Setting up Christie View

Christie View allows up to four different video sources to be displayed on one screen at the same time. The system displays up to four inputs from a single projector simultaneously, which enables multiple viewers to observe up to four different experiences.

When Christie View is enabled the projector ingests up to four different video inputs. Each user views one of the four 2K—2048x1080 (Griffyn® Series, Sapphire® 4K40-RGBH, and Mirage SST)/1920x1080 (Christie M RGB Series)—video sources at 60Hz. Each user views the projected output through a pair of active shutter glasses.

Affected products

The following products support Christie View.

- Christie M RGB Series
- Griffyn® Series
- Mirage SST
- Sapphire® 4K40-RGBH

Required components

The following components are required.

Christie View

- Mirage Pro license
- DB9 to mini DIN3 2 m harness

Additional components

- Christie Twist™ 2.8 or higher
- Active shuttered glasses (recommend model: XPAND X105-RF-X1):
  - Two pairs for 4-port, 2-viewer 3D glasses
  - Four pairs for 4-port, 4-viewer 2D glasses
- RF transmitter (recommended model: XPAND AD025-RF-X1)

Video source

- For Mirage SST only, inputs connected into any of the following layouts:
  - [0-1], [0-2], [0-3], [0-4]
  - [1-1], [1-2], [2-1], [2-2]

- [3-1], [3-2], [4-1], [4-2]
- For Griffyn® Series, Sapphire® 4K40-RGBH, and Christie M RGB Series only, inputs connected to SDI1, SDI2, SDI3, and SDI4
- 2K—2048x1080 (Griffyn Series, Sapphire® 4K40-RGBH, and Mirage SST)/1920x1080 (Christie M RGB Series)—resolution at 60 Hz required on all inputs

> - All sources must be frame synchronous.
> - 1920 x 1080 (FHD) image formats are supported.
> - 1/1.001 fractional frame rates are supported.

Adding the Mirage Pro software license to the projector

Add the Mirage Pro software license to the projector using Christie Twist™ 2.8 or higher.

The Mirage Pro license must be installed on the projector for Christie View to function.

1. Record the serial number of the projector(s) and send it to Christie Technical Support requesting the Mirage Pro software license.

   The serial number is available on the projector label, from the **Status** > **Configuration** menu, or you can send the (SST+CONF?1) serial API command.

   Christie Technical Support will send zipped license file(s) to you. If you sent more than one serial number, you will receive multiple license files as the .key file is based on the serial number of the projector.

2. Unzip the license file(s) to a known location on your computer.

3. Make sure the projector you want to apply the license to is running and is on the same subnet as your computer.

4. From the Start menu, select **Christie** > **Twist 2.x** > **Projector License Utility**.

5. In the Christie Projector License Utility dialog, select **Browse**.

6. Navigate to the location of the unzipped license file (.key) and select the Mirage Pro license.

7. From the Projectors list, select the projector you want to apply the upgrade to.

8. Select **Apply**.

9. Reboot the projector.

10. To verify the license was installed, select **Menu** > **Admin** > **Licenses** > **View**.

11. Repeat steps 3 to 10 for each additional projector.

Setting up Christie View

Follow these steps to connect the Christie View cable to the transmitter(s) and enable the input selection.

> Enabling Christie View changes the output resolution of the projector to 2K.

1. Set up the projector and connect to AC power.

   Do not turn on the projector.

2. Plug the content source outputs into the projector.

3. Connect the female DB9 end of the Christie View cable into the male GPIO connector on the projector.

4. Connect the RF transmitter(s) into the female mini-DIN3 connectors on the Christie View cable.

5. Disable all GPIO macros.

   The emitter required for Christie View uses the GPIO port. Macros that use the GPIO pins can cause a conflict.

6. Enable HFR:

   a) Select **MENU** > **Configuration** > **Input Settings** > **High Frame Rate**.

   b) To change to 2K resolution for HFR, select **Enable**.

   c) At the confirmation prompt, select **Enable**.

      The projector reboots and the High Frame Rate button changes to Disable.

