MODEL 2086
THERMAL GRAPHIC RECORDER

The EPC Model 2086 is a wide-bed, 20 inch Thermal Graphic Recorder capable of producing high resolution gray scale imagery on heat-sensitive paper or plastic film. The continuous record output is ideally suited for data presentation from side-scan sonars, sub-bottom profilers, and spectrum analyzers.

Offering a wide range of hardware interfaces and software emulation modes for other recorders, the 2086 can be integrated with more sensors and processing systems than any other hardcopy plotter on the market today. The TCP/IP Ethernet input exposes a simple socket interface that allows the recorder to receive commands and data over a LAN or Internet connection. The Parallel and RS-232 inputs provide backward compatibility with legacy processors and also allow simple integration with GPS/Navigation Systems. The analog interface includes three fully independent inputs with separate time bases and data processing functions (TVG, Bandpass Filter, etc.).

Contact EPC today for more information on how the world's most flexible recorder can solve your hardcopy needs.

EPC LABORATORIES INC., 8 Perry Way, Newburyport, MA 01950 USA PHONE: (978) 462-1900
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HARDWARE

Host Processor
Pentium Class
CPU Bus
PC/104 Bolt-down
Control Panel
Sealed membrane type, software defined
Display
One 4x20 super bright LCD display

POWER

Power Supply
800 Watt, auto-sensing, universal input
84-265 VAC, 50-60 Hz
Power Consumption
50 Watts non-printing
150 Watts Peak

PHYSICAL

Dimensions & Weight
29"W x 22"H x 7"D
65 LBS.
Media
Heat sensitive thermal paper or high grade
Plastic film - 23dB dynamic range
Paper Length: 300 feet
Film Length: 240 feet
Temperature (non-condensing)
0°C to 65°C - Operating
-28°C to 65°C - Storage

PRINTING

Gray Levels & Resolution
Selectable: 8, 16,32, 64 Levels
Printhead: 4096 Pixels @ 203 DPI
Chart Speeds (Lines Per Inch)
Fixed: 80, 100, 120,150, 200, 240, 300
Variable: Speed Correction input from GPRMC GPS string.

SIGNAL PROCESSING

Time Varied Gain
100 Logarithmic curves to choose from
Band Pass Filtering
Low Pass: 1 kHz to 25 kHz
High Pass: 40 Hz to 1 kHz
Stacking
Up to five lines, boxcar average

ANNOTATION

128 Character ASCII Alphanumerics
Automatic or manual fixes, messages and events based on line intervals
Automatic annotation feature on settings changes

Warranty: One Year Limited Parts & Labor.

ANALOG INTERFACE

Channels A, B, and C Independent Inputs
-10V to 10V SIGNAL BNC inputs
(2KΩ Input Impedance)
External Trigger Input (slave)
TTL EXT TRIG BNC input with slope sense
Internal Key Output (master)
TTL KEY OUT BNC with polarity selection
(256us pulse width)
Gain, Threshold, Polarity
Independent controls for each channel
Minimum printable signal 150 mV
Time Bases
560 kHz A/Ds with 16 Bit resolution
Scan - 5 mS to 10 secs, 1 ms resolution
Key - 5 mS to 10 secs, 1 ms resolution
Delay - 0 secs to 8 secs, 1 ms resolution

PARALLEL INTERFACE

Interconnect
25 Pin Sub D, metal shell
Data Input (Pins 2-9)
Eight Bit Centronics Compatible
TTL Signals
White = 0X00; Black = selectable
Handshake
Low Active host/STB on Pin 1
Low Active printer/ACK on Pin 10
High Active printer BUSY on Pin 11
Emulation Modes
Normal 2086, 4096 bytes per scan
EPC 9800S, 3 byte preamble w/ 4096 byte data stream
EPC 1086S, 2048 bytes per scan

ETHERNET INTERFACE

Interconnect
RJ45 10/100 front panel connection
Data Input
High-level Socket Interface with API provided, TCP/IP Protocol

COMMAND INTERFACE

QWERTY Keyboard, Socket, or RS-232 with selectable Baud Rates (DCE, Null Modem Required for PC Conn.).
All panel functions remotely accessible
On-line help facility prints command set
Automatic GPS decode for annotations strings and speed correction.

*Specification subject to change.

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