

## LIMITED WARRANTY

THIS MODEL E-04 EMERGENCY LOCATOR TRANSMITTER IS GUARANTEED BY ACK TECHNOLOGIES, INC. AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF TWO YEARS FROM THE INSTALLATION DATE OR TWO YEARS THREE MONTHS FROM THE DATE IT WAS MANUFACTURED WHICHEVER OCCURS FIRST. ACTIVATE YOUR WARRANTY BY REGISTERING ON LINE AT OUR WEBSITE [WWW.ACKAVIONICS.COM](http://WWW.ACKAVIONICS.COM) THIS WARRANTY IS LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE E-04 ELT AND ASSOCIATED PARTS WHICH WERE MANUFACTURED BY ACK TECHNOLOGIES, INC. THE DEFECTIVE PARTS MUST BE RETURNED FREIGHT PREPAID TO OUR MANUFACTURING FACILITY. THIS WARRANTY DOES NOT INCLUDE REPAIR OR REPLACEMENT OF ANY PART THAT HAS BEEN IMPROPERLY USED, INSTALLED OR PHYSICALLY DAMAGED. THIS WARRANTY DOES NOT COVER ANY DAMAGE CAUSED BY CHEMICAL EXPOSURE TO THE ELT. DISCHARGE OF THE LITHIUM BATTERY IS NOT COVERED BY THIS OR ANY OTHER WARRANTY. EXCEPT AS PROVIDED HEREIN ACK TECHNOLOGIES, INC. MAKES NO EXPRESS WARRANTIES, AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN ITS DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES SET FORTH HEREIN. ACK TECHNOLOGIES, INC. SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR MISUSE OF THIS PRODUCT. EXCEPT AS PROVIDED HEREIN NO EMPLOYEE, AGENT, DEALER, OR OTHER PERSON IS AUTHORIZED TO GIVE ANY WARRANTIES OF ANY NATURE ON BEHALF OF ACK TECHNOLOGIES, INC.

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# ACK TECHNOLOGIES INC.

## MODEL E-04 ELT INSTALLATION MANUAL OPERATION MANUAL

**IMPORTANT** VISIT OUR WEBSITE [WWW.ACKAVIONICS.COM](http://WWW.ACKAVIONICS.COM) FOR THE LATEST SERVICE BULLETINS AND INSTALLATION INFORMATION BEFORE STARTING THE INSTALLATION.

THE CONDITIONS AND TESTS REQUIRED FOR TSO APPROVAL OF THIS ARTICLE ARE MINIMUM PERFORMANCE STANDARDS. IT IS THE RESPONSIBILITY OF THOSE DESIRING TO INSTALL THIS ARTICLE ON A SPECIFIC TYPE OR CLASS OF AIRCRAFT TO DETERMINE THAT THE AIRCRAFT INSTALLATION CONDITIONS ARE WITHIN THE TSO STANDARDS. THE ARTICLE MAY BE INSTALLED ONLY IF FURTHER EVALUATION BY THE APPLICANT DOCUMENTS AN ACCEPTABLE INSTALLATION AND IT IS APPROVED BY THE ADMINISTRATOR.

### APPROVALS

FAA /TRANSPORT CANADA

TSO C-126b  
TSO C-142a  
TSO C-91a

EASA

ETSO 2C126  
ETSO 2C91a  
ETSO C142a

COSPAS/SARSAT  
T.007

INDUSTRY CANADA  
1863A-E04AF

Brazil ANAC  
ANTEL



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UNITED STATES  
<https://beaconregistration.noaa.gov/rgdb/>  
 CANADA  
[www.canadianbeaconregistry.forces.gc.ca](http://www.canadianbeaconregistry.forces.gc.ca)

4.) For other countries contact the COSPAS/SARSAT regulating body for registration instructions. If allowed by your regulating country you may register at the COSPAS/SARSAT website.

INTERNATIONAL  
[www.406registration.com](http://www.406registration.com)

5.) When filling out the registration the hex code identifier may also be found on the front right side of the ELT. (Fig 15)

6.) **YOU MUST UPDATE YOUR BEACON REGISTRATION** every two years, and any time the beacon is used in a different aircraft.



FIGURE 15

BEACON REGISTRATION LABEL LABEL ON RIGHT FRONT OF ELT

HEX CODE Note: No letter "O" used in Hex codes, just zeros'

## SECTION 9 OPERATION AND SELF TEST

THERE ARE THREE MODES THAT THE ELT MAY BE ACTIVATED:

- 1.) The ELT automatically activates when in the "armed" position, and a crash level deceleration force is applied to the ELT, in the forward direction as indicated by the arrow on the top of the battery pack.
- 2.) The ELT also may be activated by pressing the "On" button on the cockpit remote control (RCPI). (Page 11 Fig. 16)
- 3.) A third method of activating the ELT, is by means of placing the main on-off-armed switch, on the front of the ELT in the "On" position. (Page 11 Fig. 17)

The red rubber cover, covering the main switch on the ELT **SHOULD BE LEFT OFF AT ALL TIMES, EXCEPT WHEN THE ELT IS IN THE ARMED POSITION.** The cover has a center cone, that projects down into the switch recess, and provides for positive retention of the switch in the armed position.

There are two modes in which the ELT may be deactivated.

