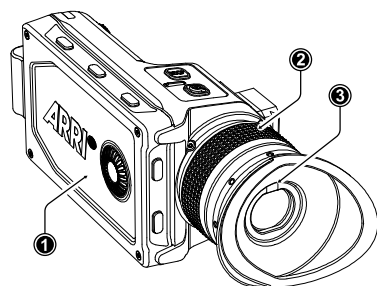
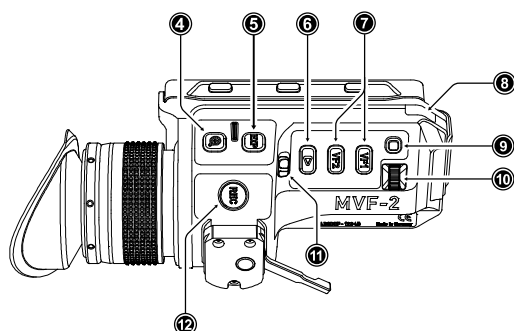


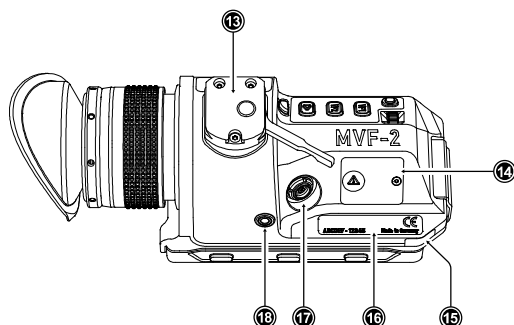
12 Multi Viewfinder MVF-2



- 1 Flip-out Monitor
- 2 Diopter Adjustment
- 3 Proximity Sensor



- 4 ZOOM Button
- 5 EXP Button
- 6 PLAY Button
- 7 VF 1&2 User Buttons
- 8 Top Tally Light
- 9 SET Button
- 10 User Wheel
- 11 LOCK Switch
- 12 REC Button



- 13 Dove Tail
- 14 Service Cover
- 15 Bottom Tally Light
- 16 Product Label
- 17 Viewfinder Connector
- 18 Headphones Out

OLED Display

The MVF-2 is equipped with a high contrast, temperature controlled 1920 x 1080 OLED display.

Flip-out Monitor

The 4" flip-out monitor (1) with up-and-down tilt function can display the camera live image or the main user interface, providing full access to camera functions and menus. See the next chapter for more information.

Diopter Adjustment

With the camera switched on and looking into the viewfinder, twist the ring (2) left or right to adapt the viewfinder image to your visual acuity. With the help of the scale labelled from 1 to 9 you can easily remember your adjustment when different people are using the viewfinder. The diopter adjustment can compensate from -5 to +5 diopters.



Proximity Sensor

This infrared sensor (3) automatically deactivates the MVF-2's internal OLED panel when you withdraw your eye to prevent burn-ins on the panel and activates it again as soon as you approach the eyepiece. Do not permanently cover the sensor as this might cause irreversible burn-in on the OLED panel.

Built-in Eyepiece Heater

The MVF-2 is equipped with a built-in eyepiece heater to prevent fogging of the eyepiece when shooting in cold environments. The eyepiece heater can be activated in the camera menu and only becomes active when the eyepiece has a temperature of 15 °C (59 °F) or below. In extremely cold environments please use the Heated Eyecup HE-7.

EXP (Exposure Tool Button)

The *EXP* button (4) activates and deactivates the exposure tool (either false color or zebra) for the viewfinder and the flip-out monitor.

ZOOM Button

Pressing the *ZOOM* button (5) activates the viewfinder zoom feature for a temporary 2.25x zoom-in to quickly check focus. The magnification ratio is 1:1, or one sensor pixel to one viewfinder display pixel.

PLAY Button

Press and hold the *PLAY* button (6) for two seconds to start in-camera playback from the recording media.

VF1 and VF2 User Buttons

The MVF-2 has two user buttons, *VF1* and *VF2* (7). You can assign a frequently used function to each button.

User Wheel and SET Button

The user wheel and the *SET* button (9, 10) provide the same functionality as the *JOGWHEEL* on the flip-out monitor (see next chapter) and can be used for menu navigation and adjustment when the flip-out monitor is used with the display visible in the folded-in position.

LOCK Switch

The *LOCK* switch (11) locks all MVF-2 buttons. A dedicated lock icon is displayed on the HOME screen as well as in the viewfinder.

