



# Radio Frequency Do's & Don'ts

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## Please read before installing !

Almost all of us have used a cordless phone, cellular phone, or FRS radios by now. They all work with the same principles as our wireless products only they have the advantage of us listening to hear when we are in a bad location by hearing static or noise and knowing we have to move closer or move to a hill (higher) to acquire better signal reception. Radio frequency (wireless) in simple terms consists of a transmitter and a receiver. Our transmitters send data via radio frequency (wireless) to the receiver (inside) triggering a tone or alert inside your home. Line of sight with no obstructions between outside device and inside receiver are always favorable for the best results. 98% of our tech support phone calls are asking why my sensor isn't working or is intermittent in sensing. And 98% of the time it is poor communications between outside sensor and inside receiver. A good example is using your cordless phone or cell phone and stepping one direction or the other to sound clear or full of static and noise. The difference is you are able to hear the noise and adjust your location. Because our devices send data, the only way to determine "noise" or "static" is by your system not "beeping" or intermittent and/or erratic operation.

Learn how your sensing device works by trying it first in your house before mounting it at the location that you want to install it. All variables are less of a factor the closer the receiver and sensor are to each other. In other words it is more critical at 700 foot distance than at 100 foot distance from transmitter to receiver.

### Do's

- Mount the receiver as high as possible in your home.
- Make transmitter to receiver as clear of obstructions as possible.
- Try your sensor and receiver inside before mounting to understand how unit operates.
- Set the receiver at a window on the same side of the house as the sensor.

### Don'ts

- Do not set the receiver on the floor inside your home.
- Do not place the receiver in a basement.
- Do not set your receiver next to cordless phones, computers, or any other electronic devices.
- Do not set the receiver next to metal devices.
- Do not mount the outside sensor on metal.
- Do not set your outdoor sensor on the ground to test.

#### Other Wireless Facts:

- Steel or aluminum siding can greatly reduce range of transmitter to receiver range.
- Metalized Celotex under siding or brick can have a huge effect on reduction of range.
- Brick and masonry will have a substantial range reduction.
- Height is a huge factor in performance of transmission distance.
- Glass windows provide the least resistance to radio frequency.
- Always try to place your receiver at a window on the same side of your home as the sensor outside.
- The closer the sensor is to the receiver, the less that the above play into as factors.
- Mounting an outdoor sensor over a hill has the most reducing effect of radio frequency distance.
- Usually small receiver relocations are all that is needed.
- 2nd story placement of the receiver can result in a huge distance increase if applicable.
- Maximum height and minimum obstructions are the largest benefit in range.
- Our units distance are rated line of sight average. You can experience more or less range than rated.
- Weather conditions can also change performance of distance.
- Over a period of time range can slightly degrade as product ages, frequencies of product slightly shift, foliage growth, or local RF interference changes. You may need to relocate the sensor closer to the receiver.

## PROGRAMMING

All sensors must be programmed before installing outside. Reprogramming may be necessary if receiver or sensor is not working properly or to add more sensors. NOTE: Maximum of four sensors can be programmed into each receiver.

### Adding a Sensor

1. Disconnect power from the receiver and wait 10 seconds.
2. Place the sensor a minimum of 10 feet from the receiver. Wait 10 seconds.
3. Reconnect power to the receiver. The green light will flash. Connect the AC Adapter to the receiver and plug it into a wall outlet. The receiver will make a series of beeps and the green light will flash for a few seconds.
4. While the green light is flashing, press and hold the grey button (on the receiver) down until you hear one beep (approximately 2 seconds). Release button.
5. The red light on the receiver will turn on, indicating the receiver has entered programming mode. NOTE: you now have 1 minute to program your sensor.
6. Rotate or move the sensor. One beep will sound. If you have more than one sensor, only activate one sensor at a time. A total of 4 sensors can be programmed into each receiver.
7. When all sensors have gone through the process, simply wait a minute or press and release the grey button (on the receiver) to exit the programming mode.

### Clear All

1. Disconnect power from the receiver and wait 10 seconds.
2. Place the sensor a minimum of 10 feet from the receiver. Wait 10 seconds.
3. Reconnect power to the receiver. The green light will flash.
4. While the green light is flashing, press and hold the grey button (on the receiver) down until you hear a series of two beeps (approximately 5 seconds). Release the grey button.
5. The red LED will be illuminated. Press and release the grey button to complete Clear All.

