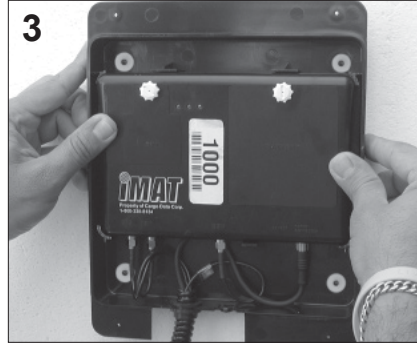
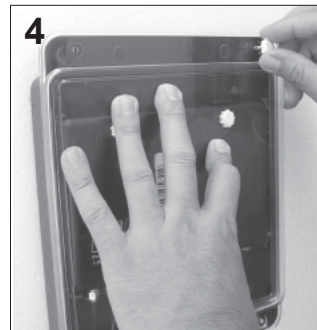


remove the small grommet and run the power cable through the small notch in the terminal case. Attach the cables to each of the 4 connections as marked. There is no connector for "sensor".



STEP 3: Clip the terminal inside the locating brackets. Once the power is connected, open the battery door, turn it on and watch for LED lights. The green LED

should blink every second if on Reefer battery and if it blinks 2-3 seconds apart it is not properly connected to reefer power. Check external power and wiring. Close the battery door,



making sure it is flush with the terminal surface and tighten screw.

STEP 4: Before placing the clear top on the case check the power supply by viewing the Green LED light. If it is not blinking every second, then check external power assembly.

SECTION 4: WIRELESS RF SENSOR INSTALLATION

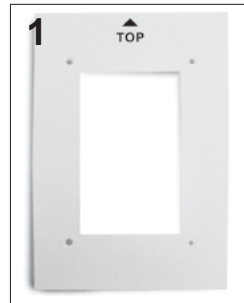
Preparation for Sensor placement & installation:

Standard installation is 6 RF wall sensor and door sensor. Each sensor is marked and must be placed in the proper location. Sensors should be evenly placed 3 on each side of the trailer as marked - Left front, Left middle and Left rear and Right front, Right middle and Right rear. Left side is the drivers side. Place sensors 15' apart beginning 15' from front of trailer.

Locate and mark positions to install sensors keeping sensors above usual pallet height to avoid forklift or pallet damage. Place out of direct air flow from chute.

FOR RECESSED RF SENSORS:

STEP 1: Use Template and trace cut-out and mark 4 corner holes. Drill 4 holes as marked for plastic fasteners using 6.5mm drill bit. Cut out center rectangle area using utility

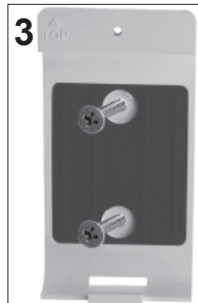


saw or saber saw, depending on wall composition. Remove only necessary insulation to fit recessed sensor bracket flush with wall.



STEP 2: Insert one plastic fastener into each hole until even with bracket surface and tap or screw in to secure. Continue until 4 corners are secure. Lift rubber seal and turn on sensor - blinking green LED indicates operation. Use sealant around entire edge between wall and bracket to seal. Repeat for each of 6 recessed wall sensors.

SURFACE MOUNT RF SENSORS:

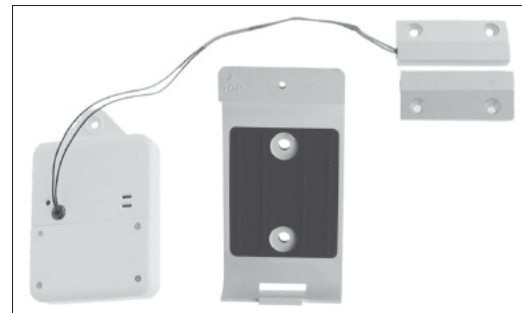


STEP 3: Remove backing tape from sensor and secure to wall. Drill 2 holes through existing bracket holes using drill bit #1 or rotary cutting tool/rip saw. Install provided screws. Use sealant around entire bracket and screws to prevent moisture penetration.

STEP 4: Place sensor in track at bottom edge of bracket and use thumb screw to secure. Repeat for each of 6 walls surface mount sensors.

SECTION 5: DOOR OPENING SENSOR INSTALLATION

What's included: Magnetic sensor and mounting bracket.



Side by side doors:

The sensor marked "DOOR", with the attached wires and magnetic sensor uses recessed or surface mounted brackets.

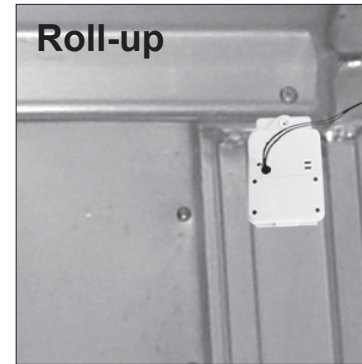


STEP 1: For recessed mounting, mark position using same template from step 4/1. Make necessary cutouts and mount according to section 4 step 2.