REC Button

The *REC* button (12) starts and stops recording to the recording media. With no recording media inserted, the button is inactive.

Product Label

The product label (1) shows the MVF-2 serial number. The serial number consists of the last 5 digits of the product number K1.0024074 - XXXXX.

Viewfinder Connector

The ALEXA Mini LF uses an industrial CoaXPress interface to connect the MVF-2 viewfinder with the camera. The interface transmits power, video and control data and supports cable lengths of up to 10 m (33 ft). The VF connector comes without a key, so the VF cables plug in regardless of their orientation and support hot plugging of the viewfinder.



Headphones Out

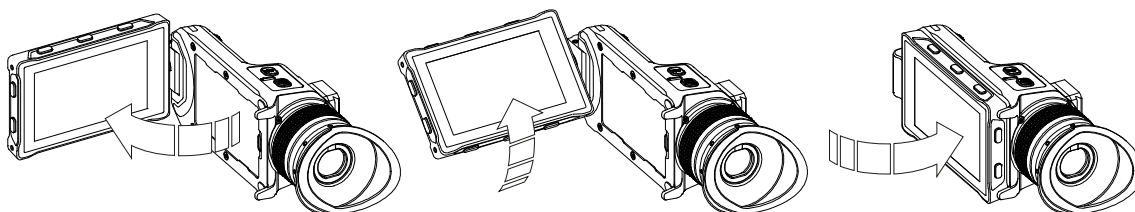
The headphones out (18) is a 3.5 mm TRS connector (headphone jack), which outputs all four audio channels with a maximum power of 2.5 dBm.

ADVICE

- Constantly covering the proximity sensor of the MVF-2 can cause an irreversible burn-in on the viewfinder OLED display. If you need to cover the viewfinder, please disable the EVF OLED first using the EVF power setting: *MENU > Monitoring > EVF/MONITOR > Settings > EVF Power*
- The Heated Eyecup HE-6 is not compatible with the MVF-2 viewfinder. When using the Heated Eyecup HE-6, the proximity sensor that activates the OLED display will always be covered. In this state, the OLED display will not switch off when not in use, this can cause an irreversible burn-in on the OLED display. Please use the Heated Eyecup HE-7 instead. This is compatible with the MVF-2 viewfinder.
- When shooting in hot environments make sure to have the viewfinder mounted on the viewfinder bracket to ensure proper cooling.
- If the MVF-2 is used as a remote control without standing support, we recommend to turn off the OLED via "EVF-Power Off" to save battery power and avoid unnecessary heating up of the device in hot environments.

12.1 Flip-out Monitor

Adjusting the Flip-out Monitor

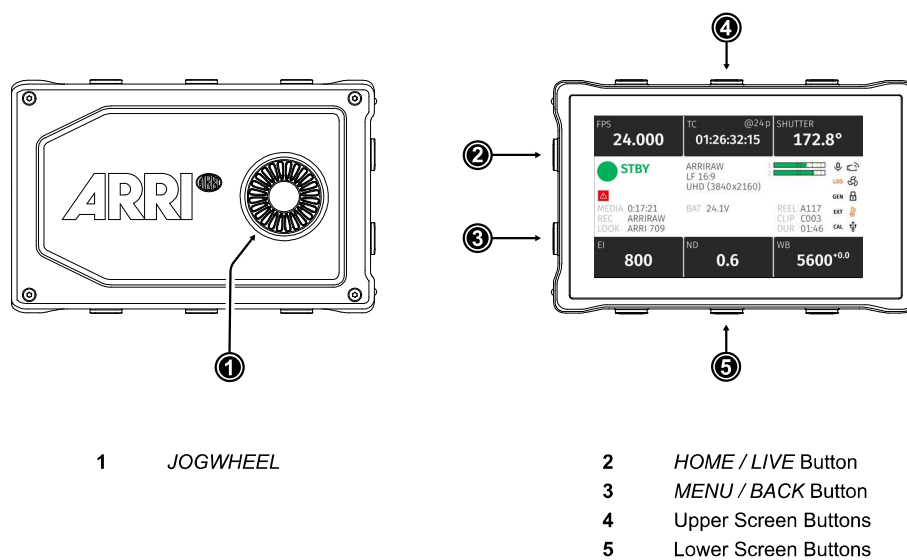


Fold out, swivel and fold in the monitor to put the display visible in the folded-in position. The image on the monitor automatically adjusts its orientation, or can be set to the desired orientation in the camera menu).

