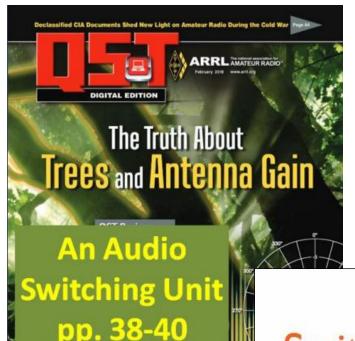
Supplemental Materials



February 2018 Issue

An Audio Switching Unit

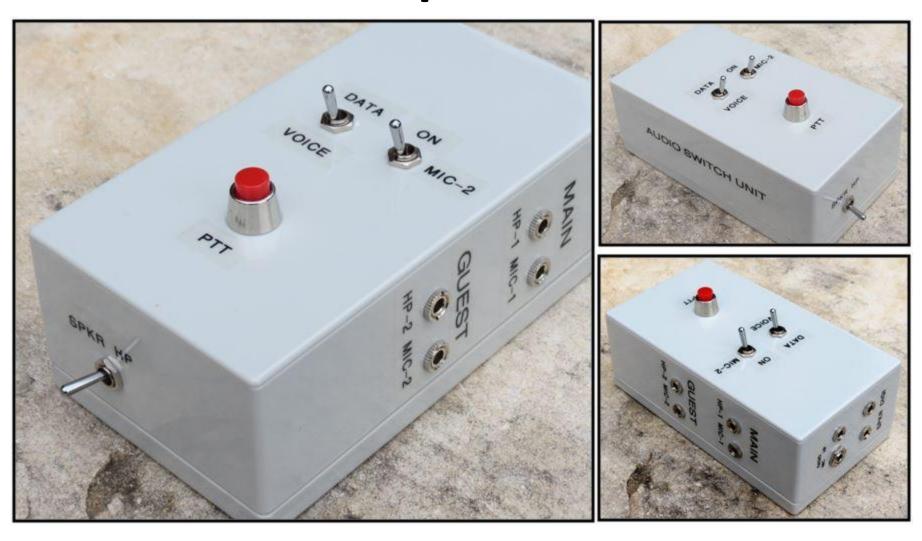
Easily switch between speakers and headsets for control and guest operators.



Gene Hinkle, K5PA

<u>www.k5pa.com</u> 1/13/2018

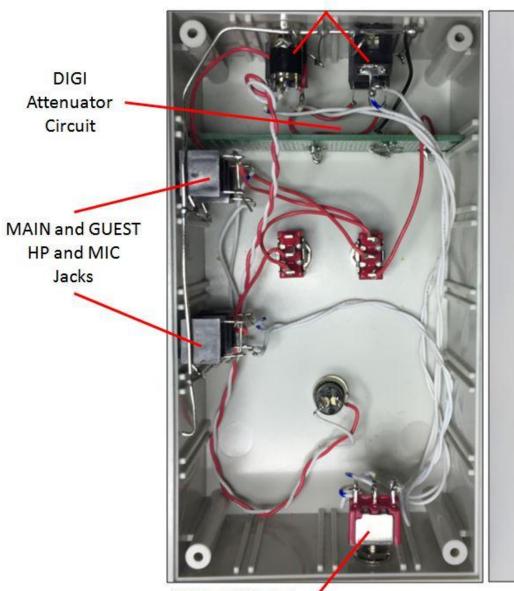
Perspectives



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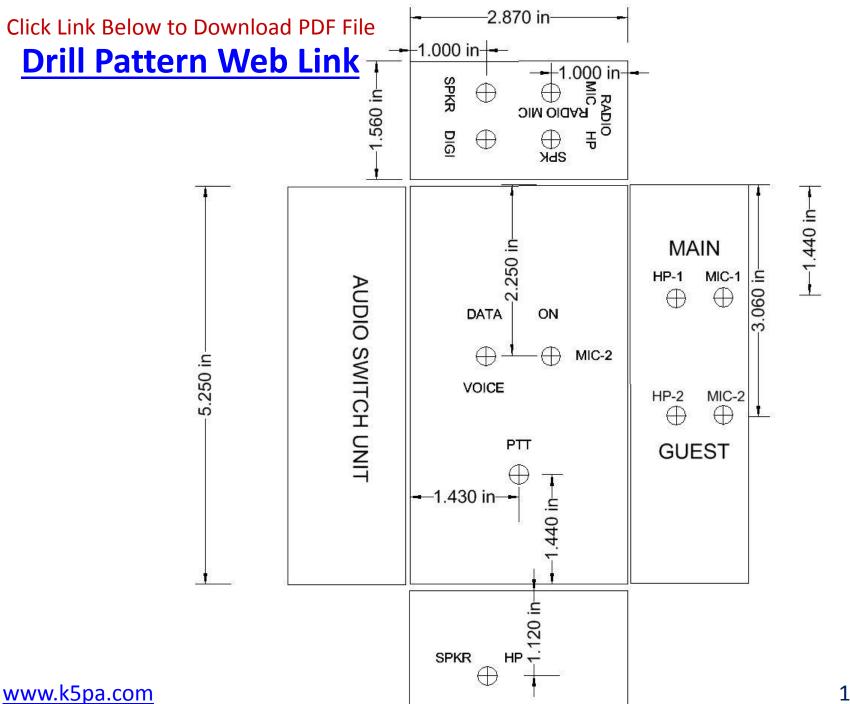
Point-to-Point Wiring

Radio, DIGI, SPKR Connections





SPKR - HP Switch



1/13/2018

Audio Isolator Example SNI – 1/3.5

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QS1802-Hinkle01 ON MAIN MIC-1 VOICE Control operator J8 TRRS connections microphone) Sleeve Ring 1 Approximately 20 dB pad and de isolator J2 DIGI (Digital signals) Ring 2 S Jack 5.6 k (R1 MAIN HP-1 side view PIT Control operator Tip farside JB headphone) RADIO HP Connect to TRRS Jack MIC jack on KX3 rear view **GUEST MIC-2** SPKR \$1 (Guest microphone) RADIO MIC Connect to TRS headphone jack HP on KX3 J1 - J7 TRS jack connections S **GUEST HP-2** (Guest headphone) J7 SPKR Jack Connect to rear view speakers

Errata on Figure 1

Figure 1 — Schematic diagram of the audio switching unit.

- C1 0.1 µF capacitor J1 – J7 — 3.5-millimeter panel-mount audio jack, three connector, TRS (Mouser
- J8 3.5-millimeter panel-mount audio jack, four connector, TRRS (Mouser SJ5-43502PM)
- R1 5.6 kΩ resistor, ¼ W
- R2, R3 56 kΩ resistor, ¼ W S1 — DPDT toggle switch (Mouser 7201SYZQE) S2 — SPDT momentary contact pushbutter switch (Dick Key CKM/031 ND
- button switch (Digi-Key CKN4031-ND); red pushbutton cap (Digi-Key CKN1105-ND); dress nut (Digi-Key CKN1184-ND) S3, S4 — SPDT toggle switch
- (Mouser 7101SYZQE)
 Box ABS gray box 5.25 × 3 × 2 inches,
 Bud Industries CU-1874-G (Digi-Key
 377-1166-ND)
 Cround loop rotice isolator PAC SNIL16
- Ground loop noise isolator PAC SNI-1/3.5 (available from Amazon) Labels — Brother TZe-121 9-millimeter black on clear tape for P-Touch labelers

On J8, change the words RADIO HP to RADIO MIC.

On **J6**, change the words **RADIO MIC** to **RADIO HP**.

The other word descriptions under these ALL CAP words are correct as shown.

73 Gene K5PA