

How to set up an **infrared network** *with* *the Network Connection Center*™

This document is provided to help you set up an infrared network with the Home Director Network Connection Center (NCC). For complete information on Home Director products, please call 1-800-426-7144 or visit our Web site: www.homedirector.com.

Introduction to infrared

Infrared remote controls transmit packets of information to a receiving device. These packets contain 14 bits of information. These bits encode the specific manufacturer (Sony, Toshiba, etc.), model number, of the consumer device, type of component (DVD, VCR, TV, etc.), and a specific command to perform (Play, Volume-Up, etc.). This encoded information is received by all consumer electronics that accept infrared communication, but only the intended component interprets and accepts the infrared command.

Infrared and the Network Connection Center

The Home Director video amplifier distributes modulated signals from DVDs, VCRs, or in-home cameras to TVs throughout the house. Through an infrared network you can control source signals from these devices with a remote control from any room in the house. Follow the instructions provided in this document to set up an infrared network.

Infrared network equipment

In order to properly set up an infrared network, you will need the following equipment:

Emitters

These devices duplicate the infrared signals passed from the remote control to the target and emit them onto the infrared sensor window of the controlled component.

Targets

These devices accept the infrared signal of a remote control. The targets then transmit the signal over coaxial cable to all emitters connected to the targets' signal.

Remote Control

This device is usually a universal remote control that is able to control all of the components connected to the infrared network.

Modulators

These devices are required to broadcast modulated signals onto unused cable channels. This device allows you to select the channel to which you will send the modulated signal. All components must have a modulator.

Channel Filter

A channel filter may be required to remove channels from the incoming cable signal. These filters are placed between the incoming cable television signal and the video amplifier.

Power supply

Power is supplied to the infrared network over coaxial cable through a power injector. DC blockers should be used on the internal ports that lead to wallplates or to non-coaxial powered components.

Set up an infrared network

- 1 Identify each part of the infrared network.
- 2 Select the components which you want to control through the infrared network.
- 3 Attach an emitter directly to the infrared sensor window of the components controlled through the infrared network, such as a VCR.
- 4 Set up a target in each room you want to use the infrared network. You can control components from each room that has a target. Set up targets within 20 feet of and in a clear path for the remote control.
- 5 Connect the coaxial cable through a power injector. The power injector supplies power to targets. A jumper cable is supplied to complete connections. The injector acts as a coupler and as a DC blocker. The coupler allows cable or satellite signal to pass through to the TV but blocks any harmful electrical current.
- 6 Connect the target into its appropriate port on the power injector (refer to the manufacturer's instructions for detailed information).
- 7 Connect the power supply into its appropriate port on the power injector (refer to the manufacturer's instructions for detailed information).
- 8 Choose a coupler that has ports for emitters. Connect emitters to these ports (refer to the manufacturer's instructions for detailed information). These ports supply power to the emitters and block harmful electrical current from other components.
- 9 Connect modulators to each component connected to the infrared network (refer to the manufacturer's instructions for detailed installation and programming information).

Infrared Network Path

