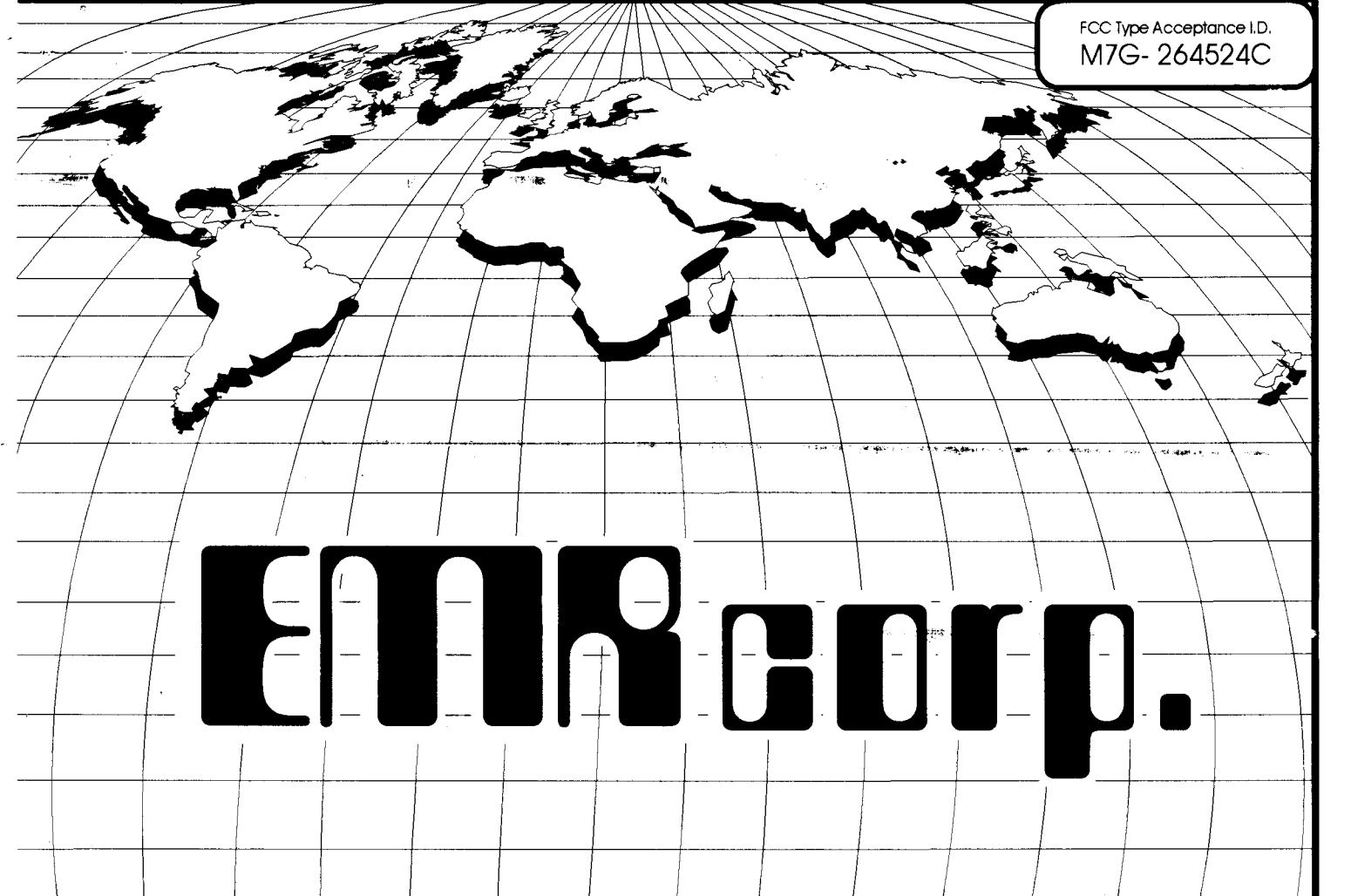




EMR corp.

