DCR-VX2200E


SONY
HANDYCAM
SONY
3CMOS
Mini DV
HANDYCAM
20x
OPTICAL
ZOOM
Sony Lens G
G

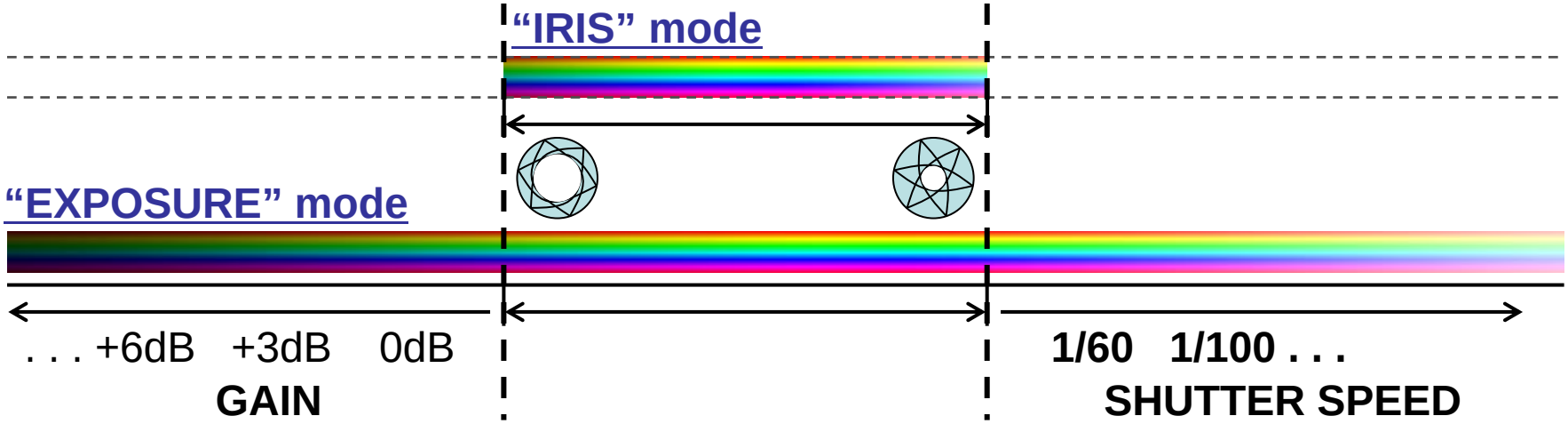
Camera Features

- **IRIS / EXPOSURE mode**
- **IRIS ring**
- **Three ND Filters**
- **Minus Gain**
- **Camera Control System**
- **LCD / EVF**

“IRIS” / “EXPOSURE” mode

The following two exposure adjusting mode can be controlled by the IRIS ring.

- **“IRIS” mode**
  - The brightness of the picture is controlled optically by using iris only.
- **“EXPOSURE” mode**
  - In addition to iris, gain and shutter speed become under control by the ring, which enables to adjust picture brightness continuously and seamlessly in a wide range.
  - Either gain or shutter speed, or both can be selected. Also, both can be un-selected, which functions exactly as same as “IRIS” mode.



Reversible IRIS Ring

- **Rotate direction can be reversed.**

In general, rotate direction to close the iris is same among the industry.

It is possible to reverses the rotate direction.

It is useful when changing the camcorder angle between high-angle and low-angle, while the ring operate direction can be kept as same.

Minus Gain of DCR-VX2200E

+21dB

0dB

-6dB

Electrical noise caused by gain control.

*All pictures are simulated.

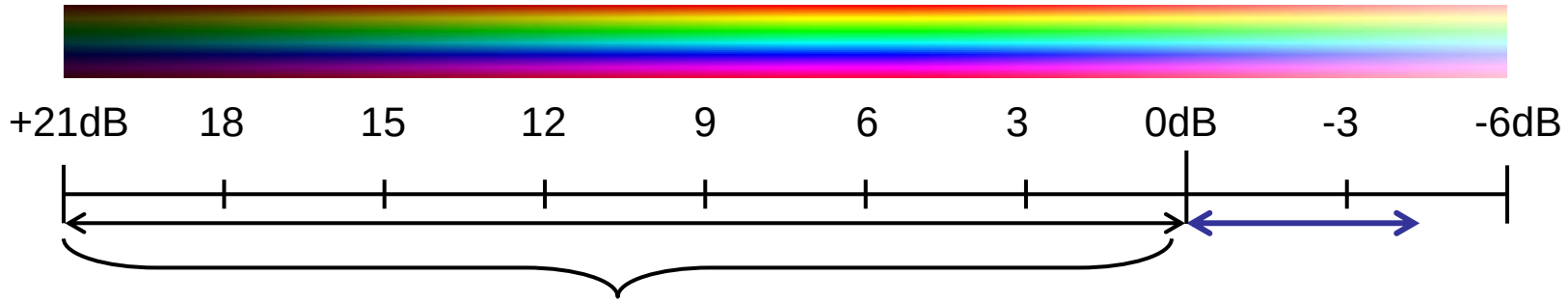
Advantages of Minus Gain implemented in DCR-VX2200E