STEP 2: For surface mount, place the



bracket along the top edge of one door. Use supplied screws to attach to door. Attach the sensor to bracket. Place magnet as close as possible to the opening so as not to interfere with opening and closing. Mount the other magnet to the opposite door so when doors are closed the sensors are about 1/2" apart. Use supplied tape to secure wires so they are not loose or become snagged or torn from the sensor.



Roll-up

Roll up doors:

Install sensor and magnets using either flush or recessed methods described above. Carefully locate RF sensor and door sensors out of harms way. Do not allow sensor to interfere with the roll up mechanism.

Doors vary. Place the two magnetic sensors in the best position for the type of door.

cargoDATA

www.imatsystem.com
800/338.8134

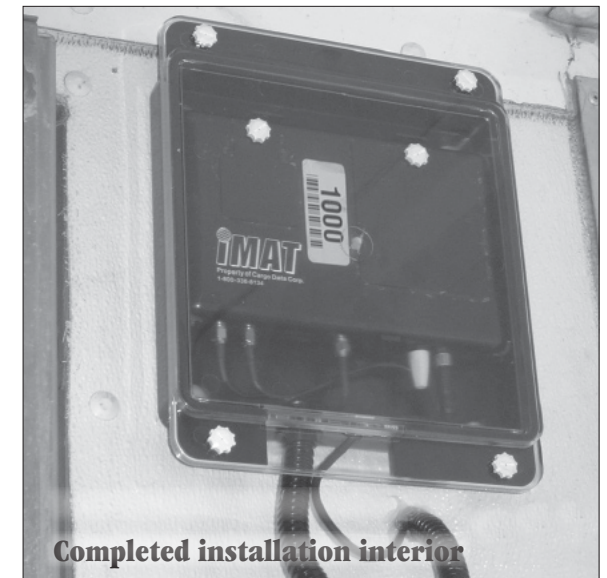
Installation for

IMAT

Independent Monitoring And Tracking



Completed installation exterior



Completed installation interior

Installation Instructions for IMAT SYSTEM:

Trailer exteriors & interiors vary so these instructions are a general purpose guide. Your installations may differ and adjustments will be required to fit each situation. Please review each step below before starting installation..

Tools required:

- 3/8" power drill
- Electric or hand Phillips screw driver
- Rip, rotary cutting tool or power saber saw (if using recessed sensors –See step 3 below)
- Tape measure
- Work light for interior installation

Included in IMAT kit:

- Terminal Protective Clear top case
- IMAT terminal
- Antenna for GPS/Cell Phone communications
- 5 Cargo Data Wireless Ambient Sensors
- 1 Cargo Data Wireless Ambient/Humidity sensor
- 1 Cargo Data Wireless Ambient/Door event sensor
- 7 recessed Sensor brackets
- 1 flush mounted sensor bracket
- 3 drill bits (19mm, 2.7mm and 6.5mm)
- Screws & fasteners
- Fuse holder assy and battery connector
- Tube of silicone/sealant
- Steel wool
- Template for use with recessed sensor
- Clear plastic tube for cable installation
- Marker for template

It is **strongly** recommended that you read this entire installation guide before starting installation process.

SAFETY FIRST: Check before you drill. Be sure not to cut through existing wires or refrigeration coils.

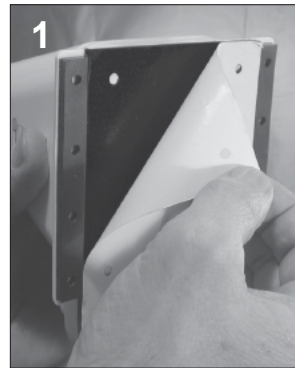
SECTION 1: EXTERIOR - ANTENNA/BACKET ASSEMBLY

Components: Antenna & Bracket Assembly, Clear flex cable tube, Sealant, steel wool

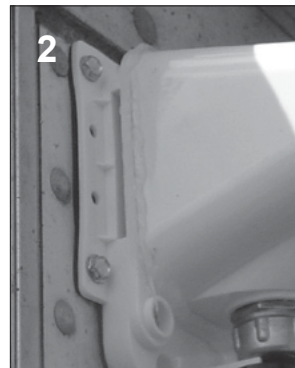
Tools: Drill, Phillips screwdriver

Before installing antenna, determine best way to route power cable from the terminal box to reefer battery or auxiliary board in reefer. It's better to mount antenna on same side as reefer battery.

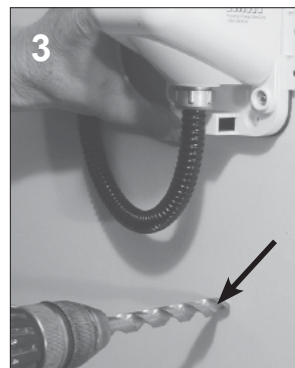
Select the best location to attach antenna to the trailer that is close to the reefer while avoiding access doors for reefer or into trailer. If there are access doors or other obstacles be sure there is enough room for flex cable installation as described in #6 below. The top of the antenna should be as high on the front of the trailer as possible. Clean the application area on the trailer rail/header with steel wool pad to remove all residues and prepare surface.



