

RED + Dragonframe Setup Instructions

Version 1.4

Dragonframe 4.1 supports the RED DSMC2 models via the GIG-E interface. DSMC3 models are not currently supported.

What Does the Integration Do?

Primarily, the integration downloads full-resolution R3D files over the GIG-E interface using the RCP + R3DSDK.

Since Dragonframe uses GIG-E streaming to capture R3D files, this setup can limit the REDCODE compression level to what can be streamed.

Additionally, you can set Shutter Speed, ISO and White Balance via the Camera Settings in Dragonframe.

In other words, Dragonframe can use the RED camera as a capture source.

What About Live View?

It is *possible* to select the RED camera as a video assist source. In this scenario, Dragonframe will use the GIG-E connection to stream R3D data, and decode frames. Unfortunately, this consumes a lot of CPU, and yields a fairly small video assist size (1/8th the camera output) at a fairly low framerate.

Instead, we recommend that you use the SDI output from the camera, and use a Blackmagic Design capture device to get it into Dragonframe. We have a list of supported Blackmagic Design hardware on our camera setup page.

<https://www.dragonframe.com/camera-support/>

This yields a really great image at a high frame rate, with less CPU usage.

What Hardware Do I Need?

1. You need the RED DSMC2 camera that supports GIG-E.
2. A backplate that has a GIG-E connector. For example, a RED DSMC2 Jetpack Expander SDI. The type you need depends on the model of camera you own. Contact RED if you are unsure which to use.
3. A RED GIG-E to CAT5E ethernet cable. Again, contact RED if you are unsure which model you need.

4. If your computer does not have an ethernet (RJ45) input, you may need an adapter. For example, most Mac laptops in the last few years do not have a wired network connector. You can get a Thunderbolt->Ethernet or USB->Ethernet adapter.

Can I Use WiFi instead?

No. It's not fast enough for what we're doing.

Setup Instructions

1. **DF4 only:** In Dragonframe, go to the **Preferences | Capture** and make sure the 'WiFi camera module' is enabled. If it wasn't, you will have to restart Dragonframe after making the change.
2. Connect the camera's SDI output to the Blackmagic device, and connect the Blackmagic device to the computer.
3. In Dragonframe, choose the Blackmagic device as the **Video Assist Source** (in the Capture menu).
4. Verify that you see the live video stream within Dragonframe. If not, review our Camera Setup page for Blackmagic device instructions.
5. Connect the RED camera GIG-E cable to your computer.
6. Review/set the RED's ethernet connection settings. Set it to use a static IP address. For example, 192.168.0.100, with a netmask of 255.255.255.0.
7. On your computer, configure your LAN network settings to use a static IP address. For example, use 192.168.0.101, with a subnet mask of 255.255.255.0. (It must be an address in the same network range as the camera.)
8. In Dragonframe,
 - a. **DF4:** Go to the Capture menu and choose 'Configure WiFi Cameras...'
DF5+: Go to the Scene menu and choose 'Cameras...', then press 'Configure IP Cameras...'
 - b. In the dialog, click 'Add' to add a camera.
 - c. Choose the RED camera type from the dropdown.
 - d. Set the network to LAN.
 - e. Enter the IP address of the camera, "192.168.0.100" (if that's what you used).
 - f. Press OK in that dialog, and then OK to dismiss the WiFi camera dialog.
9. Choose the RED camera as the Capture Source (in the Capture Menu).
10. It should connect. Go to the Cinematography workspace and attempt to take a test shot. You should also see options for shutter speed and ISO.