

Noise-Canceling Microphone

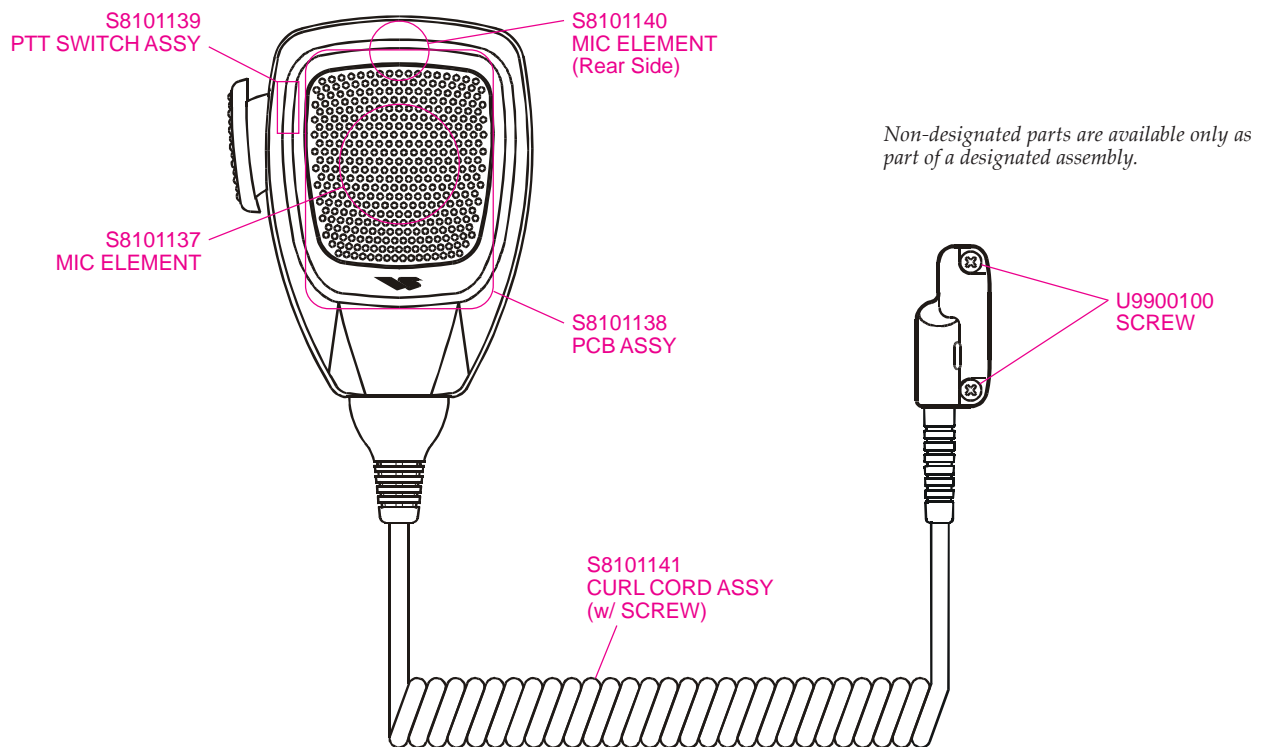
MH-53A7A

Service Manual

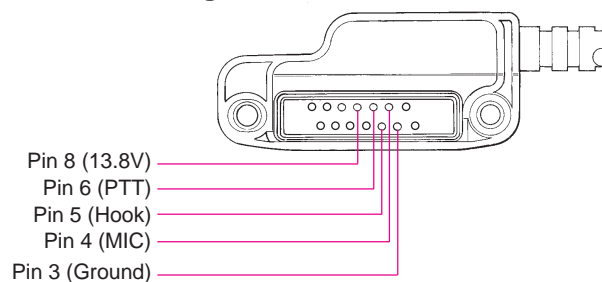
Vertex Standard LMR, Inc.

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EAB02X90A

The MH-53A7A is a Noise-Canceling Microphone designed especially for Vertex Standard Transceivers.