- S/N is improved. Less noise picture can be captured.
- Dynamic range will not be influenced. Brighter part of the picture will not lose gradation because of applying this minus gain.

- In general, minus gain will effect dynamic range of captured picture, which the VX2200E does not have (as mentioned above).
- [-3dB] and [-6dB] can be used at manual gain switch.

AGC range configuration

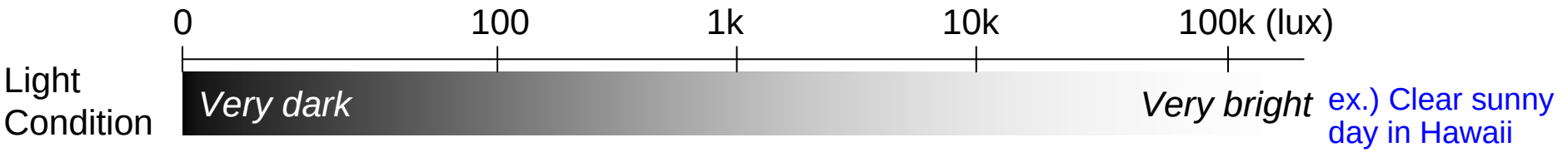
Current High-end CAM models can set the upper limit of AGC. The DCR-VX2200E / HDR-FX1000E can, in addition, set the lower limit of AGC which enables to use minus gain zone.

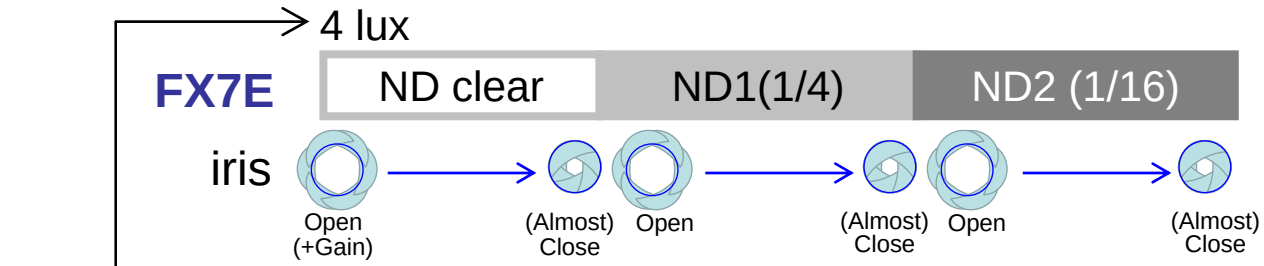


- **AGC Limit**
  - Limits the maximum gain from [21dB] to [0dB] by each 3dB segment.

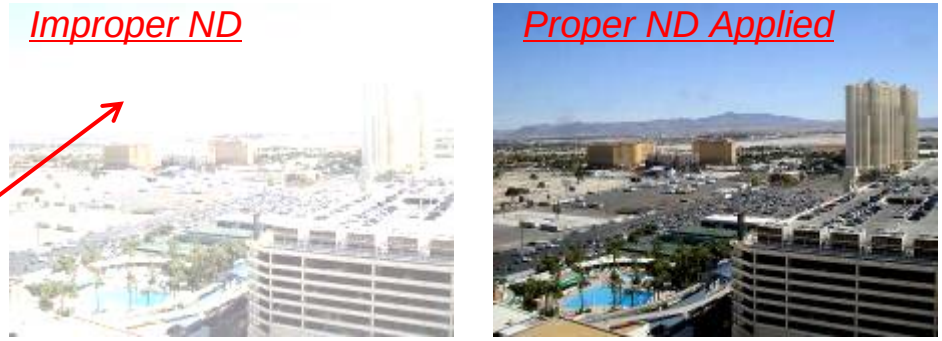
- **Minus AGC : ON (default)**
  - The gain parameter moves approx -3dB at the lowest.
  - It is possible to set “OFF”. The minimum gain is set to zero dB.

