

CMX-2300T

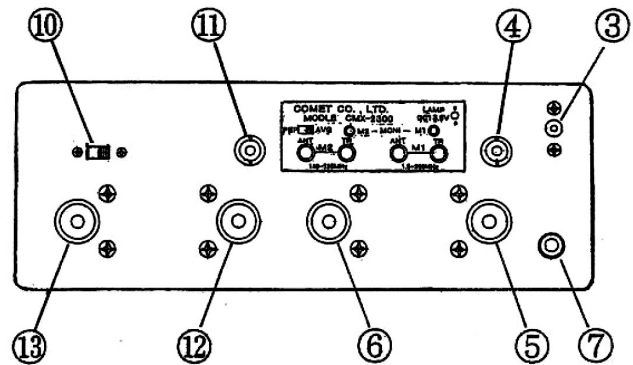
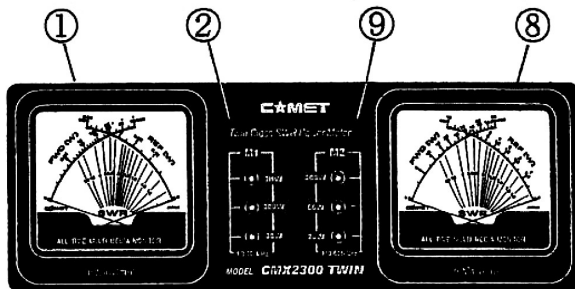
Power meter with Twin cross needle display for HF, VHF, UHF

Thank you for your purchasing our product. This product is made under the stringent quality control. Should there be any breakage in transit, please do not hesitate to contact the shop you purchased this product. For your safety, read this manual carefully for proper handling and operation before using.

◆ Features

- 1.8-200MHz band and 140-525MHz band simultaneously can be measured based on two separate band meters.
- Cross needle display provides FWD, REF and SWR simultaneously.
- Passing Sensor helps power loss minimal. (Continuous Connection is OK)
- Beautifully illuminated when connected to your power supply.
- BNC Connector on the back side for monitoring modulated wave form and measuring frequency.

◆ Appearance & Components



- ① Display meter M1: indicates FWD, REF and SWR
- ② Measurement range selector button M1: changes the max power of FWD
- ③ Power supply input terminal: for illuminating the meter
- ④ Monitor output connector M1: for attenuated 30dB high-frequency power.
- ⑤ TR connector M1: SO-239(M-J) type Connector for the Power of Antenna
- ⑥ ANT connector M1: SO-239(M-J) type Connector for Antennas or Dummy Load
- ⑦ Earth terminal: for connecting the earth cable. TVI and BCI will be decreased when it's earthed.
- ⑧ Display meter M2: indicates FWD, REF and SWR
- ⑨ Measurement range selector button M2: changes the max power of FWD
- ⑩ AVG/PEP selector switch: AVG reads Average Voltage. PEP reads Peek Envelope Power
- ⑪ Monitor output connector M2: for attenuated 30dB high-frequency power.
- ⑫ TR connector M2: SO-239(M-J) type Connector for the Power of Antenna
- ⑬ ANT connector M2: SO-239(M-J) type Connector for Antennas or Dummy Load



◆ Precautions for using

- CMX-2300T is perfectly pre-tuned. Do not take the panel off or touch inside, it might cause the measurement error. Especially, the RF sensor has extremely low loss circuit so that you can't tune it with a common measuring instrument.
- Never attempt to use the monitor a 15V or more. Failure to follow this could cause serious damage.

◆ Specifications

	M1 band	M2 band
Frequency range	1.8-200MHz	140-525MHz
Power measurement area	0-3KW(HF), 0-1KW(VHF)	0-200W
Power measurement range	30/300/3KW	20/50/200W
Power measurement accuracy	±10% (In full scale)	
SWR measurement area	1.0-∞	
Impedance	50Ω	
VSWR	1.2 or less	
Insertion loss	0.2dB or less	
Minimum power for SWR measurement	Approx. 6W	
Connector	SO-239(M-J)	
Power supply for illuminating lamps	DC11-15V Approx.450mA	
Dimension (Parenthetic number includes protrusions)	(W) 250 x (H) 93 (98) x (D) 110 (135)	
Weight	Approx. 1540g	

◆ How to connect

- At 1.8~200MHz Band, put the antenna cable into M1 "TR" connector. Then, put the antenna feeding cable or dummy load into M1 "ANT" connector.
- At 140~525MHz Band, put the antenna cable into M2 "TR" connector. Then, put the antenna feeding cable or dummy load into M2 "ANT" connector.
- When you use an Antenna Tuner with CMX-2300T, put CMX-2300T between Transceiver and an Antenna Tuner. Do not put it between an Antenna Tuner and cable. Failure to follow this might cause serious damage.
- Connect the Power at 11~15V to the External Source Terminal for illumination, if necessary.

Note : Never attempt to use it at 15V or more.

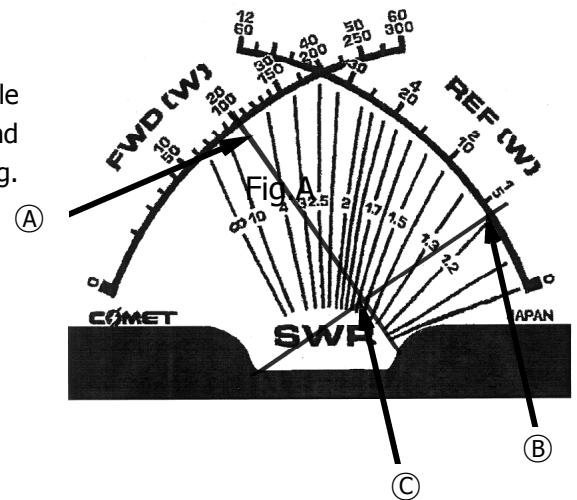
◆ How to use

Switch the Power Range Button, according to the power of transceiver. While the transceiver transmitting. FWD Meter indicates Forwarding Wave Power and REF Meter indicates Reflecting Wave Power. while the transceiver transmitting. Cross Point of these two needles indicates SWR.

1. FWD power → 20W (A)
2. REF power → 0.8W (B) (Example -1)
3. SWR power → 1.5 (C)

In 200W range

1. FWD power → 80W (A)
2. REF power → 3.2W (B) (Example -2)
3. SWR power → 1.5 (C)



Warning

- Extremely high SWR might cause serious damage. ■ Do not expose RF Censor to excessive shock.
 - You MUST keep CMX-2300T at horizontal position.
- Maximum continuous power is changed as below in case wave is FM, AM, CW, FAX or RTTY. Higher Power than below would burnout elements.

MAX Continuous Power ; M1 Band : Approx. 2KW(1.8~30MHz) / Approx.800W(50MHz or more)
M2 Band : Approx. 150W(140~220MHz) / Approx.120W(400MHz or more)

Appearance and specifications are subject to change without notice.

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2nd Version