

fixed frame rate

VTR: ON camera

MULTI-FORMAT MENU

Maintenance page M6



CHANGING VIDEO RECORDING FORMAT

- In the example above:
 - The CURRENT format is 4:4:4 23.98P
 - The NEXT format is 4:4:4 24PsF
 - The NEXT format becomes CURRENT after highlighting
- SET FORMAT and pressing the thumbwheel

SETTING A FIXED (NON-SELECTABLE) FRAME RATE

1. Turn and press thumbwheel so that the **NEXT** line displays one of the chosen fixed frame rates:

NEXT: 444 23.98PsF NEXT: 444 24PsF NEXT: 444 25PsF NEXT: 444 29.97PsF NEXT: 422 50P

- (as you change the NEXT fps speed, the corresponding format
- is also highlighted in the lower part of the screen)
- 2. Press and turn thumbwheel to highlight SET FORMAT
- 3. Press thumbwheel and the camera and VTR will automatically change formats
- 4. CURRENT will display the new format

selectable frame rate

VTR: ON camera

Maintenance page M6

1. Turn and push thumbwheel so that NEXT displays one of the selectable frame rates (*note: 444 or 422 must be selected first before selecting a frame rate*):

444	23.98PsF	24PsF
		25PsF
444	29.97PsF	30PsF
		50P
444	S29.97PsF	S30PsF
422	S59.94P	S60P

- To shoot 23.98 or 29.97 fps, select S29.97 or S59.94 To shoot 24, 25 or 30 fps, select S30 or S60 (as you change the NEXT fps speed, the corresponding format is also highlighted in the lower part of the screen)
- 2. Push and turn thumbwheel to highlight SET FORMAT
- 3. Push thumbwheel, and the camera and VTR will automatically change formats
- 4. CURRENT will display the new format
- 5. Press menu switch up towards $\boldsymbol{v}\boldsymbol{f}$ to exit camera menus.

SETTING FRAME RATE - LCD MENU

- 1. Press menu switch down towards lcd to select LCD menu
- 2. Turn thumbwheel until FPS shows on LCD screen
- 3. Press thumbwheel and turn to desired FPS rate

(1 to 30 fps or 30 to 50 fps depending on format selected in the camera)

- 4. Press thumbwheel to confirm **FPS** choice
- 5. Push **menu** switch down towards **lcd** to exit LCD menu







vtr: audio

SET AUDIO RECORD LEVEL

dB 20 - 10 - 0 -	IANA IANA					800 - -	80 - -
-20 -40 EE			: 	:	10		- - -
	CH1 CH2 CH3 CH4	UNI COOO UNI UNI	Soul 2nd Soul 2nd The start start start start start start start start start start start start				
			II/VA		9) (2:0)	EN	

- 1. Press Audio button on left side of VTR control panel
- 2. Turn thumbwheel on upper right to highlight **Rec Level**
- 3. Press thumbwheel
- In changed window, turn to select Uni/Var (Uni=unity Var=variable)
- 5. In Var, use big right-hand Adjust knob to set level
- 6. Press thumbwheel
- 7. Turn to select End
- 8. Press thumbwheel
- 9. Press **Home** on left to return to main display

vtr: time code

CHANGE TIME CODE HOUR



- 1. Press **TC** button on left side of VTR control panel
- 2. Turn thumbwheel on upper right to highlight **Timer Preset**
- 3. Press thumbwheel
- 4. In new window, select TCG TC
- 5. A **TC** number appears in window
- Press thumbwheel a triangle indicates digit to change
- 7. Turn thumbwheel to change hour
- 8. Press thumbwheel to confirm new hour
- 9. Turn thumbwheel until **Set** is highlighted
- 10. Press thumbwheel to set **TC** for next recording
- 11. Press **Home** to return to display



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selectable frame rate notes

please read

There is a $\frac{1}{3}$ stop loss from 23.97PsF when set to S29.97. There is an additional 1 stop loss, total 1 $\frac{1}{3}$ stop, when set to S59.94.

Frame rates 30 and above require the camera to be in $4{:}2{:}2\ \text{mode}.$

There are three exposure options while shooting at selectable frame rates: constant gain, accumulate and constant shutter. CONSTANT GAIN—maintains exposure regardless of frame rate, requiring no other exposure compensation. Best overall signal to noise. Strongly recommended.

ACCUMULATE MODE—requires either shutter or aperture exposure compensation just like shooting film. Signal to noise varies with frame rate.

CONSTANT SHUTTER MODE—the camera will compensate for exposure using shutter angle (speed), meaning no external control of shutter. Signal to noise remains constant. FPS Format (in VTR) **MUST** be set to DEFAULT unless the project is not 24fps (23.97), such as a 25P PAL project. FPS Format is the target playback frame rate—in other words shoot 48fps for playback at 24fps. If this is changed, it will effect the playback.

Do not change Frame Rate on the VTR. This mode is only used when the VTR is attached to cameras other than Genesis.

In Selectable Frame Rate, the VTR will buffer frames in memory before recording, meaning that at slow frame rates the VTR will not be recording all the time. Once Stop has been pressed, the VTR will require a few seconds to record the buffered frames. **Do not turn the camera or VTR off during this record cycle or you will lose the data.** Look at the VTR control panel to make sure it has completed the record before powering off.

When running off speed, the Clockit or other external time code source should be disconnected and the VTR must be reset to Internal Time Code.

exposure waveform equivalents



WAVEFORM PERCENTAGE



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BOX CURSOR MENU

Operation page 4

DEFINES FRAME LINES	ASPECT RATIO FORMAT W H W
H_POSI 50 V_POSI 50	PERCENTAGES PIXELS
(and table) WIDTH 9 HEICHT	PANAVISION SUGGESTED SAFE ACTION VALUES
	2.39 film
usually set at 95%	1.85 film
HFIGHT	1.78 tv transmitted 95 95 1824 1026
will vary with the format	1.33 common H
To CALCULATE	

width and height percentages:

desired safe action percentage = WIDTH

(1.78/Aspect Ratio) x WIDTH = **HEIGHT**

- ASPECT MASK MENU

Operation page 5

MARKER MENU

Operation page 3

<aspect mask=""></aspect>	5	TOP
VF : OFF MONITOR : ON MODE : VAR VAR WIDTH : 1016 LEVEL : 50	Š	

SETS TRANSPARENT MASK

to isolate the desired ASPECT RATIO in the image

RECOMMENDED VALUES

VF:	OFF
MONITOR:	ON
MODE:	VAR V
LEVEL:	50

VAR WIDTH lines the mask up with frame lines

This **MASK** feature is especially useful for the monitor output to isolate the frame for the director.

SETS WHICH FRAME LINES APPEAR

in viewfinder and monitor

RECOMMENDED VALUES

MARKER:	ON	CENTER:	ON
CURSOR:	ON	EVERYTHING ELSE:	OFF

VIEWFINDER SWITCH

ASPECT: mask on/off in VF DISPLAY: frame lines on/off in VF



