

# TEKIN<sup>TM</sup>

## ELECTRONICS, INC.

### TEKIN TER AM MICRO RECEIVER

World's smallest, lightest 2 channel receiver designed specifically for electric powered model cars. Designed to reject speed control interference.

Super low operating voltage, 2.2 volts, to extend running time. Also operates at up to 7.2 volts.

Narrow band ceramic filter design with 4 stages of I.F. Reduces glitches from adjacent transmitters.

Designed for electric powered cars only. Very high sensitivity for excellent range.

1.17" x .50". Weight .45 ounce. Less than 1/2 size and weight of others.

### OPERATING FREQUENCIES

The Tekin TER receiver is available on the following standard non-flying model frequencies. Colors and channels shown are those established for identification.

27 MHz			75 MHz		
Channel	Frequency	Color	Channel	Frequency	Color
1	26.995	Brown	62	75.430	Blue/Red
2	27.045	Red	64	75.470	Blue/Yellow
3	27.095	Orange	66	75.510	Blue/Blue
4	27.145	Yellow	68	75.550	Blue/Gray
5	27.195	Green	70	75.590	Purple/Black
6	27.255	Blue	72	75.630	Purple/Red
			74	75.670	Purple/Yellow
			76	75.710	Purple/Blue
			78	75.750	Purple/Gray
			80	75.790	Gray/Black
			82	75.830	Gray/Red
			84	75.870	Gray/Yellow
			86	75.910	Gray/Blue
			88	75.950	Gray/Gray
			90	75.990	White/Black

For use outside of the United States, the Tekin TER is also available on 29 and 40 MHz.

### GENERAL INSTRUCTIONS

The antenna wire should be positioned to point straight up into the air, preferably with a plastic tube or fiberglass rod. (If using a fiberglass rod, however, do not coil the wire around the fiberglass, but run it straight up the side.) It must also be fully extended, with any excess allowed to hang over the tube or rod end. Do not fold the antenna wire back over itself.

DO NOT ALTER THE LENGTH OF THE ANTENNA WIRE, it must remain 14.5 inches long. Any change in its length will de-tune the receiver.

The antenna wire must be electrically isolated from any metal or graphite component. It must also be kept off the chassis, especially aluminum. (If needed, elevate the receiver with a 1/4 inch spacer.)

Keep the antenna mounted away from the speed control or motor.

Mount the receiver so that it is at least two inches, but preferably seven, away from the speed control and/or motor. (On Associated's RC-10, a good place is on the shock tower.)

This receiver will work with any AM transmitter, however it is designed to use the same type receiver crystals as the connector type supplied; i.e., if the receiver has Futaba plugs, use Futaba crystals, etc. If needed, you may change the servo/receiver plugs so they may be used with any servo or speed control. (See servo/receiver plug installation instructions, figure 1.)

Receiver crystals may be inserted in either direction. A piece of tape may be used to secure them in place.

Do not let the receiver get wet. Do not spray anything inside it. Do not attempt to retune it.

Channel 1 (S) is "steering", Channel 2 (T) is "throttle", and (B) is "battery". The (B) or battery plug must only have two wires on it, a positive and a negative, usually red and black. CUT THE THIRD WIRE OFF or the receiver may be damaged. If you are using an electronic speed control, the (B) or battery plug is not used. If you are using an electronic speed control with a separate receiver battery, remove the red wire from the speed control plug or the speed control or receiver could be damaged.

To reduce "glitches" and extend running time, a receiver power cell (TEKIN® part #PC1200) may be plugged into the battery slot.

This receiver is designed for standard 50KHZ channel spacing on 27, 29 and 40MHZ; and 40 KHZ channel spacing on 72 and 75MHZ. Do not use "split" or "in-between" crystals. Other people using "split" frequencies close to yours can cause problems.

### WARRANTY

Tekin Electronics Inc. guarantees this product to be free from factory defects in materials and workmanship and to perform to factory specifications for a period of 120 days from date of purchase, verified by sales receipt. This warranty does not cover: suitability for specific application; components worn by use; application of reverse or otherwise improper voltage; tampering; misuse; shipping, or damages or loss resulting from the use of this product. In no case shall our liability exceed the original cost of the product. We reserve the right to modify the provisions of this warranty at any time without notice. Thank you and good racing.