SERVICE MANUAL

264524C SERIES

440-470 Mhz AMPS

*469.9895 Mhz
440.0105*

EMR Corp. - 22402 N. 19th Ave. - Phoenix, Az. 85027

Tel: 623/581/2875

1/800/796/2875

Email: info@emrcorp.com

<http://www.emrcorp.com>

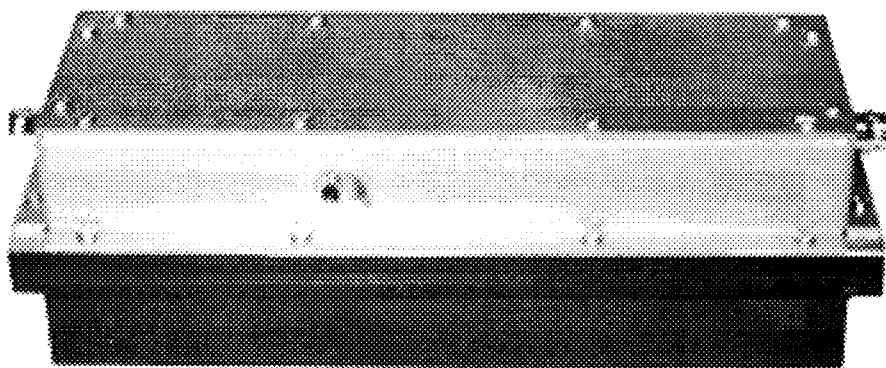
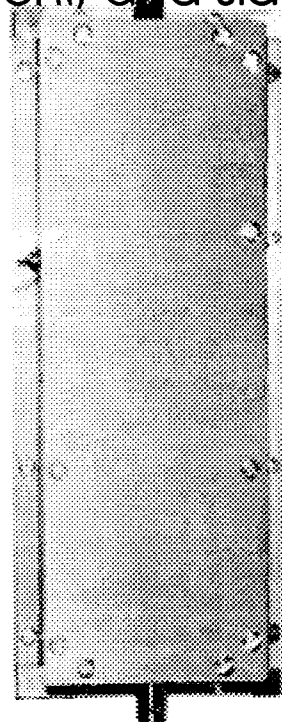
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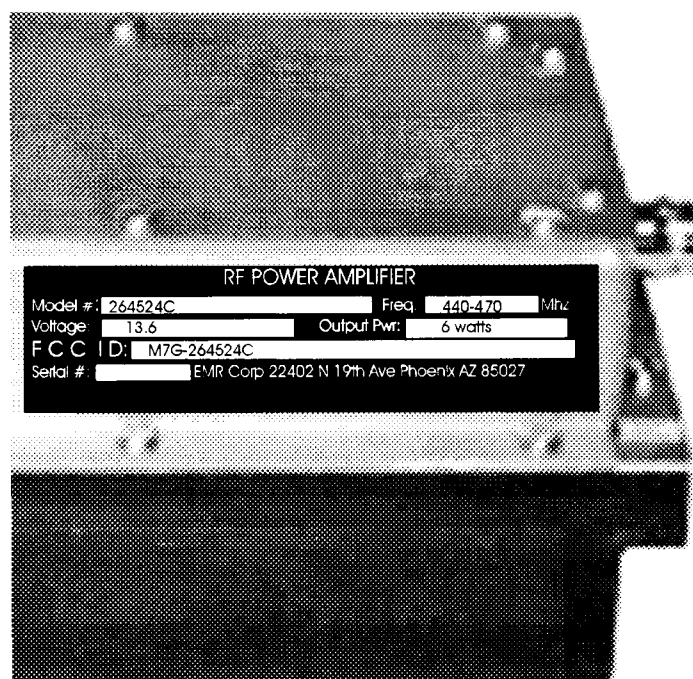
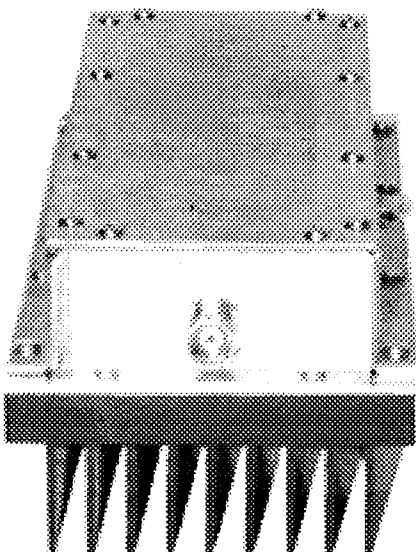
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The 264524C Series of EMR amplifiers are intended for use in low power amplification and re-amplification systems. Applications include land mobile radio bi- and uni- directional signal booster systems. They will cover the frequency range extending from 440 MHz to 470 Mhz.

