

PANORAMA™ Application Note

The IP-Based Distributed Entertainment Company.

Connecting a Panorama PAN6400 Video Distribution Center (VDC) in Standalone Mode

Products Included:

- Panorama PAN6400
- Panorama PANVP500
- Panorama PANVP700

Standalone mode is useful for projects where a Musica™ MU5066ADC is not required (for example, connecting several video output devices so that they are controlled from one location). This mode also allows the PAN6400 to be controlled using RS-232 with a third-party controller.

Figure 1 is an example of how you might connect a video switch in standalone mode.

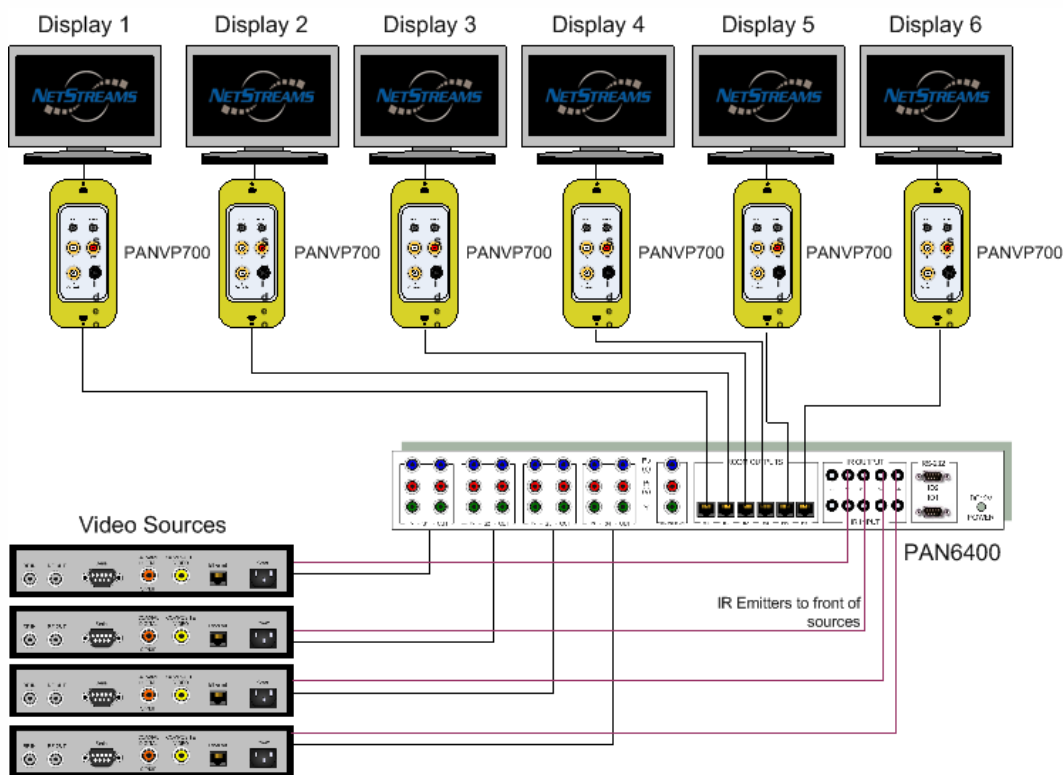


Figure 1 Video Switch in a standalone environment

There are various ways to configure the PAN6400 standalone mode:

- Coaxial/Digital (S/PDIF) Audio/Component Video (requires two PAN6400s),
- Coaxial/Digital (S/PDIF) Audio/Composite Video, and
- Coaxial/Coaxial Digital (S/PDIF) Audio/S-Video.



To connect this configuration, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the RCA cable from the Component Video Out ports of the source to the input ports for that source on the *PAN6400* (2).
3. Connect the Coaxial Digital (S/PDIF) cable from the source to the *PAN6400* In port (green) for that source on the *PAN6400* (1).
4. Connect the IR emitter from the S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output ports on the *PAN6400* (2) to the IR window on the front of the source.
5. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* (2) to the VIM port of the *Panorama PANVP700* Video Port.
6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* (1) to the VIM port of the *PANVP500*.
7. Connect the IO1 port on *PAN6400* (1) to IO2 on the *PAN6400* (2) using the null modem cable.
8. Connect the *PANVP700* to the display (or route the video through the IR receiver to the display).
9. Connect the *PANVP500* attached to the *PAN6400* (1) to the digital audio input on the A/V receiver.
10. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
11. Connect the IO1 port on the *PAN6400* (2) to the third-party controller.
12. Turn power on to all devices.

