOTE: The vinyl extrusion should be pre-qualified by a iON Security rep. to ensure the frame will accommodate the iON MICRA transmitter as well as the placement of its corresponding magnet.

2 Place and Set

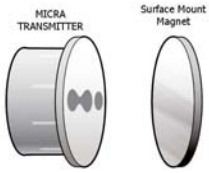


Insert the iON MICRA's antenna into the extrusion hollow then press the transmitter body into the cored opening.

3 Surface Mount Magnet Placement



Remove adhesive backing and place on desired location.



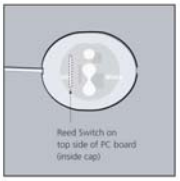
NOTE: It is essential to the systems operation that the positioning of the MICRA transmitter point in the same direction as its corresponding magnet.

iON MICRA

Recessed Transmitter

CAUTION: Before drilling any holes, make sure that successful transmission reception tests have been conducted

CAUTION: BATTERY CAUTION: Risk of fire, explosion and burns. Do not recharge, disassemble, heat above 212°F (100°C) or incinerate. Dispose of used batteries promptly. Keep away from children.



Reed Switch Positioning

MOUNTING *(See Figure 1)*

1. Mark the selected location for the transmitter on the frame of the window.
2. Mark the location for the magnet on the window sash, directly opposite the transmitter location. Before drilling any holes, make sure that the successful Go/No Go transmission receptin tests have been conducted as called for in the iON MICRA transmitter section. *(see page back)*
3. Drill holes at the location marked, for the transmitter (3/4" diameter, no more than 1/3" deep).
4. **Insert the transmitter into the hole so that the cap is flush with the surface. Make sure the antenna goes into the cavity as straight as possible.**

DO NOT hammer the transmitter or the magnet in place with hard blows. Press them into their respective holes by hand.

The iON MICRA uses a santaprene case that, once placed, is designed to self-seal in the mounting hole. However, if desired, a thin bead of silicon may be applied for additional moisture protection.

Figure 2

SPECIFICATIONS

		iON MICRA transmitters
Dimensions	Dowel Package	0.750" diameter
	Additional Info	Dowel Lid 0.850" diameter x 0.060" thick
	Wire Antenna	8.5" x 0.050" diameter (24 gauge)
	Fits Cavity Depth	0.330" depth
Power Source		3.0V Lithium Coin Cell Battery CR1620
Transmit Range		Typically >500 ft. open air
Temperature Range		10° to 120° F (-10° to 50° C)
Compatibility	Windows	Vinyl, Wood Casement, Awning,
		Double-Hung and Access.
	Door	Plunger Pkg

FCC Notice

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by ION Digital LLP can void the user's authority to operate the equipment.

Figure 3

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system. The installer should assume the responsibility of developing and offering a regular maintenance program to the user, as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's operation at all times

REFER TO THE INSTALLATION INSTRUCTIONS FOR THE RECEIVER / CONTROL WITH WHICH THIS DEVICE IS USED, FOR WARRANTY INFORMATION AND FOR DETAILS REGARDING LIMITATIONS OF THE ENTIRE ALARM SYSTEM.

BATTERY INSTALLATION & REPLACEMENT

1. Remove the transmitter from the window by inserting the flat blade of a small screwdriver into the pry-slot on the cap end and twisting slightly counter-clockwise. The transmitter must be removed from the window complete in order to refit the transmitter properly back into the hole once the internal battery has been replaced.
2. Using the flat blade of a small screwdriver in the pry-slot again, separate the white cap from the orange base with a slight counter-clockwise twist. Once open, slide the cap with the transmitter PC board assembly apart from the orange base. Pull the antenna through the hole in the orange base just enough to allow the battery to be replaced. Do not pull the antenna completely out of the orange base.
3. Remove the old battery from it's battery holder on the bottom of the PC board.
4. Observe correct polarity (*see Figure 3 Step 3 & 4*) and insert the fresh battery into the battery holder (positive polarity indicator is shown on the battery holder).
5. Slide the cap with the PC board assembly back into its orange base by gently pulling on the antenna, easing the transmitter cap into place.
6. Snap the transmitter cap back onto the orange base, locking it into place.
7. Placing the antenna into the cavity first, reinsert the transmitter into its original mounting hole in the window. Be sure to point the 'iON' graphic on the cap in the same direction as the 'iON' graphic on the accompanying sash-mounted magnet.

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