

## TDR-94/94D ATE Test Panel

ASI-CTS-940

OEM Equivalent: Rockwell Collins  
MN: NMN  
PN: 628-8750-001  
Manual: 523-0778502  
Manual Figure: 1001 - 1002

UUT: TDR-94 622-9352-004 and Up  
TDR-94D 622-9210-004 and Up

Size: H: 7.00" W: 19.00" D: 6.50"  
Pwr: 28 VDC

### Description:

The ASI-CTS-940 Test Panel provides capability to test and repair the Collins TDR-94/94D Transponders. The Test Panel provides power, test points, discretes, and interconnection required for testing using the computer controlled ATE Test Station, Preferred or Alternate Testing Methods per the Collins TDR-94/94D Component Maintenance Manual. It is recommended that the ATE Test Station (653-5815-008) be used for all new applications.

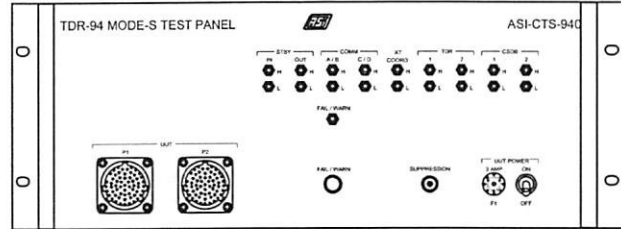
The ASI-CTS-940 works in conjunction with a computer and various bench test equipment required for testing the UUT. See the Collins TDR-94/94D Component Maintenance Manual for a list of associated equipment required for proper testing of the Transponder. The required Test Software (listed below) must be purchased directly from Collins in order to ensure latest revision status.

### TDR-94/94D Test Software:

815-5058-019 TDR-94/94D Test Software (ATE Test Station / 653-5815-008)  
815-5058-017 TDR-94/94D Test Software (Preferred Method)  
831-0311-012 TDR-94/94D Test Software (Alternate Method)

### Equipment Supplied:

| ASI MN    | OEM PN       | Description                 |
|-----------|--------------|-----------------------------|
| ASI-94-0D | NPN          | J12 Loopback Test Connector |
| ASI-94-0E | NPN          | J13 Loopback Test Connector |
| HBL-7464V | 368-0010-000 | Power Input Connector       |



### Optional Equipment Usage:

ATE Test Station: ASI-94-0A/A1 / ASI-94-0B1 / ASI-901  
Preferred Method: ASI-94-0A/A1 / ASI-94-0F / ASI-94-0G / ASI-900-1  
Alternate Method: ASI-94-0A/A1 / ASI-94-0B / ASI-94-0C / ASI-900-1

### Optional Equipment:

| ASI MN     | OEM PN         | Description                                     |
|------------|----------------|-------------------------------------------------|
| ASI-94-0A  | 628-8752-001   | Cable, ASI-CTS-940 (P1-P2) to TDR-94/94D (4 FT) |
| ASI-94-0A1 | 628-8752-001   | Cable, ASI-CTS-940 (P1-P2) to TDR-94/94D (9 FT) |
| ASI-94-0B  | 628-8753-001 A | Cable, ASI-CTS-940 (P3-6, P15) to ARINC Smart   |
| ASI-94-0B1 | 628-8753-001 B | Cable, ASI-CTS-940 (P3-6, P15) to OmniBusBox    |
| ASI-94-0C  | 628-8754-001   | Cable, ASI-CTS-940 (P11) to Contec PIO 24/24L   |
| ASI-94-0F  | (Item 13+27)   | Cable, ASI-CTS-940 (P11) to I/O Card (NI)       |
| ASI-94-0G  | (Item 12+28)   | Cable, ASI-CTS-940 (P3-6, P15) to CEI-520/520C  |
| ASI-900-1  | 983-8108-001   | Time Tag Generator                              |
| ASI-901    | 638-1481-002   | Multi-Function Panel (P/O 635-5815-008 ATE)     |

## TDR-94/94D ATP Test Panel

ASI-CTS-941AR

OEM Equivalent: Rockwell Collins  
MN: NMN  
PN: NPN  
Manual: 523-0775652 / 523-0775997  
Manual Figure: 5-5 / 901

UUT: TDR-94 622-9352-002/-003  
TDR-94D 622-9210-002/-003

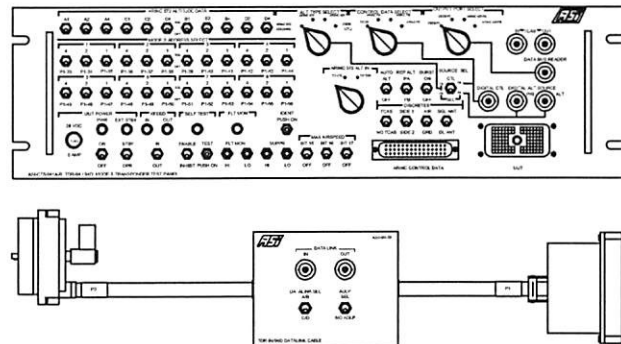
Size: H: 5.25" W: 19.00" D: 6.00"  
Pwr: 28 VDC

### Description:

The ASI-CTS-941AR Acceptance Test Interconnect Panel provides the capability to manually test the Collins TDR-94/94D Transponder. The Test Panel provides power, test points, discretes, and interconnection required for testing using the Acceptance Test Procedures per the Collins TDR-94/94D Component Maintenance Manual. The Acceptance Test can be used as a Return to Service Test (RTS) per Collins TDR-94/94D Instruction Book (523-0775652).