PANVP700 Connection

Using the *PANVP700* in this configuration allows IR passthrough from the *PANVP700* to the video source. In this way, the video source can be controlled from the room. For a completed wiring diagram for this configuration, see Figure 3.

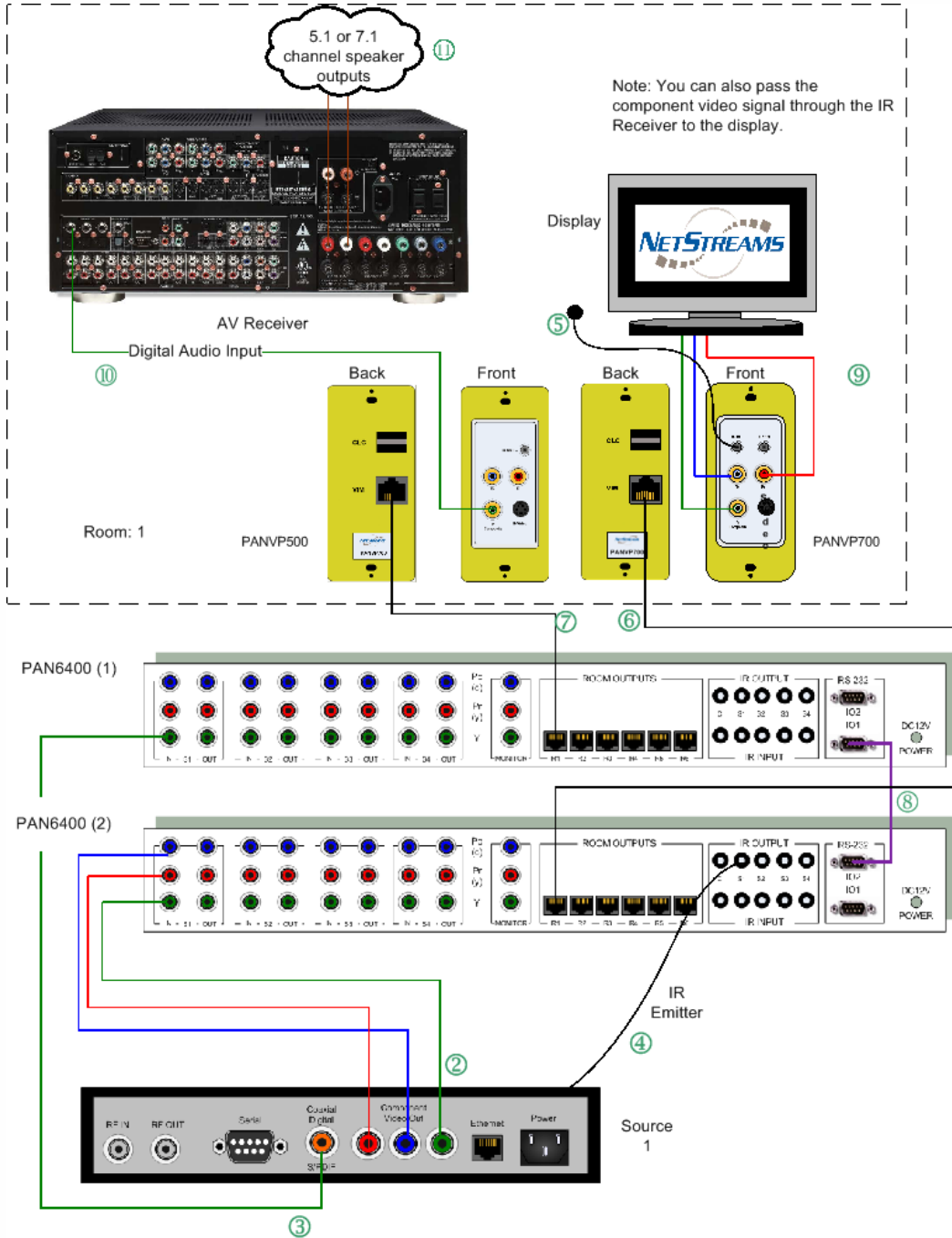


Figure 3 Coaxial Digital Audio with Component Video

To connect this configuration, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the RCA cable from the Component Video Out ports of the source to the input ports for that source on the *PAN6400* (2).
3. Connect the Coaxial Digital (S/PDIF) cable from the source to the *PAN6400* In port (green) for that source on the *PAN6400* (1).
4. Connect the IR emitter from the S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output ports on the *PAN6400* (2) to the IR window on the front of the source.
5. Connect the IR receiver from the *PANVP700* to a location that is protected from fluorescent light and that is accessible to the IR signal of the remote.
6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* (2) to the VIM port of the *Panorama PANVP700* Video Port.
7. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* (1) to the VIM port of the *PANVP500*.
8. Connect the IO1 port on *PAN6400* (1) to IO2 on the *PAN6400* (2) using the null modem cable.
9. Connect the *PANVP700* attached to the *PAN6400* (2) to the display (or route the video through an IR receiver to the display).
10. Connect the *PANVP500* attached to the *PAN6400* (1) to the digital audio input on the A/V receiver.
11. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
12. Turn power on to all devices.

Coaxial Digital (S/PDIF) Audio/Composite Video

These procedures show you how to connect Coaxial Digital (S/PDIF) Audio and Composite Video.

PANVP500 Connection

This configuration is useful if you do not need IR control of the source or if the IR is handled by another system. For a completed wiring diagram for this configuration, see Figure 4.

