

MT-8500 KEYPAD OPERATION
Software Versions 1.18 To Date

- NOTES: 1. X = Any channel, 1 - 8
2. * = Must be trending (paper moving) or in HALT

SET TIME - 9:00 A.M.	TIME-0-9-0-0-ENTER
9:30 P.M.	TIME-2-1-3-0-ENTER
SET DATE - Jan. 1, 1987	DATE-0-1-0-1-8-7-ENTER
Oct. 10, 1987	DATE-1-0-1-0-8-7-ENTER
8 Channels, 1 - 8	CHAN-ENTER
8 Channels, different order	CHAN-X-X-X-X-X-X-X-X-ENTER
6 Channels	CHAN-X-X-X-X-X-X-ENTER
4 Channels	CHAN-X-X-X-X-ENTER
3 Channels	CHAN-X-X-X-ENTER
2 Channels	CHAN-X-X-ENTER
1 Channel	CHAN-0-X-X-ENTER
	NOTE: X=X
2 Channels overlapping	CHAN-0-X-X-ENTER
4 Channels overlapping	CHAN-0-X-X-X-X-ENTER
Set Snapshot Window	ABC-CHAN-T-ENTER T = 1,2,4 or 8 (seconds)
*2 Channel Snapshot	CHAN-A-X-X-ENTER
*4 Channel Snapshot	CHAN-B-X-X-X-X-ENTER
*8 Channel Snapshot 1-8	CHAN-C-ENTER
*8 Channel Snapshot different order	CHAN-C-X-X-X-X-X-X-X-X-ENTER
Set X-Y Plot Window	ABC-X-Y-T-ENTER
*Low Resolution X-Y Plot	X-Y-X-X-ENTER
*High Resolution X-Y Plot	X-Y-A-X-X-ENTER
	NOTE: 1st X=X, 2nd X=Y
*Overlap Snapshot 2 channels	CHAN-0-A-X-X-ENTER
*Overlap Snapshot 4 channels	CHAN-0-B-X-X-X-X-ENTER
Set Triggered Snapshot Parameters	ABC - ZERO

1. Display reads 000 (default) or previously selected threshold voltage, -250mv to +250mv. Press A for positive values 0-250mv. Press C for negative values 0 to -250mv. Enter value including leading zeros (example 060 for 60) and press ENTER.

2. Display reads SLPN. Press 0, 1, 2 or 3, then ENTER.

- 0 - external event trigger using trigger BNC connector
- 1 - trigger on rise
- 2 - trigger on fall
- 3 - trigger on rise or fall

3. Display reads POSN. Press 1, 2 or 3, then ENTER.

- 1 - pre-trigger (show date after trigger)
- 2 - center-trigger (show data before and after trigger)
- 3 - post-trigger (show data before trigger)

4. Display reads SECN. Press 1, 2, 4 or 8 seconds then ENTER.

Triggered Snapshot 2 channels	X-Y-B-X-X-ENTER
Triggered Snapshot 4 channels	X-Y-B-X-X-X-X- ENTER
Triggered Snapshot 8 channels, 1-8	X-Y-B-ENTER
Triggered Snapshot 8 channels different order	X-Y-B-X-X-X-X-X-X-X-X-ENTER
Triggered Snapshot 2 channels overlapping	X-Y-B-0-X-X-ENTER
Triggered Snapshot 4 channels overlapping	X-Y-B-0-X-X-X-X-ENTER
X-Y Plot of Triggered Snapshot data, 2 channels	X-Y (after data printout)
*Printout of Channel Annotation Code	CHAN-ABC-0
* Channel Annotation	Refer to Manual
*Turn Off Grid	CHAN-X-Y Repeat to turn grid back on
Pause	HALT Press again to resume
Program Insta-Speed Keys A, B, C	Example: A = 1 mm/hr B = 1 mm/sec C = 25 mm/sec ABC-A-mm/hr - 1 - ENTER ABC-B-mm/sec - 1 - ENTER ABC-C-mm/sec - 2-5-ENTER

MT-8500 SPECIFICATIONS

General Specifications

Dimensions:

Bench Model: 8" high (203 mm) x 19" wide (483 mm)
x 18" deep (457 mm)

Rack-Mounting Model: 10 1/2" high (267 mm) x 19" wide
(483 mm) x 18" deep (457 mm)
(6 rack height space)

Weight: Bench model (MT8500) - 45 lbs. rack-
mounting model (MT8500R) - 59 lbs.

