



FISHER MODEL  
MPX-10



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TRADE NAME	Fisher Model MPX-10
MANUFACTURER	Fisher Radio Corp., 21-21 44th Drive, Long Island City 1, N. Y.
TYPE SET	AC Operated 5 Tube Stereo Multiplex Adaptor
POWER SUPPLY	105-125 Volts AC, 50-60 Cycles      RATING    18 Watts, .2 Amp. @117 Volts AC

**HOWARD W. SAMs & CO., INC.** Indianapolis 6, Indiana

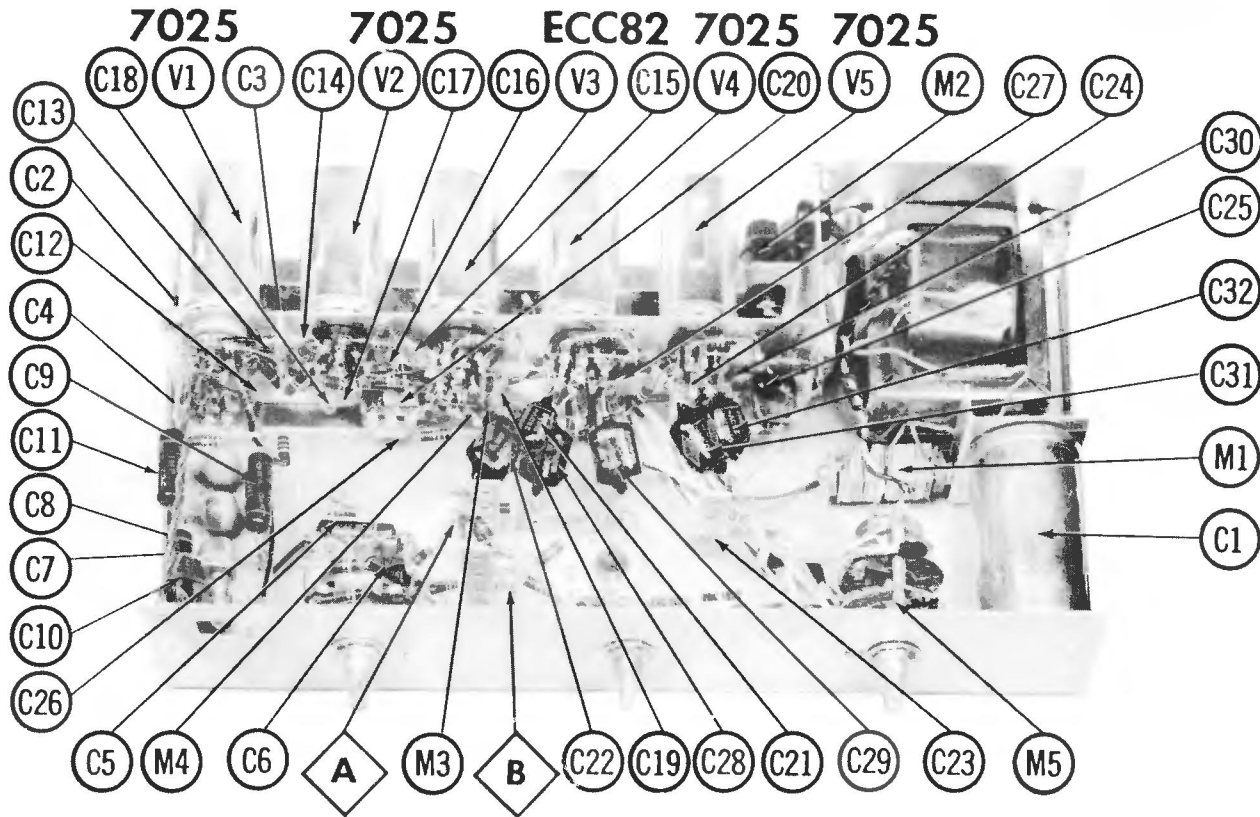
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# PARTS LIST AND DESCRIPTIONS

## TUBES

## CHASSIS—TOP VIEW



ITEM No.	USE	TYPE	ITEM No.	USE	GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
					FOLLOWER	FOLLOWER	FOLLOWER	FOLLOWER	FOLLOWER	FOLLOWER
V1	Sub Carrier Cath. Follower	7025 (ECC83/12AX7*)	V4	Matrix Amp. - Matrix Amp. Channel A Output-Channel	7025 (ECC83/12AX7*)					
V2	Sub Carrier Amp.	7025 (ECC83/12AX7*)	V5	B Output	7025 (ECC83/12AX7*)					
V3	Sub Carrier Cath. Follower	ECC82/12AU7								
	Sub Carrier Amp.									