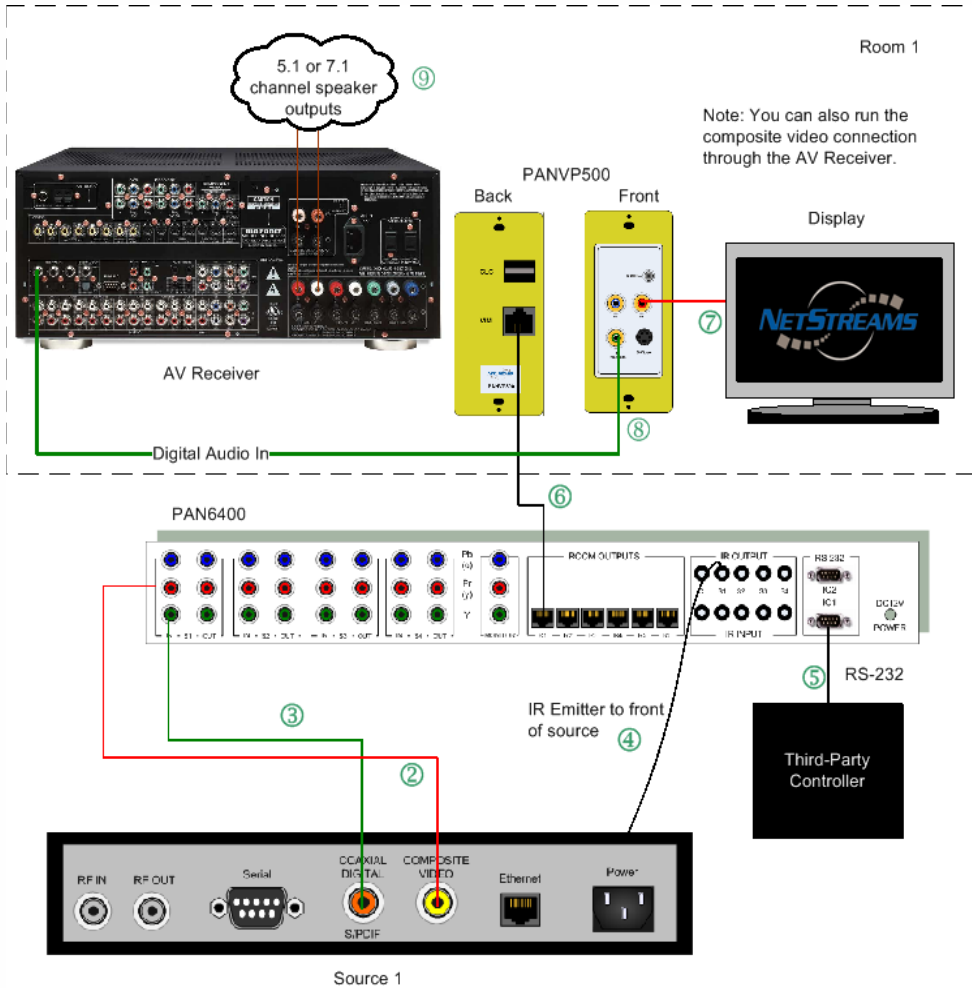


Figure 4 Coaxial Digital (S/PDIF) Audio and Composite Video

To connect, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the Composite Video Out port of the source to the input port (red) for that source on the PAN6400.
3. Connect the Coaxial Digital (S/PDIF) cable from the source to the PAN6400 input port (green) for that source.
4. Connect the IR emitter from the PAN6400 S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output to the IR window on the front of the source.
5. Connect the RS-232 null modem cable from the IO1 port of the PAN6400 to the third-party controller.

6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* to the VIM port of the *PANVP500*.
7. Connect the *PANVP500* to the display (or route the video through an A/V receiver to the display).
8. Connect the Y/Composite port of the *PANVP500* to the Digital Audio In of the A/V Receiver.
9. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
10. Turn power on to all devices.

PANVP700 Connection

Using a *PANVP700* provides IR passthrough from the room to the video source. This configuration works well when the *PAN6400* is used as a standalone device or is used by a third-party controller. For a completed wiring diagram for this configuration, see Figure 4.

