



Model MH-3
MULTI-HEAD

INSTRUCTION MANUAL

MERCURY
ELECTRONICS CORP.

manufacturers of quality electronic products

SPECIFICATIONS

- Mercury's exclusive new MULTI-HEAD, MODEL MH-3 is designed for use with any emission-type tube tester, enabling you to test all black-and-white and color (including the latest rectangular color) picture tubes.
- The COLOR GUN SWITCH is adapted to permit the testing of special types of black-and-white picture tubes by just switching to the GREEN position.
- All tests are made with a single test cable.
- Durability and compact size enables the MH-3 to be easily stored. 3-3/8" x 2-7/8" x 2-1/16".
- Lightweight: only 9-3/4 oz.

OPERATING INSTRUCTIONS

The Multi-Head is designed for use with any emission-type tube tester, enabling you to test all black-and-white and color picture tubes.

TEST PROCEDURE

1. Set your heater voltage to 6.3 volts (for most types).
 - a. Use following chart for tubes which use other heat voltages:

BLACK-AND-WHITE PICTURE TUBES			
Tube	Heater Voltage	Tube	Heater voltage
9QP4	4.7 Volts	21EVP4	2.68 Volts
10ADP4	8.4	23BZP4	8.4
14ATP4	8.4	23CAP4	8.4
17CDP4	8.4	24AVP4	2.35
17DAP4	2.68		
17DEP4	2.35		
17DRP4	2.68		
19ABP4	2.68		
19AEP4	12.6		
21EAP4	2.35		

2. Set Color Gun Switch on MH-3 to RED (for most black-and-white types).
Set Color Gun Switch to GREEN for the following types:

17DLP4	21ESP4
19ZP4	23KP4
3. Test for shorts, leakage, and emission quality with the following set-ups:
 - a. On **ALL EMISSION** type tube testers, use your regular tube tester procedure for **6K6** tube.
 - b. ON MERCURY TUBE TESTERS MODEL 1000, 1200, and 2000, use the regular tube test procedure for **6L6** tube.
 - c. For color picture tubes, repeat the above tests for **each position** of the MH-3 color gun switch.
4. Interpret picture tube quality as follows:
 - a. If **QUALITY** reading is over 20% of full scale. . . picture tube is **GOOD**.

- b. If QUALITY reading is 5% to 20% of full scale. . .picture tube is FAIR.
 - c. If QUALITY reading is under 5% of full scale. . .picture tube has short life expectancy (even if it still works in a TV set).
 - d. If there is no meter reading at all, tube is dead, or has an open element.
5. A very weak picture tube may have its life extended by use of a CRT brightener.

PARTS LIST

Symbol	Description	Part No.	Price
S-1	3 Pole, 3 Position Rotary Switch	6-2-42	\$1.31
K-1	Indicator Knob	15-1-14A	.11
CA-1	Plastic Case	30-1-26	.75
MC-1	Metal Case Cover	31-1-11	.24
SKT-1	90° Rectangular Color, 14 Pin Socket (small)	8-1-33	.51
SKT-2	Standard Color, 14 Pin Socket	8-1-13	2.64
SKT-3	Sylvania 110°, 7 Pin Socket	8-1-12	.51
SKT-4	R.C.A. 110°, 8 Pin Socket	8-1-11	.39
SKT-5	Duo-Decal, 12 Pin Socket	8-1-10	.53
SR-1	Strain Relief	32-1-28	.06
TS-1	6 Lug Terminal Strip	9-1-17	.06
OP-1	8 Pin Octal Plug	27-1-16	.07
MP-1	Metal Plug	27-1-18	.03
GR-1	3/8" Rubber Grommet	32-1-30	.02
CC-1	6 Conductor Cable	60-1-4	.36
CP-1	Plastic Cross Piece	30-1-7	.23
SC-1	1-72 x 1/2" Screw	50-1-31	.04
NU-1	1-72 Hex Nut	50-2-12	.01
LW-1	No. 1 Lock Washer		.01