### ELECTROLYTIC CAPACITORS

ITEM No.	CAP.	VOLTS	REPLACEMENT DATA				NOTES			
			FISHER PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.		PYRAMID PART No.	SPRAGUE PART No.	
C1A	.40	300	C670-125		C0870	FP327-89	TMT-181			TVLS-3561, 4*
B	#40	250			BR4025					
C	.40	250								

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

### FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REMARKS	REPLACEMENT DATA							
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELEMCO PART No.	MALLORY PART No.	SPRAGUE PART No.		
C2	8 1000V NPO 10%		BPD-02	DD-203	C10V8C	CCD-203	B-120			5HK-S20
C3	12 1000V NPO 10%			TC2-12	BYB6S2	C10Q12C	CCTO-120	CNO-412		MS-222
C4	.022 200V 5%				IR3D22	IR3D22	CM-20B-222J	CTM-4147		4TM-S47
C5	.047 250V 10%		V84C4S47		P4M4S47	4DP-3-473	6DP-2-822 5%			MS-282
C6	.082 200V 5%				IR3D82	IR3D82	6DP-2-822 5%			MS-282
C7	.082 200V 5%				IR3D82	IR3D82	6DP-1-302 5%			MS-282
C8	.082 200V 5%				IR3D82	IR3D82	6DP-2-822 5%			MS-282
C9	.082 200V 5%				IR3D82	IR3D82	6DP-2-822 5%			MS-282
C10	.082 200V 5%				IR3D82	IR3D82	6DP-2-822 5%			MS-282
C11	.082 200V 5%				IR3D82	IR3D82	6DP-2-822 5%			MS-282
C12	50000		BPD-05	DF-503	CUB2S5	CUB2S5	6DP-3-503	TA-150		5HK-S50
C13	47 1000V N750 10%			DTN-47	C10Q47U	C10Q47U	CCTN-470	CNT-447		10TCU-Q47
C14	47 1000V N750 10%			DTN-47	C10Q47U	C10Q47U	CCTN-470	CNT-447		10TCU-Q47
C15	50000		BPD-05	DF-503	CUB2S5	CUB2S5	6DP-3-503	TA-150		5HK-S50
C16	1000		BPD-05	DD-102	BYA100DM	BYA100DM	6DP-3-503	TA-150		5HK-S50
C17	50000		BPD-05	DD-102	BYA100DM	BYA100DM	6DP-3-503	TA-150		5HK-S50
C18	1000		BPD-05	DD-102	BYA100DM	BYA100DM	6DP-3-503	TA-150		5HK-S50
C19	33 1000V N750 10%			DTN-33	C10Q33U	C10Q33U	CCTN-330	CNT-433		10TCU-Q33
C20	820 5%		V84C4S22		IR3T82	IR3T82	CM-20B-821J	MCB451		MS-382
C21	.022 250V 10%				P4M4S22	4DP-2-223	GTM-A122	4TM-S22		4TM-P1
C22	.1 250V 10%				P4M4P1	4DP-3-104	GTM-A01	4TM-P1		4TM-P1
C23	47 1000V N750 10%			DTN-47	C10Q47U	C10Q47U	CCTN-470	CNT-447		10TCU-Q47
C24	20000		BPD-02	DD-203	BYB6S2	BYB6S2	CCD-203	B-120		5HK-S20
C25	.1 250V 10%			DD-203	BYB6S2	BYB6S2	CCD-203	B-120		5HK-S20
C26	20000		BPD-02	DD-203	BYB6S2	BYB6S2	CCD-203	B-120		5HK-S20
C27	20000		BPD-02	DD-203	BYB6S2	BYB6S2	CCD-203	B-120		5HK-S20
C28	.1 250V 10%		V84C4P1		P4M4P1	4DP-3-104	GTM-A01	4TM-P1		4TM-P1
C29	.1 250V 10%				P4M4P1	4DP-3-104	GTM-A01	4TM-P1		4TM-P1
C30	47 1000V N750 10%		V84C4S22		C10Q47U	C10Q47U	CCTN-470	GTM-4122		10TCU-Q47
C31	.022 250V 10%				P4M4S22	4DP-2-223	GTM-A122	4TM-S22		4TM-P1
C32	.1 250V 10%				P4M4P1	4DP-3-104	GTM-A01	4TM-P1		4TM-P1

