

Welcome to the Telephone Exchange Demonstrator

(This is how telephones worked before solid state electronics.)

Give it a try

- Turn the dial of the timer (mounted to the left of the exchange) clockwise to “SET” then counterclockwise to “ON”. This will power up the exchange for about 10 minutes.
- Lift the yellow handset and wait for the dial tone.
- Dial the number of one of the other phones.

#3 Bank of Heritage Acres

#4 Telephone Booth

#5 General Store

#6 (not connected yet)

#7 Yellow Phone on the exchange

- Have a friend answer the phone that you dialed.
- Don’t forget to hang up when you are done. **
- Your friend can call you back. Any phone can call any other phone.

** The demonstrator is not an exact replica of a POTS (Plain Old Telephone Service) mechanical exchange but it works on the same principles. The top step-relay connects to the calling line. The bottom step-relay connects to the dialed line. When the handset is replaced on the called phone, the phone will start ringing again. This is a “feature” of the simple logic. When the caller hangs up, the ringing will stop. The dial contacts and the relays are getting old and tired. Watch the lights on the demonstrator to see if the number that you dialed corresponds to the correct “Called Line”. If not, try dialing a 1 or a 2 to bump the circuit up to the desired line.