The ASI-CTS-941AR works in conjunction with an ARINC 429/CSDB Data Bus reader and various bench test equipment required for testing the UUT. See the Collins TDR-94/94D Component Maintenance Manual for a list of associated equipment required for proper Acceptance Testing of the transponder.

The ASI-CTS-941AR is supplied with the ASI-94-1F (which includes the datalink test functions) and ASI-94-1K. Additional cables and test fixtures available from ASI are listed in the Optional Equipment section below.



### Equipment Supplied:

| ASI MN    | OEM PN | Description                             |
|-----------|--------|-----------------------------------------|
| ASI-94-1F | NPN    | Cable, TDR-94/94D (With Data Link)      |
| ASI-94-1K | NPN    | Cable, Single / Dual Antenna Port Cable |

### Optional Equipment:

| ASI MN     | UUT Manual Figure      | Description                             | ASI MN    | UUT Manual Figure       | Description                              |
|------------|------------------------|-----------------------------------------|-----------|-------------------------|------------------------------------------|
| ASI-94-1A  | 523-0775997 Figure 908 | Cable, RTU-870A/T Control               | ASI-94-1L | 523-0775997 Figure 905  | Synthesizer Module A4 Test Fixture       |
| ASI-94-1B  | 523-0775997 Figure 907 | Cable, CTL-92/92A Control               | ASI-94-1M | 523-0775997 Table 902   | Modulator Peak Current Detector Load     |
| ASI-94-1C  | N/A                    | Cable, Gables 816 / G7057 Control       | ASI-94-1N | 523-0775997 Figure 913  | Synthesizer Alignment Tools (Set of 4)   |
| ASI-94-1D  | N/A                    | Cable, TDR-94/94D (Non Data Link)       | ASI-94-1O | 523-0775997 Figure 914  | Synth Alignment Probe Holder / Clip Rail |
| ASI-94-1E  | N/A                    | Cable, Single Antenna Port Cable        | ASI-94-1Q | 523-0775997 Figure 911  | IF Receiver Module Alignment Cover A     |
| ASI-94-1G  | 523-0775997 Figure 903 | IF Receiver/LVPS/HVPS Test Fixture      | ASI-94-1R | 523-0775997 Figure 911  | IF Receiver Module Alignment Cover B     |
| ASI-94-1G1 | 523-0775997 Figure 903 | Cable W1, IF/LVPS/HVPS (p/o ASI-94-1G)  | ASI-94-1S | 523-0775997 Figure 912  | Trans/Rec Front End Alignment Cover      |
| ASI-94-1H  | 523-0775997 Figure 904 | Modulator Module A3 Test Fixture        | ASI-214   | 523-0775652 Figure 5-11 | TDR-94/94D Flightline Test Set           |
| ASI-94-1I  | 523-0775997 Figure 906 | Cable, RFPA to IF Receiver (2 Required) |           |                         |                                          |
| ASI-94-1J  | 523-0775997 Figure 909 | Cable, TTC-920G                         |           |                         |                                          |

## TDR-94/94D ATP Test Fixture

ASI-CTS-941

OEM Equivalent: Rockwell Collins  
MN: NMN  
PN: NPN  
Manual: 523-0775652 / 523-0775997  
Manual Figure: 5-5 / 901

UUT: TDR-94 622-9352-002/-003  
TDR-94D 622-9210-002/-003

Size: H: 8.00" W: 12.00" D: 3.00"  
Pwr: 28 VDC

### Equipment Supplied:

| ASI MN    | OEM PN | Description                             |
|-----------|--------|-----------------------------------------|
| ASI-94-1K | NPN    | Cable, Single / Dual Antenna Port Cable |

### Description:

The ASI-CTS-941 is functionally equivalent to the ASI-CTS-941AR with the following exceptions:  
1. Manufactured in a chassis rather than a standard 19" rack mount configuration.  
2. UUT cables are pendent (Attached / Non Removable) to the chassis.

The ASI-CTS-941 is supplied with the ASI-94-1K. Additional cables and test fixtures available from ASI are listed in the Optional Equipment section above.

### Optional Equipment:

| ASI MN        | OEM PN       | Description                    |
|---------------|--------------|--------------------------------|
| ASI-CTS-940   | 628-8750-001 | TDR-94/94D ATE Test Panel      |
| ASI-CTS-941AR | NPN          | TDR-94/94D ATP Test Panel      |
| ASI-214       | NPN          | TDR-94/94D Flightline Test Set |