Recording Method: Direct Writing thermal array with 200
dots/in. amplitude axis resolution
and up to 400 dots/in. time axis
resolution

Recording Medium: Blue or black imaging thermal paper,
Z-fold in 468 ft. long length

Paper Width: 8 1/2" (216 mm)

OPERATING SPECIFICATIONS

Power Requirements: 115/230 V, 50/60/400 Hz, 250 watts

Number of Channels:

<u>Description</u>	<u>Analog Input</u>	<u>Self-Generated</u>	<u>Digitized Input</u>
Waveform	1-8	-	1-30
Event Marker	1	-	-
System Status	-	1	-

Trace Width: 1/4 mm

Frequency Response: Analog Input

<u>Mode</u>	<u>Frequency Response</u>
Real time, 8 channels	DC to 500 Hz, full-scale
Real time, 2 channels	DC to 2.5 KHz, full-scale
Snap shot, 2 channels	DC to 2KHz, full-scale
Snap shot, 4 channels	DC to 1 KHz, full-scale
Snap shot, 8 channels	DC to 500 Hz, full-scale

Analog Input: +/- 250 mV full-scale calibrated, tolerance of +/- 2.5 mV;
+/- 10V maximum, uncalibrated; single ended, floating, single common, 5K ohms impedance

Analog Input Connectors: Eight BNC jacks for analog inputs, one BNC jack for trigger input, one BNC jack for event marker. A 25-pin D-shell connector in place of all above BNC jacks.

Digitized Input Parallel Port:

Data	12 bit
Channel select	5 bit
Strobe	2 bit

Communication Ports: RS-232 and IEEE-488 ports standard

Zero Position: Continuously adjustable over channel width

External trigger for Snap Shot: BNC connector, TTL low, or switch closure

Event Marker Input: BNC connector, TTL low, or switch closure

Grid Lines: Amplitude lines - each minor division is equal to 10 mV (except for 8 channel mode, which is 20 mV)

Timing lines - time value of major timing lines automatically printed in system channel

CHART DRIVE SYSTEM

Type: Stepper, crystal referenced

Chart Speeds: 1 mm/hr to 100 mm/sec. in 1 mm increments (selectable from front panel keypad and host)

Instant Speeds: Three keys user selectable or defaulted to 1, 25 and 50 mm/sec.

Operating Modes/Sub Modes
Via Host

Display and Set Date:	Allows date entry
Display and Set Time:	Allows time entry
Real-time Oscilloscope:	Records analog waveforms as they are input
Immediate Snap Shot Oscilloscope Sub Mode:	Sub mode of real-time which captures sample points for plotting in X-Y and X-T graphs or storage in the host
Triggered Snap Shot:	Triggered to capture and sample points for plotting in X-Y and X-T graphs or storage in the host.
Full and One-Sixteenth X-Y Plotter:	Plots data captured in immediate snap shot sub mode and triggered snap shot mode
X-T Plot:	Plots data captured in immediate snap shot. Triggered snap shot data is generally plotted in its own mode, but may be plotted within the mode.
Line/Screen Printer:	Writes the contents of a computer screen or ASCII file (80 columns wide)
Transfer Data From MT8500 to Host:	Transfers sample points to the host through IEEE-488 (GPIB/HPIB)
Transfer Data from Host to MT8500:	Transfers sample points to the MT8500 through IEEE-488 (GPIB/HPIB)

ENVIRONMENTAL

Temperature:	Operating 0 to 45 degrees C non-operating -20 to 80 degrees C
Humidity:	Operating 5 to 95 percent RH non-operating 5 to 100 percent RH
Attitude:	Operating to 50,000 ft.
Vibration:	Operating 0.5 G harmonic non-operating 2 G harmonic