Connector Pinout Diagram



Specifications

Microphone Type: Dynamic

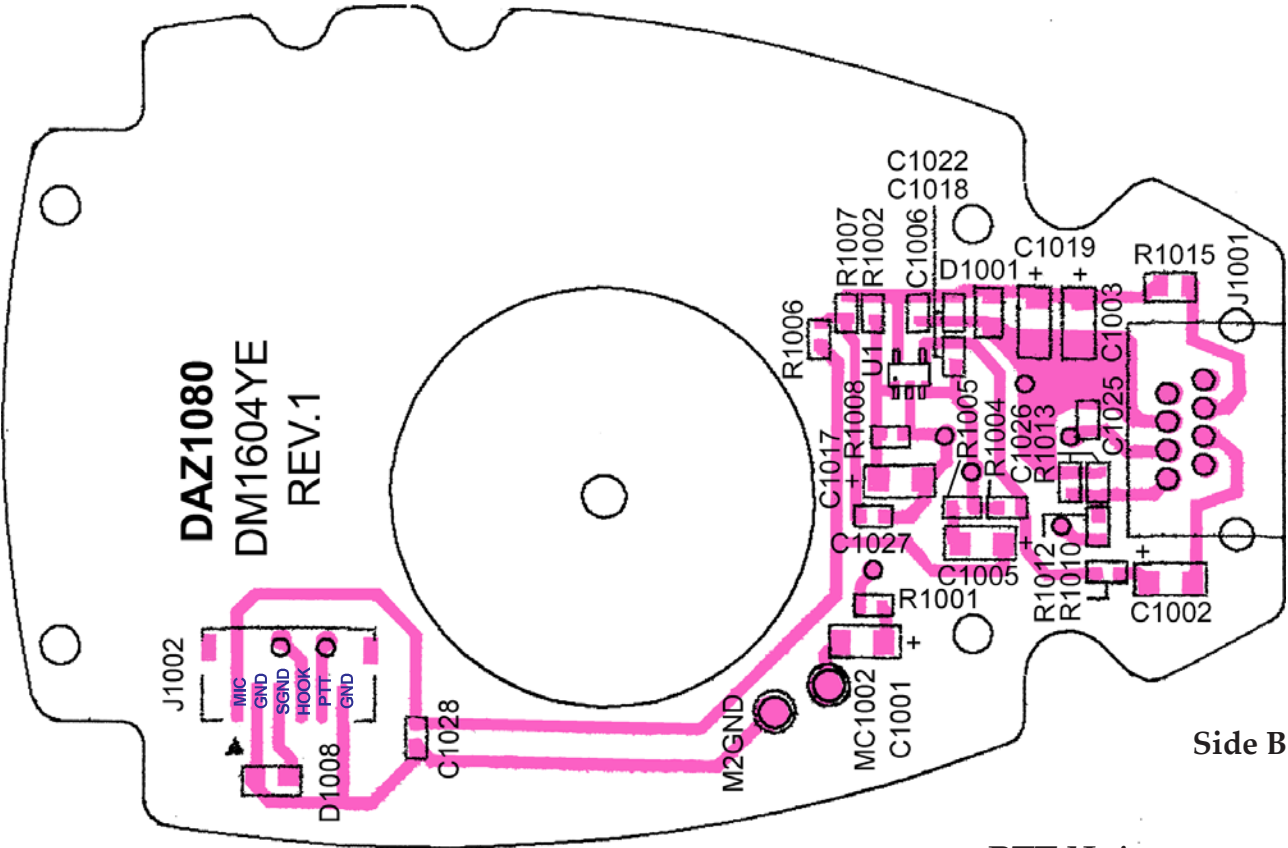