Flip-out Monitor

The 4" flip-out monitor with up-and-down tilt function can display the camera live image or the main user interface (HOME screen and camera menu).





JOGWHEEL

The JOGWHEEL (1) is used to

- scroll or navigate through lists and menus
- change values (by scrolling up or down)
- access and confirm settings (by pressing the JOGWHEEL center)

HOME / LIVE Button

The HOME / LIVE button (2) toggles to display either the HOME screen (shown in the image above) or the camera live view.

MENU / BACK Button

Pressing the MENU / BACK button (3) while on the HOME screen or in camera live view opens the camera menu. While in the camera menu, it serves as a BACK button.

Screen Buttons

The MVF-2 flip-out monitor has six screen buttons, three above (4) and three below (5) the screen. Their function depends on the screen content and is labeled directly below or above each button. Unlabeled buttons do not have a function for that screen. A grayed-out label indicates that the function is currently not available.

12.2 MVF-2 Cables

The Multi Viewfinder MVF-2 is connected to the camera using an industrial CoaXPress cable. The cable center pin and shield transport power, video, audio and data and the interface allows for hot-plugging the viewfinder. Since the VF connector has no key, the viewfinder cable can be plugged in in any orientation.

ADVICE

When attaching a new viewfinder to the camera for the first time, it may take around 2 minutes until the viewfinder OLED calibration is fully loaded and activated.

Viewfinder Cables

MVF-2 viewfinder cables are available in the following lengths:



ID No.	Length	Suggested Use
K2.0023915	0.35 m (1.15 ft)	For use of MVF-2 on camera left side in handheld mode
K2.0023943	0.5 m (1.5 ft)	For use of MVF-2 with VEB-1 or VEB-3, for use on camera right side
K2.0023944	2.0 m (6.5 ft)	The medium length for remote use
K2.0023945	10.0 m (33 ft)	The longest possible length for remote use



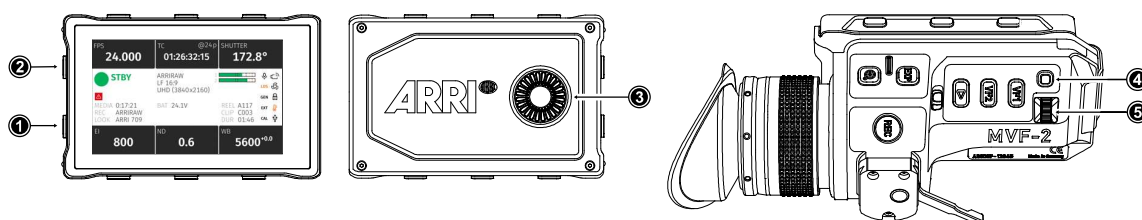
13 Menu Operation

The camera menu has a tree structure and the name of the current submenu is displayed across the top of every screen. To access the menu, press the *MENU / BACK* button on the MVF-2 or connect to the camera via WiFi or Ethernet and open the "web remote", Page 122.

The ALEXA Mini LF menu consists of 11 submenus:

- Recording
- Media
- Monitoring
- Look
- System
- Setup
- User Buttons
- Metadata
- ECS (Electronic Control System)
- Info
- Alerts

Basic Menu Operation



1. Press the *MENU / BACK* button (1) on the MVF-2 to access the camera menu.
2. Rotate the *JOGWHEEL* (3) or the *USER WHEEL* (5) to scroll up or down to select the desired menu entry:

Entries with a ">" at the end navigate to a submenu. To navigate to a submenu press the *JOGWHEEL* center or the *SET* button (4). To return to a higher menu level press the *MENU / BACK* button.

Entries with a value allow for direct editing. To edit a value press the *JOGWHEEL* center or *SET* button, then rotate the *JOGWHEEL* or *USER WHEEL* to select the desired value. Press the *JOGWHEEL* center or *SET* button to confirm the change or press *CANCEL* to discard.

Entries with a check box allow for direct activation/deactivation. Press the *JOGWHEEL* center or *SET* button to activate/deactivate the setting.