Built-in 3 ND Filters





Low light performance is determined by the sensitivity of imager.



The built-in 1/64 ND filter covers wide range of brightness : approx 20k - over 100k lux.

Camera Control System

- **AUTO - MANUAL switch**

The concept of “camera control” will be simple that is only switchable for AUTO or MANUAL, not have a HOLD position. The AUTO mode controls iris, gain, shutter speed and white balance. Unlike FX1/FX7, when customers select manual mode, default setting of each iris, gain, shutter speed and white balance is manual to achieve the position which they want to adjust manually.

Auto-Manual SW

A : AUTO
M : MANUAL

One of the most cases to use MANUAL mode

1 action

MANUAL (default)

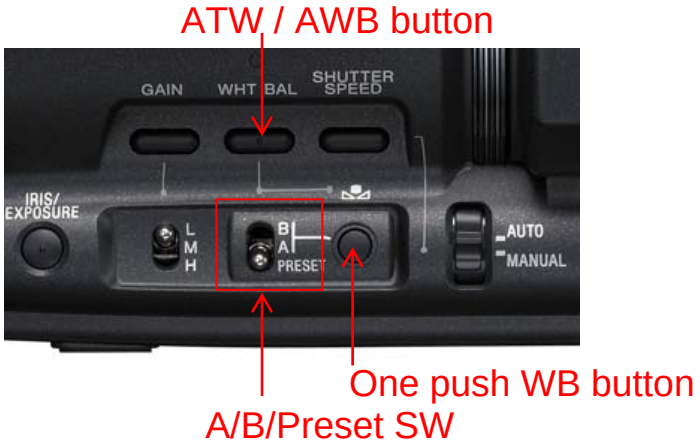
0 action

IRIS	**A**	**A**	**A**	**A**	**M**	**M**	**M**	**M**
GAIN	**A**	**A**	**M**	**M**	**A**	**A**	**M**	**M**
S/S	**A**	**M**	**A**	**M**	**A**	**M**	**A**	**M**

White Balance

Three modes can be switched :

- ATW (Auto Tracing White balance)
- AWB (Auto White Balance)
- PRESET mode



- **ATW (Auto Tracing White balance)**

  ATW corrects the color balance automatically and dynamically with any changes in captured image of color temperature. It is useful when a shooting scene moves from indoors to outdoors, for example.

- **AWB (Auto White Balance)**

  AWB adjusts the color temperature automatically when the button is pushed. It can be achieved by framing the camera on a white object, typically a piece of white paper, and records the captured color temperature at bank “A” or “B”.

- **PRESET mode**

  Two presets color temperature is registered, “INDOOR” and “OUTDOOR”.

Shot Transition

	VX2200E / FX1000E	FX7/FX7E	FX1/FX1E
Transition Time	**3.5 to 15.0sec (per 0.5 sec), 20, 30, 45, 60, 90sec**	3.5 to 15.0sec (per 0.5 sec)	3.5 to 15.0sec (per 0.5 sec)
Trans Curve	•LINAR •SOFT STOP •SOFT TRANS	•LINAR •SOFT STOP •SOFT TRANS	•LINAR •SOFT STOP •SOFT TRANS

- **Transition Time**
  - 20, 30, 45, 60, and 90 are added. It is very difficult or almost impossible to control focus/zoom/iris manually to transit from one status to another smoothly by taking 60 or 90 seconds.

LCD/EVF panel

- **XtraFine™ LCD/EVF**

  The DCR-VX2200E adopts a high quality digital panel called XtraFine LCD/EVF. Thanks to these new panel/EVF, sever manual focusing will be realized.

XtraFine™ LCD

- 3.2 inch, 16:9, VGA panel
- 921K dots (1920x480)
- High contrast
- Wide view angle
- approx. 100% display area
- approx. 6500K color temperature

XtraFine™ EVF

- 0.45 inch, 16:9, WVGA panel
- 122.6K dots (852×3[RGB]×480)
- approx. 100% display area
- approx. 6500K color temperature

- **approx. 6500K color temperature**

  Color temperature of FX1/FX7's is higher than a standard display monitor. That of VX2200E / FX1000E is approximately 6500K which is equal to default setting of a normal monitor and a professional external panel.

