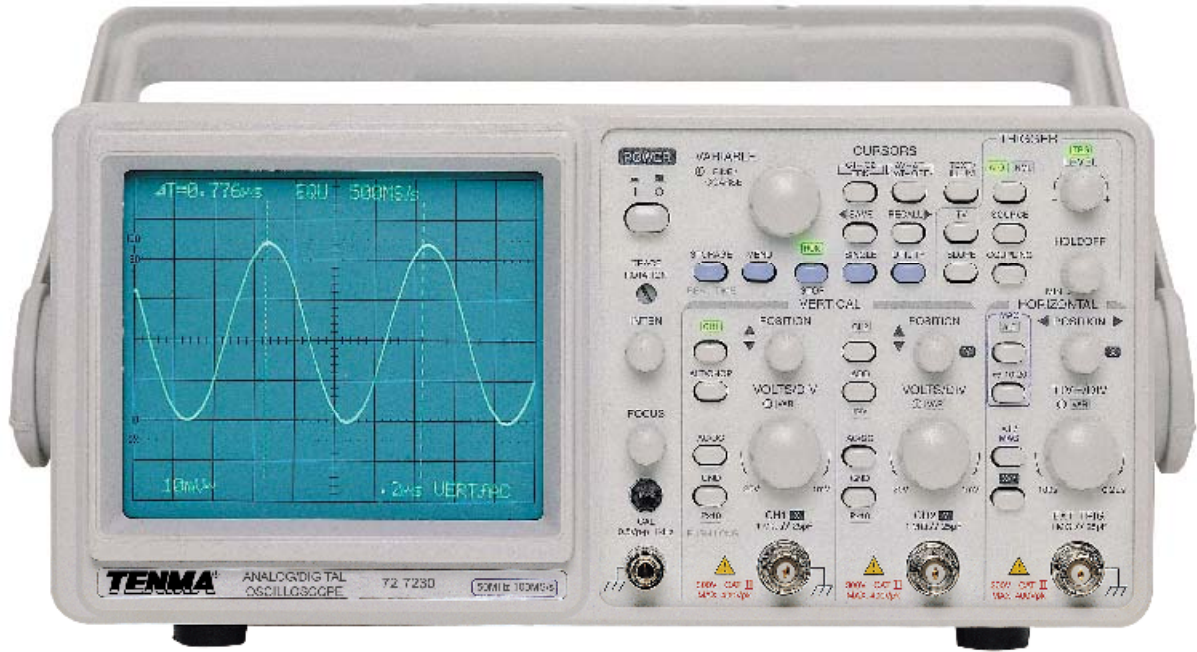




REVISIONS

DOC. NO. SPC-F004 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
905	A	RELEASED	JWM	2/17/03	JC	8/28/03	DJC	8/28/03



FEATURES:

- DC~50MHz, 20MSa/s, 2kV/CH x 2
- 2 Channels, 4 Traces
- Normal Sampling: 100MSa/s
- Equivalent Time Sampling of 500MSa/s max.
- Waveform SAVE / RECALL (M0~M9)
- Pre-trigger Function 0 ~ 10 div.
- ROLL Mode to 100s/div.
- Max. Sweep Rate 10ns/div.
- Cursor Readout Function: ΔV, ΔT, 1/ΔT
- ALT-MAG Function (x5, x10, x20)
- Panel Setting SAVE / RECALL 10 sets. (M0~M9)

SPC-F004.DWG

<p>TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.</p>	<p>DRAWN BY: Jeff McVicker</p>	<p>DATE: 2/17/03</p>	<p>DRAWING TITLE: Combi-Scope - Real Time Storage Oscilloscope</p>			
	<p>CHECKED BY: John Cole</p>	<p>DATE: 8/28/03</p>	<p>SIZE A</p>	<p>DWG. NO. 72-7230</p>	<p>ELECTRONIC FILE 16H5081.dwg</p>	<p>REV A</p>
	<p>APPROVED BY: Daniel Carey</p>	<p>DATE: 8/28/03</p>	<p>SCALE: NTS</p>		<p>U.O.M.: Millimeters</p>	<p>SHEET: 1 OF 3</p>

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CRT

6-inch CRT 150CTB31, 10kV
INTEN and FOCUS: Front panel control
Illumination: Front panel control
Z-axis Output:

Sensitivity: at least 5V (TTL)
Polarity: positive going input decrease intensity
Max.input voltage: 30V (DC+AC peak)
Input impedance: approx. 47Kohms

VERTICAL SYSTEM

Sensitivity and Accuracy: 1mV ~ 2mV/DIV±5%, 5mV ~ 20V/DIV±3%,
14 calibrated steps in 1-2-5 sequence

Variable Continuously: 2.5:1 ~ min. 50V/DIV

Bandwidth (-3dB) and Rise Time:

	Bandwidth (-3dB)	Rise Time
5mV ~ 20V/DIV	DC ~ 50MHz	Approx. 7nS
1mV ~ 2mV/DIV	DC ~ 7MHz	Approx. 50nS

Vertical Mode: CH1, CH2, DUAL(ALT or CHOP)

Chopper Frequency: Approx. 250KHz

Sum or Difference: CH1+CH2, CH1-CH2

Invert: CH2

Input Impedance: Approx. 1Megohms ±2% // approx. 25pF

Input Coupling: AC, DC, GND

Maximum Input Voltage: 400V (DC + AC peak)

HORIZONTAL SYSTEM

Sweep Time: 0.2µS/DIV ~ 0.5S/DIV, 20 steps selectable in 1-2-5 sequence

Variable Continuously: 2.5:1 UP TO 1.25s/DIV (uncal.)

