



Westhold
Corporation.

**Activated Transponder &
Activator
Instruction Manual**

Westhold Corporation General Warranty

Modules and other equipment ("Goods") purchased from Westhold Corporation are warranted against defects in materials and workmanship under normal use for a period of three years from the date of purchase. In the event of product failure due to defects in materials or workmanship, the customer may return the defective product to Westhold Corporation for repair or replacement. The customer is responsible for all shipping charges associated with shipping the Goods back to Westhold Corporation. Westhold Corporation pays shipping charges associated with the return of Goods back to the customer. As Westhold Corporation will not be responsible for damages incurred during any incoming shipment, it is recommended that the customer insure their shipment through their carrier.

Westhold Corporation shall, at its sole option, repair or replace the Goods. Repair or replacement of Goods is Westhold Corporation's sole obligation and the customer's exclusive remedy for all claims of defects. If that remedy is adjudicated insufficient, Westhold Corporation shall refund the customer's paid price for the Goods and have no other liability to the customer.

Westhold Corporation's software, if included with Goods, is sold as is, and this warranty is inapplicable to such software.

This warranty does not cover and Westhold Corporation will not be liable for, any damage or failure caused by misuse, abuse, acts of God, accidents, electrical irregularity, or other causes beyond Westhold Corporation's control, or claim by other than the original purchaser. This warranty is void if Westhold Corporation, in its sole discretion, determines that there has been any:

1. Tampering, signs of tampering, alteration, modification, or other indications or abuse.
2. Application of power outside of the voltage level and polarity specified in the data sheet or user's manual.
3. Repair or attempt to repair by anyone other than a Westhold Corporation authorized technician.

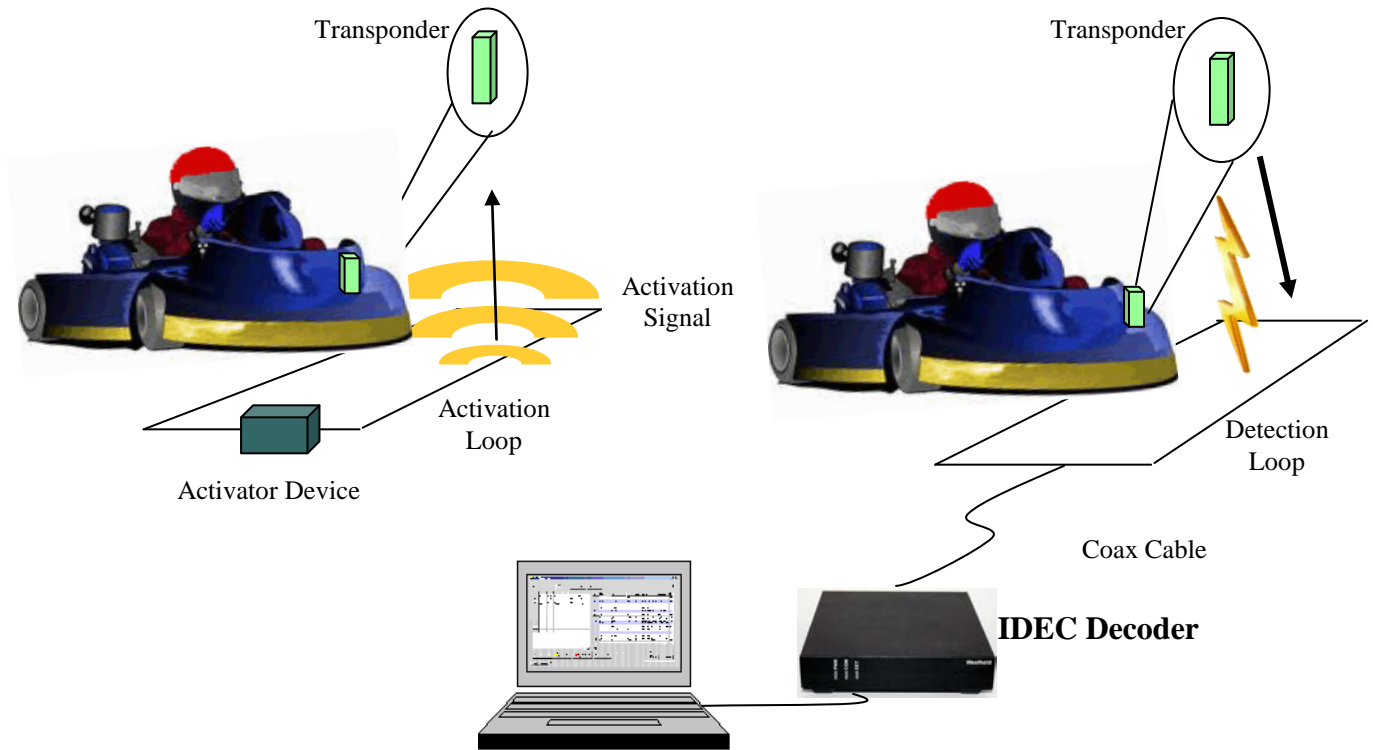
This is our entire warranty and is given in lieu of all other possible warranties either expressed or implied, including warranties of merchantability and of fitness for a particular purpose. By accepting delivery of the Goods, Purchaser/User waives all other possible warranties, except those specifically given.

