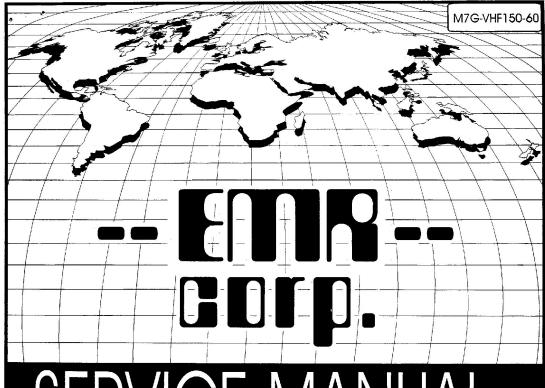
## APPENDIX B OPERATING/SERVICE/INSTRUCTION MANUAL



# SERVICE MANUAL

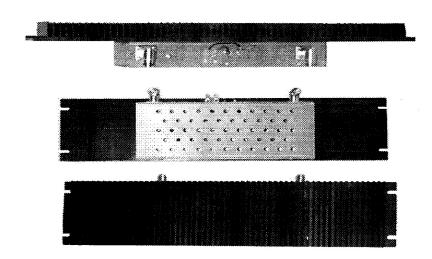
# VHF 150-60 SERIES 150-170 MHz AMPS

EMR Corp. - 22402 N. 19th Ave. - Phoenix, Az. 85027 Tel: 602/581/2875 1/800/796/2875 Email: info@emrcorp.com http://www.emrcorp.com

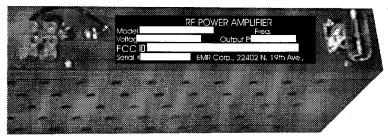
Table of Contents	PAGE
PRODUCT DESCRIPTION	2
GENERAL SPECIFICATIONS	3
CIRCUIT DESCRIPTIONS	4
SCHEMATICS	5
PARTS LIST	6
BLOCK DIAGRAM	7
WARRANTY INFORMATION	8

The VHF 150-60 Series of EMR amplifiers are intended for use in commercial communications systems. Applications include land mobile repeaters, trunking and data systems. They will cover the frequency range extending from 150 MHz to 170 MHz

For operator convenience, views of the top, front, and side of the amplifier are presented here.



FCC Type Acceptance Label Placement



7

FREQUENCY RANGE:

150-170 MHz

**OPERATING MODE:** 

FΜ

MODEL #:

VHF 150-60

**OUTPUT POWER:** 

**60 WATTS** 

**OPERATING** 

TEMPERATURE RANGE:

-20 to +50 Deg. C

**OPERATING VOLTAGE:** 

+13.6 VDC / 10 amps

**DUTY CYCLE:** 

100%

HARMONIC ATTENUATION: Meets FCC Type Acceptance

**OPTIONS:** 

EMR Amplifiers are available with several mechanical mounting options and in various configurations.
(Specified at time of order.)

FCC TYPE ACCEPTANCE LABEL

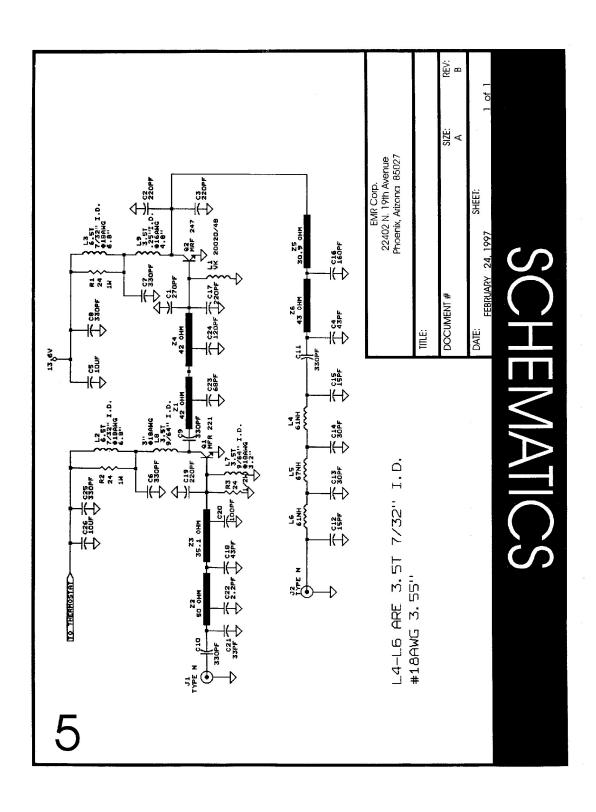


3

For placement see: PRODUCT SPECIFICATIONS

# The VHF 150-60 Series power amplifier is a self-contained rack mountable unit capable of up to 60 watts of class c output power. The input signal is amplified by the driver transistor capable of producing 15 watts. This signal is amplified by the final transistor and then filtered by a five element low pass filter.