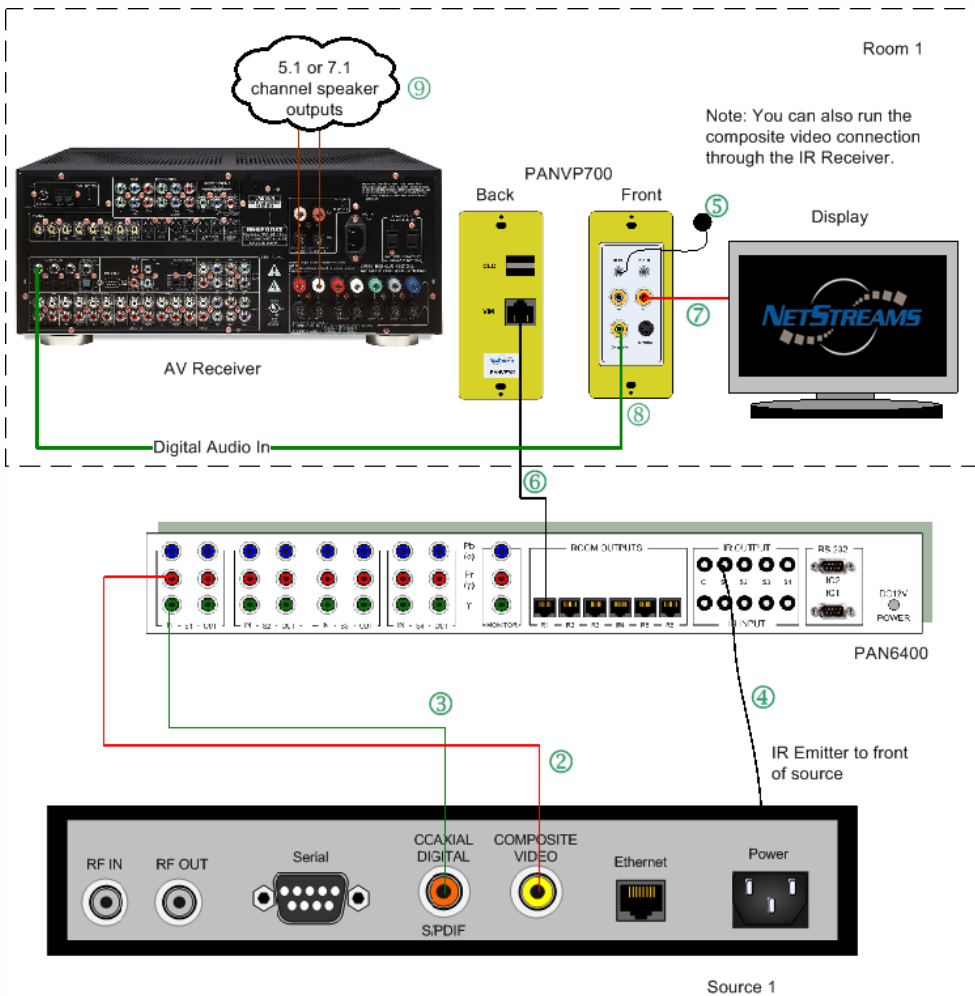


Figure 5 Coaxial Digital (S/PDIF) Audio and Composite Video

To connect, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the Composite Video Out port of the source to the input port (red) for that source on the *PAN6400*.

3. Connect the Coaxial Digital (S/PDIF) cable from the source to the *PAN6400* input port (green) for that source.
4. Connect the IR emitter from the *PAN6400* S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output to the IR window on the front of the source.
5. Connect the IR receiver from the *PANVP700* to a location that is protected from fluorescent light and that is accessible to the IR signal of the remote.
6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* to the VIM port of the *PANVP700*.
7. Connect the *PANVP700* to the display (or route the video through an A/V receiver to the display).
8. Connect the Y/Composite port of the *PANVP700* to the Digital Audio In of the A/V Receiver.
9. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
10. Turn power on to all devices.

Coaxial Digital (S/PDIF)/S-Video

These procedures show you how to connect Coaxial Digital (S/PDIF) Audio and S-Video.

PANVP500 Connection

This configuration is ideal when IR control is not needed or is handled by another system. For a completed wiring diagram for this configuration, see Figure 6.