By act of using this product the user assumes all resulting liability.

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**NOTE:** There are two versions of the Tekin TERX receiver: an Airtronics and a Futaba model. They are not interchangeable. Be sure you are using the correct version or you will damage your receiver, speed control and servo.

#### RECEIVER PLUG INSTALLATION FOR TERX-A "AIRTRONICS" MODEL

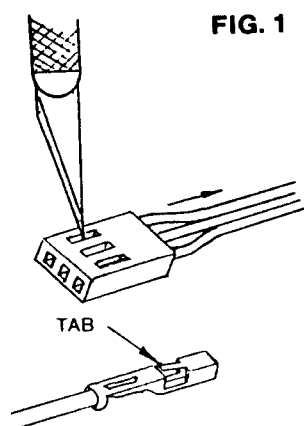
A) Refer to figure 3, plug into receiver, slots in plugs should face crystal. **NOTE:** The case is keyed to accept "Airtronics" type plugs. Do not force plug and be sure it is aligned with the keyed slots. Do not try to use a different plug or you may damage your receiver, ESC, or Servo. The case is marked "AIR" by the connector slot.

B) On 75 MHz you must use an "Airtronics" type receiver crystal. On 27 MHz, use any 27 MHz receiver crystal.

#### RECEIVER PLUG INSTALLATION FOR TERX-J "FUTABA J" MODEL

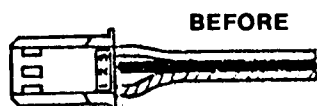
The Tekin TERX-J may be used with a variety of plugs, it will accept Futaba J plugs as is. To use other types of plugs refer to the following. Failure to follow these instructions may result in damaging the internal components of the receiver and void the warranty. The speed control plugs into the "T" (throttle) slot, the steering servo plugs into the "S" (steering) slot and battery (if used) into the "B" (battery) slot. Cut the third wire off if using the battery plug.

**NOTE:** When adapting plugs as outlined below, be sure to change the servo, speed control, and if used, battery plugs, otherwise you will damage your receiver, servo and speed control. The case is marked "FUT" by the connector slot.

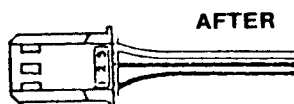


**FIG. 1**

**K.O.**



**BEFORE**



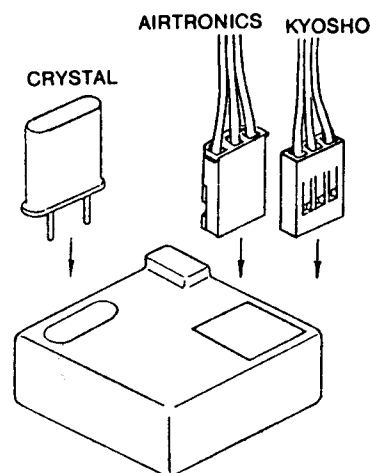
**AFTER**

3 - Control Signal - Blue  
2 - Battery Negative - Black  
1 - Battery Positive - Red

3 - Battery Negative - Black  
2 - Battery Positive - Red  
1 - Control Signal - Blue

**FIG.2**

**PLUG INSTALLATION FIG. 3**



#### **K.O. - Refer to Figures 1 and 2**

- Use only "Futaba J" type receiver, not Airtronics.
- Remove wires 1, 2 and 3 (figure 2) by gently depressing connector tab through slot with the tip of your x-acto knife while carefully pulling on the wire (figure 1).
- Re-spring the tabs of the crimped on connectors by gently bending up as shown in figure 1; use your x-acto knife.
- Replace black wire into slot No. 3, red into slot No. 2 and blue into slot No. 1
- Plug into receiver (figure 3) being sure that the slots in the plug face towards crystal.

#### **KYOSHO - Refer to Figure 3**

- Use on "Futaba J" type receivers only.
- The slots in plugs face away from the crystal (figure 3).

#### **FUTABA - G**

- Splice on a Futaba "J" connector as follows: Red to red, black to black, and white to white. Solder and insulate.
- Use "Futaba G" to "J" adaptors, available from your hobby dealer.