

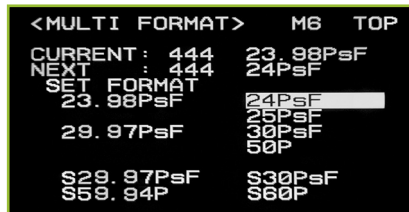


fixed frame rate

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	444 24PsF	
		444 25PsF
444 29.97PsF	444 30PsF	
		422 50P
444 S29.97PsF	444 S30PsF	
422 S59.94P	422 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 **vf** to exit camera menus.

SETTING FRAME RATE – LCD MENU

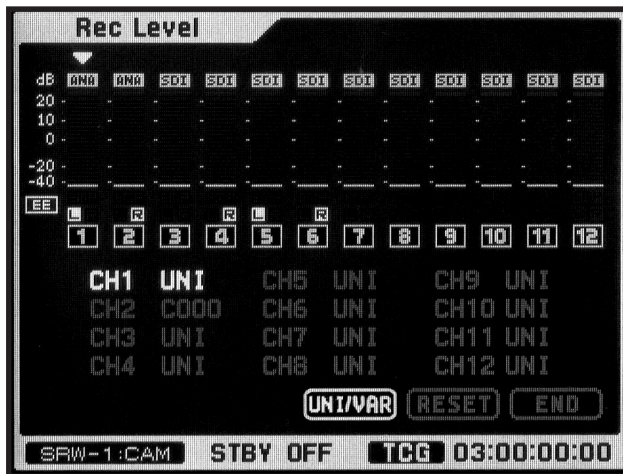
1. Press **menu** switch down towards **lcd** to select LCD menu
2. Turn thumbwheel until **FPS** shows on LCD screen
3. Press thumbwheel and turn to desired FPS rate
(1 to 30 fps or 30 to 50 fps depending on format selected in the camera)
4. Press thumbwheel to confirm **FPS** choice
5. Push **menu** switch down towards **lcd** to exit LCD menu





vtr: audio

SET AUDIO RECORD LEVEL



1. Press **Audio** button on left side of VTR control panel
2. Turn thumbwheel on upper right to highlight **Rec Level**
3. Press thumbwheel
4. 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
6. 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





selectable frame rate notes

please read

There is a $\frac{1}{2}$ stop loss from 23.97PsF when set to S29.97. There is an additional 1 stop loss, total $1\frac{1}{2}$ stop, when set to S59.94.

Frame rates 30 and above require the camera to be in 4:2:2 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

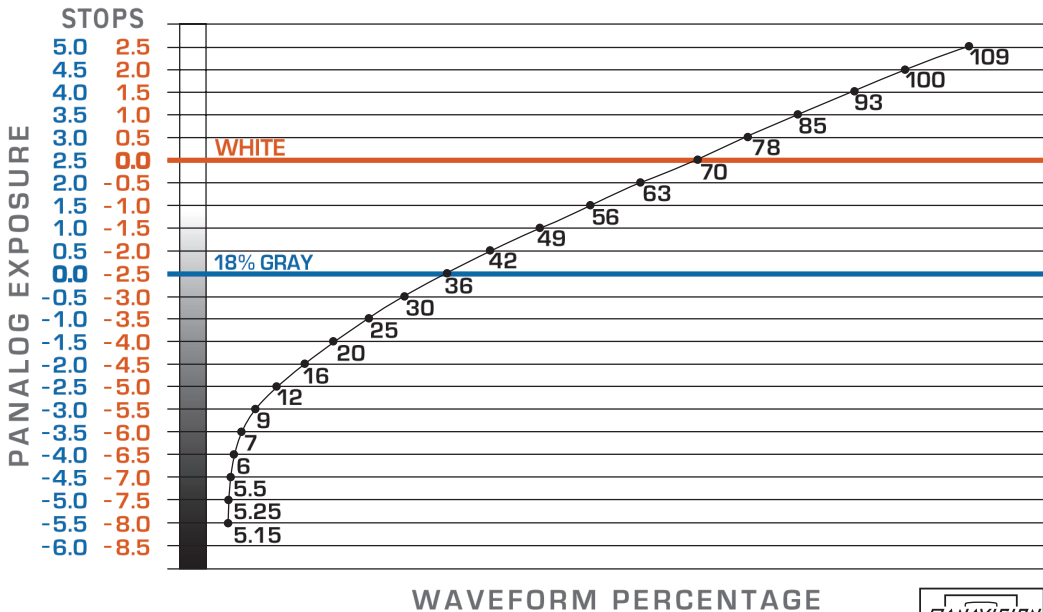
project is not 24fps (23.97), such as a 25P PAL project. FPS Format is the target playback frame rate—in other words shoot 48fps for playback at 24fps. If this is changed, it will effect the playback.

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 equivalentents





frame lines

BOX CURSOR MENU

Operation page 4

DEFINES FRAME LINES

H-POSI 50 V-POSI 50
 (see table) **WIDTH** & **HEIGHT**

WIDTH
 usually set at 95%

HEIGHT
 will vary with the format

To CALCULATE
 width and height percentages:

desired safe action percentage = **WIDTH**

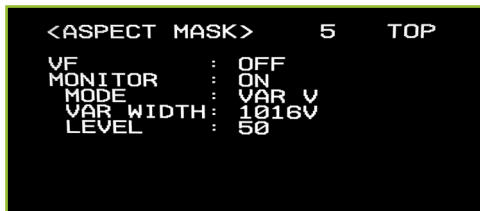
$(1.78/\text{Aspect Ratio}) \times \text{WIDTH} = \text{HEIGHT}$

ASPECT RATIO FORMAT

	W	H	W	H
	PERCENTAGES		PIXELS	
PANAVISION SUGGESTED SAFE ACTION VALUES				
2.39 film	95	71	1824	764
1.85 film	95	91	1824	987
1.78 tv transmitted	95	95	1824	1026
1.33 common H	71	95	1363	1026

ASPECT MASK MENU

Operation page 5



SETS TRANSPARENT MASK

to isolate the desired ASPECT RATIO in the image

RECOMMENDED VALUES

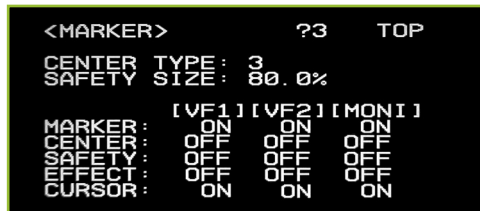
VF: OFF
MONITOR: ON
MODE: VAR V
LEVEL: 50

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.

MARKER MENU

Operation page 3



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