3. To leave the menu press the *HOME / LIVE* button (2).

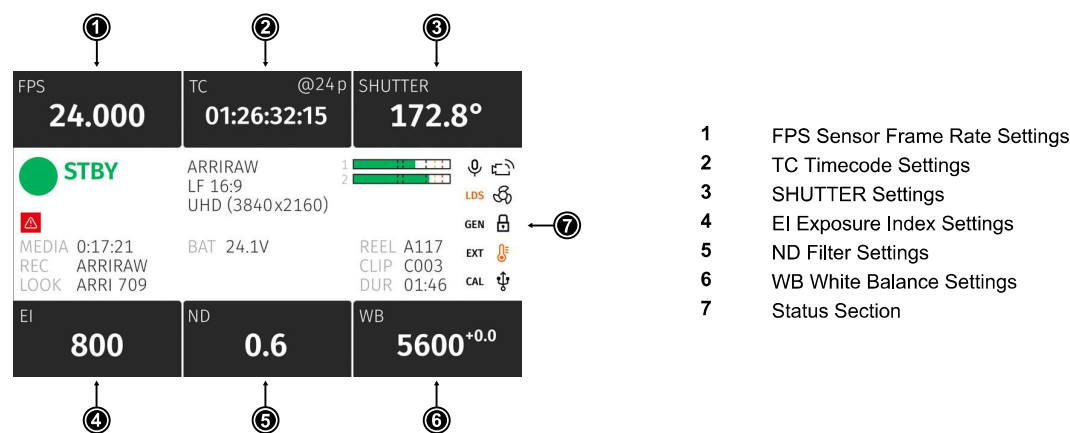
The *JOGWHEEL* and the *USER WHEEL* + *SET* button provide identical functionality.

For the remainder of this manual, whenever the term *JOGWHEEL* is used, it refers to the *JOGWHEEL* and the *USER WHEEL*. Whenever "press the *JOGWHEEL*" is used, it refers to the *JOGWHEEL* center and the *SET* button.



13.1 HOME Screen

The HOME screen is the ALEXA Mini LF default screen. It shows the most important camera parameters and gives quick access to changing them through the screen buttons:



FPS (Sensor Frame Rate)

The FPS label shows the current sensor frame rate in frames per second. Press the FPS screen button to adjust the sensor frame rate. The FPS label turns orange if the sensor fps does not match the project fps rate.

Note: The maximum frame rate that can be set is dependent on the recording resolution and the codec.

TC (Timecode)

The TC label shows the current timecode value and project rate. Press the TC screen button to access the timecode settings. The TC label turns orange if a timecode misconfiguration persists, press the TC screen button for more information.

SHUTTER

The SHUTTER label shows the current shutter angle or exposure time. Press the screen button to set the shutter of the sensor. Shutter angle and sensor FPS determine exposure time of the sensor in seconds by the following equation: $\text{angle} / (360^\circ * \text{FPS})$. The shutter unit can be set to display either shutter angle (5.0° to 356.0°) or exposure time (1 s to 1/8000 s). The maximum shutter angle is limited by the resulting exposure time (1 s max.).

EI (Exposure Index)

Shows the current exposure index. Base sensitivity for the ALEXA Mini LF is 800 ASA. Press the screen button to adjust the exposure index in a range from 160 to 3200 ASA.

ND Filter

The ND label shows the current ND filter value of the in-camera FSND (Full Spectrum Neutral Density) filter stage. Press the screen button to change the ND filter.

WB (White Balance)

The WB label shows the current white balance and tint. Press the screen button to set the camera's white balance. This is the color temperature of the light source that the camera is currently adjusted for. In addition to the red/blue correction of the white balance, the ALEXA Mini LF can also compensate for a green/magenta tint. This value, called CC (color compensation), is shown as an exponent of the WB value. Positive values are marked with a "+" and negative values with a "-".



White balance can be adjusted from 2,000 to 11,000 Kelvin (here: 5,600) in steps of 10 K for red/blue correction. Color compensation for green/magenta tints can be adjusted in a range from -16.0 to +16.0. Positive or negative CC color compensation values then appear as an exponent of the WB value (here: +0.0).

