

RECORDING

Recording Codec [Apple ProRes 422 HQ, 4444, 4444 XQ]

Sensor Mode [4K 16:9  
4K 2:1  
3.8K 16:9  
2K 16:9 S16]

Recording Resolution [4K (4096x2304)  
*depends on Codec* UHD (3840x2160)  
*and Sensor Mode* 2K (2048x1152)  
HD (1920x1080)]

PROJECT SETTINGS

Project Rate [23.976p, 24p, 25p, 29.97p, 30p, 48p, 50p, 59.94p and 60p]

Next Reel Count [1 - 9999]

Camera Index [A\_ - ZZ]

Camera Index Color [Red, Green, Blue, Cyan, Magenta, Yellow, Black, White]

REC BEEPER

Rec Start Beeper [On, Off]

Rec Stop Beeper [On, Off]

Media Full Beeper [On, Off]

AUDIO RECORDING

Audio Recording [On, Off]

Gain Levels...

Channel 1/2/3/4 Source [None, Line In L/R, AEM-1 L/R, Internal Mic L/R]

Channel 1/2/3/4 Control [if Source = Line In L/R: Manual Gain, Manual Gain + Lim, Auto Gain]

VF Headphones Routing for Channel 1-4 [Off, L, L+R, R]

VF Headphones Volume [0-30 | 20]

Reference Tone [Off, -9dBFS, -18dBFS, -20dBFS]

MEDIA

Erase Media...  
*erases files on Compact Drive*

Prepare USB Medium...  
*creates necessary folders on USB drive*

MONITORING cont.

VF

Surround View [On, Off]

EVF Surround Mask [Black Line, Colored Line, 25% Mask, 50% Mask, 75% Mask and 100% Mask]

Monitor Surround Mask [Black Line, Colored Line, 25% Mask, 50% Mask, 75% Mask and 100% Mask]

Magnification [100% - 200% | 100%]

SETTINGS

EVF Brightness [120, 200 and 300]

EVF Power [Auto, Off, On]

EVF Eyepiece Heating [On, Off]

EVF Image Rotation 180° [On, Off]

Monitor Brightness [1 - 10 | 6]

Monitor Flip Mode [Auto, Normal, Flipped]

EVF OVERLAYS

Frame Lines [On, Off]

Center Mark [Off, Dot, Small Dot, Cross, Samll Cross]

Status Info [Off, Overlay and Safe]

STATUS COMPONENTS

Electronic Horizon [On, Off]

Show Numeric Values [On, Off]

Lens Data [On, Off]

Lens Focus Distance [On, Off]

Depth of Field [On, Off]

Distance Measure [On, Off]

Master Grips/OCU-1 Control [On, Off]

Info Left/Right/Top/Bottom [On, Off]

Audio [On, Off]

Timecode [On, Off]

Overlay Brightness [1 - 4]

MONITOR OVERLAYS

Frame Lines [On, Off]

Center Mark [Off, Dot, Small Dot, Cross, Small Cross]

Electronic Horizon [On, Off]

Show Numeric Values [On, Off]

SDI

SDI 1/2 PROCESSING

Surround View [On, Off]

Surround Mask [Black Line, Colored Line, 25% Mask, 50% Mask, 75% Mask and 100% Mask]

Magnification [100% - 200% | 100%]

OVERLAYS

Frame Lines [On, Off]

Center Mark [Off, Dot, Small Dot, Cross, Small Cross]

Status Info [Off, Overlay and Safe]

STATUS COMPONENTS

Camera Index Letter [On, Off]

Electronic Horizon [On, Off]

Show Numeric Values [On, Off]

Lens Data [On, Off]

Lens Focus Distance [On, Off]

Depth of Field [On, Off]

Distance Measure [On, Off]

Master Grips/OCU-1 Control [On, Off]

Info Left/Right/Top/Bottom [On, Off]

Audio [On, Off]

Timecode [On, Off]

Overlay Brightness [1 - 4]

False Color [On, Off]

Peaking [On, Off]

Hide Messages [On, Off]

MONITORING cont.

