

INSTALLATION INSTRUCTIONS

172-94X XTRA LINK 2® REMOTE CONTROL EXPANSION KIT

The Model 172-94X is an expansion kit intended for use when installing Xtra Link 2's in more than one room. It includes only the parts needed for each additional room, thus avoiding the unnecessary duplication of couplers, emitters and coax jumper cables.

The 172-94X kit consists of the following supplied parts:

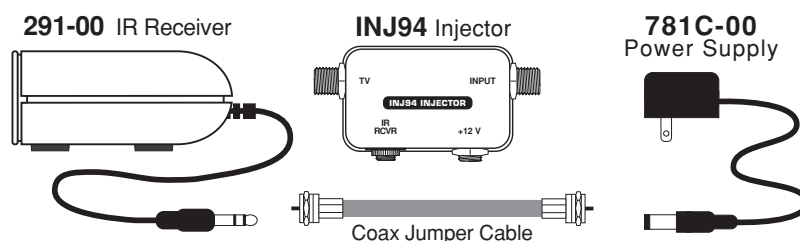


Fig. 1 172-94X Kit Parts

1. **One 291-10 Infrared (IR) Receiver.** It is placed at the remote room location to receive IR signals from the handheld remote controller.
2. **One INJ94 Injector.** This unit, located in the Remote Room, injects the remote control signal into the room-to-room coaxial cable (along with the TV signal) and passes it to the CPL94B Coupler in the Main room. It also allows quick connection of the 291-00 IR Receiver and 781RG Power Supply cables.
3. **One short coaxial cable.** Connects the INJ94 Injector to the TV in the Remote Room.
4. **A 781C-00 Power supply.** This plugs into an unswitched 120V AC outlet to provide power to the 291-00 IR Receiver.

INSTALLATION

Fig. 2 shows the connections necessary when using a 172-94X expansion kit to provide remote control from an additional room.

Begin by installing a standard 172-94 kit, for one of the remote rooms. (Refer to the owner's manual for the Xtra Link 2 Model 172-94, for basic system connections). Next, using one of the 172-94X kits, install it into the second remote room, making connections as shown in Fig. 2. Note that a 2-way RF splitter is used to split the coax signal to each of the remote rooms. This splitter **must be** a DC passing type, such as the Xantech Model 200-00.

NOTE: If RF amplifier(s) are used anywhere in the line of coaxial cable between the CPL94B Coupler and the INJ94 Injectors, you **must use** a Xantech BYPASS94 KIT to route the IR commands around such amplifier(s).

ADVANCED MULTIROOM HOOKUP

Fig. 3 shows an advanced system using six 172-94 plus five 172-94X Expansion Kits, in a multiroom installation. The connection concept is essentially the same as in Fig. 2, except for the additional splitters, RF amplifiers, etc. that need to be taken into consideration.