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



FCC Certification
Label Placement



PRODUCT DESCRIPTION

GENERAL SPECIFICATIONS

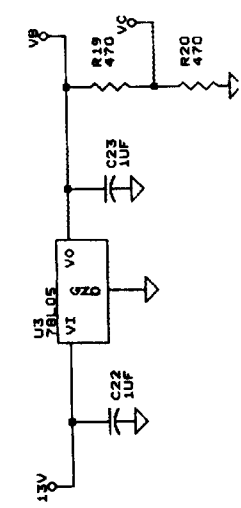
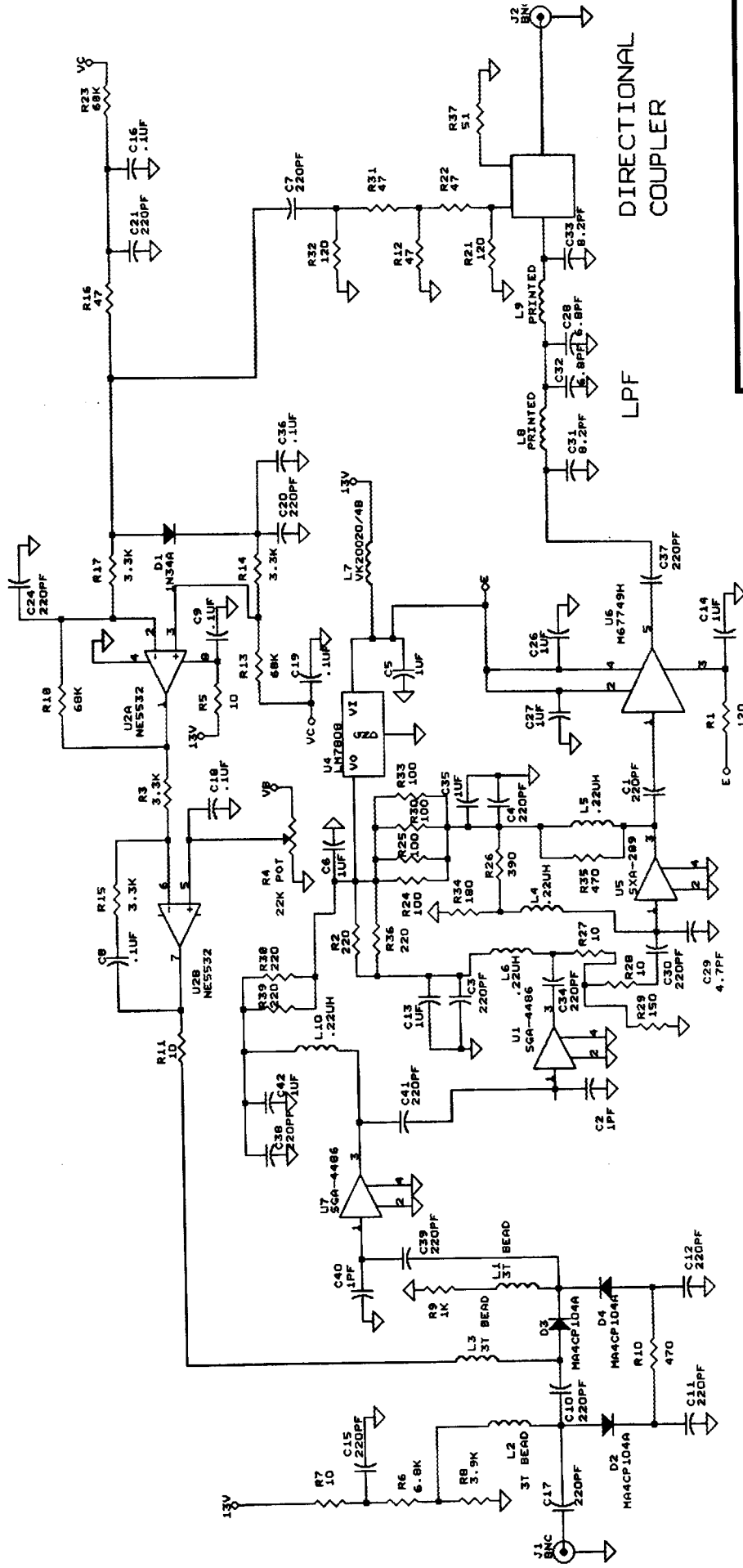
FREQUENCY RANGE:	440 - 470 MHz
OPERATING MODE:	FM
USAGE:	Bi- & Uni- Directional Systems
MODEL #:	264524C
OUTPUT POWER:	6 WATTS
OPERATING TEMPERATURE RANGE:	-20 to +50 Deg. C
OPERATING VOLTAGE:	+13.6 VDC
DUTY CYCLE:	100%
HARMONIC ATTENUATION:	Meets FCC Certification
OPTIONS:	EMR Amplifiers are available With several mechanical mounting options and in various configurations. (Specified at time of order.)