Status Section

The status section on the home screen shows key data about recording, power supply, remaining media capacity and more:

1

2

3

8

7

6

5

4

STBY

ARRIRAW

LF 16:9

UHD (3840x2160)

1

2

GEN

EXT

CAL

0:17:21

ARRIRAW

ARRI 709

BAT 24.1V

REEL A117

CLIP C003

DUR 01:46

1

2

3

4

5

6

7

8

Camera Status

Codec & Recording Resolution

Audio Meters

Status Icons

Clip Information

Battery Level

Media Capacity & Look Setting

Camera Alert Icon



Camera Status

STBY	Standby - ready for recording.
REC	Recording.
PLAY	Camera is in play mode.
ERASE	Erasing the recording media. Active erasing disables recording.
None	Idle, recording not possible (e.g. no media inserted, media is full).

ARRIRAW
LF 16:9
UHD (3840x2160)

Codec & Recording Resolution

Currently active codec and recording resolution.



Audio Meters

The audio meters are only displayed if audio recording is enabled and show the current level of audio channels 1 & 2. If audio recording is disabled, a crossed out speaker icon is displayed.

Black markers are shown at signal levels -20, -18, -9 dBFS for reference test tone. The yellow marker at -5 dBFS and the red marker at -2 dBFS indicate a signal close to clipping. A red frame around the meter indicates a clipping at the A/D stage.

REEL A117
CLIP C003
DUR 01:46

Clip Information

REEL	Current reel (camera index letter and reel number)
CLIP	Name of current clip of current reel.
DUR	Duration of currently recorded clip (during REC) or last recorded clip (during STBY).

BAT 24.1V

Battery Level

Current battery voltage level.



MEDIA 0:17:21
 REC ARRIRAW
 LOOK ARRI 709

Media Capacity & Look Settings

MEDIA	Remaining capacity of the recording media, at current FPS and codec combination, in real time. When media capacity is below 2 minutes, capacity values start flashing.
REC	Active recording processing (ARRIRAW or Log C)
LOOK	Active Look

Status Icons



WiFi Icon, WiFi is enabled and the WiFi mode is set to *Host*



WiFi Icon, WiFi mode *Client* is enabled and the camera is connected to a network.



WiFi Icon, WiFi mode *Client* is enabled but the camera is not connected to a network.



Sensor Temperature Icon

Black	Sensor temperature warning
Orange	Sensor temperature error
Red	System temperature error (see <i>MENU > Info > System Info</i>)



Fan Speed Icon

Black	Fan speed about to increase above 20 dB.
Orange	Fan speed is higher than 20 dB.



USB Icon

Black	USB medium ready.
Gray	USB medium is read only.
Orange	USB medium is not usable.



Frame Grab Icon

Black	Frame grab is active.
Orange	Frame grab failed.



Camera Lock Icon, Camera buttons are locked.



MVF-2 Lock Icon, MVF-2 buttons are locked.



Audio Icon, Audio recording is enabled.



Audio Icon, Audio recording is disabled.





Audio Icon. Internal microphones are enabled.



MVF-2 eyepiece heater is active.

Black

Eyepiece heater is active.

Gray

Eyepiece heater is not heating (eyepiece temperature is > 15 °C (59 ° F)).

GEN

Genlock Icon

Black

Camera is synchronized to genlock source.

Orange

Camera is not synchronized to genlock source (signal not present or unusable).

EXT

EXT Sync Icon

Black

EXT sync active.

Orange

Mismatch in EXT Sync configuration. See *MENU > Alerts* for more information.

WRS

Camera white radio is active.

CAL

Lens Motor Icon

Orange

Lens motor calibration required.

Black

Lens motor calibration in progress.

LDS

Indicates an error on the LDS interface.



Alert Icon. Alert is active. See *MENU > Alerts* for more information.

13.2 Using the On-screen Keyboard

When working with textual parameters on the camera, an on-screen keyboard allows entering text. You can use the keyboard, for example, to enter the name of a user setup.



- ▶ Use the *JOGWHEEL* to select and confirm characters.
- ▶ Use the *CLEAR* button (top right) to delete the character to the left of the cursor. Push the button and hold it to clear the entire text.
- ▶ The *aA#* button (2) toggles between lower case, upper case and numeric text entry.
- ▶ Press the *SET* button (3) to save the entry.
- ▶ Press the *CANCEL* button (1) to discard the entry and exit.

13.3 Working with Lists and Import of Files

For certain parameters, the camera menu operates with lists that come with a default content and that can be adjusted to the user's preference. You can *ADD* values to and *DELETE* values from these lists, so that only project relevant values are displayed. Some lists contain values that can be edited directly in the camera (value-based lists) while other lists consist of files that can be imported from or exported to the USB medium (file-based lists).