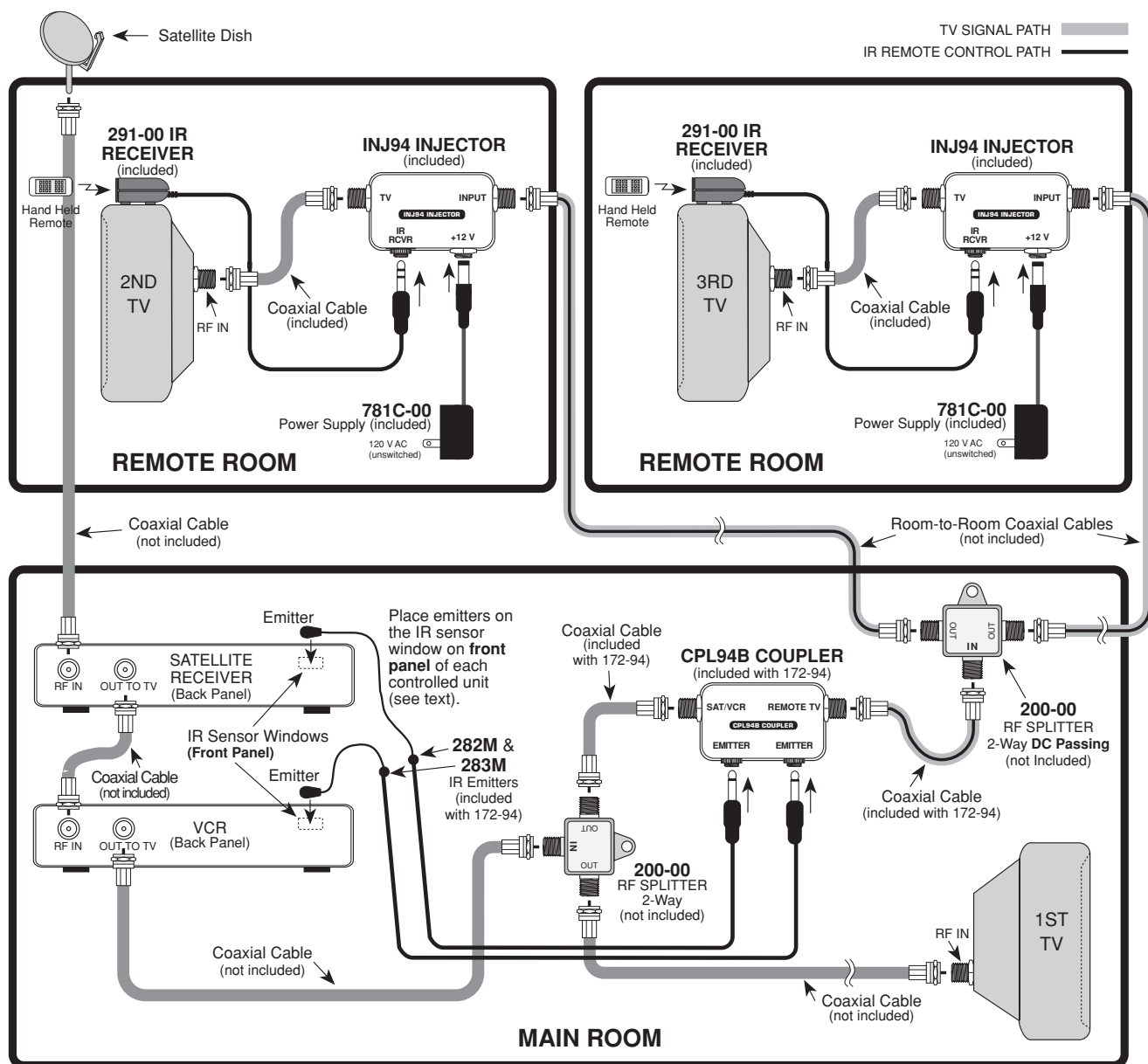


Fig. 2 Applying One 172-94X Kit For a Second Remote Rooms

Keep the following items in mind when installing the system:

1. Each of the RF splitters used **must be** DC passing types, such as the Xantech models 200-00 (2-way) and the 202-00 (4-way), as shown.
2. Note that model 203-00 DC Blockers are used on the two coax leads going to the two TV sets in the rooms **not** having IR receivers. This is **a must** to prevent the RF inputs on the two TV sets from "shorting out" the IR control signals.
3. If an RF amplifier(s) is used anywhere in the line of coaxial cable between the CPL94B Coupler and the INJ94 Injectors, you **must** use a Xantech BYPASS94 Kit to route the IR control signals around the amplifier(s). See Fig. 4.
4. Where possible, place RF amplifiers ahead of the CPL94B Coupler, as shown in Fig. 3, instead of using a bypass kit.
5. For information on how to connect and configure modulators and RF amplifiers, refer to ChannelPlus® technical information.