SDI 1/2 Image [Clean, Processed, Clone SDI 1 (SDI 2 only)]

SDI 1/2 Format [422 1.5G HD, 422 3G HD, 444 3G HD, 422 6G UHD, 422 12G UHD, 444 12G UHD]

SDI 1/2 Frame Rate [23.976p, 24p, 25p, 29.97p, 30p, 48p, 50p, 59.94p, 60p, 23.976psf, 24psf, 25psf, 29.97psf, 30psf]

SDI 1/2 3G Level [Level A, Level B] *A only for 444*

Master Magnification [100% - 200% | 100%]

FRAME LINES

Frame Line [none]  
*choose/add custom/delete frame lines*

FRAME LINE DISPLAY

Frame Line A/B/C [On, Off]

Frame Line Color [Red, Green, Blue, Cyan, Magenta, Yellow, Black, White]

Frame Line Opacity [1-4 | 3]

OUTSIDE SHADING

EVF Outs. Shad. [Off, 25%, 50%, 75%, 100%]

Monitor Outs. Shad. [Off, 25%, 50%, 75%, 100%]

SDI 1 Outs. Shad. [Off, 25%, 50%, 75%, 100%]

SDI 2 Outs. Shad. [Off, 25%, 50%, 75%, 100%]

USER RECTANGLES

User rectangles [Off, Rect 1, Rect 2, Rect 1+2]

User rectangle 1/2 Width [0-999]

User rectangle 1/2 Height [0-999]

User rectangle 1/2 Offset Top [0-999]

User rectangle 1/2 Offset Left [0-999]

User rectangle 1/2 Reset all

PEAKING

VF Peaking Mode [Aperture, Color]

VF Peaking Level [1 - 20 | 5]

VF Peaking Offset Shift [-5 - +5 | 0]

VF Peaking Color [Red, Green, Blue, Cyan, Mag., Yellow, White]

SDI 1 Peaking Mode [Aperture, Color]

SDI 1 Peaking Level [1 - 20 | 5]

SDI 1 Peaking Offset Shift [-5 - +5 | 0]

SDI 1 Peaking Color [Red, Green, Blue, Cyan, Mag., Yellow, White]

RETURN IN

Use SDI 2 as Return In [On, Off]

Show Return In on VF [On, Off]

Show Return In on SDI 1 [On, Off]

SDI Color Bars [On, Off]

IMAGE

LOOK

Look  
*choose/add custom/delete look | Default*

Look Intensity [10%, 20%, 30%,... 100%] \*ACM only

Enable Live Painting [On, Off]

VF Processing [LogC4, Look (SDR), Look (EVF:HDR, Mon:SDR)]

SDI 1/2 Processing [LogC4, LogC4 Wireless Video Optimized, Look]

SDI 1/2 Color Space [REC 709 (SDR), REC 2020 (SDR), REC 2100/PQ (HDR), REC 2100/HLG (HDR)]

TEXTURE

Texture  
*choose/add custom/delete a texture | K445 Default*

SYSTEM

SENSOR

Genlock [Off, SYNC IN or TC IN]

Sync Shift (0.000 µs) [+/-20833.3330 µs | 0 µs]

User Pixel Masking

Install User Pixel Mask

Export User Pixel Mask

Delete User Pixel Mask

Grab Raw Image

Fan Mode [Rec Low, Low Noise]

Shutter Unit [Exposure Time, Shutter Angle]

POWER

Priority [Power In (PWR), Onboard Bat. (BAT), Highest Voltage]

Power In (PWR) Warning (%) [0-99% | 10%]

Power In (PWR) Warning (V) [19.0-35.0V | 22.0V]

Onboard Battery (BAT) Warning (%) [0-99% | 10%]

Onboard Battery (BAT) Warning (V) [19.0-35.0V | 22.0V]

BAT Unit Preference [Percent Volt]

Enable PWR/BAT LEDs [On, Off]

BAT Auto Boot Up [On, Off]

SYSTEM TIME + DATE

*set Year, Month, Day, Hour, Minute*

BUTTONS + DISPLAY

Display style [Day, Night]

Button + LED brightness [0-3 | 1]

MVF-2 Touch [On, Off]

Tally [Off, On (Recording), On(Remote/CAP)]

TLM-1 Brightness [0-10 | 5]

TLM-1 ID Brightness [0-10 | 5]

CAMERA ACCESS PROTOCOL (CAP)

Enable CAP Server [On, Off]

CAP Server Password...  
*set password*

CAP Client List...  
*view connected devices*

NETWORK/WIFI

WiFi power [On, Off]

WiFi Mode [Host, Client]

Wifi Host Password...  
*set password*

WiFi Host Channel [Automatic or 1-11 | Automatic]

WIFI NETWORK

*if Mode = Client: choose network*

STREAMING METADATA

Enable Streaming [On, Off]

Streaming Addressing [Unicast, Multicast]

Streaming Address [192.168.0.123]

Streaming Port [5432; 1024 - 65535]

LAN IP Mode [Static, DHCP]

LAN Static IP [192.168.0.100]

LAN Static Subnet [255.255.254.0]

LAN Static Gateway [0.0.0.0]

LICENSES

*install/uninstall licenses*

UPDATE

Update Camera...

