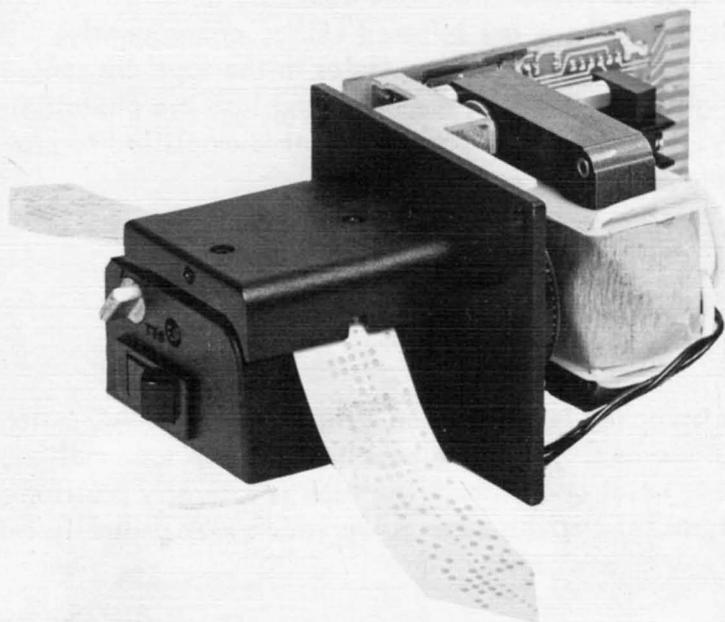


MODEL 640 "DATA-LOADER"



FEATURES

- Low Cost
- 350 Characters/second
- Reads 5,6,7, and 8 Level Tape
- Fan Fold Box Available
- LED Light Sources
- Hermetically Sealed Phototransistors
- Extremely Quiet Operation
- No Adjustment Necessary
- Easily Interfaced to CMOS or TTL Logic

The Model 640 Paper Tape Reader is the newest addition to the Addmaster line of quality, low cost peripheral equipment. The Reader provides high speed low cost data loading wherever "stop on character" operation is not needed. Available in three configurations:

- Model 640-1** Schmitt triggered amplifiers with TTL compatible low powered Schottky drivers.
- Model 640-2** Schmitt triggered CMOS data amplifiers
- Model 640-3** No electronics. Outputs are direct from phototransistors with factory selected emitter resistors.

X • **ADDMASTER CORPORATION**

416 Junipero Serra Drive • San Gabriel, California 91776
(213) 285-1121

OPTICS

The paper tape is illuminated from above by an array of light emitting diodes. These are infrared LED's, consequently, the light is not visible to the eye. Holes in the tape are sensed when the light passes through the holes and into the phototransistor array. The resulting photo-current is amplified to provide the data output.

TAPE DRIVE

The reader sprocket is belt driven by a shaded pole AC motor. The belt is toothed, providing positive, no-slip tape motion, and extremely quiet operation. The tape is laterally positioned by the sprocket and an edge guide which may be easily set for 5, 6, 7, or 8 level tape.

ELECTRONICS

Phototransistor emitter resistors R1 through R9 are factory selected to normalize the voltage swing of each channel. IC1 and IC2 are 74C14 Schmitt Trigger Circuits. These drive IC3 and IC4 (74LS04) which provide the TTL compatible outputs ("bit 1" through "bit 8" and "SPKT").

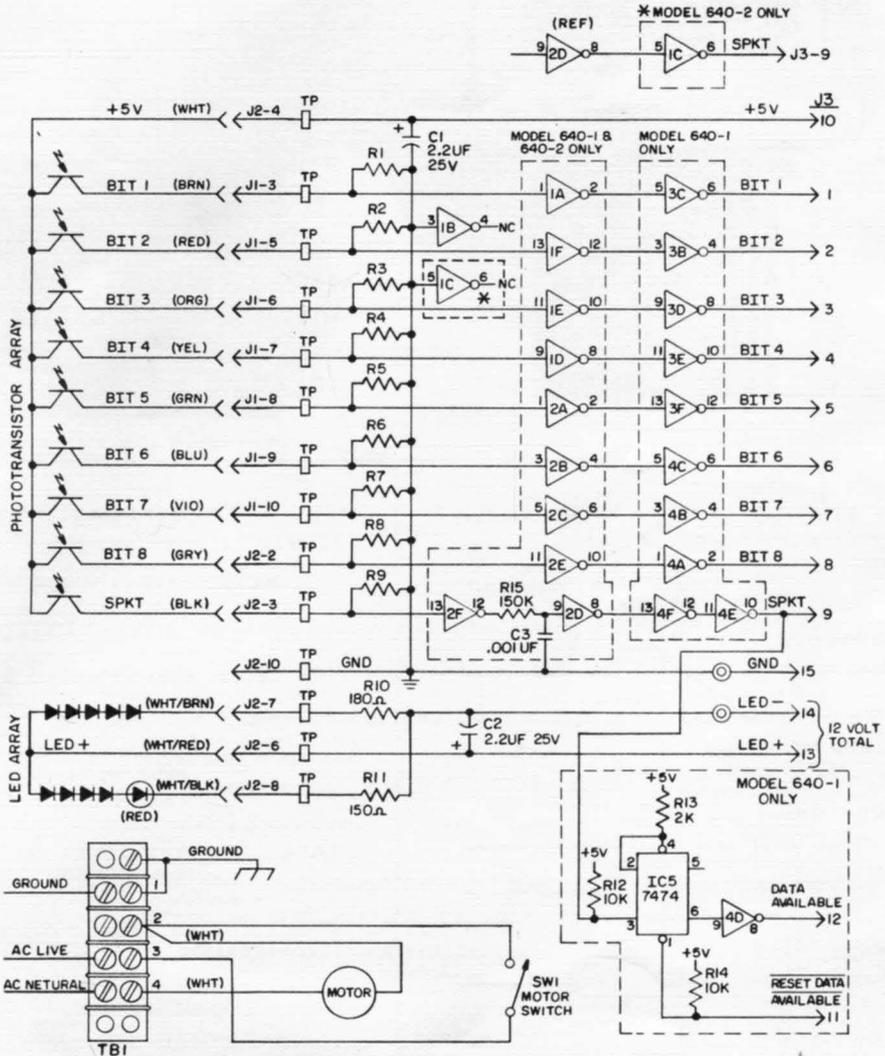
Data may be read using the sprocket output, "SPKT", as a strobe, or the "Data Available" line can be monitored to indicate when a character is ready to be read. "If "Data Available" is used, it must be reset externally at pin 11.
(see timing diagram)