LCD/EVF panel

- **Comparison of LCD panel**

	VX2200E / FX1000E	HDR-FX7E	HDR-FX1E
Size	**3.2”wide**	3.5”wide	3.5”wide
Dots	**921K (1920x480) Stripe**	211K (960x220) Delta	250K (1120x224) Delta
Type	**Normally Black (VA)**	Normally White (ECB)	Normally White (ECB)
Color reproduction	**NTSC 65%**	NTSC 65%	NTSC 35%
Contrast	**250:1**	200:1	100:1
Wide view angle (U/D/L/R)	**80/80/80/80°**	70/55/65/55°	70/70/70/70°
Back Light/LED	**300cd/m² LED6**	250cd/m² LED9	250cd/m² LED10
Display area	**approx. 100%**	approx. 90%	approx. 90%

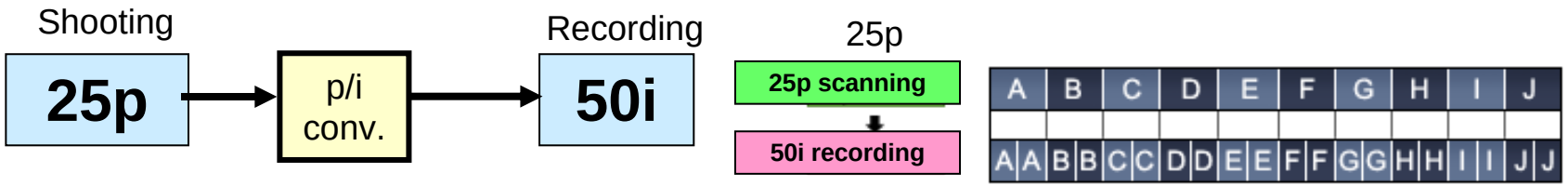
LCD/EVF panel

- **Comparison of EVF panel**

	VX2200E / FX1000E	HDR-FX7E	HDR-FX1E
Size	**0.45”wide**	0.54”wide	0.54”wide
Dots	**1,226K (852xRGBx480)**	252K (1120x225)	252K (1120x225)
Pixel layout	**Stripe**	Delta	Delta
LCD type	**FLC+LCOS**	High temp polysilicon TFT	High temp polysilicon TFT
Brightness [cd/m^2]	**200/120**	200/120	200/120
LED	**3 color LED**	1 white	1 white
Display area	**100%**	Approx. 90%	Approx. 90%

Progressive Scan

The 25p scan signal is recorded on tape as a 50i signal by dividing each frame into two fields. This allows your 25p scan footage to be played back or fed to an editing suite using the thousands of existing Sony DV/DVCAM equipment already in use throughout the world.



General Information

- **Spec Sheet**
- **Supplied Accessories**
- **Feature Comparison chart**

Supplied Accessories

Lens hood with flip-flop lens cover

Wireless remote commander “RMT-831”

AC adaptor “AC-L100”

Power cable

New !

RCA x3 male Composite cable

New !

A/V R Composite connecting cable

Operating guide (booklet)

FX1000E vs. VX2200E vs. VX2100E

- **Shooting / Recording Features**
  - Optics have significantly improved from the VX2100E.
  - Main features are succeeded from the FX1000E except HD related functions.

	HDR-FX1000E	DCR-VX2200E	DCR-VX2100E
Focus Length (35mm equivalent)	29.5 - 590mm (16:9) 36.1 - 722mm (4:3)	29.5 - 590mm (16:9) 36.1 - 722mm (4:3)	46.3mm - 556.1 (16:9) 43.2 - 518.4 mm (4:3)
Optical Zoom	20x	20x	12x
ND Filters	Three (1/4, 1/16, 1/64)	Three (1/4, 1/16, 1/64)	Two (1/4, 1/32)
Lens ring	Three (focus/zoom/iris)	Three (focus/zoom/iris)	Two(focus/zoom)
Imager	1/3” 3CMOS	1/3” 3CMOS	1/3” 3CCD
Progressive scan	Yes	Yes	Yes (only still image)
REC format	HDV / DV (SP) / DV(LP)	DV (SP) / DV(LP)	DV (SP) / DV(LP)
Smooth Slow Rec	6 sec	6 sec	No
x.v.Color	Yes (HDV)	No	No
Down Conversion	Yes	No	No
Dual Rec	Yes	Yes	No
Still Image Recording	0.9M (1080 x 810) 1.2M (1440 x 810)	0.9M (1080 x 810) 1.2M (1440 x 810)	VGA (640 x 480)

FX1000E vs. VX2200E vs. VX2100E

- There are few differences of audio features, but the quality of built-in stereo microphone is further improved from the VX2100E.
- EVF / LCD are “HD ready” devices.
- Shooting supporting features are succeeded from the FX1000E, which are mostly not implemented in the VX2100E.