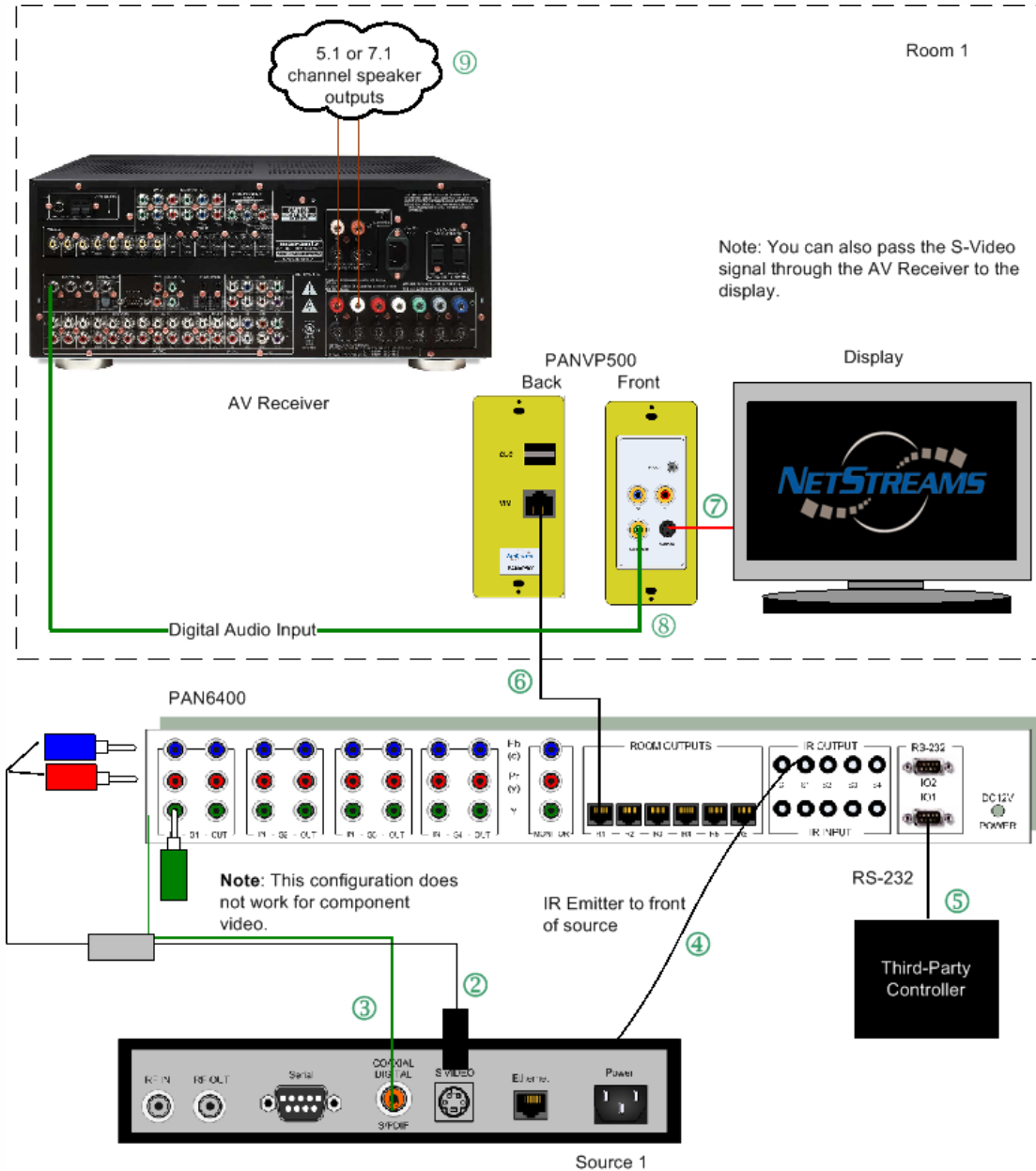


Figure 6 Coaxial Digital (S/PDIF) Audio and S-Video

To connect, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the S-Video Out port of the source to the supplied S-Video adapter, and connect the adapter to the corresponding red and blue input ports (red) for that source on the *PAN6400*.

NOTE: This requires a special adapter that converts S-Video to RCA red and blue cables.

3. Connect the Coaxial Digital (S/PDIF) cable from the source to the *PAN6400* In port (green) for that source.
4. Connect the IR emitter from the *PAN6400* S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output ports to the IR window on the front of the source.
5. Connect the RS-232 null modem cable from the IO1 port of the *PAN6400* to the third-party controller.
6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* to the VIM port of the *PANVP500*.
7. Use an S-Video cable to connect the *PANVP500* to the display (or route the video through an A/V receiver to the display).
8. Connect the Y/Composite port of the *PANVP500* to the Digital Audio In of the A/V Receiver.
9. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
10. Turn power on to all devices.

PANVP700 Connection

Adding a PANVP700 provides IR passthrough from the room to the video source when in standalone mode or controlled by a third-party controller. For a completed wiring diagram for this configuration, see Figure 6.