Update LBUS Devices...

Update MVF-2...

Update Lens Mount...

Update Media...

Update PDM-1...

SYSTEM cont.

RESET ELECTRIC HORIZON

recalibrate roll & tilt

Restrict Local Camera Control [On, Off]

Language [English, 中文]

SETUP

User Setups Installed...  
*save/load/delete/export User Setups*

User Setups On USB...  
*save/load/import User Setups from USB drive*

Factory Reset...  
*load factory default settings*

USER BUTTONS

*define User Button functions for*

Camera User Buttons (1 to 9)

MVF-2 User Buttons (VF1 & VF2)

Monitor User Buttons (M, 1, 2, 3, 4)

Hand Unit User Buttons (1 to 6)

LBUS Device User Buttons (1 to 12)

GPIO User Buttons (1 to 14)

Lens Buttons

Lens RET (1 to 4)

Lens ENG, Lens PROD, and Lens VTR

POSSIBLE FUNCTIONS

Off

VF Status info

VF Check LogC4

VF Check HDR

VF False Color

VF Frame Lines

VF Peaking

VF Processing

VF Surround View

VF Zoom

VF Zoom Position

SDI 1/2 Status info

SDI 1/2 Check LogC4

SDI 1/2 False Color

SDI 1/2 Frame Lines

SDI 1/2 Peaking

SDI 1/2 Surround View

SDI 1/2 Zoom

SDI 1/2 Zoom Position

SDI 1/2 Zoom (Smart)

SDI Color Bars

EI In-/Decrease

FPS In-/Decrease

FPS Preset

ND In-/Decrease

Shutter In-/Decrease

WB In-/Decrease

Audio CH-1/2 In-/Decrease

Audio Mute int. Mic

Audio Solo

Auto WB

Check Last Clip

USER BUTTONS cont.

Flip Monitor

Frame Grab

Mirror Image

Playback

Prerecording

Record Start/Stop

Return In

WiFi Power

Talk (Eng)

Talk (Prod)

METADATA

*set metadata fields:*

Production

Production Company

Director

Cinematographer

Camera Operator

Location

Scene

Take

User Info 1/2

LENS & ECS

LENS DATA

*info on active lens*

Lens Tables Installed...  
*see/add/delete/export Lens Tables*

Lens Table Favorites...  
*see/add/delete/export Lens Tables*

Add To Favorites

Clear Lens Table  
*clears active Lens Tables*

Calibrate All Motors

LBUS LENS MOTOR CONFIGURATION

Focus/Iris/Zoom Motor Torque [1-4 | 3]

Focus/Iris/Zoom Motor Direction [Left, Right]

Focus/Iris/Zoom Motor Teeth Count [Auto, 40t, 50t, 60t]

RADIO

Power [On, Off]

Channel [0-13 | 4]

Status (*info*) [Off, Initializing, Ready]

Connected Devices (*info*)  
*see number of connected devices*

Wireless Region Setting [Australia... to World]

Focus Unit [Lens Default, Imperial, Metric]

Circle of Confusion [0.009, 0.013, 0.025]

Enable lens mount [On, Off]

HOME

FPS

set sensor speed [0.750 - 120.000fps | 24.000fps]  
add/delete value

TC

view timecode

OPTIONS

Timecode

reset/set to time

Run mode [Free run, Rec run]

Mode [Regen (Media), Regen (TC in), Preset, Jam sync (TC in)]

Count Mode [Non-Dropframe, Dropframe]

TC Offset [+/-20 | 0]

SHUTTER

set shutter angle  
add/delete value

resulting exposure time shown in info pane

EI

set exposure index [160 - 6400, 2560 ES - 6400 ES | 800]  
ES limitation shown in info pane

IRIS

view current iris readout (LDS 1 or 2 lens required)

ND

set ND filter [ND —, ND 0.6, ND 1.2, ND 1.8]

WB

set white balance [2.000 - 11.000K +/-16.0CC | 5600K 0.0CC]  
add/delete/rename values

AUTO WB

press two times to trigger auto white balance  
(follow instructions on screen)

MENUCONT.

PLAYBACK

INFO

get info on:  
Version  
System  
False Color  
PWR/BAT LED  
Media  
USB  
Network  
Lens  
User Button  
and export logs and info files:  
Export HW Info File...  
Export Logfiles...

ALERTS

view alerts and warnings

PLAY

skip rev/fwd, see clip list

OPTIONS

Play End Mode [Pause on end, Pause on start, Loop, Play next clip, Exit playback]