IN NO EVENT SHALL WESTHOLD CORPORATION BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES ARISING OUT OF OR RELATING IN ANY WAY TO ANY DEFECT IN OR FAILURE OF OR INABILITY TO USE THE GOODS, INCLUDING BUT NOT LIMITED TO, CLAIMS BASED UPON LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS, REVENUE OR SAVINGS, LOST GOODWILL, ENVIRONMENTAL DAMAGE, INCREASED EXPENSES OF OPERATION, COST OF REPLACEMENT GOODS, OR CLAIMS OF THE CUSTOMER OR CUSTOMER'S CUSTOMERS, WHETHER OR NOT BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHERWISE. WESTHOLD CORPORATION'S MAXIMUM LIABILITY UNDER THIS WARRANTY SHALL NOT EXCEED THE PAID PRICE FOR THE GOODS UPON WHICH SUCH LIABILITY IS BASED AND ALL SUCH LIABILITY SHALL TERMINATE NO LATER THAN ONE YEAR FROM THE DATE OF DELIVERY OF THE GOODS.

Note: Westhold Corporation's Goods are sold for resale or for commercial purposes, and are thus not covered under the Magnuson-Moss Warranty Act.

1. Introduction

The activator device is intended only for activated transponders. The transponders turn on when they hear the appropriate activation signal generated by an activator device. Once the transponder turns on it will stay on for approximately 1 hour. If it does not hear the activation signal again within the hour it will turn off automatically. If the transponder does hear the activation signal again, it will reset its internal timer.



2. Installation and Usage

2.0 General Notes

The first step of installation is to carefully plan where each piece of the activator device will reside. The plan must take into account the limitations of the system. Some of these limitations are fixed. Others are variable and dependent upon the track environment.

2.1 Activator Device Installation

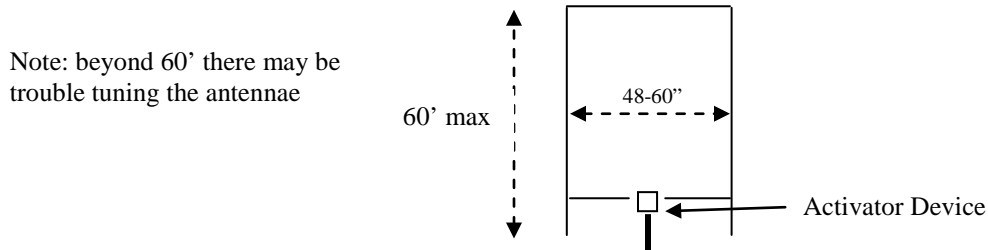
After establishing the best location for the activator device and activator loop, create a loop that will eventually be inputted into the activator device. The activator loop is simply insulated copper wire. The wire should be no shorter than 10' and no longer than 120' total, otherwise the activator may fail to tune properly. Each end of the wire should

be either soldered to, or firmly attached to a banana plug (provided). Any gauge will work, as long as the wire fits inside the barrel of the banana plug, and as long as the sleeve can still be tightly secured.



Note that the activation loop can be overhead or even to the side of the transponder. You may choose to place the activation loop at a spot before the vehicles get on the track if it is known the races will not last longer than the activation time (approx. 1 hour for standard version, 2.5 hours for the extended version), or you may decide to put the activator loop on the track, instead of at the track entrance (or pre-grid). In either case, be sure the activation loop is at least 10' away from the detection loop.

The activator loop should be buried beneath the surface of the track and should be approx. 36- 60" wide. The loop can be of varying length to cover the width of the track. See the figure below. The overall size of the loop will depend on the track type (dirt versus paved) and the track environment (iron content in the soil or RF interference). It is not desirable to make the loop any longer than necessary since it will reduce the performance of the system.



To install the activator loop, cut a groove approximately ¼ inch (6-8 mm) wide and ½ inch (12-13 mm) deep in the track with the dimensions shown below. For dirt tracks, place the activator loops in plastic PVC sprinkler pipes. Make sure the pipes are sealed such that water will not enter the pipes. Once the loop has been created and installed, the banana plugs at the ends of the loop should be inserted into the loop inputs on the activator device.

NOTE: Keep the power connectors and the banana plugs away from water. While the activator device itself is water resistant, the power connector and the loop connectors should not be exposed to water, as there is a potential danger of electrical shock or shortage.

2.2 Activator Device Operation

The Activator device has 3 LED indicators, one to indicate power and two activator loop lights. Once power is supplied to the device with the 12V power supply provided, the loop lights will blink a series of red, yellow and green for approx. 15 seconds while the device is tuning. Once it has gone through this sequence, the lights will remain either solid red or solid green. The activator will display two solid green loop lights to indicate the loop is intact and ready to activate all transponders within range. The activator will display two solid red lights when either the loop is too short (approx. less than 10'), or the loop is not making good connection due to a possible break in the wire.



When a transponder is near an activator loop (approx. 5'-10') it will flash rapidly. This indicates the transponder has been activated, and is ready for use. In standard operating mode, the transponder will blink once/second.

