This latest release from Robart incorporates features from our first generation control box.

- Proprietary plug design to ensure proper connections and eliminate damage caused from not using the control box.
- Status light clearly defines the condition of the system.
- 2-wire design, allowing for the easy change of retract direction.

Easy to follow instructions make the installation of our Electric Series Retracts very simple, however, please read the following safety / installation tips:

- There are many pinch-points on retracts.
 Keep all body parts away from these as injury could occur.
- Make sure that all electric connections are tight. Loose connections can cause the retracts to be nonfunctional or erratic.
- Make sure batteries are fully charged and are of the proper voltage.

Thank You

We are pleased to have you join the Robart team with your purchase of these high-quality Electric Series Retracts.

We are confident that you will find The dependability, versatility and convenience of our Electric Series to be unmatched in the industry.

Warranty:

One year parts, six months labor covering manufacturing defects. Warranty void if EZ RETRAX Controller box or actuators are opened or modified.

Locking Extensions:

Available From Robart in 12", 24", & 36"

#177E12	12" Locking Extension (Pair)
#177E12S	12" Locking Extension (Single)
#177E24	24" Locking Extension (Pair)
#177E24S	24" Locking Extension (Single)
#177E36	36" Locking Extension (Pair)
#177E36S	36" Locking Extension (Single)



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Robart Electric Retract Series EZ RETRAX

Instruction Manual

(Please Read Carefully Before Operating)



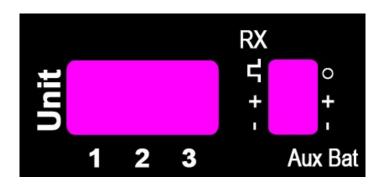
Installation Instructions:

- 1. Read the Warning & Precautions sheet thoroughly.
- 2. Install the retracts (Do not modify retracts).
- 3. See below to setup the Electric EZ RETRAX Control Unit.
- 4. Run actuator leads from each retract to the Control Unit and plug each lead into the appropriate retract circuit.

 Retracts use a special 2-Pin locking plug and require matching extensions available through Robart. This prevents accidentally plugging the retract directly into the receiver which will destroy the actuator.
- 5. Match the retract switch on your transmitter to the actual position of the gear.
- 6. Turn on your transmitter. Then turn on the airplane. Cycle the gear. You may have to reverse the gear channel in your transmitter or reverse the actuator lead connection. If your radio is capable, set retract channel endpoints at 100% for down and 100% for up.
- 7. In some installations, one retract may work opposite of the other mechanisms. In this case, flip the orientation of the actuator plug in the retract control board.
- 8. Power off when not in use.

Control Unit Setup:

- 1. The Control Unit has three actuator circuits, UNIT 1-3.
- 3. Position the Control Unit near your receiver and secure with a foam pad and Silicone tape (Available from Robart).
- 4. Plug the provided receiver lead (male/male) from the gear channel on your receiver to the RX port on the Control Unit. Using a heavy-duty servo extension is acceptable.
- 5. Optional Install an auxiliary battery in the airplane and plug into the AUX BAT port via a charging switch. An AUX BAT is recommended on larger gear to make use of a higher voltage than most receivers can accept. (See using an auxiliary battery instructions)
- 6. With proper connections made and powered on, a green status light will appear on the face of the controller.



EZ RETRAX Controller

Amp-Out Circuitry:

The Robart Electric Series uses "Amp- Out" circuitry to sense the up/down travel limits or an obstruction such as a gear door. When the amp draw reaches a pre-programmed level, it completely shuts off the motor. Therefore, if a retract "hangs up" it will not drain the battery. If the retract amps out on an obstruction, simply use the transmitter gear switch to reverse the gear away from the obstruction.

Using an Auxiliary Battery:

The Robart Electric Series can be run off the receiver battery or an auxiliary battery. To use an auxiliary battery, remove the jumper (Save for future use) in the AUX BAT port and plug in the battery via a charging switch. Take care to maintain proper polarity when plugging in all leads. The speed of the retracts is voltage dependent. If you want to increase the travel speed, use a higher voltage battery. A voltage regulator set for 9 volts (#177VR-9) is available from Robart to allow the use of 3 cell LiPo or 3 cell LiFe batteries

Acceptable battery range of 4.8V-9.0V

Status Lights:

System Ready

There will be a steady green light illuminated when the control box is ready to operate. This means the receiver is connected and powered on, the AUX BAT is connected properly or jumper is in the proper position, and the system voltage is within specified range.

System Not Ready

A flashing green light indicates that the RX, AUX BAT, or jumper is inserted incorrectly.