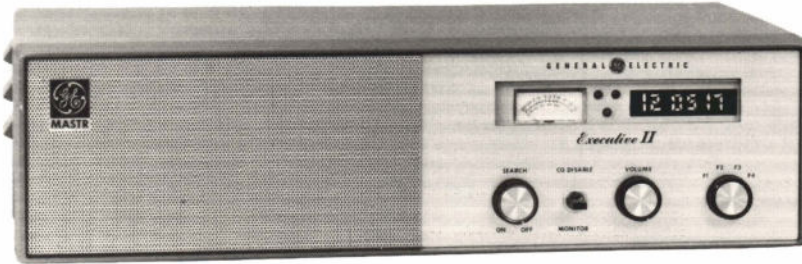


MASTR[®] Executive II

BASE STATIONS - ALL SOLID STATE

35 WATTS, 138 TO 174 MHz



Desk Top Station shown with standard desk microphone and optional equipment: clock, VU meter, PSLM & CG Monitor.



Alternate cabinet for indoor or outdoor wall mounting.



Optional Handset with magnetically operated hookswitch.

PRODUCT FEATURES

- ★ Top Quality Specifications
- ★ Modular Construction
- ★ All Solid State
- ★ Silicon Transistors & ICs
- ★ Adjustable Power Output
- ★ Broad Band Power Amplifier
- ★ Single Conversion Receiver
- ★ Fixed Squelch
- ★ Desk Top and Wall Mount Models
- ★ "Snap-Lock" Crystal Modules
- ★ Plug-in Interconnections
- ★ Modules Interchangeable with Mobiles

And many options with few incompatibilities ...

MAJOR BENEFITS

- For Optimum Performance
- For Increased Reliability
- Long Life Expectancy & Instant Operation
- Dependable High Temperature Operation
- Match Levels to System Needs
- No Tuning Controls
- Minimizes Spurious Responses
- Rids Operator of Needless Control
- Use Indoors and Outdoors
- Solid Retention/Easy Removal
- Change Modules without Soldering
- Simplifies Maintenance

Provides wide selection of models for basic or sophisticated systems.

OPTIONS and ACCESSORIES

- | | |
|--|--|
| <input type="checkbox"/> Channel Guard (tone squelch) | <input type="checkbox"/> Handset & Magnetic Hookswitch |
| <input type="checkbox"/> Up to 8 Channels | <input type="checkbox"/> External Tone Devices |
| <input type="checkbox"/> Carrier Control Timer | <input type="checkbox"/> Battery Standby Kit |
| <input type="checkbox"/> Squelch Operated Relay | <input type="checkbox"/> Electronic Digital Clock |
| <input type="checkbox"/> Priority Search Lock Monitor (2f) | <input type="checkbox"/> VU Meter |
| <input type="checkbox"/> UHS (Preamp) Receiver | <input type="checkbox"/> Remote Controllers |
| <input type="checkbox"/> Noise Blanker | <input type="checkbox"/> Local Control Extension |
| <input type="checkbox"/> Multiple Tone CG Encoder | |



OPERATING SPECIFICATIONS

MASTR Executive II BASE STATIONS

138-174 MHz

For Local, Local/Remote or Remote Operation

GENERAL

MODEL SERIES	RF POWER OUTPUT (Watts)	PA POWER INPUT (Watts)	AC POWER INPUT (Watts) @ 121 VAC			FCC FILING NUMBER			APPLICABLE TO PART NUMBER (FCC Rules)	RECEIVER FCC MODEL NUMBER
			Standby	Receive	Transmit	1&2 Freq.	3&4 Freq.	1to8 Freq.		
FI56	10 to 35	75	36	72	302	KT-124-A	KT-124-A	KT-124-B	21, 81, 89, 91, 93	ER-89-A
WI56						KT-129-A	N/A	N/A		

AC POWER INPUT: 121 VAC 50/60 Hz, operable over $\pm 20\%$ Input Voltage Range. *Up to 2 Channels only. (Optional 242 VAC or 13.8 VDC standby battery.)

