



Testing Made Simple!

**AEA Technology, Inc.**

# Avionics TDR & Avionics TDR Kit

**Ultimate in Hand-held Step TDR Technology is now available in two Avionics Models**

## Avionics TDR Kit



## Avionics TDR



The Avionics TDR and TDR Avionics Kit are designed specifically for testing and fault location on aircraft wiring. The Step TDR is ideal for troubleshooting **all types of coax, twisted pairs, single-wires in a harness, and aircraft power cables.** Whether testing a new harness for complete connections or aging aircraft wiring this TDR will provide the most accurate trace of the cable's impedance over length and detect even the smallest faults. Both models include: ETDR PC Vision™ software for trace documentation and new avionics training presentations. See reverse for complete details on each model.

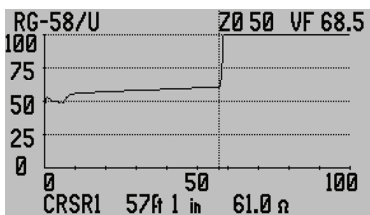
## Boeing approved model

### Features

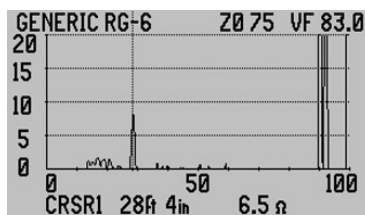
- Ranges: from 0-10ft (0-2m) to 20,000 ft (5Km)
- No dead zone on any range setting
- Range Zoom on Cursor
- Impedance zoom using Z Scale
- Cursor reading down to  $\pm \frac{1}{2}$  inch ( $\pm 8\text{mm}$ )
- Cable List with up to 64 avionics cable types
- BNC and RJ45 connectors standard
- Setup Wizard – step-by-step start up assistance
- Context sensitive help
- Cell phone style alpha-numeric entry pad
- Keypad LED indicators for active function
- Cable toning – coax, pairs, or single-wires
- Stores 32 traces with name, date & time
- Rechargeable NiMH AA cells (included)
- ETDR PC Vision software (included)
- Kit Case is ATA rated and MIL-STD tested

### Benefits

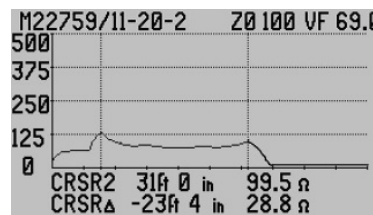
- Test coax, twisted pairs, or single-wires in a harness
- Wire-to-wire or wire-to-airframe
- Accurate and clear trace indication of faults
- Kit includes pin an socket test leads for harness connectors sizes 12, 16, 20 and 22
- Kit adds secure, but convenient, accessory access with anti-FOD layout in ATA 300 Cat 1 rated case
- Save, upload, print or email TDR's traces
- Find faults other TDRs miss - Micro Fault locating
- Clear wiring trouble more quickly with less testing
- Customize, upload, and download Cable Lists
- Saved traces are also saved setups for recall
- Avionics TDR is RF shielded and has both cable Noise Detection and Noise Filtering
- Locate coax, pairs, single-wires via Tone Function
- Setup Wizard helps new users and aids training.



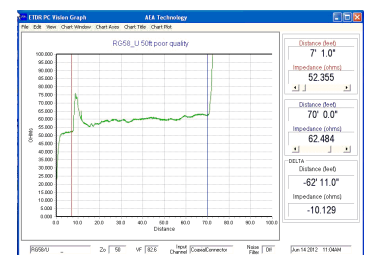
Coax-high impedance (Z) & open far end



Coax crimp using MicroFault locating



Single-wire in harness shorted to airframe



ETDR PC Vision graphical display



Made in USA with US and global parts

See reverse for ordering information, accessory details, Avionics TDR and Avionics Kit's Case specifications



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# Avionics TDR & Avionics TDR Kit

## Ordering Information

### Avionics TDR



Part Number  
6021-5054

#### Kit Includes:

Avionics TDR, EMI shielded with BNC and RJ-45 connectors and aviation cable list. Soft carrying case, belt case, AC power adapter, BNC-to-alligator clips test lead, 8AA NiMH cells (installed), USB Cable. Basic Guide, Quick Start Guide, CD-ROM with ETDR PC Vision software, Operation Manual, Training Presentation, Application Notes, and Calibration Certificate with data.

