

TDU-1200F / TDU-2000F Thermal Display Units



SPECIFICATIONS		
DISPLAY	TDU-1200F	TDU-2000F
Paper type	Direct thermal	Direct thermal
Effective printing width	11.85 in. (30cm)	20.16 in. (51.2 cm)
Paper width	12.25 in. (31.1 cm)	21.12 in. (53.6 cm)
Paper length*	200 ft. (61 m)	200 ft. (61 m)
Dot density	300 dots/in. (11.8 dots/mm)	203 dots/in. (8 dots/mm)
Total number of dots/line	3552	4096
Dot heater size	2.7 x 4.33 mils (.069 x .110 mm)	4.33 x 6.88 mils (.110 x .175 mm)
*Length for plastic medium is 160 ft. (47.9 mm)		
Electronic Design	Microprocessor	Microprocessor
Input Signals (Data) (control)	TTL compatible with 4.7 pull-up TTL compatible, negative true 2.2K pull-up	TTL compatible with 4.7 pull-up TTL compatible, negative true 2.2K pull-up
Output Signals	TTL driven	TTL driven
Power	103.5 to 126.5 VAC,47-63Hz, single phase	103.5 to 126.5 VAC,47-63Hz, single phase
Power Requirements	350W maximum	350W maximum
Physical / Environmental		
Weight	45 lbs (20.25kg)	60 lbs. (27.0 kg)
Dimensions	8 in. (20.3 cm) H x 17.5 in (44.4 cm) W x 20 in (50.8 cm) D	8 in(20.3 cm) H x 26.3 in. (66.8 cm) W x 20.5 in (52 cm) D
Operating Temperature	0 C to 50 C	0 C to 50 C
Storage Temperature	-40 C to 70 C	-40 C to 70 C
Shock	50g 11 msec, MIL-STD-202F, method 213B, test condition G	50g 11 msec, MIL-STD-202F, method 213B, test condition G
Vibration	MIL-STD-167, type 1, exploratory 10-50 Hz	MIL-STD-167, type 1, exploratory 10-50 Hz
Humidity	95% non-condensing (excluding paper)	95% non-condensing (excluding paper)
Operating Features		
Sweep Speed (Sec/Sweep)	8.0, 4.0, 2.0, 1.0, 0.5, 0.25, 0.125, 0.0625, 0.0312	
Paper Feed (Lines/Inch)	300, 200, 150, 120, 100, rapid advance	
Grey Shades	B/W, 8, 16, 32*	
*32 is limited to 0.0625 sec/sweep		