## WARRANTY

One year limited warranty. For returns, technical problems or warranty repair, please contact Jansen Electronics at 815-232-3093. JANSEN ELECTRONICS IS NOT LIABLE FOR LOST PROFITS, INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATIONS ANY SUCH DAMAGES DUE TO IMPROPER WIREING OR MISUSE OF THE PRODUCT.

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.

## TROUBLE

## SOLUTION

Receiver does not power up	Make sure the AC power outlet has power. Plug in a lamp to verify. Ensure that the AC adapter is plugged into the receiver AND the wall.
Receiver does not sound when vehicle passes	Ensure that the sensor is triggering. The sensor should make a "cricket" type sound when a magnetized or metal object is moved nearby. Reprogram the sensor Make sure the sensor is within range of the receiver Ensure that the receiver is not in Silent Mode BATTERY MODEL ONLY - Check batteries, replace if necessary SOLAR MODEL ONLY - make sure the sensor is located in direct sunlight. Allow the sensor to charge in full sunlight for 2 days, then try programming the sensor again. SOLAR MODEL ONLY - replace rechargeable batteries. Use only 1.2V size AA NIMH rechargeable batteries! Charge the sensor in direct sunlight for 2 days, then perform programming again. Or charge batteries with a battery charger plugged into a house outlet.
Sensor does not activate or does not signal the receiver when a vehicle passes by	Test detection using a large metal object, such as a steel shovel or large magnet. The sensor will make a soft clicking sound when activated. Try moving the sensor closer to the driveway Try placing the sensor so the vehicle never passes between the sensor and the receiver. Rotate the sensor 1/3 of turn
Receiver sounds when no vehicle is present (false trigger)	May take up to 48 hours to stabilize. Make sure the sensor is mounted as firmly as possible and does not move in the wind. Try moving the sensor farther from the main road. Make sure the sensor is at least 25 feet away from any unsteady metal objects.
Sensor false triggers when lightning strikes nearby.	This may occur and is normal operation
Sensor delays chime when car passes	Rotate sensor 180 degrees

**OPTIONAL ACCESSORIES**  
**Lamp Controller**  
**Additional Solar Driveway Sensor**  
**Additional Battery Operated Sensor**  
**Additional Indoor Receiver**

# Xtralert™



## MD500

Jansen Electronics

2285 S. Rock City Rd

Ridott, IL 61067

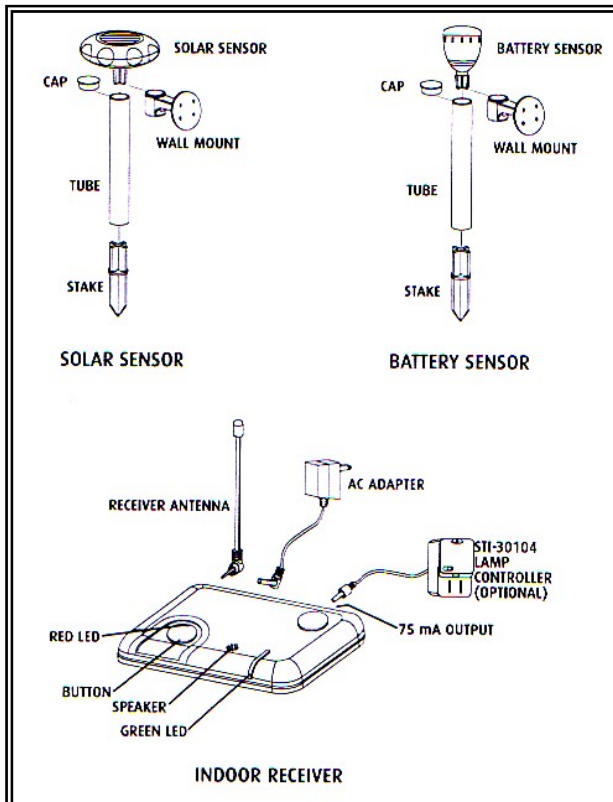
Thank you for purchasing the XTRALERT MD500. Your satisfaction is very important to us. We suggest you take a moment to review this manual carefully to get the most from your new system.

## HOW THE PRODUCT WORKS

Because of its patented magnetometer sensor system, the MD500 will only be triggered by cars or trucks - not people, animals and so forth. When a vehicle passes the sensor next to the driveway, the receiver unit inside the home or office sounds a chime and flashes the alert light. The alert light will continue to flash for 15 minutes and the receiver will chime each time a vehicle passes. The earth has a uniform magnetic field around it. A vehicle creates a slight disturbance in that field. The sensor's job is to detect this disturbance and transmit a signal to the receiver.