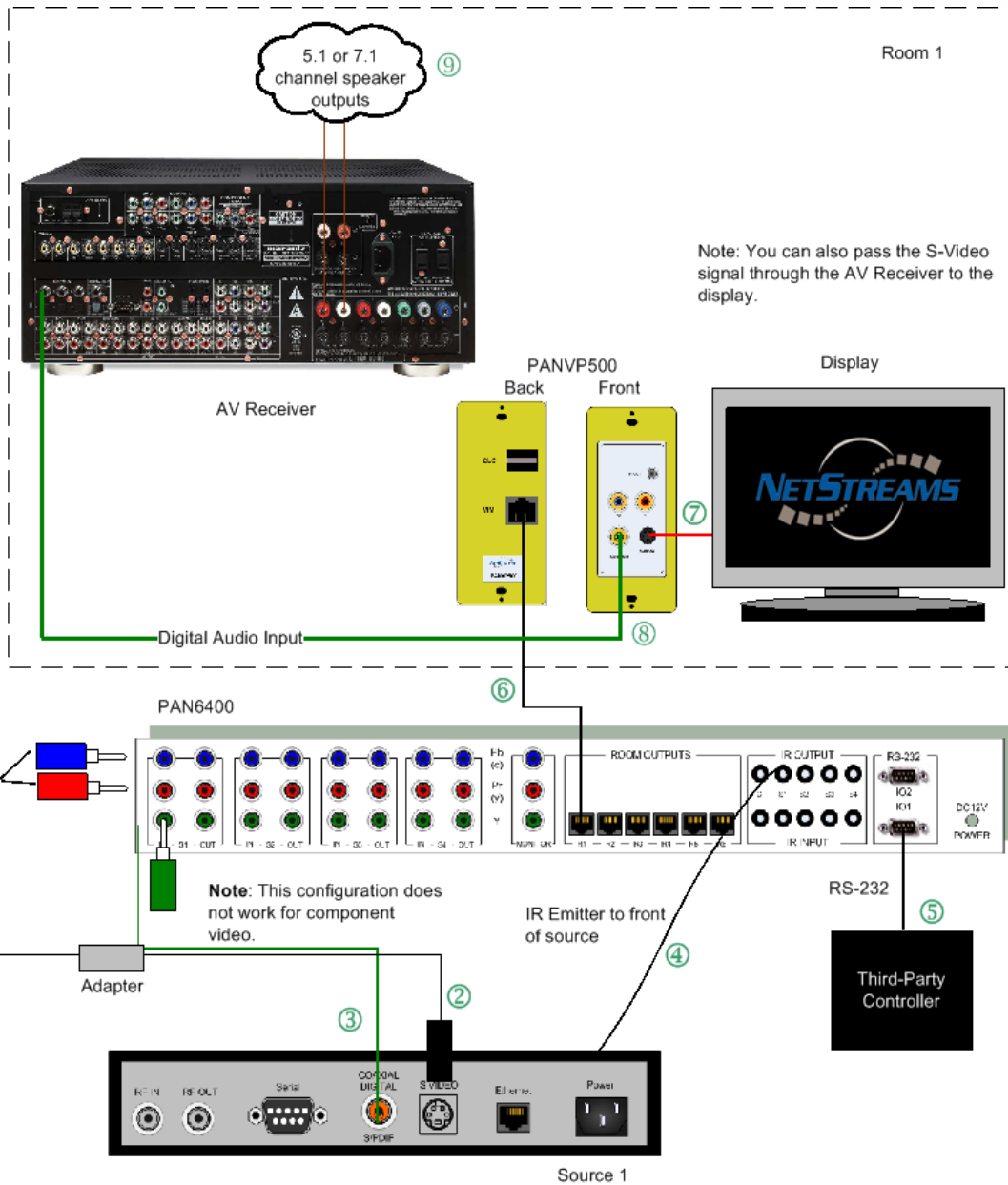


Figure 7 Coaxial Digital (S/PDIF) Audio and S-Video

To connect, complete the following steps:

1. Ensure power is off to all devices.
2. Connect the S-Video Out port of the source to the supplied S-Video adapter, and connect the adapter to the corresponding red and blue input ports (red) for that source on the PAN6400.

NOTE: This requires a special adapter (included with the *PAN6400*) that converts S-Video to RCA red and blue cables.

3. Connect the Coaxial Digital (S/PDIF) cable from the source to the *PAN6400* In port (green) for that source.
4. Connect the IR emitter from the *PAN6400* S1, S2, S3, or S4 (for source 1, source 2, source 3, source 4) output ports to the IR window on the front of the source.
5. Connect the RS-232 null modem cable from the IO1 port of the *PAN6400* to the third-party controller.
6. Connect the Ethernet CAT5 cable from the room output on the *PAN6400* to the VIM port of the *PANVP700*.
7. Use an S-Video cable to connect the *PANVP500* to the display (or route the video through an A/V receiver to the display).
8. Connect the Y/Composite port of the *PANVP700* to the Digital Audio In of the A/V Receiver.
9. Connect 5.1 or 7.1 channel speakers from the output ports of the A/V Receiver.
10. Turn power on to all devices.

IR Controls

For information on IR, refer to Chapter 6, *Using IR* of the [PAN6400 Installation Guide](#) and the following sections.

Connecting IR to the PANVP700

Figure 8 shows how to connect IR to and from the *PANVP500*. To connect IR, complete the following steps:

1. Connect the 3.5 mm phono jack of the *NetStreams* IR receiver (included) to the IR IN port of the *PANVP500*.
2. Place the *NetStreams* IR receiver in a location where it can receive the IR signal from the source remote.

NOTE: When placing the *NetStreams* IR receiver, choose a location that is shaded from fluorescent light. The *NetStreams* IR receiver works best if the dome is placed so that the dome faces the IR remote.