      Issuing the `(OTR <0 | 1>)` serial command for the Griffyn® Series and Mirage SST also toggles between the 4K and 2K resolutions.

7. Turn on the projector.

8. From the display panel, select **Input Selection** > **Port Configuration** and select one of the following inputs: **Four-port, 4 Viewer 2D** or **Four-Port, 2 Viewer 3D**.
   The port type is displayed in the preview screen of the display panel. All the transmitters should be emitting a red light indicating they are on.

Setting up the glasses

Follow these steps to set up the XPAND Vision glasses to use with Christie View.

If using the XPAND Vision glasses for the first time, they must be paired with the RF emitter(s). If the glasses have already been paired, skip to step 7.

1. Connect the first RF emitter to the mini-DIN3 connector on the Christie View cable labeled A.

   Make sure only one emitter is connected to the Christie View cable.

2. Turn on the glasses by selecting the button on the inside of the frame once.

   A red LED illuminates indicating the glasses are turned on.

3. Select and hold the button on the inside of the frame for at least one second.

   The LED starts blinking at a rate of one blink every two seconds. After the glasses have successfully paired with the RF emitter, the LED blinks six times.

4. For each pair of glasses needing to be paired to the connected RF emitter, repeat steps 2 to 3.

5. When all glasses for view A have been paired, disconnect the RF emitter for view A from the Christie View cable.

   Christie recommends the emitter(s) and glasses are labeled for their respective view to avoid confusion during and after setup.

6. Repeat steps 1 to 5 connecting each RF emitter to the cable in descending order (B, C, and then D).

   Up to four emitters can be connected.

7. Turn on each pair of glasses by selecting the button on the inside of the frame once.

   A red LED illuminates indicating the glasses are turned on. The glasses default to Four-port, 2 Viewer 3D mode. Each lens should be showing a different view.

8. If using Four-port, 4 Viewer 2D mode, double-press the button on the inside of the glasses frame.

   The LED blinks once. The same view should now be visible through both lenses.

The glasses are turned off automatically when the projector is powered off or if the input on the projector is changed to a non-Christie View mode. Christie recommends ensuring the glasses are turned off when not in use to conserve battery life. To turn off the XPAND Vision glasses, select the button on the inside of the frame. A red light flashes once, slowly.
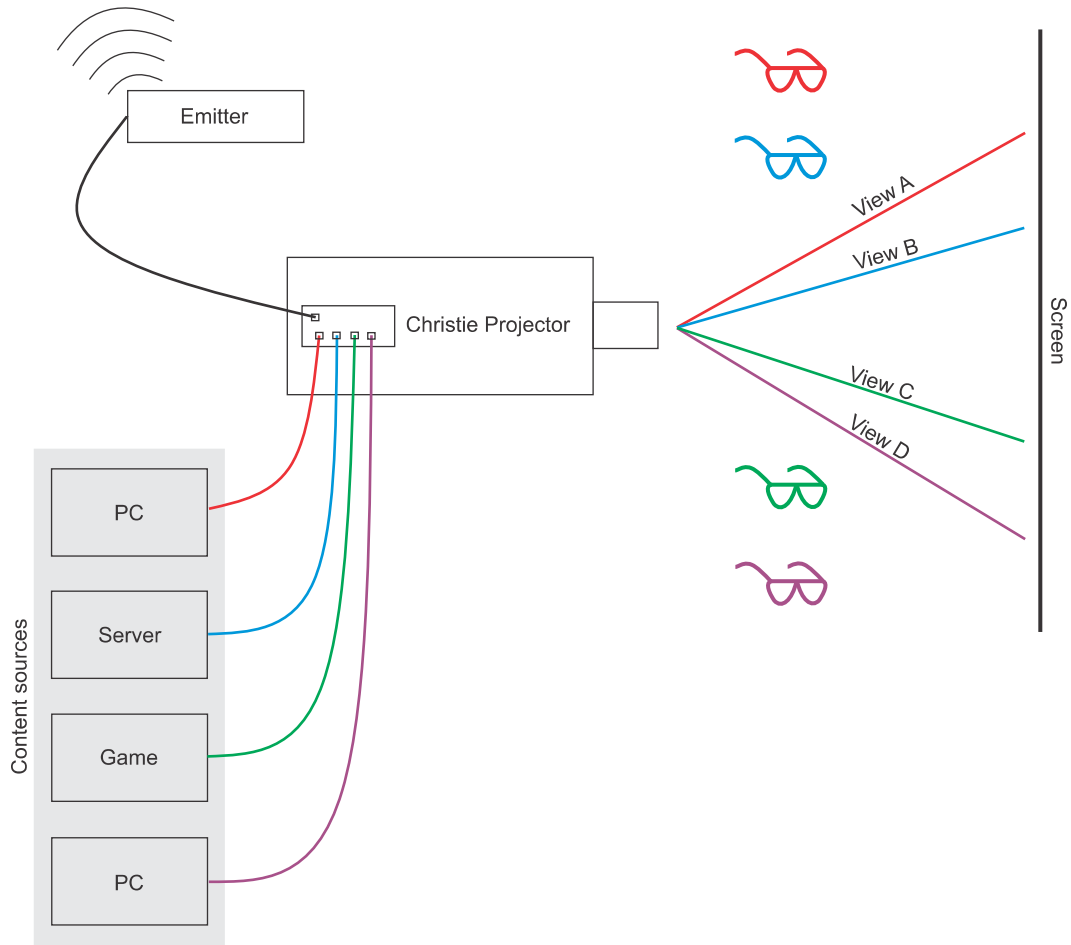
Connection diagrams

