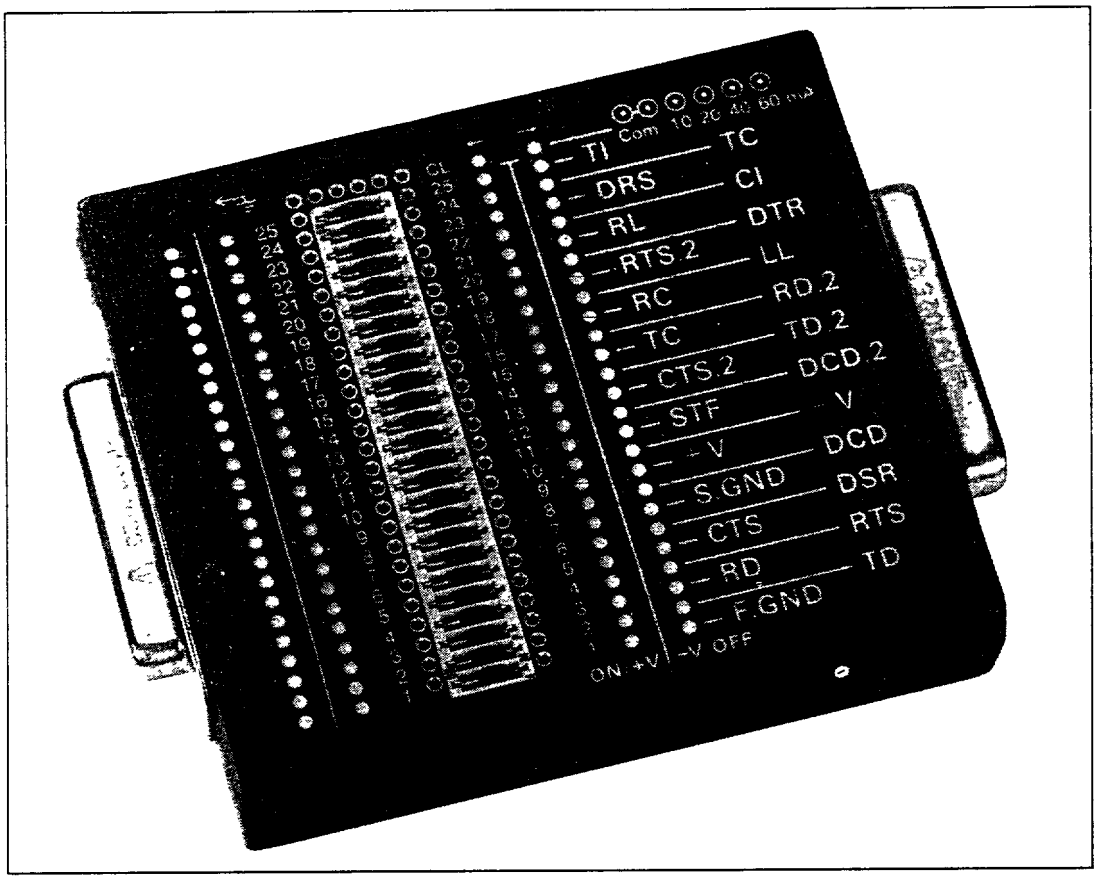
292-886

COMTEST
RS.232/V.24 TROUBLE-SHOOTERS



Comtests are constructed by field service engineers and famous for their convenience in use and reliability. They are the result of many years' experience in designing and incorporating customers' requests. The logical "in-line" design (switches, breakout, monitor, description on same height) make our BOBs the most compact and easy to read on the market.

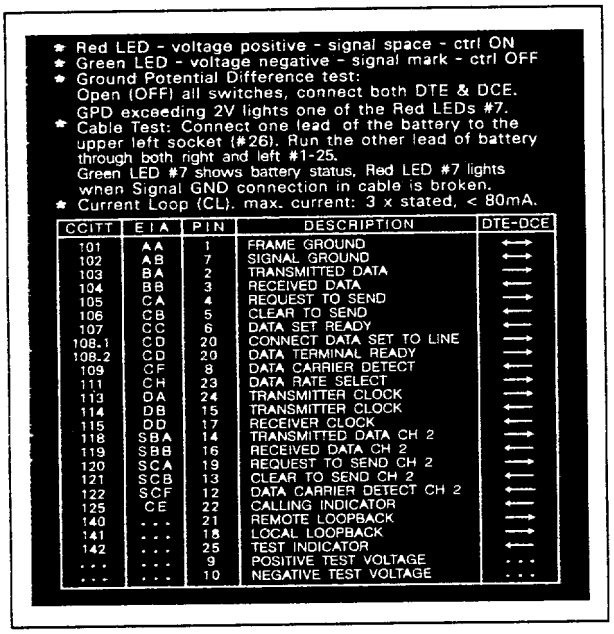
Beside obvious Breakout Box functions, Comtests offer two exclusive ones: the GPD circuit tests if two connected systems use the same Ground Potential, the Current Loop circuit enables you to test Short Haul Modems (often found in RS.232/V.24 environments).

Comtests keep high quality and use high efficiency LEDs. They will satisfy you for many years to come and are lifetime guaranteed.

All three testers show full interface activity (all 25 lines), one monitor consisting out of one Green and Red LED. The monitors are line powered and show signal strength (no batteries are needed to show line status) The high efficiency LEDs give a bell light drawing a minimum of current from the line.

The front and the back panels are provided with easy to read instructions The back side carries a guide describing all signals with CCITT and EIA abbreviations, including identification of originating signals, pin numbers and their description

Our Breakout Boxes are housed in a molded, durable plastic case All contacts are gold-plated to ensure superior electrical contact. The text on the panels is printed in such a manner that lettering can not wear off.



