MOBILE RADIO

ECR-2038E

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 — MAJOR BENEFITS

★ **Top Quality Specifications**	For Optimum Performance
★ **Modular Construction**	For Increased Reliability
★ **All Solid State**	Long Life Expectancy & Instant Operation
★ **Silicon Transistors & ICs**	Dependable High Temperature Operation
★ **Adjustable Power Output**	Match Levels to System Needs
★ **Broad Band Power Amplifier**	No Tuning Controls
★ **Single Conversion Receiver**	Minimizes Spurious Responses
★ **Fixed Squelch**	Rids Operator of Needless Control
★ **Desk Top and Wall Mount Models**	Use Indoors and Outdoors
★ **"Snap-Lock" Crystal Modules**	Solid Retention/Easy Removal
★ **Plug-in Interconnections**	Change Modules without Soldering
★ **Modules Interchangeable with Mobiles**	Simplifies Maintenance
And many options with few incompatibilities ...	*Provides wide selection of models for basic or sophisticated systems.*

OPTIONS and ACCESSORIES

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

GENERAL ELECTRIC

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 ±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%

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	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	65 lbs.	29.5 kg.
Shipping (Domestic Pack)	56 lbs.	25.4 kg.	72 lbs.	32.7 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).

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

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 µv	0.175 µv
20 dB Quieting:	0.5 µv	0.25 µv
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:	±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.) (MHz) (Optional, 2 to 8 channels)	138to155	150.8to174
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:	±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.) (MHz) (Optional, 2 to 8 channels)	138to155	150.8to174
Full Specifications (MHz):	1.8	2.0
1 dB Power Output Degradation (MHz):	2.25	2.5

MOBILE RADIO DEPARTMENT
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GENERAL ELECTRIC

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11/78 Printed in U.S.A.
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