Connections at board edge mate with Molex 09-01-1151 connector and 08-06-0105 pins, (supplied) or equivalent.

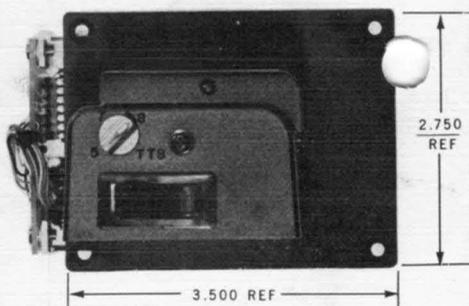
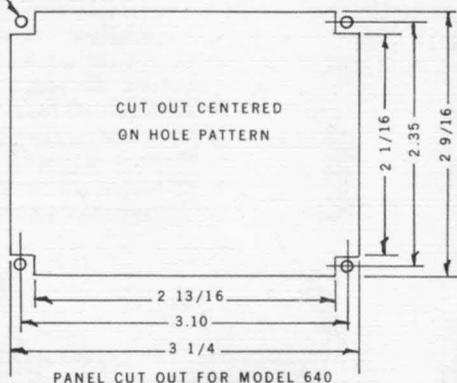
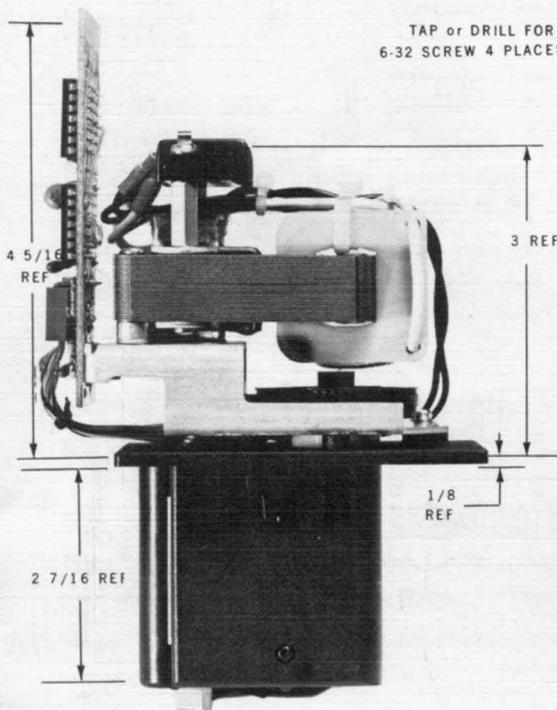
MODEL 640 SCHEMATIC

NOTE - UNLESS OTHERWISE SPECIFIED

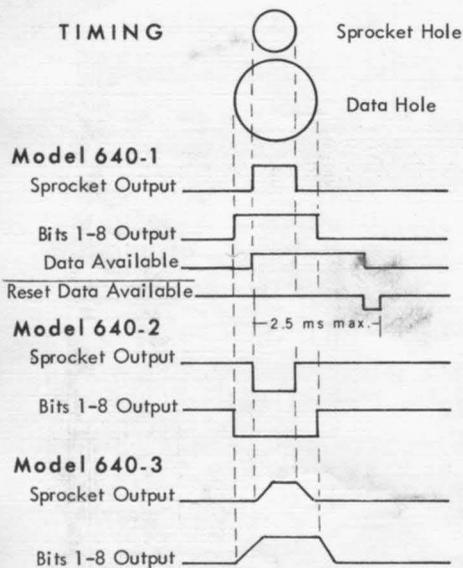
1. ALL RESISTORS 1/4W 5% (SELECTED IN TEST)
2. IC1 AND IC2 ARE 74C14
3. IC3 AND IC4 ARE 74LS04
4. MOTOR LEAD TO TBI-2 (BLK) FOR 220-240V
5. MOTOR LEAD TO TBI-4 (BLK) FOR 220-240V
6. TBI SHOWN AS VIEWED FROM REAR OF READER
7.  SOLDER PAD ON PCB
8.  TEST POINT ON PCB



SCHEMATIC DIAGRAM



TIMING



SPECIFICATIONS

POWER

Motor: 115 VAC + 10 % 50/60 HZ
(220/240 VAC available)
0.15 AMP MAXIMUM

LED's: + or - 12 VDC + 5 % @ 60 MA

Vcc: + 5 VDC + 5 %
640-1 requires 20 MA
640-2 requires 10 MA
640-3 requires 10 MA

TAPE Any standard tape whose opacity is at least 50 % fan fold or strip.

TEMPERATURE

Storage -25° C to +80° C
Operating 0° C to +45° C