Appendix A: Specifications

Video Input

Digital: SD and HD-SDI (1xBNC), SMPTE-259/292/296

HDMI

Analog: SD/HD Component (3xBNCS):

SMPTE/EBU N10, Betacam 525 line,

Betacam 525J, YPbPr

12-bit A/D, 2x oversampling

Video Output (all simultaneously active)

Digital: SD and HD-SDI, SMPTE-259/292/296 (1xBNC)

HDMI

Analog: Composite (1xBNC):

NTSC, NTSCJ, PAL

12-bit D/A, 8x oversampling

SD/HD Component (3xBNCs):

SD: SMPTE/EBU N10, Betacam 525 line,

Betacam 525J, RGB

12-bit D/A, 8x oversampling

HD: YPbPr, RGB

12-bit D/A, 2x oversampling

Audio Input

Digital:

24-bit SDI embedded audio, 8 channel, 48kHz

HDMI embedded, 2 channel

Analog:

24-bit A/D, 2 channel balanced (2 XLR), 48kHz

Input level: Line, Mic, Mic + phantom 48Vdc

2 channel unbalanced (2 RCA)

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VIDEO SYSTEMS

Audio Output

Digital:

24-bit SDI embedded audio, 8 channel, 48kHz

HDMI embedded, 8 channel

Analog:

24-bit D/A, 2 channel balanced XLR, 48kHz

2 channel unbalanced (2 RCA)

Network

10/100/1000 Ethernet (RJ45)

802.11b/g wireless transceiver

Embedded webserver for remote control

Panel User Interface

2 x 20 character display, with dedicated buttons

Timecode

LTC timecode input and output via BNC

SDI embedded RP188 timecode

Control

LANC Loop (2 LANC connectors)—not supported in Version 2.0

Lens Tap: connects to optional AJA Lens Tap intercept cable placed between camera body and lens for start/stop control—not supported in Version 2.0

IEEE-1394a/FireWire 400 for control and timecode data—not supported in Version 2.0

Serial Port

RS-422 (slave pinout), 9-pin (available beginning with version 2.0 firmware)—Connector pinout is as follows:

1 GND
2 TX -
3 RX +
4 GND
5 No Connection
6 GND
7 TX +
8 RX -
9 GND
Shell GND

FireWire

IEEE-1394b, FireWire™ 800Mb/s connects to Mac Pro or MacBook Pro (mount as harddrive)—not supported in Version 2.0

Hardware up-conversion - 10-bit

Anamorphic: full-screen

Pillar box 4:3: results in a 4:3 image in center of screen with black sidebars

Zoom 14:9: results in a 4:3 image zoomed slightly to fill a 14:9 image with black side bars

Zoom Letterbox: image zoomed to fill screen

Zoom Wide: combination of zoom and horizontal stretch to fill 16:9 screen; this setting can introduce a small aspect ratio change

Hardware down-conversion - 10-bit

Anamorphic: full-screen

Letterbox: image is reduced with black top and bottom added to image area with the aspect ratio preserved

Crop: image is cropped to fit new screen size

Hardware cross-conversion - 10-bit

1080i to 720P

720P to 1080i

Physical

Height: 3.25″ (8.25 cm)

Width: 9.00″ (22.86 cm)

Depth: 6.12″ from front antenna cover to back of handles (15.56 cm)

Weight: 3.7 pounds (1.67 kg)

Temperature

Operating Temperature Range: 5^C to 40^C

Safe Storage Temperature Range (power OFF): -20^C to 60^C

Power

Voltage: 100-240 VAC (to supplied AC Adapter);
12Vdc to power connector input on side of chassis:
     12 Vdc minimum
     18 Vdc maximum
Current: 3.3A (maximum)

Typical operating power: 30W