



AMERI-KING CORP.

406 MHZ ELT EMERGENCY LOCATOR TRANSMITTER
WITH GPS/NAV POSITION,
(406 / 243.0 / 121.5) MHZ, MODEL AK-451- () SERIES



PORTABLE HAND USE

Garmin GNC 300XL TSO
BendixKing KLN 90B

GENERAL AVIATION

Garmin GPS 400W
BendixKing KLN 94

BUSINESS JET AIRCRAFT

Garmin GPS 500W
BendixKing KLN 900

TRANSPORT AIRCRAFT

Garmin GNS 530W

WORLD'S LEADING PRODUCER OF ELT AND MULTI AXES ELT

DESCRIPTION

The Ameri-King AK-451-() Series is a FAA TSO'd approved, JAA JTSA'd approved, 406 MHz ELT Emergency Locator Transmitter, Types (AF) Automatic Fixed, (AP) Automatic Portable, (S) Survival. It transmits aircraft GPS/NAV position data, immediately and accurately, on triple (406 Satellite /243 Military /121.5 Civilian) MHz frequencies.

The supreme advantage feature is the aircraft GPS/NAV Latitude / Longitude exact position shall be transmitted, within 1 minute, on the very first burst, without waiting for a Polar Orbiting Satellite (could be up to 4 hours). Enhance the accuracy significantly, for the ground search area, from 1-2 kilometers (non GPS/ NAV Position) to 22 meters typical (with GPS/NAV Position).

Having triple frequencies insures your distress message reaches both NOAA Satellite Operation and US Air Force AFSR Ground Operation, Search and Rescue Team, with 100% fully confidence, due to transmitting on both 243.0 MHz Military and 121.5 MHz Civilian bands, for immediate ground search dispatch, narrowing the searching time to almost nothing.

The choice is clear, when it come to Safety, Fast, Accuracy, Reliability, Price and Product Support, Ameri-King's AK-451-() Series is your best choice.

FEATURES

- Applicable to all Aircraft types: Transport Aircraft; Business Jet Aircraft; General Aviation, Helicopters.
- **Dual Antenna:** Blade Type (1.0 Mach) or Rod Type (350 Knots) or Whip Type (300 Knots) and Portable Hand Use.
- Ultra Long Lasting, **up to 78 hours @-20 deg C, @ End of 5 yrs useful life time.** Lithium Battery Package, Li MnO2 or Li SO2, 4 D-Size Cells.
- Reliable sealed G Switch, for dependable safety.
- Optional Multi Axes (5 Axes) G Switch for Helicopters
- Simple Installation. All accessories include Pre-fabricated Wiring Harness Assy, Remote Control Panel, Audible Warn Horn, Coaxial Cable Assy, and Universal Mounting Tray.
- Interface with aircraft GPS/NAV, via RS-232 Aviation Protocol: Garmin Int'l Inc , Honeywell Bendix King Inc. , Trimble Nav Inc.; Arnav Inc., Il Morrow Inc.
- Coding Programming Worldwide, all available ELT Protocols, i.e. Long Messages and Short Messages (Location Protocol; User Location Protocol; User Protocol)
- Self Test built-in. OXCO tech for perfect grad temp stability
- PERP: 5W (406.028 MHz) 50 mw (243.0/121.5) MHz
- RTCA Env Categories: F1XBA[204/183][204/183]XR [204/183]XXSZXXX(AC)204/183](BC)XXXX(C/204)
- Patent Pending. **Made in U.S.A.**



SPECIFICATIONS FOR MODEL AK-451

APPROVALS: FAA TSO C126 / C91a / C142 ELT
Emergency Locator Transmitter, type(AF)(AP)(S)
COSPAS SARSAT

PHYSICAL CHARACTERISTICS:

*Size and Weight:

Main unit: (4.27"Wx2.95"Hx5.64"L) 1lb 14 oz
Remote unit: (2.17"Wx1.20"Hx1.18"L) 1.0 oz
Blade/ Rod/ Whip antenna: (9"/ 18.5"/ 24" L) 1.4/ 0.5/ 0.25 Lbs
Portable antenna: (17"L) 4 oz
Coax Cable Assy: (6 ft) 5 oz
Aural Monitor: (0.7"Dia x 1"D) 0.3 oz
Mounting tray: (4.51"W x 0.75"H x 5.87"L) 4.0 oz

*Case and color:

High impact, fire resistant, waterproof, high temperature ABS plastic, safety international orange color.

GENERAL SPECIFICATIONS (STANDARD CONDITIONS):

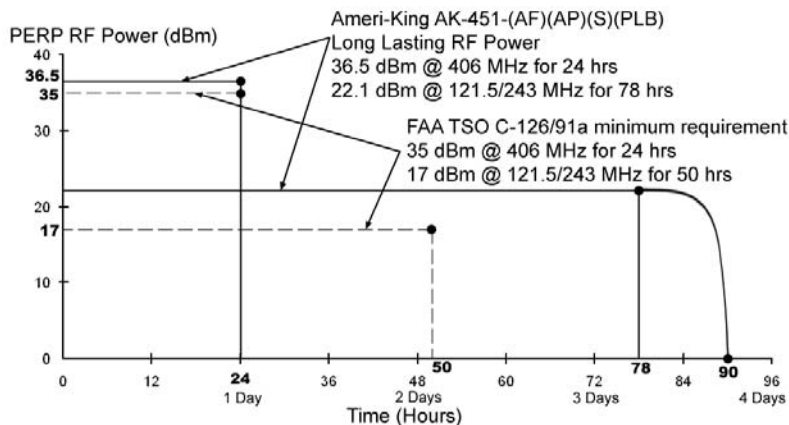
Operating frequencies: 406.028 +/- 0.001 MHz
243.0/ 121.5 MHz +/- 0.0025%

Transmitter Power Output:

5 W +/- 2 db @ 406 MHz, for 24 Hrs
22 +/-2 dBm @ 243 and 121.5 MHz, for 78 Hrs

Self Test: built-in with Failure detection flashing code number for Diagnostic Maintenance check: RF Output Power & Frequencies, Battery Low Voltage, ELT shuts down etc... .

