

Wildlife Materials International, Inc.

The **MINI 2** Element **ANTENNA** With **NEW SMALL WMI RECEIVER**

The MINI 2 element yagi directional Antenna is **SMALL**, compact and **EASY** to use. At half the size of a 3-element antenna, the MINI 2 gives a good direction.

The MINI 2 Antenna is **VERSATILE**. The 2 elements can be folded under a receiver for storage. The user can also **REMOVE** this antenna from a receiver. If needed, the user can switch to the bigger 3-element antenna for **LONGER** range.

This small antenna works with all receivers. It attaches beneath "WILDLIFE MATERIALS" small, compact TRX-3S, TRX-10S, TRX-16S, and TRX-48S Receivers, with a small padded carrying case available for the receiver/antenna. **This miniature antenna works best when mounted directly beneath a smaller receiver.** However, the user can hold the MINI 2 in one hand while operating WMI's larger TRX-64S and TRX-1000S Receivers as well as any other manufacturer's receivers.

When ordering, please specify whether you want to use the MINI 2 Antenna with a) a **new small WMI** receiver, b) an **already-in-use small WMI** receiver, or c) the **larger TRX-64S, TRX-1000, TRX-2000 Receivers or other manufacturer's receiver**. In this last instance, \$5.00 extra will be charged for the needed connective assembly and 4 foot cable.

DIRECTIONS for USE:

1. **To mount MINI 2 antenna on a SMALL WMI receiver**, align the antenna's Dual Lock material with same material on receiver bottom. Press together at the 4 corners; you will hear a "snap" when the attachment occurs.
2. **Unfold the handle** by turning receiver so bottom faces up. Lift the two center bars that are velcroed and hinged. **Press the two center bars together so Velcro connects.** You have created a pistol handle grip. Turn unit so you hold the receiver above antenna.
3. **To open the antenna elements**, look at receiver face. Note the 2 layers of antenna elements folded beneath receiver. Pull the **bottom** element halves out to 90 degrees from **each** side of receiver. Then pull the **upper** element halves out to 90 degrees from **each** side of receiver. Your antenna mounted under a small receiver is ready to use.
4. **TO LOCATE a transmitter collar's SIGNAL**, hold the receiver/antenna so your **arm is fully extended in front of you**. Raise the receiver/antenna so it is **at or slightly above eye level**. Rotate your body in a **complete circle** and watch the receiver's meter needle or LED bar.
 - For best reception, turn your receiver **ATTENUATOR ON**, and keep your receiver **GAIN/volume LOW**. Adjust the receiver **GAIN** knob so that the meter needle or the LED bar is only at **1-2** on the scale when you are pointing the antenna toward a strong signal. These actions will avoid signal distortion, make the signal easier to track and use less battery power.
 - To find the best signal, go to a **high** place (i.e., on a ridge, in a tree, standing on truck bed, in an airplane).
 - Rotate your wrist so that the antenna elements **are moved from horizontal position to vertical and back**. Play with it! You may get better signal direction from one position.

Remember that signal reception can vary from day to day, depending on weather, terrain and time of year.

- **Take SEVERAL readings. Move about 10 feet to each side, as well as about 10 feet forward and back. Change your background when possible; this may eliminate objects behind you that a signal can bounce off.**
 - **The place where 2 or more signals CROSS is your dog's location.** Usually any false direction will disappear and two or more directions will agree. This is the true direction of your animal. This process is called TRIANGULATION.
5. **To fold antenna elements under receiver for storage**, look at receiver face. Close the two **back** wings under the receiver **first**. **Then** fold the two **front** wings under the antenna. Separate the two handle bars and press them to receiver bottom. Your receiver/antenna is ready to be placed in its case.
 6. For maximum signal range and most sensitive direction you may need to **switch to the 3-element directional antenna that gives longer signal range**. If so, proceed as follows:
 - Detach the cover bracket at receiver's back by removing the black thumb screws that hold the black cover bracket to receiver. **SAVE THEM!**
 - Pull this cover bracket off.

IMPORTANT: BEFORE you separate the antenna from receiver bottom, detach the cable with BNC connector assembly from receiver back. This prevents the cable from getting pulled and harmed.

 - To detach the MINI 2's short black cable assembly from back, press the right angle BNC connector **IN toward the receiver** and turn **RIGHT**.
 - Pull the BNC cable assembly from the receiver antenna jack. The receiver may now be used with a standard 3-element directional antenna. Just plug in the 3-element antenna cable's connector at the same spot. Push the cable's BNC connector **IN** and turn **Right**.
 7. **To remove antenna from a small receiver bottom**, make sure the antenna has been folded beneath the receiver. Position one **side** of receiver against you. On other side, place 4 fingers of each hand between receiver and antenna. Interlock your fingers, grasp and pull (hard) receiver from antenna. The Dual Lock material snaps as separation occurs.

DESCRIPTION:

- ❑ Folding elements are made of black copper-clad fiberglass. Each element's dimensions: 7.0-inch length, .75-inch width, and 0.062-inch thickness.
- ❑ A folding velcroed handle projects 3.5 inches below the antenna when opened. When collapsed, the handle separates into two parts, which lie flat against the receiver bottom for storage.
- ❑ The antenna mounted to a Wildlife Materials receiver and folded under the receiver adds 0.5-inch thickness.
- ❑ Snap-together material (3M Dual Lock) allows easy mounting of the antenna to the receiver. The antenna can be attached to or separated from the receiver in a few seconds.

- ❑ A cover bracket at the back of the receiver protects the antenna connector and cable. The cover bracket can be removed by means of four thumbscrews.

- ❑ The antenna's design is based on the continuous loading principle.

TECHNICAL SPECIFICATIONS:

GAIN -- 3 dB (gives 10-15% less range than the 3 element Yagi antenna)

DIRECTIVITY -- Front to back and front to side ratio 12 dB or better

INPUT IMPEDANCE -- 50 ohms nominal

BAND WIDTH -- good direction for 3 MHz, so one antenna can be used for 216-219 frequencies or 219-222 frequencies. Standing Wave Ratio is less than 1.5 for bandwidth.

ADAPTABILITY -- Attaches to bottom of TRX-3S, TRX-10S, TRX-16S and TRX-48S Receivers

IMPORTANT NOTE on SMALL ANTENNAS

All antennas occasionally exhibit "signal bounce." This phenomenon occurs when the transmitter signal being received arrives at your antenna by more than one path. A direct signal path is usually blocked by a hill, mountain or thick wet woods.

A second signal path may arrive at your antenna via a reflection off another hill, rock outcropping, tree or valley. This second path sometimes gives a stronger signal than the direct path. This causes a faulty direction when any antenna is used, but this "signal bounce" effect is even more noticeable with a miniature antenna. There may be places where the antenna even gives a stronger signal off its back than its front.

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34 Years Manufacturing Experience