Model 100 Compact back panel

Technical information:

Signal Indication
Red LED shows High... > +3V
Green LED shows Low... < -3V
Load 2mA/monitor

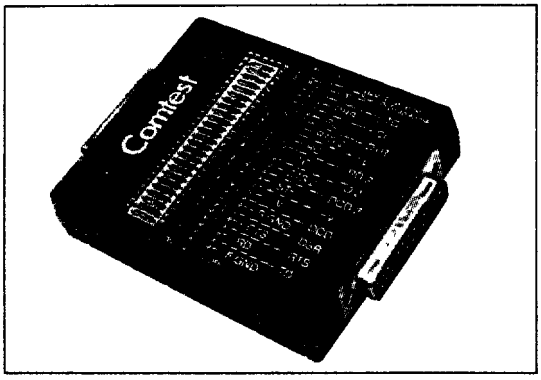
Breakout System
25 switches, 50 probe points

GPD circuit.
GPD voltage exceeding 2V will light one of LEDs number 7.

Current Loop circuit.
Tests 4, 10, 20 & 60mA, showing both current and direction.

Our Breakout Boxes come together with jumper cables, user manual and a small pouch for transport.

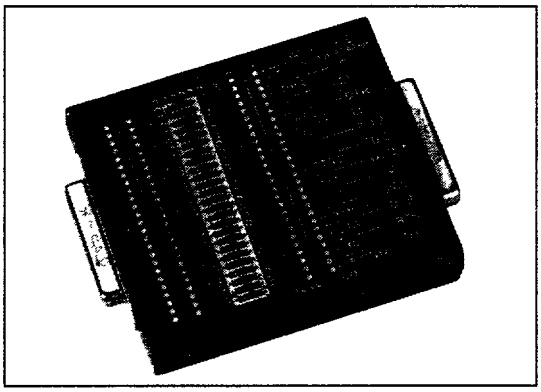
For further information please contact



Model 52

An economic RS.232/V 24 "full interface" tester without compromise to functionnality

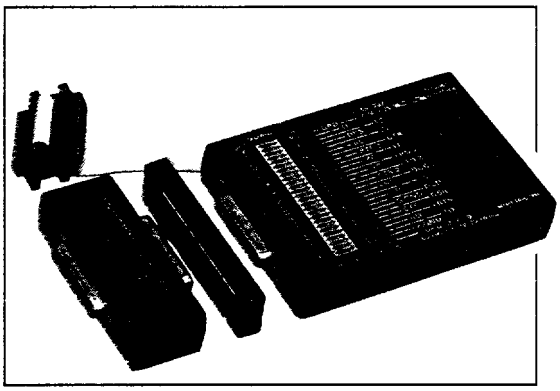
* 26 Red/Green monitors (52 LED)
* Full breakout
* In-cable model
* GPD* and CL** test
* Simple operation
* Small and lightweight



Model 100 Compact

The only "shirt" pocket size "100 LED" tester with capabilities over its "big brothers"

* 51 Red/Green monitors (102 LED)
* Full breakout
* Cable test
* 30 cm detachable cable
* GPD* and CL** test
* Simple operation
* Small and lightweight



Model 100 Plus

A "100 LED" tester able to test Parallel interfaces and wall mounted cables.

* 51 Red/Green monitors
* Full breakout
* Cable test
* Parallel interface test
* Cable with dual gender contacts
* GPD* and CL** test
* Simple operation

	Model 52	100 Compact	100 Plus	Your alternative
Monitors Red/Green	26	51	51	
Cable test	No	Yes	Yes	
Parallel test	No	No	Yes	
GPD* test	Yes	Yes	Yes	
CL* test	Yes	Yes	Yes	
Dimensions	103 x 80 x 20	103 x 80 x 20	189 x 84 x 24	
Weight in grams	170	210	290	
Guarantee	lifetime	lifetime	lifetime	

Comtests are like "black sheep of the Breakout Boxes family" To make our reasoning comprehensible, we would like to tell something about our products and ourselves

Designing Breakout Boxes, we are not aiming to copy our competitors Otherwise also our tester would look as big and colourful as theirs and come in fancy three zipper bags

We have on purpose taken distance from certain functions, such as null modem switch and common ground switches We find these confusing: in case of wrong use, they can cause more problems than they help

We always first listen to engineers working in field service when designing new products, resulting in that Comtests best feature is conviviality. The fancy Red and Green LEDs our competitors have pointing out of their front panel, we have discretely located behind the face-plate Our Breakout Box doesn't "show colour" until a signal let a Green or Red light show up Beside the monitor you can read signal description and see directly which switch and breakout point belong to it (all "in-line" with the monitor). The panel on the back side gives all needed information to use the tester and complete signal description. Please compare user friendliness if you may look at any other Breakout Box.

As no single user can have acquired the same knowledge as all our customers together, we would like to clear up two unique features built in our testers:

* Ground Potential Difference circuit:
Few engineers imagine that their communication problems come from the power distribution system. The GPD develops because of imbalance between phases and when there are more than one grounding points in a power system. Power problems can change into data communication problems as in many devices Signal Ground (pin 7) is connected in the main Ground (pin 1, Frame Ground). GPD problems are solved by a galvanic separation (by disconnecting Frame from Signal Ground within a device, by Short Haul Modems "SHMs", or fiber optic).

** Current Loop circuit·
Current Loop circuits are used to increase RS 232/V.24 communication distances (up to 5-10 km) or to solve GPD problems. Our testers can handle most of the existing CL standards.

GPD and CL test features were our customers' ideas We will be happy to hear yours as well.

Only a satisfied customer is a good customer !