The RA-4500 Radar Altimeter provides advantageous AGL information from 2000 feet down to ground level. This real-time system enhances operational safety during approaches, nighttime operations, and hazardous flight above rough terrain. One of our newest radar altimeters, the RA-4500 is especially valuable when flying search and rescue missions, forestry operations, pipeline maintenance, offshore helicopter operations, aeromedical emergency medical services, border patrol, and electronic news gathering operations. The RA-4500 Radar Altimeter with its ARINC 429 output can be easily coupled with modern electronic flight information systems (EFIS), flight director systems, and terrain awareness and warning systems (TAWS), possessing serial inputs. Proven and precise, the RA-4500 offers improved situational awareness for a broad range of fixed and rotary wing aircraft. Designed for applications where accuracy is needed down to zero feet, such as helicopter and seaplane operations, the RA-4500 provides precise AGL information from 2000 feet down to ground level.

FREE FLIGHT RA-45000 RADAR ALTIMETER

Intended for Experimental Aircraft use only.

For critical flight regimes, the new RA-45000 Radar Altimeter (TSO-C87) provides today’s pilots with highly accurate and economical above-ground-level (AGL) information. This real-time system enhances operational safety during approaches, nighttime operations, and hazardous flight above rough terrain. The newest radar altimeter model, the RA-45000 is especially valuable when flying search and rescue missions, forestry operations, pipeline maintenance, offshore helicopter ops, helicopter emergency medical services (HEMS), other aero-medical emergency services, border patrol, and electronic news gathering operations. The RA-45000 Radar Altimeter with its ARINC 429 output can be easily coupled with modern electronic flight information systems (EFIS), flight director systems, and Terrain Awareness and Warning Systems (TAWS). Proven and precise, the RA-45000 offers improved situational awareness for a broad range of fixed and rotary wing aircraft. Designed for applications such as helicopter and seaplane operations where accuracy is needed down to zero feet, the RA-45000 provides precise AGL information from 2000 feet down to ground level.

RA-45000 ........................................... P/N 10-03976 $11,465.00

FREE FLIGHT RA-4500 RADAR ALTIMETER

Intended for Experimental Aircraft use only.

The TRA 3000 Radar Altimeter, combined with the TRI40 Radar Indicator, provides precise AGL information from 2,500 feet down to 40 feet. This real-time system offers an extra measure of operational safety during landing, navigation, and hovering. It is especially useful in flying search and rescue missions, forestry operations, pipeline maintenance, offshore helicopter operations, aeromedical emergency medical services, border patrol, and electronic news gathering operations. The transmitter / receiver and antenna fit in a single lightweight & aerodynamic unit that is easy to install.

TRA 3000 with TRI 40 ....................................... P/N 10-02519 $6,095.00

FREE FLIGHT RA-4000 RADAR ALTIMETER

Intended for Experimental Aircraft use only.

The RA-4000 Radar Altimeter is designed to be easily integrated with electronic flight information systems (EFIS), flight director systems, and Terrain Awareness and Warning Systems (TAWS), possessing serial inputs. Proven and precise, the RA-4000 offers improved situational awareness for a broad range of fixed and rotary wing aircraft. Designed for applications where accuracy is needed down to zero feet, such as helicopter and seaplane operations, the RA-4000 provides precise AGL information from 2000 feet down to ground level.

RA-4000 ........................................... P/N 10-03976 $11,465.00

FREE FLIGHT RA-40000 RADAR ALTIMETER

Intended for Experimental Aircraft use only.