FCC
LABEL

RF POWER AMPLIFIER			
Model #:	264524C	Freq:	440-470 Mhz
Voltage:	13.6	Output Pwr:	6 watts
FCC ID:	M7G-264524C		
Serial #:	EMR Corp 22402 N 19th Ave Phoenix AZ 85027		

The 264524C Series amplifier is a self-contained single board unit capable of up to 6 watts of output power with built in power control circuitry. The input signal is amplified by 2 gain blocks and a module capable of 65dB of gain, filtered by the output low pass filter and finally analyzed by the output coupler circuitry for excessive power. If overdrive level is sensed, the coupler and power control circuits compute a dc voltage that controls an electronic attenuator at the input of the unit. The attenuator makes the necessary adjustment to relieve the overdrive condition sensed by the output coupler.

SCHEMATICS



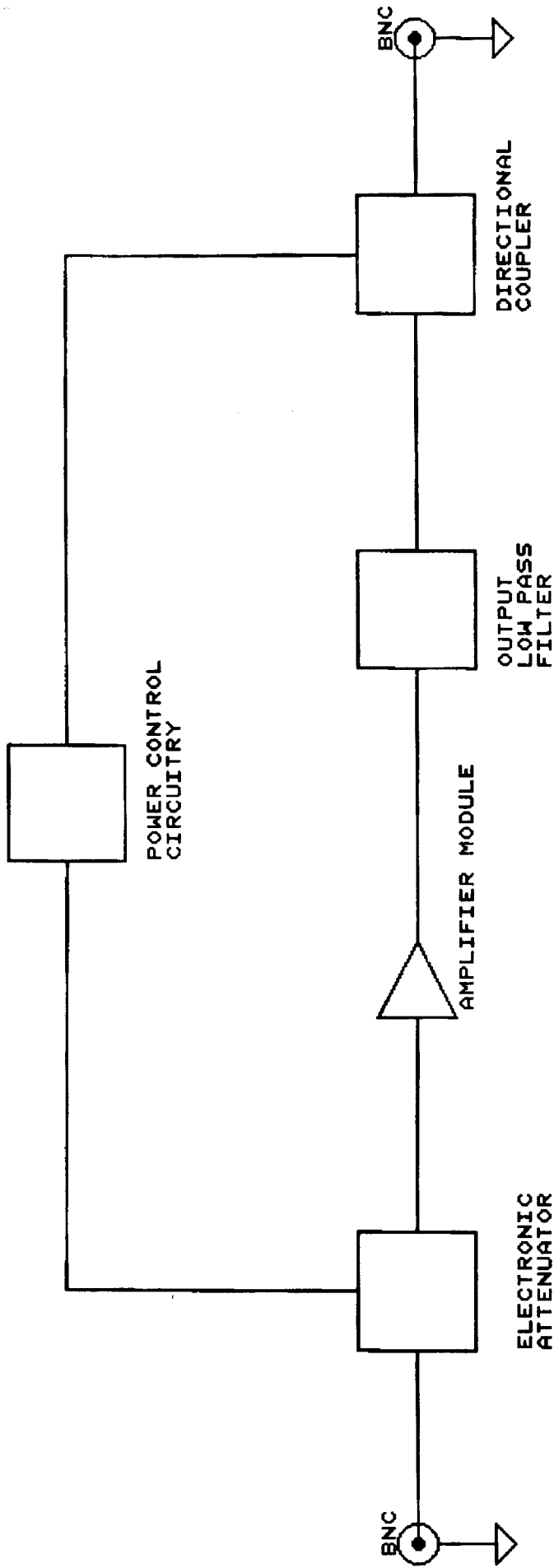
EMR Corporation 22402 North 19th Avenue Phoenix, Arizona 85027	
Title: 6-watt UHF Linear Amp w/ Power Control	
Size B	Document #
Date: October 7, 2002	Sheet: 1 of 1
Rev: B	

6 WATT LINEAR AMP W/POWER CONTROL

Bill of Materials Nov. 20, 2002

PARTS LIST

ITEM	QUANTITY	REFERENCE	PART
