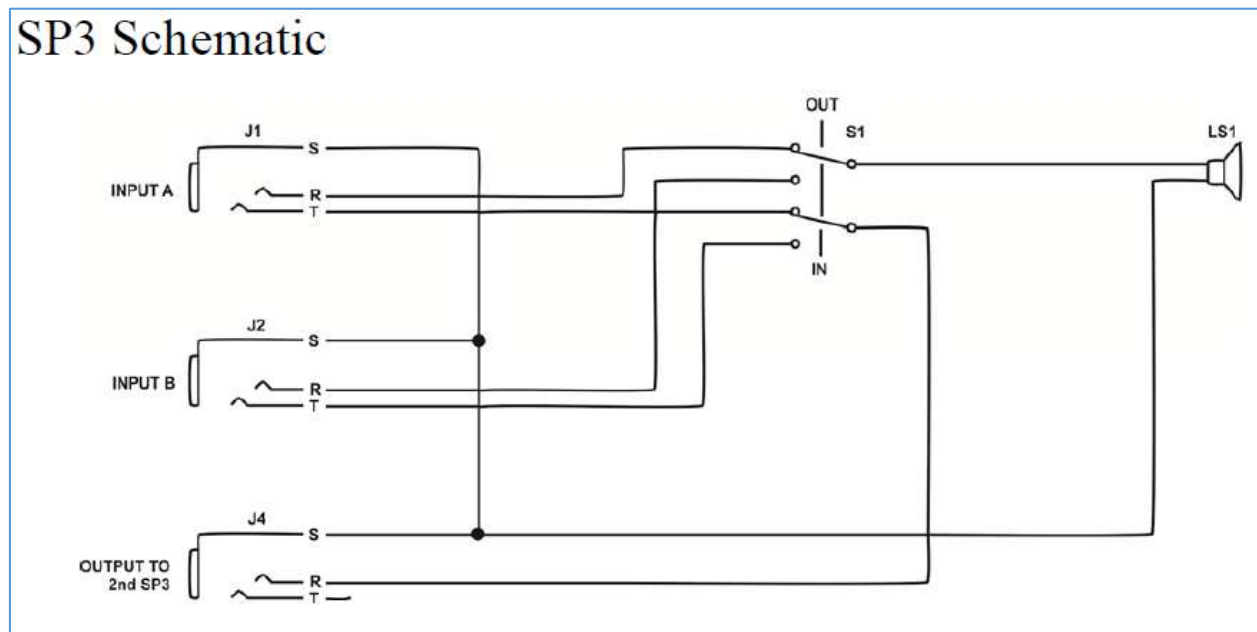


Installation of a 1062-KBD into a Elecraft SP3 speaker

The SP3 speaker has two audio inputs (A and B) selectable from the A/B front panel switch. These inputs and the A/B switch allow 2 Mono audio sources to be selected to the speaker.

If a Stereo source is used then the speaker will select the signal on the Tip only. The audio from the Ring connection is routed to the Second Speaker socket.

The NESDP1062 module will only work on the modified speaker and will not affect the operation of a second speaker, if attached. If DSP Noise Reduction is required on the second speaker, it will require the same modification using a second bhi NESDP1062-KBD module.

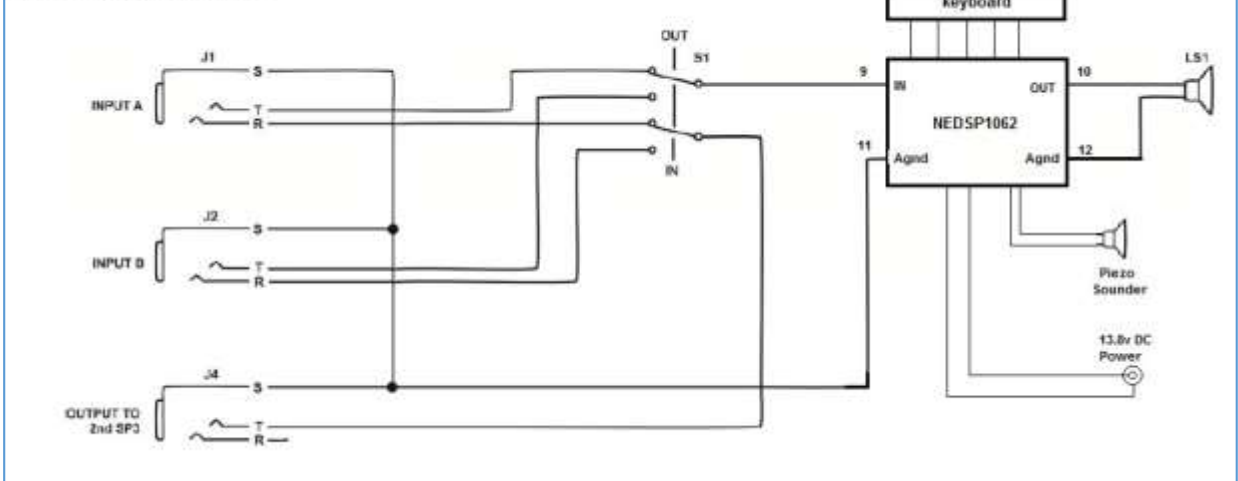


Note: The nice Guys at Elecraft got the Ring and Tip annotation wrong on their diagram, although in every other way its correct.

To retrofit the bhi NESDP1062-KBD amplified module into the speaker it is fairly straightforward:

1. Firstly read the bhi NESDP1062-KBD (1062-107D Issue E user manual available on the Web Site in the downloads section) to get an idea of how the 1062 board is mounted in a Kenwood SP31 housing.
2. Open the Elecraft SP3 unit using the right tools, investigate where you can best mount the module and where the push button Keyboard would fit and where the power socket could be mounted. Bear in mind the old adage 'measure twice and cut once'.
3. Carry out all the mechanical modifications necessary in order to install the main board, Keyboard and Power socket (dimensions in the user manual).
4. The next part is quite simple if you've carried out points 1 to 3. Trace the wires from the speaker end back to their origins. There should be a wire from the switch output to the speaker and one to the general ground path (The S connection on all the connectors).

SP3 Schematic



5. Study the Diagram of the modified circuit (above) against the original diagram on page 1 and you'll see where this is all heading.
6. Break the wire from the switch to the speaker and connect the NEDSP 1062. The wire originally connected from the switch to the speaker, now connects to Pin 9 of the NEDSP1062 board.
7. From Pin 10 of the NEDSP1062 board you now need to connect the other end of the wire that went to the switch. If this is too short, then you'll need a new piece of wire of similar size to connect between the speaker and Pin 10.
8. Break the wire from the speaker ground to the sockets 'S' pin and now connect this to Pin 12 of the 1062 board.
9. Finally, connect a piece of wire if there wasn't enough left from operation 8, between Pin 11 of the 1062 Board and the ground system i.e. the 'S' connections of the jack sockets.
10. Before applying power, just check your installation one last time, including connections.

The rest should be easy, just follow the rest of the instructions in the NEDSP1062-KBD manual to ensure that the modification and module is working correctly.

The only thing to do after this is to carefully re-assemble the case and use.