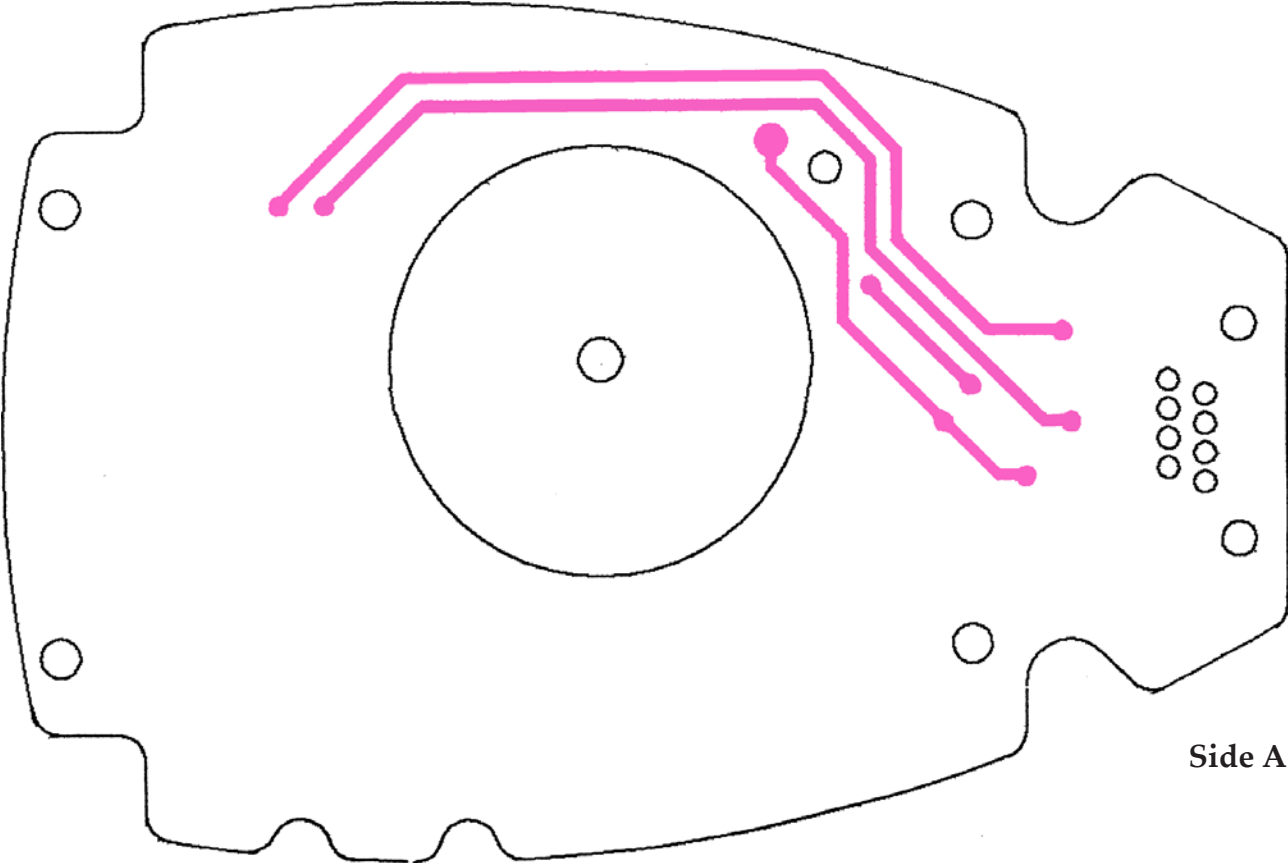
Microphone Impedance: 700-ohm \pm 30 % at 1 kHz

