

xtralertTM

MD500

Operating Instructions

Jansen Electronics
2285 S. Rock City Rd
Ridott, IL 61067
Phone: 815-232-3093
Email: info@jansenelectronics.com
Web: www.jansenelectronics.com

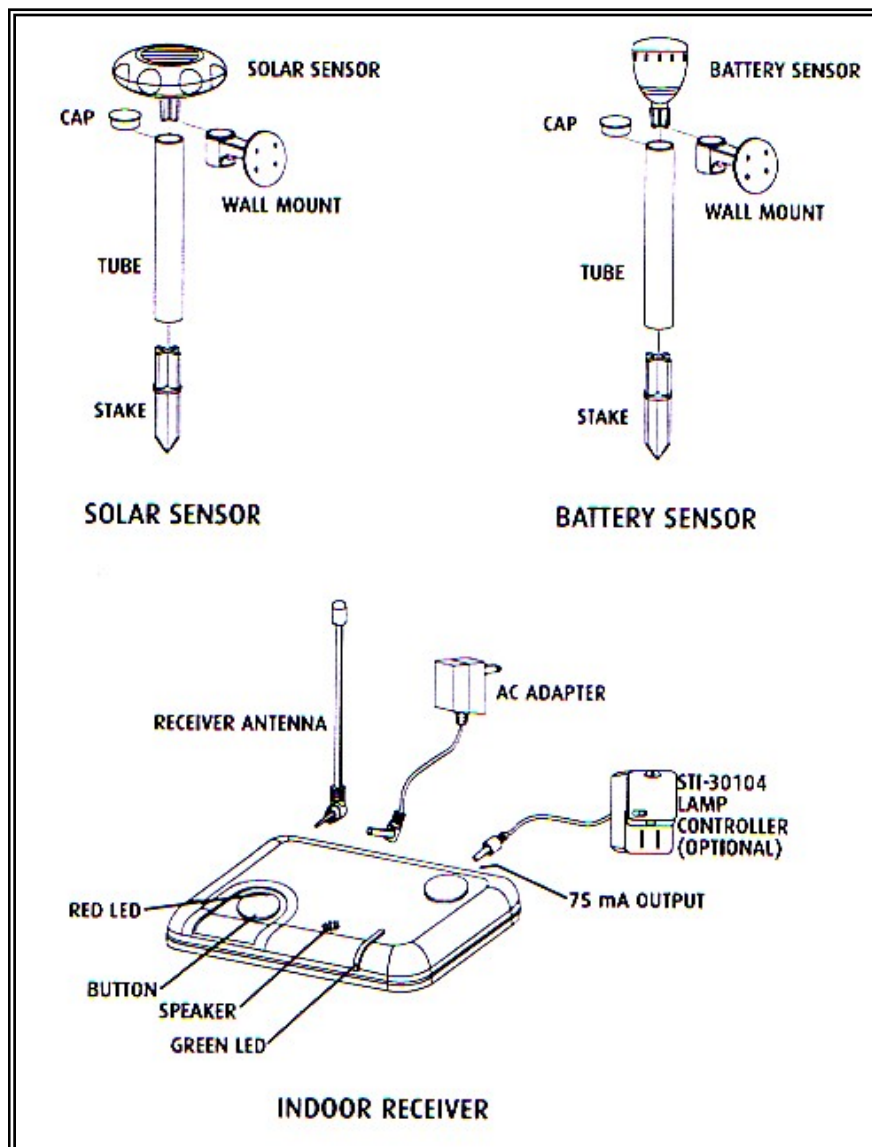
Thank you for purchasing the XTRALERT MD500. Your satisfaction is very important to us. We suggest you take a moment to review this manual carefully to get the most from your new system.

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

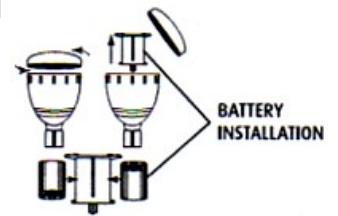
Solar Model (MD500S)

- 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.



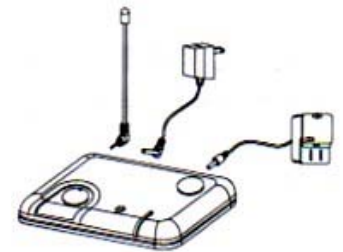
Battery Model (MD500)

- 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

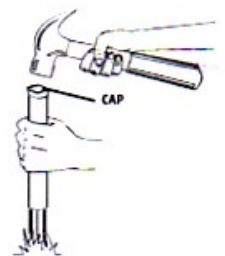
- Plug the antenna into the receiver.
- Once the batteries in the sensor are fully charged, bring the sensor indoors and place it 10 feet from the receiver. Do not disturb the sensor for at least 60 seconds.
- Connect the AC Adapter to the receiver and plug it into a wall outlet. The receiver will make 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

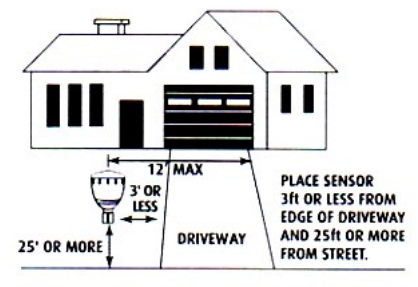
If you purchased the SOLAR sensor, it must be located in full or partial sunlight. Place the sensor near the driveway and at least 25 feet or more from the street. NEVER hit the sensor because it is fragile. The unit can be mounted in the ground or on a STABLE post with the included wall mount kit.

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 reset 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:

1. Mount the sensor no more than four feet off the ground.
2. Place receiver in an area so the antenna has a clear line of sight to the sensor.
3. 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:

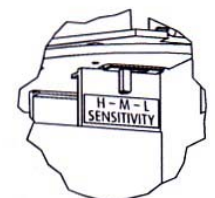
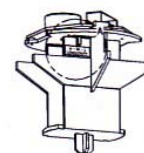
Solar Model (MD500S)

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

Battery Model (MD500)

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

BATTERY MODEL



VIEW A

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.

Programming 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 WIRING 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.

TROUBLESHOOTING

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 Try changing the sensitivity of the sensor
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