### CONTROLS

ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES	
		FISHER PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.		MALLORY PART No.
R1A	500K*	R734-118				UE3955	Output Level, Channel A
R2A	500K*	R734-119	B-59	A47-500K-S	Q11-133	U50	Output Level, Channel B
B	500K		Not Req.	FS-3	Not Req.	Not Req.	Channel Separation
R3	50K	R50150-1					Matrix Control

\* STA-LOC equivalent: FA55DT334, RU55DT334, CS9500.

\* Taps @ 200K & 330K.

# PARTS LIST AND DESCRIPTIONS (Continued)

## RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING
R4	10meg	R14	220K	R24	470K	R34	82K	R44	4700Ω
R5	4.7meg	R15	1500Ω	R25	10K	R35	47K	R45	4700Ω
R6	33K	R16	150K	R26	1800Ω	R36	100K	R46	100K 5%
R7	22meg	R17	100K	R27	33K	R37	47K	R47	100K 5%
R8	39K 5%	R18	220K	R28	68K 5%	R38	3.3meg	R48	47K
R9	150K	R19	470K	R29	330K	R39	330K	R49	100K
R10	3900Ω	R20	1500Ω	R30	1meg	R40	22meg	R50	47K
R11	470K	R21	470K	R31	22meg	R41	100K	R51	3.3meg
R12	680Ω	R22	100K	R32	100K 5%	R42	470K	R52	330K
R13	2200Ω	R23	1000Ω	R33	100K 5%	R43	22meg	R53	22meg

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Fisher Part No.	Gramer Part No.	Meissner Part No.	Miller Part No.	
L1	RF Choke	L734-137				4MH
L2	RF Choke	L734-136				1.6MH
L3	RF Choke	L734-136				1.6MH
L4	RF Choke	L734-137				4MH

## TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA				Triad Part No.
		Fisher Part No.	Hollidson Part No.	Merit Part No.	Rom Part No.	
T1	117V @ .2A 360 VCT 6.3V @ ③. 013A 1.6A	T734-115				

## RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		Fisher Part No.	Federal Part No.	Sarkes Tarzian Part No.	Sylvania Part No.	
M1	.03A	SR5013 ①		026-14C1-Q		① Selenium Type

## FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			Fisher Part No.	Holder	Fuse	BUSS Part No.
M2	3AG	1A 250V	F3297		3/2, 500 (3AG 1/4, 250V)	AGC 1/2 HXP

## CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		Fisher Part No.	CBS Part No.	Raytheon Part No.	Sylvania Part No.	
M3	V-RL232 ①	IN636	IN295	IN295	IN295	Counter Det. (Pigtail)
M4	V-RL232 ①	IN636	IN295	IN295	IN295	Counter Det. (Pigtail)