Accuracy: ±3%, ±5% at x5, x10 MAG. ±8% at x20 MAG

Sweep Magnification: x5, x10, x20

Max. Sweep Time: 20nS/DIV (10nS/DIV are uncalibrated)

ALT-MAG Function: YES

HOLD-OFF Time: Variable

TRIGGER SYSTEM

Trigger Modes: AUTO, NORM, TV

Trigger Source: VERT, CH1, CH2, LINE, EXT

Trigger Coupling: AC, HFR, LFR, TV-V(-), TV-H(-)

Trigger Slope: "+" or "-" polarity

ALT Trigger: YES

Trigger Sensitivity:

	CH1, 2	Vert-Mode	EXT
20Hz ~ 5MHz	0.5 DIV	2.0 DIV	200mV
5MHz ~ 40MHz	1.5 DIV	3.0 DIV	800mV
40MHz ~ 50MHz	2.0 DIV	3.5 DIV	1V

TV sync pulse more than 1 DIV (CH1, CH2, VERT-MODE)
or 200mV(EXT)

External Trigger Input: Input Impedance: Approx. 1Megohm // 25pF (AC coupling)
Max. input voltage: 400V (DC+AC peak) at 1kHz

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SPC-F004.DWG

DOC. NO. SPC-F004 * Effective: 7/8/02 * DCP No: 1398

SIZE DWG. NO.

A

72-7230

ELECTRONIC FILE

16H5081.dwg

REV

A

SCALE: NTS

U.O.M.: Millimeters

SHEET: 2 OF 3

X-Y OPERATION

Input: X-axis:CH1; Y-axis:CH2
Sensitivity: 1mV/DIV ~ 20V/DIV
Bandwidth: X-axis: DC ~ 500KHz (-3dB)
Phase Difference: 3° or less from DC to 50KHz

DIGITAL STORAGE

Acquisition Memory: 8 bit ADC x 2
Maximum Sampling Rate: 500MS/s for Equivalent time sampling
100MS/s for normal sampling
Storage Bandwidth: Single shot: DC~5MHz(-3dB)
Repetive event: DC~50MHz ±5DIV
Dynamic Range: ±5DIV
Memory Length: Acquisition Memory: 2kW/CH*2, 1kW/CH(equivalent)
Save REF Memory: 1KW/CH*10 with back-up memory
Display memory: 1KW/CH*4 waveform (max.)
Sweep Time: Equivalent: 0.2µs/DIV~0.5µs/DIV
Normal: 1µs/DIV~0.1s/DIV
ROLL: 0.2s/DIV~100s/DIV
Sweep Magnification: x5, x10, x20
Max. Sweep Time: 10nx/DIV
MAG Interpolation: DOT, Linear
ALT-MAG Function: YES
Acquire Mode: Sample, Peak Detect (>25ns), Envelop, Per-sist, Average (2~256)
Operation Mode: Auto, Norm, Single, Single-Roll, Roll, X-Y, Average(2~256), Run/Stop
Smoothing Function: Dot joint ON/OFF selectable
Pre-Trigger: 0~10DIV in 0.02DIV steps
X-Y Operation: X-axis: CH1, Y-axis: CH2
Storage Bandwidth: DC~50MHz(-3dB)
Display Resolution: H:100points/DIV ; V:25 points/DIV
X-Y: 25*25 points/DIV
Waveform SAVE/RECALL: 10 sets (REF0~REF9)

CURSOR READOUT

Cursor Measurement: ΔV, ΔT, 1/ΔT
Readout Intensity: Adjustable

OUTPUT SIGNAL

CH1 Signal Output:
Voltage: approx. 20mV/DIV (with 50 ohms terminated);
Bandwidth: 50Hz~5MHz
Calibrator Output:
Voltage: 0.5V ±3%
Frequency: approx. 1KHz, Square wave

INTERFACE: RS-232C Interface

POWER SOURCE: AC 100V/120V/230V ±10%, 50/60Hz

ACCESSORIES: Power cord x 1, Instruction manual x 1, Probes(10:1/1:1) x 2

DIMENSIONS & WEIGHT: 275(W) x 130(H) x 370(D) mm, Approx. 7.2kg

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	<small>SCALE:</small> NTS	<small>U.O.M.:</small> Millimeters	<small>SHEET:</small> 3 OF 3	