

# Gemini 4:4:4™ Technical Specifications

| Feature                          | Specification   |
|----------------------------------|---|
| <b>Firmware</b>                  | *Initial Firmware will have limited features in order to provide the Gemini 4:4:4 as soon as possible.  |
| <b>Video Standards</b>           | HD-SDI, SMPTE 292M; HD-SDI 3G*, SMPTE 424M; HD-SDI Dual-Link, SMPTE 372M  |
| <b>Video Formats</b>             | 4:4:4 1080p23.976/24/25;<br>4:2:2 1080p29.976/24/25/29.97/30, 1080i50/59.94/60; 720p23.976/24/25/29.97/30/50/59.94/60;<br>Future firmware releases: 4:4:4 1080p29.97/30, 4:2:2 1080p50/59.94/60, 2048x1080p23.976/24  |
| <b>Video I/O</b>                 | Four BNCs, (2 Input, 2 output, with individual power-down options), One HDMI (Type C) Output  |
| <b>Record Features</b>           | Full Uncompressed 10-Bit 4:2:2 / 4:4:4 Recording as DPX Files with Audio in Wav file<br>User programmable over/under crank*, time-lapse*, 3:2 and 2:2 pulldown removal*, on-screen tally*<br>Record video simultaneously to both SSD drives (backup)* or span drives (for longer record times)<br>Video can be recorded with or without burned-in LUTs, on individual drive basis   |
| <b>Playback Control</b>          | Play, Rewind*, Fast-Forward*, Pause*, and Step Control*<br>Reference image overlay (aka onion skinning)*  |
| <b>S-Log, Log-C Support</b>      | S-Log, Log-C Support, with user programmable* 1D LUTs, LUTs can be applied to either SDI output   |
| <b>Media</b>                     | Two Slots for 1.8" Solid State Drives (SSD), Hot-Swappable*, 256GB / 512GB sizes<br>SSD Performance: 260 MBytes/Sec Write, 415 MBytes/Sec Read, 6Gbps SATA Interface  |
| <b>Transfer Station</b>          | 1.8" SSD to 6Gbps eSATA transfer station (included)   |
| <b>Built-In LCD Monitor</b>      | 5" high brightness LCD,, 800 cd/m <sup>2</sup> , 800 x (RGB) x 480 Pixels, 24-Bit, 900:1 True Contrast, Wide Viewing Angle (IPS Technology), Color Calibrated at Factory<br>1:1 Pixel Option*, with user positioning of desired window via touch control*   |
| <b>Menu System</b>               | Touch Sensitive menu system, with user-defined presets* and customizable level of on-screen data*   |
| <b>Timecode</b>                  | HD-SDI Embedded (SMPTE RP-188) in initial release, LTC via the remote control option*   |
| <b>Digital Audio I/O</b>         | HD-SDI Embedded 4-Channels, uncompressed, 24-Bit, 48K; 16-Channel*  |
| <b>Analog Audio Output</b>       | 3.5 mm output jack*, headphone or consumer line level*, support to monitor any channel pair*  |
| <b>3D - Dual Stream (Option)</b> | Extra cost option for Full Stereo (dual stream) record and playback in a single Gemini unit*<br>Left and Right Video Streams recorded as individual files, in full uncompressed*<br>Vertical Flip*, Horizontal Flop*, for either/both streams*<br>Individual stream output or Combine*: Side by Side*, Line by Line*, Anaglyph*, 50/50 Composite*<br>Simultaneous output in multiple formats* (ie Side by Side and 50/50 Composite) |
| <b>Remote Control (Option)</b>   | Wired Remote Control with Tally Light and LTC I/O*  |
| <b>NLE Compatibility</b>         | NLE Support planned for Avid, Final Cut Pro, Premiere, Vegas and Edius  |
| <b>Power Requirements</b>        | 6 to 19 Volts DC, 8 to 15 watts (active) / under 1 watt (power-save mode)   |
| <b>Size, Weight</b>              | 138 x 114 x 27 mm (5.4 x 4.5 x 1.1"); 450 grams (1 lb); Milled Aluminum Case  |
| <b>Environmental</b>             | +50 to -20 °C Operating / +75 to -40 °C Storage   |
| <b>Gemini Kit Components</b>     | Gemini 4:4:4 Recorder, eSATA Transfer Station, Custom Fitted Hard Plastic Case, HD-SDI cables, HDMI cable, Hotshoe with 1/4"x20 Ball Mount, Universal AC Power Supply, 4-Pin XLR Power Cable  |
| <b>Optional Accessories</b>      | 256GB / 512GB SSD Media, DC to DC Converter (Input: 20 to 32V, Output: 12V @ 4A, Sun Shade, Remote Control, D-Tap Power Cable, Sony BPu30/BPu60 Battery Adapter   |
| <b>Notes</b>                     | 1080p50/60 data striped across both drives; 4:4:4 only supported in 1080p23.98/24/25/29.97 and 2048x1080p23.98/24; Certain frame rates will be provided in future firmware release<br>Specifications subject to change without notice.<br>* Feature will be implemented in future firmware release, as initial release will have limited features   |

## Gemini 4:4:4 Recording Time in Minutes

| Media          | 1080p24<br>4:2:2 | 1080p24<br>4:4:4 | 1080p25<br>4:2:2 | 1080p30<br>4:2:2 | 1080p50<br>4:2:2 | 1080p60<br>4:2:2 | 1080i50<br>4:2:2 | 1080i60<br>4:2:2 | 720p50<br>4:2:2 | 720p60<br>4:2:2 |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|
| 256GB SSD (x1) | 33               | 22               | 32               | 27               | N/A              | N/A              | 32               | 27               | 36              | 30              |
| 256GB SSD (x2) | 66               | 44               | 64               | 54               | 32               | 26               | 64               | 54               | 72              | 60              |
| 512GB SSD (x2) | 132              | 88               | 128              | 108              | 64               | 52               | 128              | 108              | 144             | 120             |