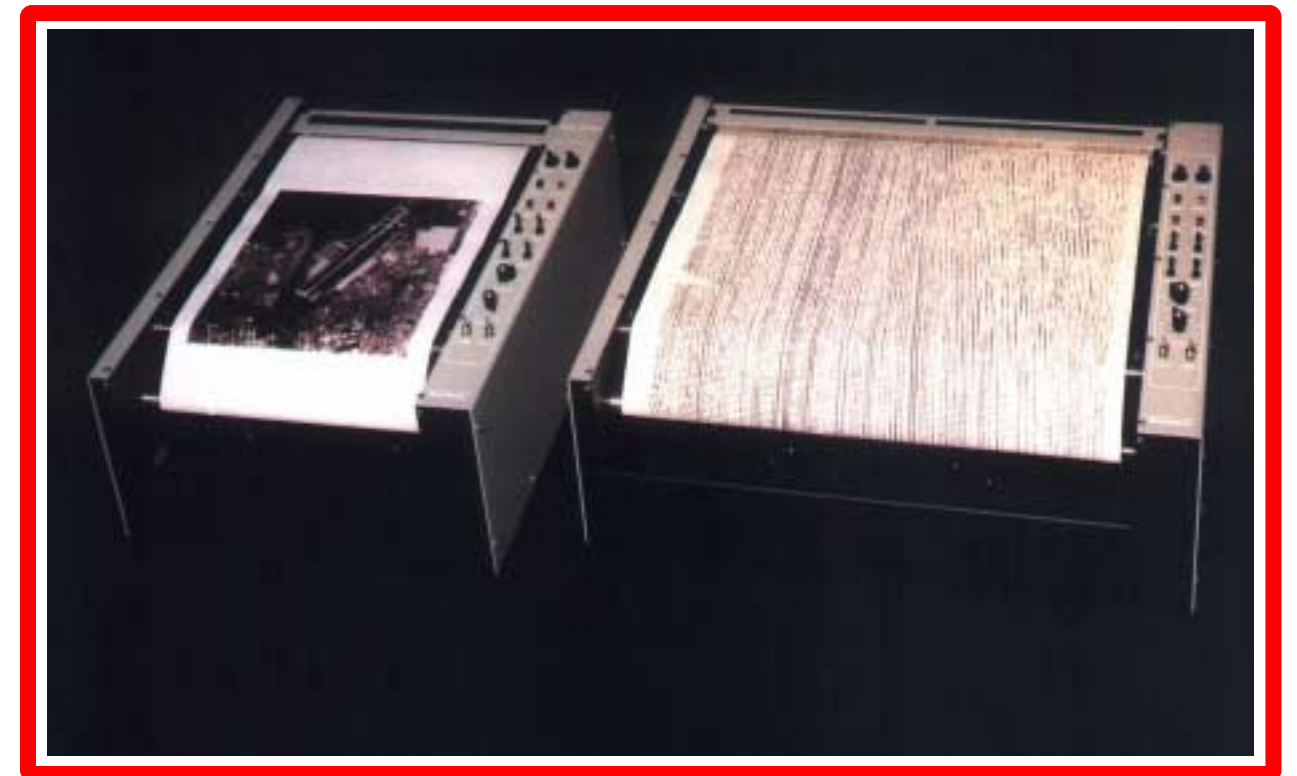
All specifications subject to change without notice.


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TDU-1200F

TDU-2000F

Flatbed Thermal Display Units




OCEAN DATA EQUIPMENT CORPORATION

TDU-1200F / TDU-2000F

Thermal Display Units

Flatbed Thermal Recorder Fulfills Unique Requirements

Ocean Data Equipment Corporation offers a thermal hard copy recorder designed specifically for applications in hydrographic survey, military surveillance, spectrum analysis, and other specialized market areas.

Flatbed TDU Thermal Display Units are now available in two distinct configurations -- in *TDU-1200F* with an 11.85 inch printing width, and the *TDU-2000F* with a 20.16 inch printing width.

The flatbed units are a natural extension of thermal technology offered in our popular, "free fall" *TDU-850 / TDU-1200* recorder product line. Hundreds of these units have been sold to original equipment manufacturers and to system integrators, in both commercial and military markets, since the product was introduced in 1986.

Display

Our thermal recorders produce full tonal images, or can display data either in graphic or alphanumeric form.

A unique microprocessor design common to all TDU-Series recorders enables the units to be easily customized to conform to specialized requirements. Ocean Data Equipment Corporation is pleased to work with individual customers and welcomes unique requirement inputs.

Benefits associated with thermal technology include a substantial reduction in lifecycle costs, greater dynamic printing range, digital input, printing that is fast and jitter-free, and the elimination of odor, carbon dust, and record smearing.

The *TDU-1200F* and *TDU-2000F* flatbeds offer our enhanced vertical data integration and produce high resolution, hard copy records.

Applications

In addition to surveillance and spectrum analysis, include: LOFAR gram displays, computer output display and control, sonar and radar recordings, facsimile transmission, and atmospheric structure profiling.

The recorders print on paper and plastic based stock.

The flatbed recorders, like the free-fall TDU units are supplied with an integral, parallel port interface suitable for high speed data transfer from computers.

Resolution

The *TDU-1200F* has a resolution of 300 dots per inch and up to 32 grey levels available, while the *TDU-2000F* has 203 dots per inch and up to 32 grey levels.

Dot resolution is preserved over the whole grey scale. The recorders always print the full compliment of dots, with each dot's grey shade appropriately modulated by the image data. TDU thermal recorders feature a jitter-free operation, a precise paper feed mechanism, and exact dot positioning to produce images with clearly defined edges and shade purity.

Power On Self Test

An internal test routine automatically checks for proper processor operation, and a self-generated test pattern may be entered from the operator control panel.