OPERATING LIFE, 78 HRS @ -20 deg C @ End of 5 years Battery Life (TYP):



TYPICAL LIFE TEST @ -20 DEGREES C @ END OF 5-YEAR BATTERY LIFE

ENVIRONMENTAL TEST SPECIFICATIONS:

- * RTCA DO – 204A / 183 / 227
- * RTCA DO – 160E ENV.CAT F1XBA[204/183][204/183]XR[204/183]XXSZXXX(AC)204/183](BC)XXXX(C/204)
- * **TEMP. AND ALTITUDE:** Category F1
Low / High Temperature: -20 / +55 deg C (Operating)
-55 / +85 deg C (Storage)
Altitude: 55,000 feet
- * **AUTOMATIC CRASH ACTIVATION:**
Velocity change of 2.3 +/- 0.3G (4.5 +/- 0.5 fps)
- * **CRASHWORTHINESS:** 100G, 23 ms, 6 directions

INSTALLATION LOCATION:

Tail or Cockpit/ Cabin installation with dual or single Antennas.

PROGRAMMING CODING PROTOCOLS:

Worldwide, all available ELT Protocols in Long and Short Messages (Standard/National/User)

Location Protocol (Long): Standard Location ELT
ELT with A/C 24 Bit Address; ELT with A/C Operator Designator; ELT with Serial No.; National Location.

User-Location Protocol (Long): Aviation; ELT with Serial No.; ELT with A/C Operator Designator & Serial No.; ELT with A/C 24 Bit Address.

User Protocol (Short): Aviation; ELT with Serial No.; ELT with A/C Operator Designator & Serial No.; ELT with A/C 24 Bit Address.

GPS/NAV POSITION INTERFACES:

Interface with External a/c GPS/NAV, via RS-232 Aviation Protocol:

Garmin Int'l Inc 500/400/300/200/100 Series
Honeywell Bendix King KLN 900/90B/94/89B/88 etc
Trimble Nav Inc. NAV1000/2000, TNL2100/3100 etc
Arnav Inc. R50/50i, STAR 5000, FMS5000, MFD etc
II Morrow Inc. Flybuddy, 2001 NMS etc....

ACCESORIES SUPPLIED:

Lithium Batteries Package, **Ultra Long 78 Hrs**, LiMnO₂, or LiSO₂; Portable Antenna, aircraft Fixed Antenna, Coax Cable Assembly, Remote Control Panel, Wiring Interconnect Assembly, Audible Monitor, Mounting Tray, Velcro holder, Hex Key Tool. All of the accessories are provided and may be ordered extra separately.

WARRANTY:

Two (2) years. Optional extended four (4) years. Lifetime warranty includes no charge for the electronic components. After the warranty has expired, customers shall pay only the labor repair cost.

HOW TO ORDER:

AK-451-(AF)(AP)/Whip/Portable: ELT, 406/243/121.5MHz, Dual Ants

AK-451-(AF)(AP)/Rod/Portable: ELT, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP)/Blade/Portable: ELT, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP)w GPS/Whip/Portable: ELT, 406/243/121.5 MHz with GPS/NAV Position, Dual Antennas.

AK-451-(AF)(AP)w GPS/Rod/Portable: ELT, 406/243/121.5 MHz with GPS/NAV Position, Dual Antennas.

AK-451-(AF)(AP)w GPS/Blade/Portable: ELT, 406/243/121.5 MHz with GPS/NAV Position, Dual Antennas.

AK-451-(AP): ELT Auto Portable, 406/243/121.5 MHz.

AK-451-(S): ELT Survival, 406/243/121.5 MHz.

AK-451-(AF)(AP)w 450000-1: ELT w Optional Multi Axes (5 Axes) G switch, for helicopters, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP)w GPS/450000-1: ELT w GPS & Optional Multi Axes (5 Axes) G switch, for helicopters, 406/243/121.5MHz, Dual Ants.

IK-451(-): Installation Adapter Kit for ACK/Pointer/Narco/Artes/Kannad

451017-1B: Antenna, Whip type, Gen Aviation, 250knots, 406/121.5MHz

451017-2A: Antenna, Rod type, Business Jet aircraft, 350 knots, 406/243/121.5 MHz.

451017-3A: Antenna, Blade type, Transport aircraft, 1.0 Mach, 406/243/121.5 MHz.

451017-4S: Antenna, Portable Hand Use.

4500010-1: Battery Package, Lithium, LiMnO₂, 90 Hrs lasting.

4500010-2: Battery Package, Lithium, LiSO₂, 87 Hrs lasting

T-451: Test Set and ELT Coding Equipment for AK-451



AMERI-KING CORPORATION
TOMORROW'S TECHNOLOGY ... TODAY!

17881 Sampson Lane., Huntington Beach, CA 92647

Tel: (714) 842-8555 - Fax: (714) 842-4235

Email: ameriking9@aol.com Website: www.ameri-king.com