Following parameters work with value-based lists:

- *HOME > FPS*
- *HOME > SHUTTER*
- *HOME > WB*

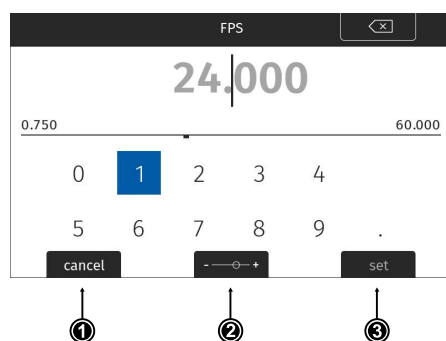
Following parameters work with file-based lists:

- *MENU > Look > Look*
- *MENU > Monitoring > Frame Lines > Frame Line*
- *MENU > Setups > User Setups Installed*
- *MENU > ECS > Lens Data > Lens Tables Installed*

Adding Entries to Value-based Lists

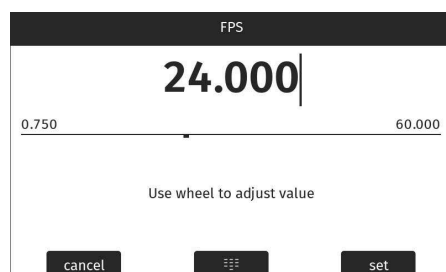
The camera offers two methods of input when adding entries to a list. The numeric keyboard is intended to be used for direct input of a value while the dial mode is intended to be used for fine tuning a value (for example to fine adjust the shutter when filming monitors). The minimum and maximum possible values are shown in the middle of the screen above the horizontal line.

1. Select *HOME > FPS > ADD*.
2. Use the numeric keyboard to directly enter a value. As a guide, the currently set value is displayed in the background:



- Use the *JOGWHEEL* to select and confirm digits. The *CLEAR* button (top right) deletes the digit to the left of the cursor. Pushing the button longer clears the entire value.

3. For fine adjustment of values press the *MODE* button (2) to use the dial mode:



- Rotate the *JOGWHEEL* to fine tune the current value. Press the *MODE* button (2) again if you want to switch back to the numeric keyboard.

4. Press the *SET* button (3) to add the new value to the list, or the *CANCEL* button (1) to exit.

Note: the SET button will be grayed out and the value displayed in red if the entered value is out of range.



Working with File Based Lists

For looks, frame lines, user setups and lens tables the camera offers to import files from the USB medium as well as from a default list. To import files from a USB medium into the camera, the USB medium needs to be prepared with a certain folder structure, see "User Storage Handling", Page 50 for more information. Files are imported from these USB folders:

File Type	Corresponding USB Folder
Look Files	ARRI/A-MINI-LF/LOOKFILES
Frame Lines	ARRI/A-MINI-LF/FRAMELINES
User Setups	ARRI/A-MINI-LF/SETUPS
Lens Data Archive (LDA)	ARRI/A-MINI-LF/LDA

Note: The maximum file name length of user files is 64 characters including the file extension. User files with a name exceeding 64 characters cannot be displayed in camera lists. The instructions below use the import of frame lines as an example.

Import Files from USB

1. Insert the USB medium into the camera.
2. Select *MENU > Monitoring > Frame Lines > Frame Line > ADD*.
3. Select the desired frame line file from the USB list.
4. Press the *IMPORT* button or the *JOGWHEEL* to add the frame line to the frame lines list.

Import Files from Defaults

1. Select *MENU > Monitoring > Frame Lines > Frame Line > ADD*.
2. Select *DEFAULTS*.
3. Select the desired frame line file from the defaults list.
4. Press the *IMPORT* button or the *JOGWHEEL* to add the frame line to the frame lines list.

Deleting List Entries

1. Select *HOME > FPS*.
2. Scroll to the entry to be deleted.
3. Press the *DELETE* button.
The selected entry is marked for delete.
4. Press the *DELETE* button again to delete the selected entry or rotate the *JOGWHEEL* to cancel.

Maximum Entries per List

All lists have a maximum number of entries they can hold. Whenever a list is full, the *ADD* button is grayed out and a message is shown. You need to delete entries from the list first in order to add new ones. The following table lists the maximum number of entries for each type of list:

List	Maximum no. of Entries
FPS	16
SHUTTER	16
WB	16
Looks	50
Frame Lines	100
User Setups	20
LDA	200