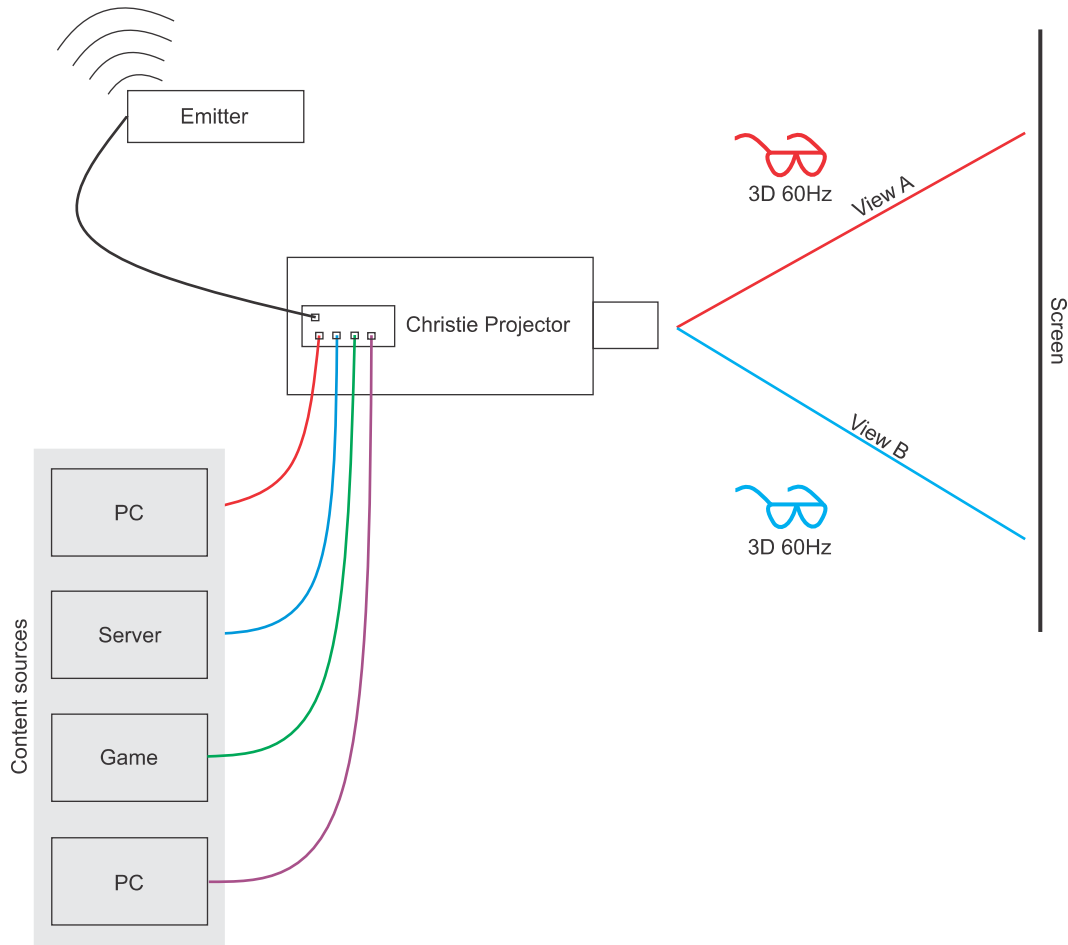The following diagrams illustrate some of the connection possibilities for Christie View.