DUTY CYCLE (EIA)
 Intermittent: Receiver, 100% – Transmitter, 20%
 Continuous: Transmitter 100%

CURRENT DRAIN ON OPTIONAL EMERGENCY BATTERY (13.6 VDC)
 Standby: 0.40A
 Receive: 1.5A
 Transmit: 10.0A

TEMPERATURE RANGE: –30°C to +60°C
 –22°F to +140°F

HUMIDITY: 95% RH @ 60°C (140°F)

ALTITUDE: 15,000 ft. (5,500 m.)

DIMENSIONS:	FI56 (Desk Top)		WI56 (Wall Mount)	
	High	Wide	High	Wide
High	6 ins.	15.24 cm.	21.25 ins.	53.97 cm.
Wide	20.375 ins.	51.75 cm.	22.5 ins.	57.15 cm.
Deep	13.75 ins.	34.9 cm.	8.875 ins.	27.54 cm.

WEIGHT (Approximate):
 Combination: 46 lbs. 20.8 kg
 Shipping (Domestic Pack): 56 lbs. 25.4 kg

OPERATING MODE: FI56 Models are available for Local or Local/Remote (PTT) operation. Remote Controller not furnished.
 WI56 Models are available for Remote (2 freq. max.) operation. Remote Controller not furnished.

METERING: Centralized metering sockets

SPEAKER: 3.2 ohms (Optional on Wall Mount Station)

MICROPHONE: Desk type, controlled magnetic, transistorized (for FI56 Station only).

DC REMOTE CONTROL COMBINATIONS (Model WI56 only)

Line-to-transmitter
 Terminating Impedance: 600 ohms (optional 150 or 900 ohm)
 Line Level: –20 dBm to +11 dBm

Receiver-to-line
 Output Level (1 kHz ref.)
 Voice: 0 vu (adjustable)
 Tone: +11 dBm (adjustable)

Output Impedance: 600 ohms (optional 150 or 900 ohm)
 Line Loop Resistance: 11,000 ohms (8000 line + 3000 termination)
 Control Currents: 0, ± 6 , ± 11 , –2.5 ma

RECEIVER

Type:	Basic	Noise Preamp or Blanker
RF Input Impedance:	50 ohms	
Channel Spacing:	25/30 kHz	
Sensitivity		
EIA 12 dB SINAD:	0.35 μ v	0.175 μ v
20 dB Quieting:	0.5 μ v	0.25 μ v
Noise Squelch:	4 dB SINAD	
Channel Guard Squelch:	6 dB SINAD	
Selectivity		
EIA 2-Signal		
(30 kHz channels):	–90 dB	–90 dB
(25 kHz channels):	–85 dB	–85 dB
Frequency Stability:	$\pm 0.0005\%$ from –30°C to +60°C	
Modulation Acceptance:	± 7 kHz	
Intermodulation:	–85 dB	–80 dB
Spurious and Image Rejection:	–100 dB	–95 dB
Audio Response:	Within +1 and –8 dB of 6 dB/octave de-emphasis, 300 to 3000 Hz per EIA.	
Audio Output:	5 watts, 5% distortion (1000 Hz ref.)	
Frequency Separation (max.) (Optional, 2 to 8 channels)	(MHz) <u>138to155</u>	<u>150.8to174</u>
Full Specifications (MHz):	0.9	1.0
3 dB Sensitivity Degradation (MHz):	1.6	1.8

TRANSMITTER

Rated Power Output		
Intermittent Duty:	35 watts	
Continuous Duty @ 25°C:	12 watts	
RF Output Impedance:	50 ohms	
Conducted Spurious and Harmonic Emission		
138–155 MHz:	–75 dB	
150.8–174 MHz:	–80 dB	
Modulation Deviation:	0 to ± 5 kHz (16F3 & 16F9)	
Frequency Stability:	$\pm 0.0005\%$ from –30°C. to +60°C.	
FM Noise:	–55 dB	
Audio Response:	Within +1 and –3 dB of 6 dB/octave pre-emphasis, 300 to 3000 Hz per EIA Standards	
Audio Distortion:	Less than 3%	
Frequency Separation (max.) (Optional, 2 to 8 channels)	(MHz) <u>138to155</u>	<u>150.8to174</u>
Full Specifications (MHz):	1.8	2.0
1 dB Power Output Degradation (MHz):	2.25	2.5

MOBILE RADIO DEPARTMENT

WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502

