



TEKTRONIX 154 Calculator RS-232-C Interface

The Interpreter

The 154 Interface. Its job is to give you better data control. It does that by putting extra power in your TEKTRONIX 31 Programmable Calculator. The 31 has a great deal of programming and processing competence. Now you can put that competence to work on instrumentation and computer peripherals from a variety of makers. That's right. By linking the 31 to any RS-232-C compatible device you can create a very efficient data handling package. But that term "data handling" covers a lot of ground. Just exactly how does the Calculator-Interface combination do all this for you?

Listening for Data:

Thru the 154 Interface, your 31 can acquire information from any RS-232-C compatible instrumentation. Your calculator will listen to anything that kind of machine might have to say.

The 31 can also be part of the conversation when disc, card, punched paper and mag tape readers are ticking away.

Talking to Terminals

Your 31, using the 154, can talk your teletype or like terminals into printing out quality control reports, financial analyses or tabularized data. By feeding control commands and data thru the 31, you can get many keyboard details normally required of an operator. And naturally all those things are brought to bear on a very useful full page format.

Incidentally, all copy can be duplicated on the 31 printer as well as special steps, listings or operator instructions not normally transmitted to the terminal.

Thanks to the 154, the calculator and the terminal become interactive. Either alpha or numerics can be keyed in on the 31 and will print on the terminal. Conversely, that same data can be keyed in on the terminal and printed on the 31.

Speaking of terminals, the 154 will interface with a wide range of models from a variety of manufacturers such as:

- Digital Equipment Corp., Model LA-30 Decwriter (300 baud, current loop)
- GTE Information Systems, Model 5741 Communications Terminal (300 baud, RS-232-C)
- NCR Model 260-6 ASR Terminal with mag tape cassette (300 baud RS-232-C)
- Tektronix Models 4010, 4013, 4023 Display Terminals (1200 baud, RS-232-C)
- Teletype Corp. Model 33 ASR with paper tape (110 baud, current loop)
- Texas Instruments Model 733 KSR Typewriter Terminal (300 baud, RS-232-C)
- Texas Instruments Model 733 ASR Typewriter Terminal with dual magnetic tape cassettes (300 baud, RS-232-C)

All for One

The categories above aren't really as distinct as they may appear and in fact may all be part of the same operation. That's especially true when you combine a 31 Calculator, 154 Interface, Teletype, Data acquisition equipment and some form of card, tape or disc storage. That makes for an unusually versatile system.

That's the way we interpret it.

Product Data

Product Description:

The 154 is self-contained and housed, with its own power supply, in a very compact package. It has two input-output connectors on the front for calculator peripherals, (a plotter, for example.) The two-way ASCII connectors are located at the rear. One is the RS-232-C connector. The other is for 20 mA current loop devices.

Standard Accessories:

Calculator cable, 7 ft.
Termination pack
Connector guide
Instruction manual

Specifications:

Will Interface to:

All RS-232-C bit serial ASCII devices including most teleprinter terminals, crt terminals, output printers, paper tape punch/readers, card punch/readers, digital tape cassettes, etc. Also provides a 20 mA current loop operation, for use with a standard Teletype.

Data Format:

Seven bit ASCII, with even or odd parity (user selected), and one or two stop bits (user selected).

Signal Levels:

RS-232-C Standard or 20 mA current loop; RS-232-C Devices:
off—binary 1; -3 to -25 volts,
-9 volts nominal
on—binary 0; +3 to +25 volts,
+9 volts nominal

Current Loop Devices:

off—binary 1; 0 mA
on—binary 0; 20 mA

Channel Protocol: Full duplex, asynchronous

Bit Rate: 110, 150, 300, 600, or 1200 Baud, user selected

Power Requirements: 100, 110, 120, 200, 220, or 240 (all $\pm 10\%$) volts A.C. 48 - 440 Hz. 7 watts nominal.

Temperature Range: 32° F to 113° F. (Operating 0° to 45° C) Non-operating -40° F to 167° F (-40° to +75° C)

Dimensions: With Feet and Bail 15.3 in. L x 3.9 in. W. x 6 in. H. (388 x 100 x 153 mm)

Weight: Approximately 6.5 lbs. (2.92 kg)

Warranty: All Tektronix products are warranted against defective materials and workmanship for one year.

Policies: For the answers on purchasing, rental, lease, maintenance and service questions, talk to your local Tektronix Sales Engineer.

To see the 154 in action simply contact your local Tektronix representative for a demonstration or write

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