TRIG TT31 MODE S TRANSPONDER

Trig’s TT31 is the perfect retro-fit for the popular Bendix King KT76A and KT78A transponders. The TT31 is a certified Class 1 transponder which will ‘plug and play’ straight into the existing Bendix King tray. This significantly reduces both installation time and cost. It provides pilots with class leading Mode S technology that is also 1090ES ADS-B Out capable too (ADS-B functionality requires a Trig tray). Retrofit – plug and play installation for KT76A and KT78A transponders. Certified Mode S and 1090ES ADS-B Out capable. Certified for IFR / VFR flight. Lowest power consumption in class. 240 watts nominal output. Great functionality and performance - TIS traffic capabilities. Backlit LED display. No cavity tube – no warm up time required. No need for dropper resistors. EASA ETSO and FAA TSO Certification – includes TSO C166b the latest ADS-B standard. Unbeatable value and quality – designed and manufactured in the U.K. Two year worldwide warranty.

Features:
- European Mode S
- Low Power Consumption
- No Cavity Tube
- 240 Watts Nominal Output
- Plug and Play Installation
- Backlit LCD Display
- Easy to Use Rotary Knobs
- Timer/Stopwatch Function
- Altitude Monitor
- Certified 1090ES ADS-B out
- TT31 Mode S Transponder

P/N 11-07997 $2,749.00
TT31 Mode S Transponder Replacement KT-76X
P/N 11-07998 $2,733.00

TRIG TT21 MODE S TRANSPONDER

Trig makes the world’s smallest and lightest Mode S certified GA transponders. The TT21 Trig compact transponder can fit into to the tightest panel space. This allows general aviation, light sport and glider pilots to fit other instrumentation or displays that otherwise might not have been possible. The TT21 is a class 2 transponder and our most popular compact transponder model. Compact size – takes minimal panel space, fits in a standard instrument hole. Integrated altitude encoder. Certified for IFR / VFR flight. Certified class 2 transponder 130 watts nominal output. Low weight – 440g (0.8 lbs). Low power consumption. 1090ES ADS-B Out capable. EASA ETSO and FAA TSO Certification – includes TSO C166b the latest ADS-B standard. Unbeatable value and quality – designed and manufactured in the U.K. Two year worldwide warranty.

Features:
- Low Weight
- Minimal Panel Space
- Low Power Consumption
- 130 Watts Nominal Output
- Integrated Altitude Encoder
- Simple Installation
- Easy to Use Rotary Knobs
- Support for ADS-B Out.
- TT21 Mode S Transponder Complete Kit

P/N 11-07999 $2,295.00
Install Kit ........................................ P/N 11-09755 $176.95
Mounting Tray .................................... P/N 11-09758 $33.85
RAM Cradle UHF Thick Tablets .......... P/N 11-09768 $22.17
TC20 Control ...................................... P/N 11-09762 $580.00

TRIG TY92 VHF RADIO SYSTEM

The TY92 is a high power performer, the perfect VHF comm radio for heavy aircraft and high performance types. It’s the ideal retro-fit radio that can be installed with the existing Bendix King tray or displays that otherwise might not have the option of a standby radio. Just like the TY91 the TY92 takes up minimal space and weight but is designed for aircraft with a 28 volt supply. Compact size, low weight - takes minimal panel space, only 74mm deep. 8.33 and 25 kHz channel spacing. Dual watch – monitor two frequencies at the same time. Unique ‘Push Step’ feature provides the fastest frequency selection. High Power Output – designed for 28 volt systems. 16 Watts Nominal Output. Simple installation. EASA ETSO and FAA TSO certification. Unbeatable value and quality – designed and manufactured in the U.K. Two year worldwide warranty.

Features:
- Provides more installation options while saving space with a control head and separate radio hardware – Certified for 25 kHz and 8.33 kHz VHF transceiver
- Requires minimal space and weight - can be mounted in a 2.25-inch round hole or in a smaller compact mount; when installed, the control head is only 3 inches deep
- Equipped with 9 programmable memories and a dual watch function that allows users to monitor standby frequency
- Simple installation
- 16 watt version (see 01079-00 for 6-watt version)
- Perfect partner for Trig’s TT21 and TT2 Mode S transponders
- Approved for fitting to European and FAA-registered aircraft
- Easily operable with gloves
- Includes a built-in speaker amplifier and two place intercom.

P/N 11-13144 $4,075.00

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

Prices Subject to Change Without Notice