Frame-locked content sources are required.

Four-port, 4-Viewer 2D (1080p 60 Hz connection)

Four-port, 2-Viewer 3D (1080p 120Hz connection)

Troubleshooting

For assistance with common issues, refer to the following troubleshooting topics.

Content is not displaying on the screen

The glasses are turned on and functioning but content is not appearing on the screen.
Solution:

1. Make sure the projector is in Christie View mode.

2. Make sure the Christie View cable is seated correctly on the projector and the RF emitter(s) are seated correctly for each mini-DIN3 connector on the cable.

Image tear appearing on the screen

The screen shows a different frame of video than what is shown on the bottom portion of the screen.

Solution: Adjust the frame delay by selecting **MENU** > **Image Settings** > **Advanced Image Settings** > **Frame Delay**.

Multiple views being observed when wearing the glasses

There is a potential for views other than your own to be visible based on brightness and content. This is referred to as ghosting.

Solution: Try to display content close to the same brightness for all views being used. This will help mitigate any ghosting that may occur.

The glasses are turning on and then off again after a few seconds

If the glasses cannot find an RF signal from an emitter within a few seconds, they turn off again.

Solution:

1. Make sure the projector is in Christie View mode.
2. Make sure the Christie View cable is seated correctly on the projector and the RF emitter(s) are seated correctly for each Mini-DIN3 connector on the cable.
3. The glasses may need to be paired again with an RF emitter.

The glasses are not turning on

The battery level for that pair of glasses may be depleted.

Solution: Charge the glasses using a micro USB cable.

The LED on the glasses is blinking every few seconds

The battery level for that pair of glasses is getting low.

Solution: Charge the glasses using a micro USB cable.

Content is being projected as black on the screen

The glasses are turned on and functioning, a Christie View mode is selected, and the content preview can be seen on the projector side panel display; however, content does not appear on the screen.

Solution:

1. Make sure the projector is set to 2K output resolution—2048x1080 (Griffyn® Series, Sapphire® 4K40-RGBH, and Mirage SST)/1920x1080 (Christie M RGB Series)—by selecting **MENU** > **Status** > **Configuration** > **3. Output Resolution**.
2. If the projector is configured to 4K output resolution (4096 x 2160):
   a. Select **MENU** > **Configuration** > **Input Settings** > **High Frame Rate**.
   b. To change to 2K resolution for HFR, select **Enable**.
   c. At the confirmation prompt, select **Enable**.
      The projector reboots and the High Frame Rate button changes to Disable.
      Issuing the `(OTR <0 | 1>)` serial command also toggles between the 4K and 2K resolutions.

Technical support

Technical support for Christie Enterprise products is available at:

- North and South America: +1-800-221-8025 or *Support.Americas@christiedigital.com*
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or *Support.EMEA@christiedigital.com*
- Asia Pacific (*support.apac@christiedigital.com*):
  - Australia: +61 (0)7 3624 4888 or *tech-Australia@christiedigital.com*
  - China: +86 10 6561 0240 or *tech-supportChina@christiedigital.com*
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