Sony PMW F5 recording to Gemini 10 bit 4444 Dual Link Recording Workflow

The unit comes with 2 SSD Cards that hold 512 Gigs of data each.

You will get 84min of 4:4:4:4 10 bit recording on the two cards.

Load them into the Gemini by flipping down the metal doors in the back of the unit and sliding the cards in. They only go one way so don’t force them. Insert them with the sata connection towards the unit and the labeling facing up.
Power connections for the Gemini

When the unit powers on you will see both green lights signaling both SSD cards are being accessed.

Next step is to format the SSD cards. Click on "Menu"
Click on “Gemini” SSD’s > Format Both – OK

Formatting please wait – Takes about 1 min per card to format
Each card is about 512 gigs

Gemini does support spanning but try to avoid it.

Next go to the “Setup” menu and set that to >Project>Frame Rate> Follows Input

This will set the Gemini to record the same frame rate as the camera is outputting.

Set the Gemini to start recording when the camera starts recording.

Go to Menu>Record>Trigger>Camera
Plug in the SDI 1 and SDI 2 Out of the F5 into the SDI A and B Input on the Gemini

SDI A and B Input on the Gemini
Plug into the Gemini
SDI 3 which has the camera menu overlays plug into the monitor input.

Turn on the Sony F5 using the on switch.

Use the knob to Navigate through the menus and press the knob to select the menu item.
Go to System Menu

Reset the camera to defaults
Go to System>System Settings

Scroll down to All Reset and choose Reset

Will have to power cycle the camera
Go to System > Record Format > HD

Select the Record Format

These are the choices you can only choose the XAVC 1920x1080 because the Gemini does not work with the XAVC 2048 x 1080 you have to use the SXS Pro cards or the Sony external recorder to record these formats
Use these Sony SXS Pro cards to record 2048 x 1080 2K footage.

32 gig will hold 40 min and the 64 gig will hold 80 minutes.

Choose the basic HD XAVC 1920 x 1080P setting.

Next go to Go to Recording Menu.

Choose > SDI Rec Control Setting set to “On”.
This will put the Gemini in record when you press record on the camera.
On the Gemini select the Record>Trigger> Camera to place the Gemini in the "Camera Control" mode.

Note on the Gemini that the unit shows that the recording will be controlled by the camera.

Currently the camera is set to YPbPr. The Gemini will see a 1080PSF 23.98 4:2:2 signal.

Go to >System>Base Setting>Main Operation>Change the setting to RGB.

*NOTE we don’t have RAW recording capabilities.*
Confirm the changes by choosing Execute.

Double check to make sure to set the color space.

Go to the >System> >Base Setting> Color Space.

Go to >Color Space>S-Gamut/Slog2.

The Gemini now auto detects the 1080PSF signal to be 4:4:4 1080PSF 23.98.

To check the input status to make sure we are recording dual link click on the soft key 1080PSF 23.98.
The Input Status should read SDI A:
1080PSF 23.98 4:4:4
SDI B: 1080PSF 23.98 4:4:4

Dual Link 3G DPX 10 Bit

The color should look correct on the Gemini Monitor

Now set to record press record on the Sony F5 camera and it will begin recording on Gemini too

Gemini in Record mode
Press the SSD Save Eject and Eject the 1 and 2 cards.

The only way to turn off is to unplug the unit.

Remove the cards and load them into the USB card reader in the Gemini Kit.

Connect the USB to the computer to offload the media.
Now we need to load the files into a computer for editing.

Open Adobe Media Encoder.

Go to File>Add Source.

Make sure the Cineon/DPX File Sequence is checked and then navigate to the first file of the folder with the lowest number.

Then Click "Open".
Change the Format to QuickTime

Click on the “Yellow” Preset to set the quicktime settings

Choose the following:
Format – Quicktime
Export Video only
Choose the Apple ProRes 4444 Video Codec
Video Settings set to 100
Frame rate 23.98
Progressive
Square Pixels
24 bit
Choose to save and click OK

Click on Output File
Click the green arrow to start the encode.

Open AVID and create a AVID 1920 x 1080 Color Space - RGB.
File > Import

Click on Options

Resolution:
Apple ProRes 4444 MXF
Choose Image sized for current format

Choose the 601 or 709 Pixel to Video Mapping

Click OK

Choose the file and the resolution as Apple ProRes 4444 MXF and select the Storage drive as the destination for the AVID file

The import will fast import the video. You should see the term Fast Import or else the image is not coming in at 10 bit 4444