- 1.) Pressing the "Reset" button on the remote control (RCPI). (Page 11 Fig. 16)
- 2.) Placing the main switch on the ELT in the "Off" position. (Page 11 Fig. 17)

When the ELT is activated, and transmitting the 406 Mhz distress signal. The cockpit remote will flash, and the audio alert indicator will emit a series of 9 beeps, approximately every 50 seconds to alert the crew that the ELT is operating. If there is no emergency, reset the ELT using the "Reset" button on the remote, (Page 11 Fig. 16) and immediately notify the appropriate search and rescue operations office, or ATC of the false activation.

### SELF TESTS:

The ELT is capable of performing a self test to verify that major ELT systems are functioning properly.

During the self test, the ELT transmits on 121.5 MHz for 1 second, (3 audio sweeps) then transmits a 406 MHz test burst for 550ms, then returns to the armed mode.

There are two modes in which a self test can be initiated:

- 1.) When the ELT is in the "Armed" position, pressing the "Reset/Test" switch on the cockpit remote control (RCPI) initiates a self test. (Page 11 Fig. 16)

2.) When the main switch of the ELT is moved from the "Off" position to the "Armed" position, it does a self test. This mode is primarily designed to provide a method to bench test the ELT, with the remote control disconnected. (Fig. 17)

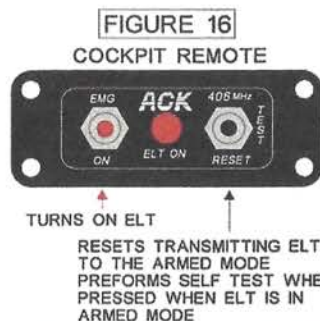


FIGURE 16

COCKPIT REMOTE

TURNS ON ELT  
 RESETS TRANSMITTING ELT TO THE ARMED MODE PERFORMS SELF TEST WHEN PRESSED WHEN ELT IS IN ARMED MODE

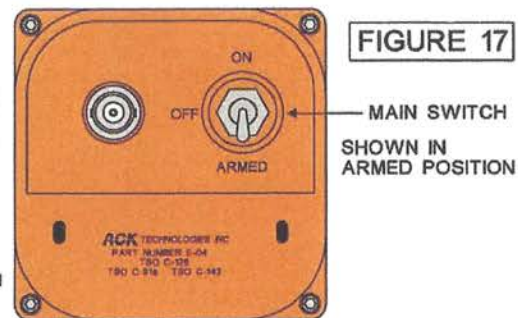


FIGURE 17

MAIN SWITCH SHOWN IN ARMED POSITION

**YOU MUST PERFORM A SELF TEST EVERY THREE MONTHS** to verify the ELT is functioning properly.

To perform the self test, make sure **THE AIRCRAFT MASTER SWITCH IS OFF AND THERE IS NO POWER APPLIED TO THE ELT THROUGH THE GPS INTERFACE.** Tune an aircraft radio to 121.5 MHz, and turn the squelch all the way off to listen for the modulated carrier. With the ELT main switch in the "Armed" position, and not operating, press the "Reset/Test" button on the cockpit remote control (RCPI) once. You will hear one second of 121.5 audio on the radio, followed by either one beep from the audio alert indicator, or one beep followed by a two second delay, and a second beep if all systems are functioning properly. The light will also flash on the remote. (The flashes are random and have no meaning) System OK codes: One Beep or One Beep followed by a second beep two seconds later.

A series of 2 - 5 fast beeps, a 2 second delay, and the beep series repeating again indicates there is a self test function that has returned a trouble condition. The ELT will not be disabled, but it should be inspected by a qualified avionics facility as soon as possible. The trouble code returns a series of beeps with a two second delay, and then the trouble code is repeated one more time. The first beeps alert you that there is a trouble condition. The two second delay is to allow you to be ready to count the second set of beeps.

Trouble code sequence: 2-5 beeps — two second delay — 2-5 beeps

### TROUBLE CODES:

2 BEEPS → BATTERY LOW

3 BEEPS → LOW RF POWER

4 BEEPS → FREQUENCY NOT LOCKED

5 BEEPS → HIGH VSWR OR HIGH CURRENT

## SECTION 10 PERIODIC MAINTENANCE/CONTINUING AIRWORTHINESS

THE FOLLOWING TEST MUST BE PERFORMED EVERY THREE CALENDAR MONTHS.  
 ELT SELF TEST FUNCTION AS DESCRIBED IN SECTION 9 OF THIS MANUAL.

THE FOLLOWING TESTS MUST BE PERFORMED A MINIMUM OF EVERY TWELVE CALENDAR MONTHS, TO ASSURE THE CONTINUING AIRWORTHINESS OF THE ELT.

- 1.) Inspect the ELT transmitter and mounting tray to insure all fasteners, and mechanical assemblies are secure.
- 2.) Inspect the coaxial cable connecting the ELT transmitter to the antenna for cuts or abrasions on its outer jacket. Disconnect the BNC connector at each end. Examine both BNC connectors and the mating plug on the ELT transmitter, and antenna base for any signs of corrosion.
- 3.) Inspect the modular cable connecting the ELT to the RCPI unit for signs of wear or abrasion on it's outer jacket. Remove the modular plug connecting the ELT transmitter