

# Wildlife Materials International, Inc.

## MAGNUM CONVERTIBLE Changeable-Battery TRANSMITTER COLLAR #3190/3280

The Magnum Convertible #3190/3280 collar comes with **three** batteries. The hunter can choose either a standard or long range, depending on the dog released and the terrain hunted. To get a **standard** range, insert the **one** bigger battery (the same used in our #3190 collar, 70+ days continuous tracking). Or, for our **longest 4-14 mile signal range**, insert **two** smaller 1/2 AA lithium batteries (also used in our #3850 collar, 17-20+ days).

**NOTE: This equipment is designed to help you locate dogs after the hunt. As you know, any electrical equipment, especially if battery-powered, may stop working. Theft, accidents, and Acts of God also occur. Wildlife Materials, Int. cannot assume responsibility for dogs that are lost or injured while being monitored.**

### DIRECTIONS:

1. Open the battery holder cap by twisting a coin counter clockwise in the cap slot. Insert the battery of your choice: 1 larger 3.5 v lithium collar for a standard 2-9 mile range, or 2 smaller 3.5 v lithium batteries for our longest 4-14 mile range. **AVOID DAMAGING CIRCUITRY!** Place **the battery's negative (-) end nearest the cap**. As a reminder, the outside of the cap has been engraved with a "-".
2. **Just before releasing your dog, make sure the battery cap and the antenna are tightened.** Also **tighten all collar screws** so transmitter is held securely to collar. These actions can avoid loss of a transmitter in the field.
3. To start the transmitter signal (with battery inside), **remove the magnet from its recess hidden between collar and transmitter. Pull the white tab that surrounds the magnet.**
4. Turn on your receiver. Tune in the transmitter collar's frequency number to get a beeping signal. Attach your handheld antenna's cable to the receiver face **after you are positioned some distance away (at least 20 yards) from your transmitter collar.**
5. Practice finding the transmitter collar **before** putting it on a dog. Place the activated collar in a tree at 200 yards so you can pick up the signal. Then ask a friend to hide the collar a further distance away.
6. For most efficient recovery of a transmitted dog, use the **NULL-to-NULL method**. With antenna plugged to receiver, hold your antenna above your head, its main boom parallel to the ground. Rotate your antenna in a full circle--360 degrees. A peak signal will be received over 15 to 20 degrees of a circle. Swing the antenna back and forth to see where the signal stops or a NULL (no sound) occurs. You will quickly find a null at 30-40 degrees on either side of the peak signal. **Divide the space between the nulls in half--this is the direction of your dog.** As you move toward the dog, take other readings, in case the dog has veered off. You may need to position the antenna so that its elements move from vertical to horizontal. For best signal reception, your antenna elements should **parallel the dog's collar antenna**: the dog may be down, or the collar antenna may have shifted on the neck.
7. If you receive a strong signal (with the receiver's Gain or volume turned low) **all** around you (called **swamping**), you are very close to your animal. Turn the receiver's attenuator on. Or detach the antenna cable from your receiver jack and then turn the receiver's gain control up. Go toward the loudest signal.

8. If signal bounce occurs in rugged terrain, go to a **high altitude** such as a ridge. Turn the receiver gain **down** and take several readings from **different** positions. The point where 2 or more signals **cross** is where your dog is located. This method is called TRIANGULATION.
9. Screw the cap onto the battery holder in a clockwise direction. Note that a black O-ring has been fitted to the inside of the cap for sealing purposes. Contact us for a new O-ring if it frays, stretches, is lost.
10. To stop the transmitter, **put the taped magnet in the recess between collar and transmitter. Or remove the battery.** Use your receiver to check that the radio signal has stopped.
11. During storage, **keep each battery in a separate envelope.** If 2 batteries touch, power will drain. Batteries can be kept in a refrigerator for longer freshness. **Also, store the collar in a cool place** (not cold).
12. Keep another magnet on hand for battery conservation. Magnets are easily lost in the field and can be difficult to purchase elsewhere.
13. To change a broken antenna, unscrew the old one by turning its base LEFT, insert the new one and tighten down with RIGHT turns. Use cable ties near the antenna base and farther up if needed.
14. Change a torn collar using a Phillips screwdriver to remove the 4 holding screws. Match the new collar's holes with the transmitter plate's holes. Insert screws and tighten the new collar to the plate. New collars with already made holes are available from Wildlife Materials International.
15. Store each battery in a **separate** envelope/container in refrigerator.

**FIVE YEAR** Warranty on Parts and Labor in **ELECTRONICS** as of 1/1/97

Refunds and exchanges are available during our 15-day trial period. Equipment should not have been worn by dog and must be returned in like-new condition.

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**34 Years Serving Dog Owners**