1	19	C1, C3, C4, C7, C10, C11, C12 C15, C17, C20, C21, C24, C30 C34, C37, C38, C39, C41	220PF
2	2	C2, C40	1PF
3	10	C5, C6, C13, C14, C22, C23 C26, C27, C35, C42	1UF
4	6	C8, C9, C16, C18, C19, C36	.1UF
5	2	C28, C32	6.8PF
6	1	C29	4.7PF
7	2	C31, C33	8.2PF
8	1	D1	1N34A
9	3	D2, D3, D4	MA4CP104A
10	2	J1, J2	BNC
11	3	L1, L2, L3	3T BEAD
12	4	L4, L5, L6, L10	.22UH
13	1	L7	VK20020/4B
14	2	L8, L9	PRINTED
15	3	R1, R21, R32	120
16	4	R2, R36, R38, R39	220
17	4	R3, R14, R15, R17	3.3K
18	1	R4	22K POT
19	5	R5, R7, R11, R27, R28	10
20	1	R6	6.8K
21	1	R8	3.9K
22	1	R9	1K
23	4	R10, R19, R20, R35	470
24	4	R12, R16, R22, R31	47
25	3	R13, R18, R23	68K
26	4	R24, R25, R30, R33	100
27	1	R26	390
28	1	R29	150
29	1	R34	180
30	1	R37	51
31	2	U1, U7	SGA-4486
32	1	U2	NE5532
33	1	U3	78L05
34	1	U4	LM7808
35	1	U5	SXA-289
36	1	U6	M67749H



13.6VDC

EMR Corp.
22402 N. 19th Avenue
Phoenix, Arizona 85027

TITLE:

440-470 Mhz Bi-Directional Block Diagram

DOCUMENT #

SIZE: A

REV: A

DATE:

November 20, 2002

SHEET:

1 of 1

BLOCK DIAGRAM

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:

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22402 N. 19th Avenue
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