

## Model 600 "Blue Box" EIA RS-232 Interface Analyzer

*Red LED's simultaneously display polarity, activity, and validity of key interface signals.*



- ★ Easy testing of computer's serial data interface
- ★ Compatible with EIA RS-232, CCITT V.24, and MIL-188C.
- ★ Easy determination of proper data cable design.
- ★ Lightweight, pocket-sized and battery powered.
- ★ Virtually indestructible aluminum case with metal hinge and latch.
- ★ The breakout box of choice for computer room field service.

### Features:

- ★ Easily inserted in series between DTE (Data Terminal Equipment) and DCE (Data Comm Equipment)
- ★ 50 Test points to access all 25 pins of both DCE and DTE connector.
- ★ Test synchronous or asynchronous modems, terminals, and multiplexers.
- ★ 24 Mini-Switches provide capability to program each signal for make or break.
- ★ Displays all modem & terminal interface signals.
- ★ Separate EIA cable facilitates use at either modem or terminal end.
- ★ Full-duplex and half-duplex monitoring.
- ★ **On GSA Schedule!**

### Description:

The Model 600 EIA RS-232 Interface Analyzer is used at the standard EIA RS-232 or CCITT V.24 data interface of modems, multiplexers, terminals, and computers. Model 600 provides access to and monitoring of all data, timing, and control signals.

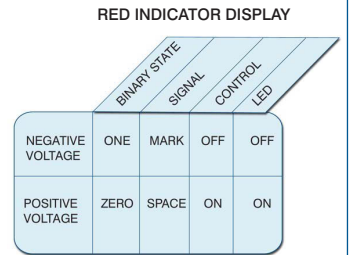
The Model 600 utilizes light emitting diodes (LEDs) to display polarity, activity, and validity of all interface signals. The battery-powered LEDs are buffered to prevent loading of the data interface. Miniature rocker switches allow the user to program 'make' or 'break' for each signal at the DCE/DTE interface. Continuous positive and negative voltages are conveniently available on the test points and can simulate handshaking or data signals. An ample supply of mini-patchcords provide for cross-patching or loopback patching of signals at the front panel test point array.

A complete table of EIA/CCITT standard interface signal description is provided inside the unit for ready reference during testing. A covered compartment provides secure storage for mini-patchcords and an EIA ribbon cable.

### LED Indicators:

The Model 600's high-efficiency LEDs clearly indicate the status of key signals at the EIA/CCITT data interface. For regularly monitored signals, a SPACE condition is signified by a red indication. A MARK condition is signified by an OFF indication. An improper signal level (between +3 volts and -3 volts) or an open circuit is also displayed as an OFF indication. Active clock signals result in an alternating on and off indication that is directly related to the clock duty cycle.

EIA-CCITT MODEM-TERMINAL INTERFACE						SOURCE	
PIN	NAME	EIA	CCITT	SIGNAL	DTE	DCE	
1	PG	AA	101	PROTECTIVE GROUND			
2	TD	BA	103	TRANSMIT DATA	■		
3	RD	BB	104	RECEIVE DATA		■	
4	RTS	CA	105	REQUEST TO SEND	■		
5	CTS	CB	106	CLEAR TO SEND		■	
6	DSR	CC	107	DATA SET READY	■		
7	SG	AB	102	SIGNAL GROUND			
8	DCD	CF	109	DATA CARRIER DETECT	■		
9	POS	---	---	POSITIVE DC TEST VOLTAGE	■		
10	NEG	---	---	NEGATIVE DC TEST VOLTAGE	■		
11	----	---	---	UNASSIGNED			
12	SDCD	SCF	122	SECONDARY DATA CARRIER DETECT	■		
13	SCTS	SCB	121	SECONDARY CLEAR TO SEND		■	
14	STD	SBA	118	SECONDARY TRANSMIT DATA	■		
15	TC	DB	114	TRANSMIT CLOCK	■		
16	SRD	SBB	119	SECONDARY RECEIVE DATA		■	
17	RC	DD	115	RECEIVE CLOCK	■		
18	----	---	---	UNASSIGNED			
19	SRTS	SCA	120	SECONDARY REQUEST TO SEND	■		
20	DTR	CD	108.2	DATA TERMINAL READY	■		
21	SQ	CG	110	SIGNAL QUALITY DETECT		■	
22	RI	CE	125	RING INDICATOR	■		
23	----	CH/CI	111/112	DATA RATE SELECTOR	■	■	
24	SCTE	DA	113	SERIAL CLOCK TRANSMIT, EXTERNAL	■		
25	BUSY	---	---	BUSY	■		



For signals monitored via the TEST pin, a pair of LEDs is used to indicate valid EIA/CCITT voltage levels. A SPACE condition is signified by a red indication from the POS LED. A MARK condition is signified by a red indication from the NEG LED. An improper signal level (between +3 volts and -3 volts) or an open circuit is indicated by a simultaneous OFF condition from both the POS and the NEG LEDs.

### Specifications:

**Input Signal:** +/- 25 volts per EIA RS-232  
More positive than +2.5 volt for ON indication.

**LED Circuit Input Impedance:** Exceeds 30K ohms

**Operating Temperature:** 0°C to 50°C

**Storage Temperature:** -20°C to 90°C

**Humidity:** 10% to 90% without condensation

**Size:** 4.0 x 5.25 x 1.75 inches (10.16 x 13.33 x 4.45 cm)

**Weight:** 15 ounces (426 grams)

**Power:** Four 1.5V, size AA batteries

**Display:** 15 high-efficiency red indicators

**Test Points:** 50 test points provide access to all 25 pins on both the DCE and DTE connector, 1 to access test LEDs and 2 to provide continuous positive and negative test voltages.

**Switches:** 24 mini-rocker switches for ON/OFF control of signals passing through between DCE & DTE connectors.

**I/O Connectors:** To DCE, a 25-pin EIA socket. To DTE, a 25-pin EIA plug.

**Cables & Patchcords:** One 10" M/F EIA ribbon cable for connection to DCE or DTE. Three single (1-to-1) patchcords and one triple (3-to-1) patchcord for use with test points.

**EIA/CCITT Modem-Terminal Interface Label:** Attached to upper panel. Describes relationship between EIA, CCITT, Signal Nomenclature, and Signal Source.

**Packaging:** Aluminum case, metal hinge and clasp. Storage compartment for cable and mini-patchcords.