### Avionics TDR Kit



Part Number  
6021-5154

Boeing approved model

#### Kit Includes:

Avionics TDR, EMI shielded with BNC and RJ-45 connectors and aviation cable list. Hard carrying case with anti-FOD/easy accessory access layout, belt case, AC power adapter, 8AA NiMH cells (installed), USB Cable. Test leads:

- BNC(m)-to-BNC(f) 6ft (2m) 50 Ohm cable
- BNC-to-alligator clips
- BNC-to-pins, sizes 12, 16, 20, and 22
- BNC-to-sockets, sizes 12, 16, 20, and 22
- RJ-45-to-RJ-45 6ft (2m) Cat 5 (ISO class D) cable

Basic Guide, Quick Start Guide, CD-ROM with ETDR PC Vision software, Operation Manual, Training Presentation, Application Notes, and Calibration Certificate

#### Examples:



Pin, Socket, and Alligator Clip Test Leads



Coax Test Lead



RJ45 Test Lead



USB Cable

## Key Specifications (visit [aeatechnology.com](http://aeatechnology.com) for more)

### Avionics TDR

- Max Ranges: 20Kft (5Km) @ .99c or 14Kft (3300m) @ .66c
- Min Range: 0-10ft (0-2m)
- Range Scales: 11 selectable ranges
- Range Acc: <0.2% ±1 inch (2.5cm) + VF uncertainty
- Z Accuracy: <2% (Cable Z=45 to 125 Ohms)
- Resolution: 0.5 inch on 10ft range scale or 10ft Zoom (8mm on 2m range scale or 2m Zoom)
- Dead Zone: Zero on any range setting
- Z Ranges: 20, 50, 100, 200, 500, & 1,000 Ohms
- Cursors: 2 independent and differential readings
- Memory: 32 traces with 1920 data points (feet), 2000 data points (meters), name, date, and time.
- Adv Features:
  - Test Lead Null
  - Micro Fault Locating
  - Setup Wizard - step-by-step setup instructions
  - Context Sensitive Help
- Cable List: 64 Cable types with their Z and VF. PC upload or download custom cable lists
- Tones: 900/1100Hz warble, 977.5, 850, 577Hz steady or pulsed & Pocket Toner enable
- Display: Quarter VGA transfective & backlit
- Comms: USB-2/serial
- Internal Power: 8 AA NiMH cells (installed) ~7.3 hours continuous operation on single charge (reduced by backlight)
- Alternate Cells: 8 AA alkaline, ~ 7 hours continuous operation (reduced by backlight)
- External Power: 90-240VAC 50/60Hz adapter to 15VDC

### Avionics TDR (continued)

- Size: 8.5 x 4.3 x 2.25 inches (216 x 109 x 57mm)
- Weight: 2.2 lbs (1Kg) with batteries and belt case
- Environmental: Splash and dust resistant
- Ruggedness: MIL-STD 810G Transient Drop tested, 48 inches (122cm) to hard surface, 26 drops

### Avionics TDR Kit's Hard Carrying Case

- FOD protection: Custom foam for item securing and lid label for item ID and locating
- Transport: ATA 300 Category 1 rated
- Size: 18.1 x 13.7 x 6.9 inches (48 x 35 x 18 cm)
- Weight full: 11.5lbs (5.2Kg) with TDR and all accessories
- Environment: MIL-STD-810F impact damage, UV, solvents, and fungus resistance  
MIL-STD-C4150J waterproof & dust tight  
MIL-STD-648C ambient pressure equalization
- CERTIFICATIONS : CE  
EMC: EN/IEC 61326-1:2013/2020  
Safety: EN/IEC 61010-1:2010 +A1:2016 + C1:2019

Data subject to change without notice



Made in USA with US and global parts