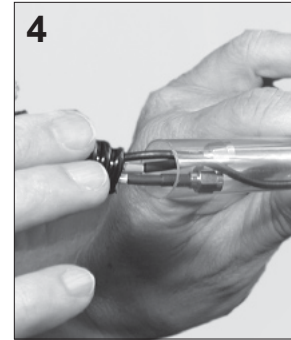
STEP 1: Remove the backing paper from adhesive on the antenna bracket assembly. Position and press firmly to seat. The tape will hold antenna in place while drilling holes. BE SURE antenna is secure before starting to drill.



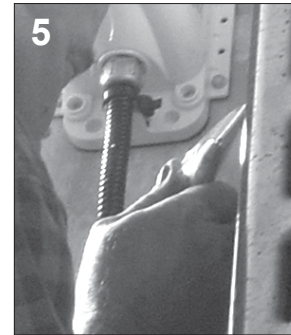
STEP 2: Drill 4 holes through existing holes of the antenna bracket using 2.7mm drill bit. There are 2 additional holes on either side of the cable. These are optional if needed for security. Use the supplied screws to fasten antenna and bracket to trailer. Apply a thin bead of silicone sealant/adhesive to entire edge between bracket and trailer and in each screw hole. This is WATER PROOFING – do not skip any area. This must be a steady line of sealant.



STEP 3: To install flex cable wiring from lower edge of antenna, measure 4" below the antenna bracket assembly. Drill hole using the 19mm bit.



STEP 4: Insert the Clear plastic guide tube through the hole and feed 3 antenna wires individually and then insert flex cable through tube so it passes into the trailer.



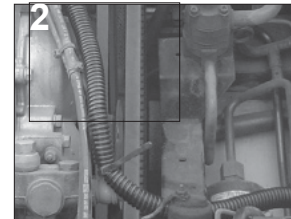
NOTE: If you have a direct power cable from the in-trailer terminal for EXTERNAL wiring, slit the clear plastic guide so that it can expand as you will feed the power cable from the inside of the trailer to the outside using this guide.

STEP 5: If you are NOT using external method for power wiring, silicone around this tube opening completely for water/moisture resistance.

SECTION 2: INTERIOR IMAT TERMINAL/POWER CABLE INSTALLATION



STEP 1: The power cable should be enclosed with slit flexible cable to protect from elements and damage.



STEP 2: Install power cable to the reefer battery. Use cable ties as necessary to protect the cable from heat or damage from moving parts.



STEP 3: At battery - two wires are used, Brown is positive & blue is negative. Black is not used.

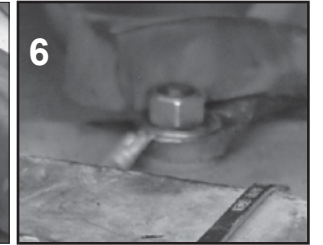
STEP 4: When length of lead to reach the battery is determined, cut cable and strip wires to fit. Insert the bare wires of brown cable into butt connector of fuse



assembly and crimp tightly. You may also fold bare wires in half for a more secure hold inside butt connector.

STEP 5: The connector end should be attached to the positive + battery terminal, as shown top left.

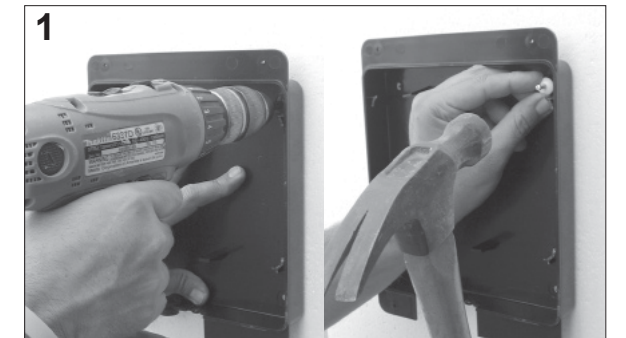
STEP 6: Attach the other connector to the blue cable and secure to the negative – battery terminal as shown at top right.



SECTION 3: INTERIOR IMAT TERMINAL INSTALLATION

Included in IMAT kit: Case & terminals assembly with power cable attached.

Tools required: Power Drill, screw driver, work light.



STEP 1: Place black terminal case, with notched areas to the floor, close to antenna cable assembly. Drill four holes in corners of terminal case, insert the white plastic/metal screws and with a small hammer, lightly tap into wall. Run silicone beads around these 4 areas.



STEP 2: Take the 3 (or 4) wires from the flex cable and feed them through the rubber seal and push the flex cable at least 3/8" into case. Be sure the rubber grommet is still securely in the groove. If power cable leads directly from the terminal box,