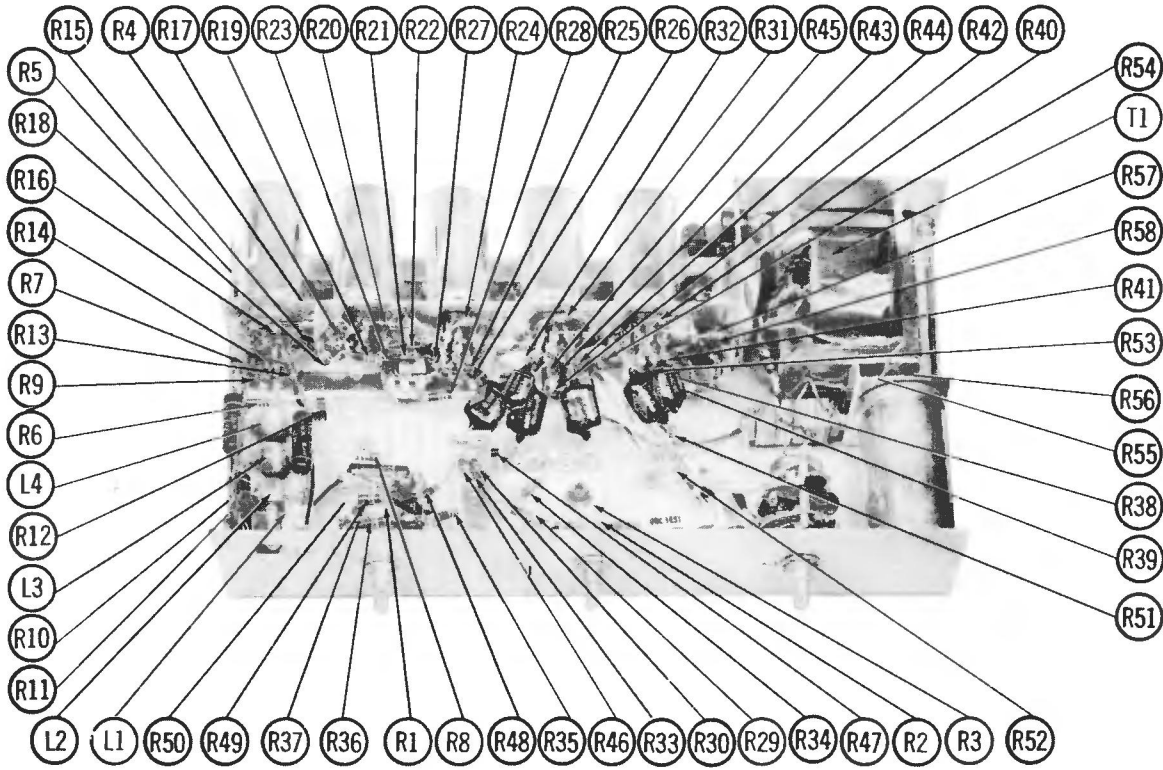
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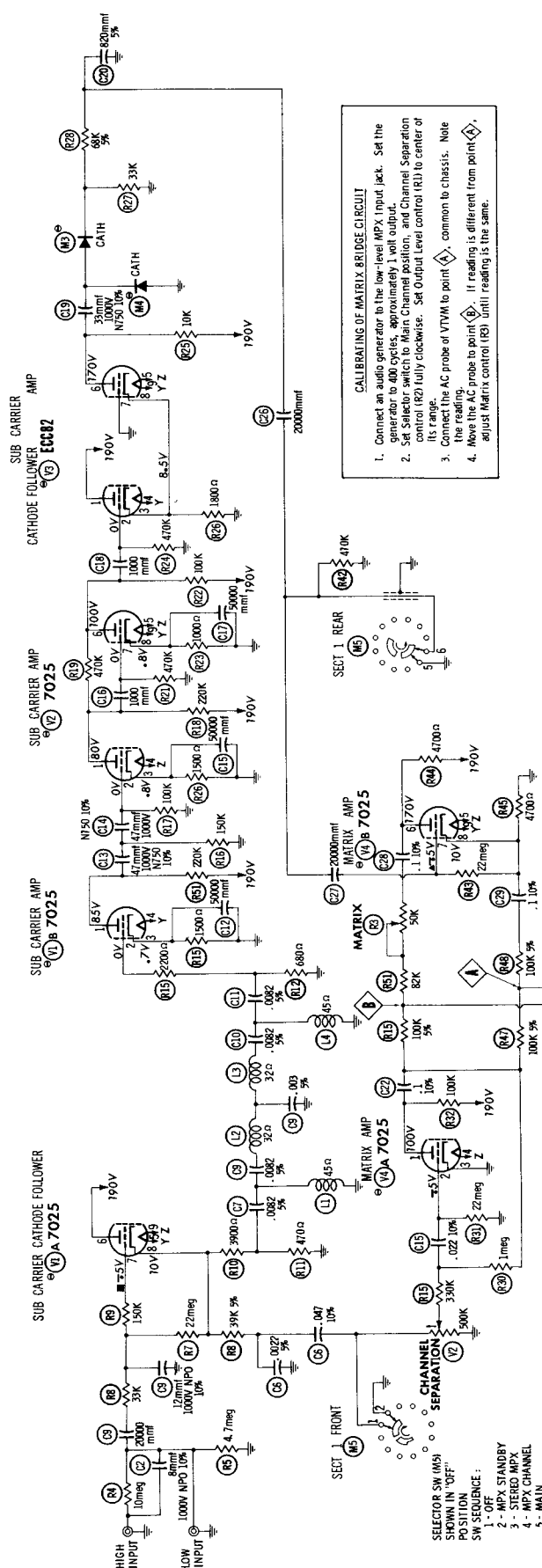
ITEM No.	PART NAME	Fisher Part No.	Notes
M5	Switch	S734-124	Selector