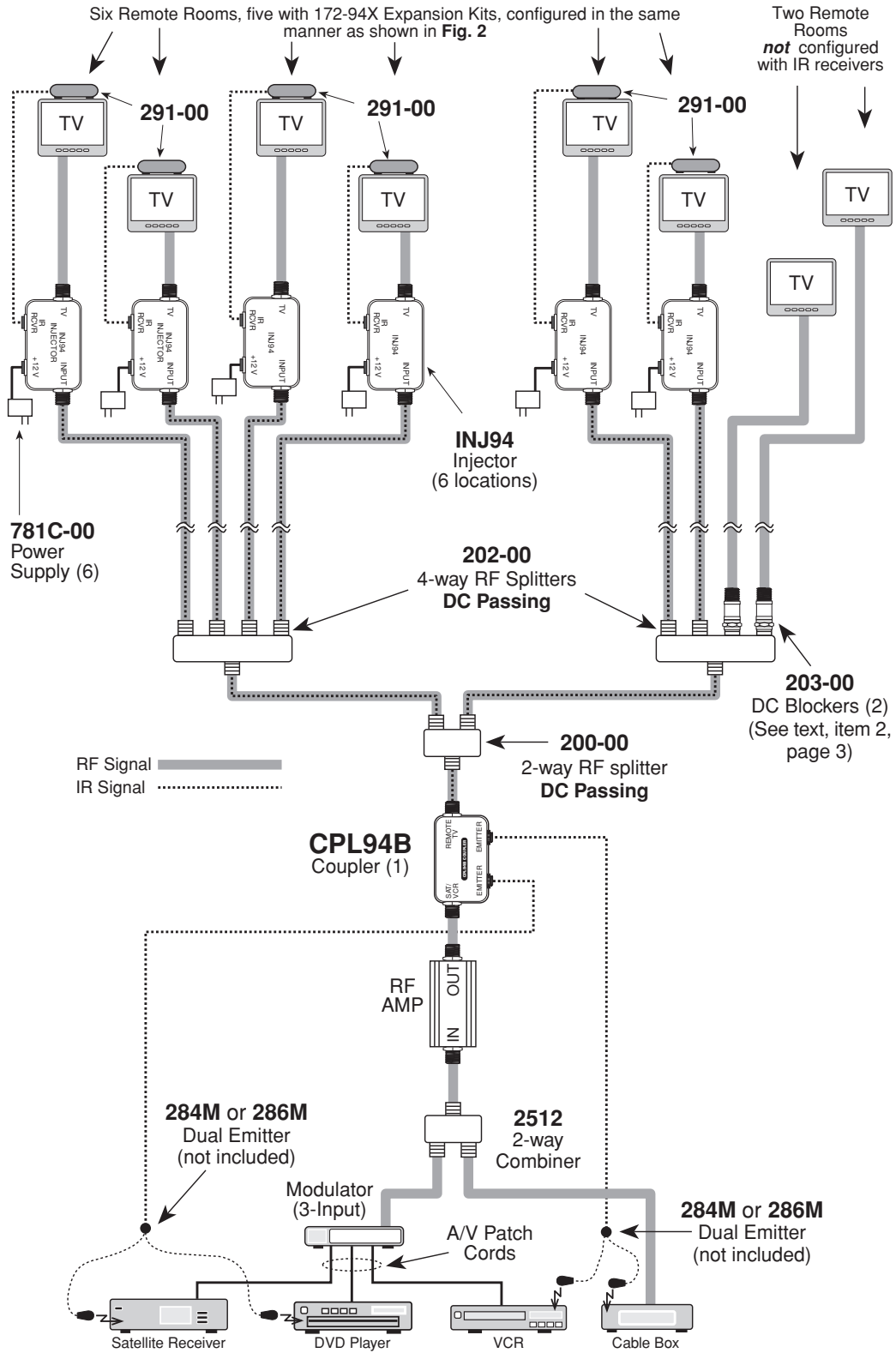


Fig. 3 Using Multiple 172-94X Kits For Additional Remote Rooms

TROUBLE SHOOTING:

1. Perhaps the most common problem encountered is stray IR or RF interference preventing proper operation of the controlled equipment.

Examples of such interference are:

- A. Fluorescent, Compact Fluorescent, Neon or Halogen lights, Neon Art, and light dimmers.
- B. Direct or reflected sunlight.
- C. Infrared security sensors (active type).
- D. RF radiation from TV sets that may be close to IR Receivers.

It may be necessary to move either the interfering source or the IR receiver to achieve proper operation. Sometimes the Xantech Sun Filters will help.

You can confirm the source of the interference by temporarily turning off the remote room TV set, isolating the 291-00 Receiver from all sunlight and turning off all lights, light dimmers and Infrared security systems. Then check to see if the 291-00 operates the satellite receiver or other components.

2. If the signal does not seem to be getting through to the IR Emitters, check for shorts or opens anywhere between the IR receivers in the remote rooms and the emitters at the controlled equipment.
 - A. Remember, you must have DC continuity all the way from the IR (IR RCVR) jacks on the Injectors, through the coax cables to the IR (emitter) jack on the coupler, without shorts to ground.
 - B. Use a Xantech 179-99 Test-IR (or a Blink IR Emitter) plugged into the IR (emitter) jack on the coupler to verify that the IR signal is being received from each room.
 - C. If necessary, use a multimeter in the low Ohms range to check for continuity, shorts, opens, etc.
 - D. Check for open emitters by substituting a known good emitter.
3. If you have one or more TV sets in rooms where you **do not** have Xtra links and they share the same DC passing RF splitter, you must use DC Blockers (Xantech Model 203-00) connected in the coaxial line to each of these TV sets.

Refer to **Fig. 3**. This is a **must** to prevent the RF Input of such TV sets from "shorting out" the IR control signal.

4. If a given component does not work, reposition the emitter. It may not be located directly over the component's IR (infrared) sensor receiving "window". Consult the owner's manual of the unit or the manufacturer for the exact location of the IR "window".

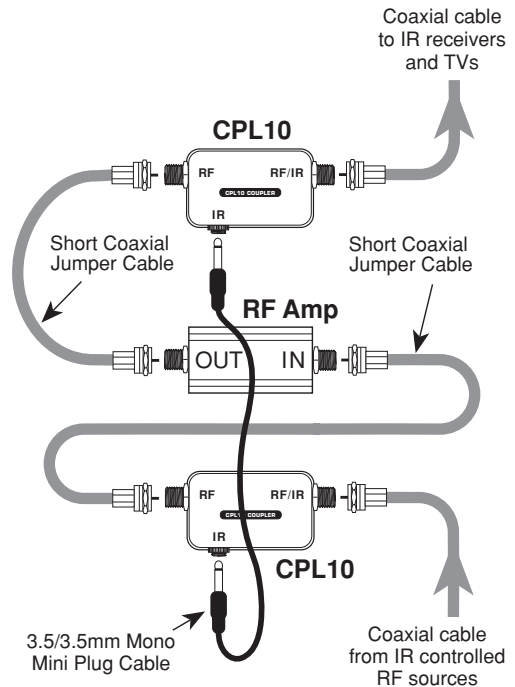


Fig. 4 Using a Xantech BYPASS94 Kit
(see text, item 3, page 2)