Modular in design and offering the latest advances in technology, TDU recorders are extremely reliable and have always offered customers the highest performance levels at the lowest possible operating cost.

Internal Controls

- 1 SPARE
- 2 SPARE
- 3 Master/Slave
- 4 Left/Right Scan
- 5 Paper Type
- 6 Video Polarity
- 7 Grey Shade 1
- 8 Grey Shade 0

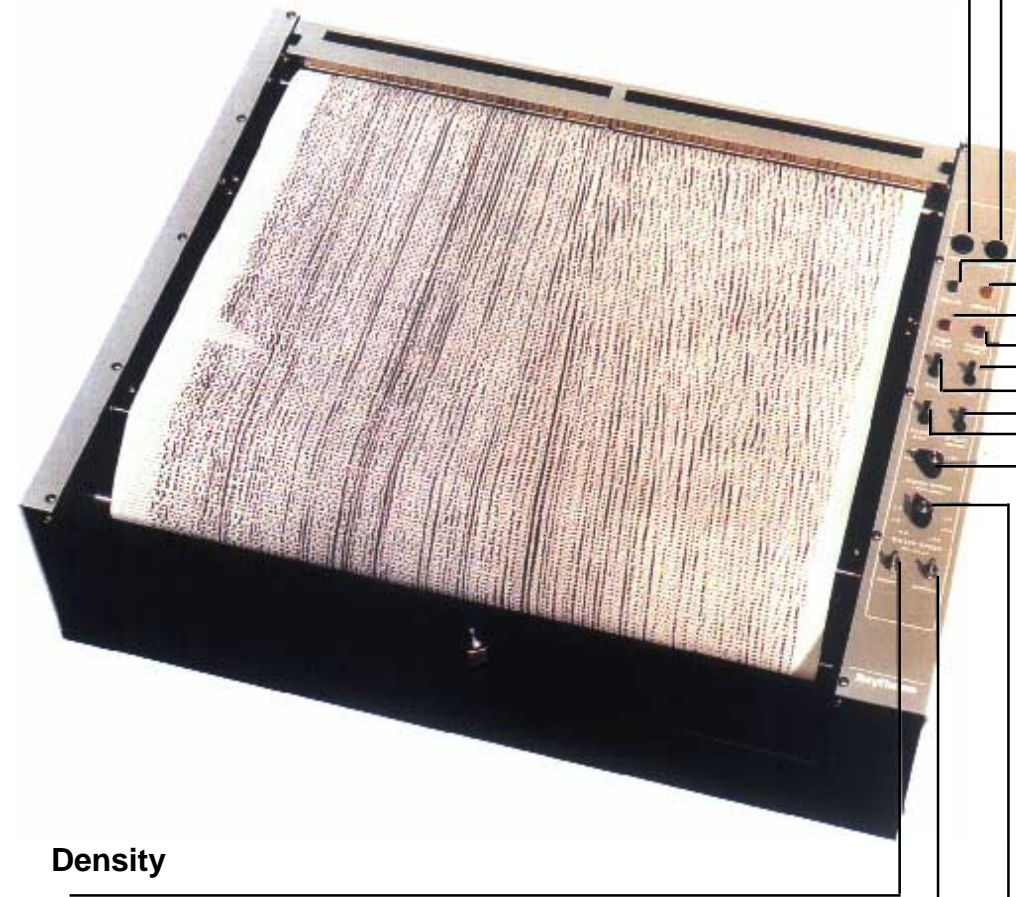
Operator Controls

Takeup

Paper takeup motor circuit breaker.

Power

On/Off circuit breaker. Applies power to unit.



Ready

Lighted during normal operation.

Remote

Indicator is lighted when unit is integrated within another system and remotely operated.

Temp Fault

Indicator is lighted if unit shuts down due to excessive thermal head temperature.

Paper Fault

Indicator is lighted when paper is expended or head is in released position.

Test

Selects internal test and shade pattern.

Cal

Selects a calibrated shade response.

Event Mark

Prints solid line across chart.

Density

Dynamic range adjustment

Contrast

Shade ratiometric adjustment.

Sweep Speed

Selects scan rate (sec/scan)

Paper Speed

Selects lines / inch feed rates.

Paper Advance

For rapid advance of paper feed.