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
 Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)  
 ..... Use BELDEN No. 1725-K (7 1/2 Ft. Length)

# CHASSIS—TOP VIEW





**CALIBRATING OF MATRIX BRIDGE CIRCUIT**

1. Connect an audio generator to the low-level MPX input jack. Set the generator to 400 cycles, approximately 1 volt output.
2. Set Selector switch to Main Channel position, and Channel Separation control (R2) fully clockwise. Set Output Level control (R1) to center of its range.
3. Connect the AC probe of VTVM to point  $\diamond$ , common to chassis. Note its range.
4. Move the AC probe to point  $\diamond$ . If reading is different from point  $\diamond$ , adjust Matrix control (R8) until reading is the same.

**RESISTANCE READINGS**

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	7025	1.20K	2900 $\Omega$	1500 $\Omega$	1.0 $\Omega$	1.0 $\Omega$	1.300K $\Omega$	1.300K $\Omega$	400 $\Omega$	1.0 $\Omega$
V2	7025	1.20K	100 $\Omega$	1500 $\Omega$	1.0 $\Omega$	1.0 $\Omega$	1.00K $\Omega$	470K	1000 $\Omega$	1.0 $\Omega$
V3	6X82	1.300K $\Omega$	470K	1800 $\Omega$	1.0 $\Omega$	1.0 $\Omega$	1.13K $\Omega$	0 $\Omega$	1800 $\Omega$	1.0 $\Omega$
V4	7025	1.00K $\Omega$	22meg	0 $\Omega$	1.0 $\Omega$	1.0 $\Omega$	1.770K $\Omega$	22meg	4700 $\Omega$	1.0 $\Omega$
V5	7025	1.00K $\Omega$	22meg	0 $\Omega$	1.0 $\Omega$	1.0 $\Omega$	1.00K $\Omega$	22meg	0 $\Omega$	1.0 $\Omega$

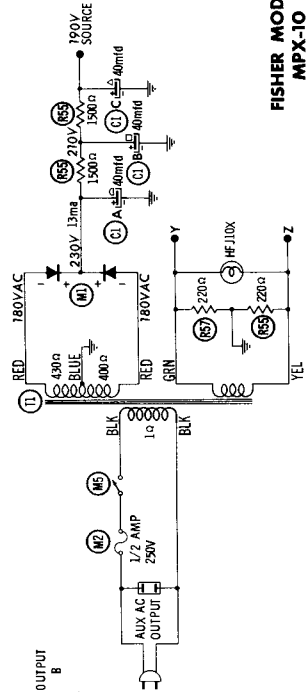
† MEASURED FROM OUTPUT OF A1  
 ‡ MEASURED FROM PIN 8 OF V1  
 § MEASURED FROM PIN 8 OF V4

**NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.**

1. AC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of  $\pm 1.5\%$  in voltage and resistance readings.
6. All controls at minimum; proper output load connected.

**SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION**  
**DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM**  
**ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)**

**A PHOTOFACT STANDARD NOTATION SCHEMATIC**  
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