		HDR-FX1000E	DCR-VX2200E	DCR-VX2100E
Audio	Input jack	Φ3.5mm mini jack	Φ3.5mm mini jack	Φ3.5mm mini jack
	Built-in Stereo MIC	Yes	Yes	Yes
	Wind noise reduction	Yes (ON/OFF switchable)	Yes (ON/OFF switchable)	Yes (ON/OFF auto)
	Audio level meter	Yes	Yes	Yes
Display	LCD	3.2” 16:9 921k XtraFine	3.2” 16:9 921k XtraFine	2.5” 4:3 211k
	EVF	0.45 16:9 1227k XtraFine	0.45 16:9 1227k XtraFine	0.44 4:3 180k
	Zebra	Yes	Yes	Yes
	Histogram	Yes	Yes	No
	Peaking	Yes	Yes	No
	Marker	Yes	Yes	No
	CAM DATA display	Yes	Yes	No

FX1000E vs. VX2200E vs. VX2100E

- HD related features (HDMI, COMPONENT, Down-conversion, i.LINK settings, etc.) are dedicated features for the FX1000E.

- “Analogue Input to DV Stream” function is dropped from the VX2100E, which was a useful function when transferring analogue content to DV editing environment.

		HDR-FX1000E	DCR-VX2200E	DCR-VX2100E
Mechanical Design, Interface	HDMI OUT	Yes	No	No
	COMPONENT OUT	Yes	No	No
	Audio / Video jack	A/V R multi jack	A/V R multi jack	RCA pin (x3)
	S Video	Yes (thru A/V R)	Yes (thru A/V R)	Yes (4pin DIN)
	Shoe	Cold shoe	Cold shoe	Intelligent Accy shoe
	DC input / Battery charge	Yes	Yes	Yes
	Flash Memory slot	MemoryStick Duo	MemoryStick Duo	MemoryStick
Output Configuration	TV type	Yes	Yes	No
	Analogue Input to DV stream	No	No	Yes

FX1000E vs. VX2200E vs. VX2100E

- Rechargeable battery NP-F570 is not supplied which is not useful for high-end users. Long duration operation is required for those users, and many cases, larger capacity battery (e.g. NP-F970) is purchased additionally.

		HDR-FX1000E	DCR-VX2200E	DCR-VX2100E
Supplied Items	AC adapter	Yes (AC-L100)	Yes (AC-L100)	Yes (AC-L15)
	Rechargeable Battery	Yes (NP-F570)	No	Yes (NP-F570)
	COMPOSITE cable	Yes (A/V R)	Yes (RCA pin x3)	Yes (RCA pin x3)
	COMPOSITE connecting cable	No	Yes	No
	COMPONENT cable	Yes	No	No
	IR remote commander	Yes (RMT-831)	Yes (RMT-831)	Yes (RMT-811)
	Lens hood	Yes	Yes	Yes
	Large type eye cup	Yes	No	No
	Memory Stick	No	No	Yes (16MB)
	Shoulder Strap	No	No	Yes

High-end DV

- G Lens (filter diameter 72mm)
  - *Wide-end 29.5mm (16:9 mode, 35mm equivalent)*
  - *Wide-end 36.1mm (4:3 mode, 35mm equivalent)*
  - *Optical 20x zoom (Digital Extender approx 1.5x)*
- 1/3" 3 ClearVid CMOS Sensor (Technology of "Exmor“)
- Minimum Illumination : 1.5lux
- Optical SteadyShot (no Active Mode)
- DV SP / DV LP recording
- Smooth Slow Rec (6sec)
- 3.2" Wide 921k dots XtraFine LCD
- 0.45" Wide 1227k dots XtraFine Color View Finder
- 2nd Handle Zoom(variable) & Rec Start/Stop Button
- InfoLITHIUM Battery, type L
- Dual Rec 1.2M Still Image
- Memory Stick Duo slot for still image recording

DCR-VX2200E

Shipment: Oct/B, 2009

ERP: 115 000 Rub

< Terminals >

- A/V R jack (S Video, Composite, L/R audio, and Remote)
- DC-IN
- Headphone jack
- 3.5mm MIC jack
- LANC
- i.LINK (4pin)
- No HDMI
- No USB
- No Analog input
- No mini-D Component jack

< Supplied Accy >

- AC Adaptor AC-L100
- Remote RMT-831
- A/V R Composite connecting cable
- RCAx3 male Composite cable
- Lens hood with lens cover
- No battery
- No Large eyecup