Microphone Sensitivity: -49.5 ± 4 dB at 1 kHz (0 dB = 1 V / microbar)

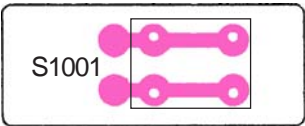
Operating Temperature: 14 °F to 122 °F (-10 °C to 50 °C)

Weight (Approx.): 11.5 oz (325 g)

Noise Canceling Unit



PTT Unit



Parts List

| REF. | DESCRIPTION | VALUE | V/W | TOL. | MFR'S DESIG | VXSTD P/N | LOT. | SIDE | LAY ADR |
|------------------------------|----------------|---------|-------|------|-----------------|-----------|------|------|---------|
| *** NOISE CANCELING UNIT *** | | | | | | | | | |
| PCB with Components | | | | | | S8101138 | 1- | | |
| C 1001 | CHIP. TA. CAP. | 4.7uF | 10V | | TESVB21A475M8R | K78100010 | 1- | B | |
| C 1002 | CHIP. TA. CAP. | 4.7uF | 10V | | TESVB21A475M8R | K78100010 | 1- | B | |
| C 1003 | CHIP. TA. CAP. | 10uF | 10V | | TEMSVA1A106M-8R | K78100028 | 1- | B | |
| C 1005 | CHIP. TA. CAP. | 4.7uF | 10V | | TESVB21A475M8R | K78100010 | 1- | B | |
| C 1006 | CHIP CAP. | 0.1uF | 16V | B | GRM39B104K16PT | K22124805 | 1- | B | |
| C 1017 | CHIP. TA. CAP. | 4.7uF | 10V | | TESVB21A475M8R | K78100010 | 1- | B | |
| C 1018 | CHIP CAP. | 220pF | 50V | CH | GRM39CH221J50PT | K22174243 | 1- | B | |
| C 1019 | CHIP. TA. CAP. | 4.7uF | 10V | | TESVB21A475M8R | K78100010 | 1- | B | |
| C 1022 | CHIP CAP. | 0.1uF | 16V | B | GRM39B104K16PT | K22124805 | 1- | B | |
| C 1025 | CHIP CAP. | 0.1uF | 16V | B | GRM39B104K16PT | K22124805 | 1- | B | |
| C 1026 | CHIP CAP. | 0.1uF | 16V | B | GRM39B104K16PT | K22124805 | 1- | B | |
| C 1027 | CHIP CAP. | 0.1uF | 16V | B | GRM39B104K16PT | K22124805 | 1- | B | |
| C 1028 | CHIP CAP. | 0.001uF | 50V | B | GRM39B102K50PT | K22174821 | 1- | B | |
| D 1001 | DIODE | | | | UDZ TE-17 5.1B | G2070448 | 1- | B | |
| D 1008 | DIODE | | | | BAS316 | G2070716 | 1- | B | |
| Q 1001 | IC | | | | TA75S01F TE85R | G1091593 | 1- | B | |
| R 1001 | CHIP RES. | 12k | 1/16W | 5% | RMC1/16 123JATP | J24185123 | 1- | B | |
| R 1002 | CHIP RES. | 12k | 1/16W | 5% | RMC1/16 123JATP | J24185123 | 1- | B | |
| R 1004 | CHIP RES. | 12k | 1/16W | 5% | RMC1/16 123JATP | J24185123 | 1- | B | |
| R 1005 | CHIP RES. | 68k | 1/16W | 5% | RMC1/16 683JATP | J24185683 | 1- | B | |
| R 1006 | CHIP RES. | 2.2k | 1/16W | 5% | RMC1/16 222JATP | J24185222 | 1- | B | |
| R 1007 | CHIP RES. | 1k | 1/16W | 5% | RMC1/16 102JATP | J24185102 | 1- | B | |
| R 1008 | CHIP RES. | 10k | 1/16W | 5% | RMC1/16 103JATP | J24185103 | 1- | B | |
| R 1010 | CHIP RES. | 680 | 1/16W | 5% | RMC1/16 681JATP | J24185681 | 1- | B | |
| R 1012 | CHIP RES. | 470 | 1/16W | 5% | RMC1/16 471JATP | J24185471 | 1- | B | |
| R 1013 | CHIP RES. | 100k | 1/16W | 5% | RMC1/16 104JATP | J24185104 | 1- | B | |
| R 1015 | CHIP RES. | 1.8k | 1/10W | 5% | RMC1/10T 182J | J24205182 | 1- | B | |
| J 1001 | CONNECTOR | | | | NTC-8PCBL8 | S8101144 | 1- | B | |
| J 1002 | CONNECTOR | | | | B6B-ZR-SM3-TF | S8101145 | 1- | | B |
| *** PTT UNIT *** | | | | | | | | | |
| PCB with Components | | | | | | S8101139 | 1- | | |
| S 1001 | TACT SWITCH | | | | SKHHAJ | N5090065 | 1- | | |