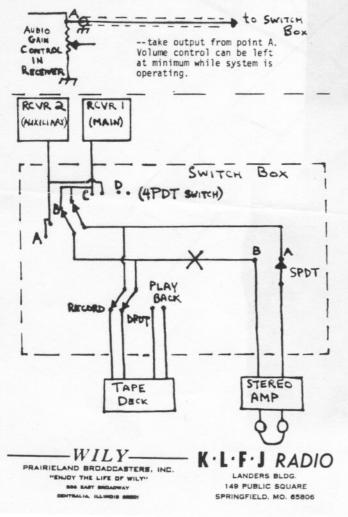
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AN AUDIO SWITCHING UNIT By Nick Hall-Patch

If you're getting into foreign DX'ing, you've probably discovered that it helps to have a second general coverage receiver in order to check for parallel stations on the BCB and shortwave. I have logged at least one new station this way--China on 1040 is difficult to hear clearly in Victoria, due to splatter from CFAX-1070, and I'd never heard a proper ID on it until I went listening to a shortwave parallel. I figured I'd wait for an ID on 7480 as I was sure that any ID on 1040 would be buried by splash. Wouldn't you know it though --the DX gods retreated in haste and a Peking Hoso ID floated through on 1040 along with the one on 7480. The two receiver system is also useful if you tape all your DX with a stereo cassette or reel deck, as you can put WWV time signals on one channel and your DX on the other. This can be helpful for making out reports to stations as you can tell exactly when that spot was by listening to the time signal channel of your tape.

I've worked out a two receiver system here using my HRO, a DX150A, a cheap old stereo amplifier, a stereo cassette deck, and a little audio switching unit to put it all together. I can hear parallels, one on each channel of my stereo headphones, listen to the BCB alone on both channels while WWV is recorded onto one channel of the tape, get virtually instant tape playback through my headset by flicking a couple of switches. I can also listen to and record from either the HRO or the DX150A alone.

The whole set-up is not actually that complex, one doesn't even need to hold stock in any of the larger wire and cable companies. Audio is taken from each receiver at the same place you would take off a signal for a tape recorder, i.e. from across the audio gain control. If the receiver has a tape output already, use that. The line from each receiver goes to the switching box, which in my case, is a 4x2x1" (approx.) aluminum mini-box. Two lines go from the switching box to the two inputs of the stereo amp, and four lines from the switching box to the the tape deck to accomodate both recording and playback modes of the tape deck. These 4 lines can be reduced to one if your deck has a 5-pin DIN connector on it. All you need then is a 4-conductor cable with a DIN connector at one end, and a good idea of which of the DIN contacts is for right and left record and playback. All cables should be shielded to prevent hum pickup. Here are some diagrams to give you a general idea of how my system works:



The 4PDT switch selects the receiver you want to listen to. Position A of this switch gives you receiver 2 alone, B gives you receiver 1 alone, and C gives you both receivers--one in each channel. D is for playing back your tape through the audic amp without hearing what's on the receivers at the same time. This position of the switch can be omitted if you're willing to turn the receiver RF gains down when you're listening to the I have standby switches on both my receivers, so tape. just switch to standby. The DPDT switch is the tabe mode selector--either you can record off the receiver(s) you re listening to or you can play back what you just heard--was that really Nepal? The SPDT switch is for muting one of the channels that you may be recording but don't want to hear on your headphones, e.g. if you're putting WWV on one channel of the tape, you don't want to hear it at the same time you're trying to dig out an ID on your DX. In position A you hear both receivers (useful for parallel DX'ing) and in position ${\rm E}$ you just hear the main receiver but can still be putting WW. on the tape. To hear WWV with your DX when you play back the tape, you simply put the SPDT switch back to A and WWV will be heard on one channel, the DX on the other. "X" marks a spot to insert an audio filter, if you want to use one. I use Autek QF-2 but any other filter which is intended for use I use an early on in the audio amplification system can be used. Of course, your tape machine will record what is coming from the receiver, not from the filter.

One doesn't have to use just stereo headphones with the amplifier of course--speakers may be just as practical. I've found that headphones give a great deal of "depth" to the sound when you're listening to parallels, one on each channel, as propagation is usually different on each station, giving different tonal qualities to the same program. I don't think that's of any practical use--it just sounds interesting.

If you run into any problems using a system like this, write and I*11 see if I can help. My address is 3272 Alder St. Victoria, BC, Canada V8X 1P2. If you have any bright ideas to improve the system, I'm sure HQ wouldn't refuse another article.