## BEFORE YOU START

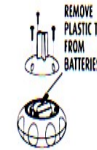
*Refer to this drawing to become familiar with all the parts.*



## STEP 1 - INSTALL BATTERIES

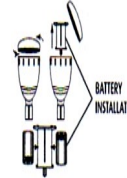
### Solar Model (MD500S)

- Remove protective plastic film covering solar cell.
- To activate batteries open the sensor case by removing the three screws. Remove the plastic tab from batteries, close the case and replace screws.
- Place sensor in direct sunlight for a total of 48 hours of sunlight (4-5 days). Batteries may also be charged in a NiMH (nickel-metal hydride) battery charger plugged into an indoor socket.



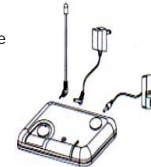
### Battery Model (MD500)

- Open the top of the sensor by turning it counterclockwise.
- Remove the battery holder by grasping the plastic piece that the circuit board is attached to, and pull up while twisting slightly. DO NOT PULL ON THE CIRCUIT BOARD OR BRASS ANTENNA. Insert two "C" alkaline batteries (not included). The sensors will make a faint cricket-like sound when activated.
- Replace battery holder and screw the top back on tightly. The O-ring provides a water resistant seal.



## STEP 2 - SET UP THE RECEIVER AND TEST THE SYSTEM

- Plug the antenna into the receiver.
- Once the batteries in the sensor are fully charged, bring the sensor indoors and place it 10 feet from the receiver. Do not disturb the sensor for at least 60 seconds.
- Connect the AC Adapter to the receiver and plug it into a wall outlet. The receiver will make a series of beeps and the green light will flash for a few seconds.
- When the green light stops flashing, rotate or move the sensor. The receiver will play a short tune and the red light on the receiver will come on. This is what will happen when a vehicle activates the system. When setup is complete, move to step three. IF THIS DOES NOT OCCUR, PLEASE CHECK THE TROUBLESHOOTING GUIDE INCLUDED WITH THIS MAUAL.



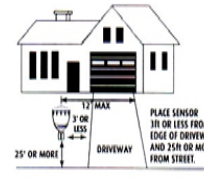
## STEP 3 - INSTALL THE SENSOR

If you purchased the SOLAR sensor, it must be located in full or partial sunlight. Place the sensor near the driveway and at least 25 feet or more from the street. NEVER hit the sensor because it is fragile. The unit can be mounted in the ground or on a STABLE post with the included wall mount kit.



For ground installation, be sure to use the cap included. Gently hammer the cap on the tube with the stake attached, into the ground. Remove the cap and place the sensor on the stake.

CAUTION: Make sure the sensor is mounted to a stable surface. Even the slightest amount of movement when the wind blows can cause the sensor to trigger accidentally. Under ideal conditions, the sensor may be placed as far as 500 feet away from the receiver but with wireless phones, wireless routers and other similar devices in the area, the range can be drastically reduced.



SPECIAL NOTE: Maximum optimal range for vehicle detection is 12' (see drawing). Additional monitors may be required for driveways exceeding the recommended range.

## MODES OF OPERATION

### Normal Mode (Green power light is on)

The light may flash periodically but it only indicates routine signals are being received and does not mean a vehicle is passing by. When a vehicle is detected, a short tune will play. If more than one sensor is being used, sensor #2 will beep twice and then play the short tune, and sensor #3 will beep three times before playing the tune. The red light on the receiver will flash for 15 minutes and then automatically reset or you can push the grey button (on the receiver) to manually rest it yourself.

### Temporary Silent Mode (Green power light is not on)

This may be programmed only when the receiver is in Normal Mode

- Press and hold the grey button (on the receiver) for two seconds. The receiver will beep once.
- The receiver will not make any sounds for 8 hours or until reset.
- The red light will come on and stay on for that time.
- Push the grey button (on the receiver) to reset and return to Normal Mode.

### Permanently Silent Mode

May be programmed only when the receiver is in Normal Mode.

To activate:

- Press and hold the grey button (on the receiver) for five seconds. Two beeps will sound.
- The receiver will not make any sound until reset.
- The red light turns on and stays on during this mode. Even after a power outage, the receiver remembers to stay in the Permanently Silent Mode.
- Push the grey button (on the receiver) to reset and return to Normal Mode.

### TRANSISTOR OUTPUT JACK

The accessory transistor output jack, where the optional Lamp Controller plugs in, will supply 75mA at 12V for three seconds. The output is a 3.5mm mono audio jack and is polarity sensitive. This output can trigger the Lamp Controller or another low powered device, such as, a relay. It allows the output to interface with many home automation products.