4

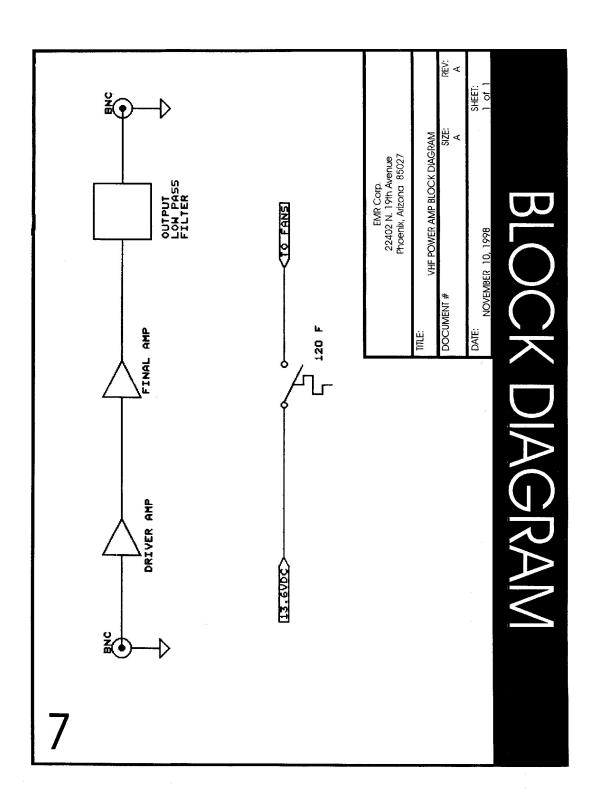


### VHF 60 WATT AMP 150 - 170 MHz Bill of Materials Feb. 24, 1997

ITEM	QUANTITY	REFERENCE	PART
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	1 4 2 2 7 2 2 1 1 1 1 2 1 2 2 1 3 1 1 3 2 1	C1, C2,C3,C17,C19 C4, C18 C5,C26 C6,C7,C8,C9,C10, C11,C25 C12,C15 C13,C14 C16, C20 C21 C22 C23 C24 J1,J2 L1 L2,L3 L4,L6 L5 L7,L8,L9 Q1 Q2 R1,R2,R3 Z1,Z4 Z2 Z3 Z5 Z6	270PF 220PF 43PF 10UF 330PF 15PF 30PF 160PF 100PF 33PF 2.2PF 68PF 120PF TYPE N VK 20020/4B 6.5T 61NH 67NH 3.5T MRF 221 MRF 247 24 42 OHM 50 OHM 35.1 OHM 30.9 OHM 43 OHM

# PARTS LIST

6



EMR Corporation, hereinafter called EMR, warrants that all equipment of its manufacture shall be free from defects in design, materials and workmanship for a period of 12 months from date of shipments unless otherwise covered by special warranty. If any such product, entirely or in part, fails to produce the performance set forth in the brochures, quotations or literature provided by EMR, such product will be replaced or repaired at EMR's expense provided that the failure was not the result of alternation, misuse, tampering, misapplication, shipping damage or vandalism. If a product failure is found to be the fault of EMR, costs of transportation to the EMR factory and return will be born by EMR. Should EMR supply components not of its own manufacture, but specified by a customer, the warranty shall reflect the original manufactures warranty, only.

It is understood that this statement constitutes EMR's entire and only warranty, there being no other warrantees expressed or implied in law or in fact, including implied warrantees of fitness. In no event shall EMR be liable for damages either direct or consequential, that may be occasioned by any defect in materials, workmanship or product support.

### For service on this amplifier, contact:

EMR Corporation 22402 N. 19th Avenue Phoenix, Arizona 85021 Tel: 602/581/2875 800/796/2875

E-mail: info@emrcorp.com http://www.emrcorp.com FAX: 602/582/9499

8

# ARRANTY INFO