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THE G-2002 FIBER OPTIC 16 STATUS SERIAL-TO-PARALLEL RECEIVER

FIBER OPTICS / DECODER

- 1300 nm E-LED
- SINGLEMODE (OR MULTIMODE OPTION)
- ST CONNECTORS
- REPEATER AVAILABLE AT 19.2 Kb/s
- OPTIONAL POWER BUDGET OF 10 db MIN.
- MANCHESTER DECODING OF FIBER OPTIC SIGNALS.
- OPERATES AT 15.36 Kb/s OR 19.2 Kb/s



GENERAL DESCRIPTION

The G-2002 is a fiber optic version of the Da-Tel 16-bit status telemeter G-7802 serial-to-parallel, FS receiver. The 16 outputs are held high or low as keyed by the transmitter. Changes are made at the update time.

The received manchester encoded word is shown in figure 1 with the derived data, clock and sync pulses.

FIBER OPTICS

The G-2002 uses one Hewlett-Packard HFBR-2315TM fiber optic receiver and a ML4622 quantizer circuit to detect and prepare the fiber optic word for the Harris HD-6409 CMOS manchester decoder. The logic circuits of the decoder then processes the data into 16 high or low outputs.

SECURITY

Two levels of security are available on the G-2002. Parity and double scan error checking. Parity error checking is required in both single and double scan security configurations. If the data fails the parity check, the output latches are not updated.

Double scan security (a field selectable option) requires the data from the second word to be identical with the data from the first word received. Updating of the output latches is blocked until two successive, identical words are received.

POWER SUPPLY

+/- 12 VDC at 60 mA
+ 5 VDC at 60 mA

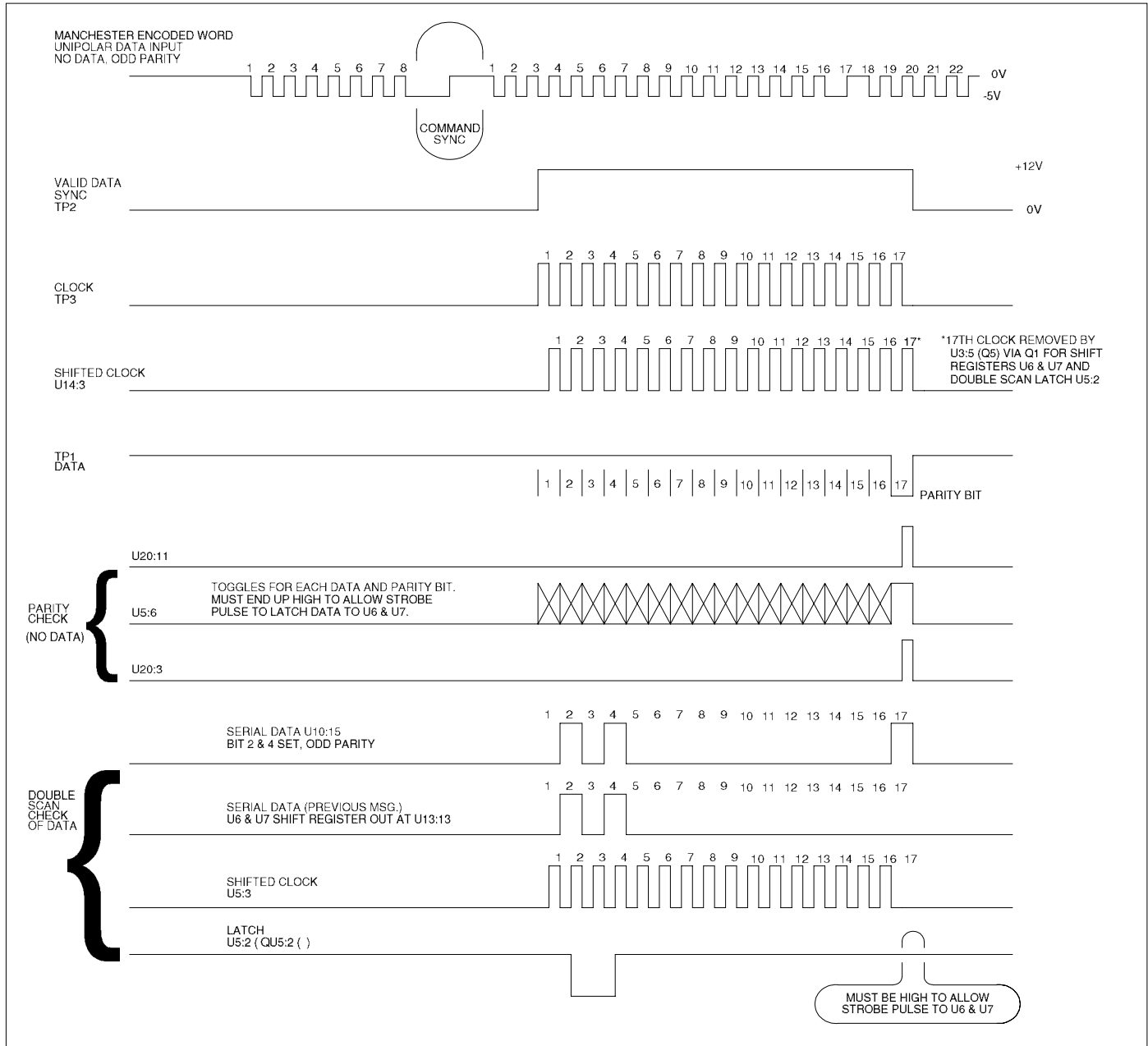


FIGURE 1.

NOTICE

As of the date of this printing, the specifications for the G-2002 in this Instruction Information sheet apply to all G-2002s, except as indicated. Because all Da-Tel products are continually being refined and improved, these specifications are subject to change without notice.