3. Connect IR emitter to the IR window on the front of the display.
4. Connect the 3.5 mm phono jack to the IR OUT port of the *PANVP500*.

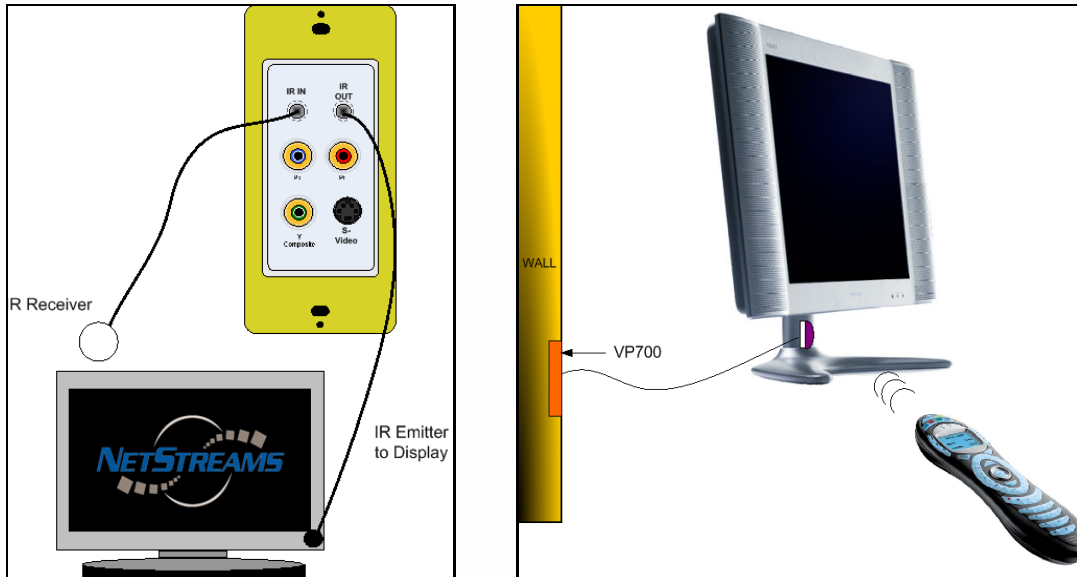


Figure 8 Connecting *PAN6400* IR receiver and emitter

Learning Source IR to the *PAN6400*

IR codes are divided into two states when a *PANVP500* is connected:

- Room IR
- Source IR

NOTE: When using third party systems to control the *PAN6400*, you may need to store the source IR into the *PAN6400*.

NOTE: Always stand within 18 inches of the receiver on the *PAN6400* when programming IR. Stay away from fluorescent light or ambient sunlight as both will affect data transmission.

There is a time out after thirty seconds to perform each task.

1. Turn the *PAN6400* on.
2. Standing within 18 inches of the IR window on the *PAN6400*, point the *PAN6400* remote control at the window.
3. Press and hold the **Menu** button on the *PAN6400* remote for two seconds.
Lights on the *PAN6400* will flash on and off. This means you've entered Learning mode.
4. Press the down arrow.
The LED turns from green to red. The first red light under "Source" indicates you are on the first step of IR Learning.
5. Use the left and right arrow keys on the remote to select the source you want to program.
When the LED on the front of the *PAN6400* is on for that source, that source is being programmed.

6. Press the command (such as "Play") you want to program on the *PAN6400* remote.
The second red light under "Source" activates. This indicates you have completed the second step of IR Learning.

NOTE: The LEDs on the *PAN6400* that are labeled "Display" are used for the sources.

When learning source IR, the Display LEDs on the *PAN6400* indicate the source being learned. For example, if the LED for Room 1 is lit, Source 1 is being programmed. Room 2 is Source 2, and so on. Since only four sources are available for programming, the Room 5 and 6 LEDs are reserved for special functions.

7. From the remote for the source, press the button to be learned into the *PAN6400*.
8. Press the button again on the source remote.
If IR is learned, the room and source LEDs will once again light in and out.
If IR is not learned, the source LEDs flash rapidly.
9. To exit Programming mode, press the **Menu** button.