Wildlife Materials International, Inc.

# The MINI 2 Element ANTENNA with BIG WMI or OTHER brand receivers

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 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 other brands of 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 manufacturers receiver**. In this last instance, \$5.00 extra will be charged for the needed connective assembly and 4 foot cable.

#### **DESCRIPTION:**

- Folding elements are made of black copper-clad fiberglass. Each element's dimensions: 7.0inch length, .75-inch width, and 0.062-inch thickness.
- A folding Velcro handle projects 3.5 inches below the antenna when opened. When collapsed, the handle separates into two parts, which lie flat against the antenna bottom for storage.
- □ 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

#### DIRECTIONS for USE:

- 1. **Attach** antenna to receiver by grasping the end of the antenna cable. The cable's BNC connector should be pressed into the Receiver's antenna jack. Push IN and turn RIGHT.
- 2. **Unfold the antenna handle**. Find it by looking under folded antenna. Lift the two center bars that are velcroed and hinged. Press the two center bars together so velcro connects for a handle.
- 3. **Open** antenna elements: pull wings out to 90 degrees on each side.
- 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.
  - a. 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

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.

- b. Rotate your wrist so that the antenna elements are moved from horizontal position to vertical and back. You may get better signal direction from one position. Remember that signal reception can vary from day to day, depending on weather, terrain, time of year.
- c. 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).
- d. **Take SEVERAL readings.** Move about 10 feet to each side, as well as 10 feet forward and back. **Change your background** when possible; eliminate objects behind you that a signal can bounce off.
- e. 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.
- 5. **After use,** fold antenna elements for storage. Then separate the two handle bars and press them down to the antenna base. Your antenna is ready to be placed in its case.
- 6. For maximum signal reception and most sensitive direction you may need to switch to the 3 element directional antenna that gives longer signal range. Just remove the MINI 2 Antenna's cable from the receiver jack, and attach the 3 element antenna's BNC connector.

### 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