### OPTIMAL RANGE TECH TIP

To achieve optimal range between the receiver and sensor:

- Mount the sensor no more than four feet off the ground.
- Place receiver in an area so the antenna has a clear line of sight to the sensor.
- Place the sensor so that vehicles do not pass between the sensor and receiver.

### SENSITIVITY ADJUSTMENT

In most cases the factory default setting of high sensitivity works fine, but the sensitivity can be adjusted by changing the position of the slide switch inside the sensor, as show:

To adjust sensitivity:

#### Solar Model (MD500S)

- Remove the three screws on the bottom side of the sensor and remove the cover.
- Position the switch as show for the desired sensitivity.
- Close the cover, replace the screws and re-install the sensor.

Solar Model



#### Battery Model (MD500)

- Unscrew the cap and remove battery holder.
- Position the switch as show for the desired sensitivity.
- Replace the cap.

BATTERY MODEL



# Xtra Accessories

### Xtra Sensor



Additional sensors allow you to monitor additional driveways.

**\$109.95**

### Xtra Receiver



Additional receivers allow you to hear your alarm in other areas of your home.

**\$79.95**

### Xtra Light Timer



Connects directly to the receiver to power lamps or any other 110V up to 500 Watt appliance.

**\$49.95**

### Xtra Line Driver



Sends signal through your existing wiring to trigger optional devices (remote chime, light switch mod., etc)

**\$49.95**

### Xtra Remote Chime



Use in conjunction with our Line Driver for announcement in multiple areas within your home

**\$39.95**

### Xtra Light Switch Module



Controls any incandescent light bulb in your home. Simply replace your existing light switch

**\$24.95**

### Xtra Line Receiver



Switches on any 110V device up to 500 Watts. Use to trigger sirens or other applications

**\$29.95**

### Xtra Sirens



Standard



Mini

**\$29.95 and Up**



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## LIMITED WARRANTY

Jansen Electronics, a division of RFR Inc. and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 12 or 24 months (product dependant) from the date of sale. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by Seller, Seller can not guarantee the performance of the security system which uses the product. Seller's obligation and liability under this warranty is expressly limited to repairing or replacing, at Sellers option, within a reasonable time after the date of delivery, any product not meeting the specifications.

SELLER MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO CASE SHALL SELLER BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER.

Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect or consequential damages or delay. Seller does not represent that its products may not be compromised or circumvented by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery, or fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.

CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR OTHER LOSS BASED ON A CLAIM THAT THE PRODUCT FAILS TO GIVE WARNING. HOWEVER, IF SELLER IS HELD LIABLE WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OR DAMAGE ARISING UNDER THIS LIMITED WARRANTY OR OTHERWISE, REGARDLESS OF CAUSE OF ORIGIN, SELLER'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT, WHICH SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST SELLER.

No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty.

WARNING: This product should be tested at least once a day.

**Any returns or refunds from Jansen Electronics require a return authorization number for any reason. Call 815-232-3093 to obtain an RA#. Packages will be refused and returned to sender if no RA # is on written outside of package. No Refunds On Shipping Charges!**

Proof of purchase from an authorized dealer of Jansen Electronics must be provided for all warranty claims. Once item is received and inspected, Jansen Electronics will have the option to repair or replace the defective product. Any alteration of the units serial # or units purchased from unauthorized dealers will void any warranty. Any misuse, physical or liquid damage, modifications, or alterations to product will void warranty.

**Jansen Electronics is not responsible for any refunds for products purchased from authorized dealers. Consumer must contact dealer directly for their return procedures.**

### Return procedures for 30 day money back guarantee policy for products purchased directly from Jansen Electronics:

1. Call for a Return Authorization number (RA#) before sending the unit back 815-232-3093.
2. Product must be shipped back to Jansen Electronics within 30 days from receipt of product(s)
3. Original receipt must accompany the product for refunds and warranty issues.
4. Customer is responsible for proper shipping, packaging, and insurance to Jansen Electronics.
5. Any misuse, physical damage, liquid damage, or alteration to product will void refund policy and warranty.
6. Dealers will use their own standard return/restock policies.
7. Minimum 20% restock fee will apply to merchandise returned in used condition.
8. Items returned for full credit/refund must be in like new saleable condition with all manuals, accessories, original packaging with no cosmetic scratches, dents, or cracks, modifications, physical or electrical damage, misuse of product, etc.