
3. Alignment and Adjustments

3-1 Camera Adjustment

Note : How to adjust the camera system.

- 1) EEPROM stores confirmed adjustment value of each adjustment step.
- 2) DSP (Digital Signal Process : ICM01-Main PCB) digitalizes the camera signal.
- 3) When replacing the Main PCB or ICM04(EEPROM) data must be readjusted.
After changing LCD PCB and CVF PCB- always readjust the data for each part.
Once the adjusted value for each section has been confirmed the data must then be stored into the EEPROM.
- 4) Adjust the following items after changing LENS Ass'y.
 - ① Auto HALL
 - ② Auto IRIS
 - ③ Auto White Balance(indoor)
 - ④ Auto White Balance(outdoor)
 - ⑤ Lens Zoom Track
- 5) Adjust the following items after changing EEPROM and Camera Main PCB.
 - ① Auto HALL
 - ② Auto IRIS
 - ⑤ Auto White Balance (indoor)
 - ④ Auto White Balance (outdoor)
 - ⑤ Lens Zoom Track
 - ⑥ Zoom VR Center

3-1-1 Adjustment Preparation

1) Before you start

- ① Use the buttons on the CAMCORDER when adjusting Camera.
- ② When changing the adjustment item, please press the “Joystick(OK)” buttons on the Set.
- ③ You can change the adjustment value to press macro button or c.nite button.
- ④ Press the “Joystick(OK)” when storing confirmed adjustment value of each adjustment Step in EEPROM.
- ⑤ The OSD shows “OK” after finishing each adjustment step.
- ⑥ In order to exit the adjustment mode, disconnect the power source.

2) Function of each buttons on the Sst Key

<Table 3-1>

Buttons	Description
Joystick(OK) push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
VOL+ (Data Up)	Changes data in the adjustment state.
VOL- (Data Down)	
Joystick(UP) (Mode Up)	Changes mode.
Joystick(DOWN) (Mode Down)	

3) How to set up the camera adjustment mode

[STEP 1]

- ❶ Connect the Power source.
- ❷ Set the Power Switch to “CAM” position and Mode Switch to “DISK” position.

[STEP 2]

- ❶ Press and hold the "STOP" and "Joystick Right" buttons on the video camera at the same time for more than 5 seconds.
- ❷ When monitor OSD appears as shown Fig. 3-1, the Camera adjustment mode has been activated successfully.

[STEP 3]

In order to complete the adjustment the power must be reset.
This can be done by disconnecting and reconnecting the power source.

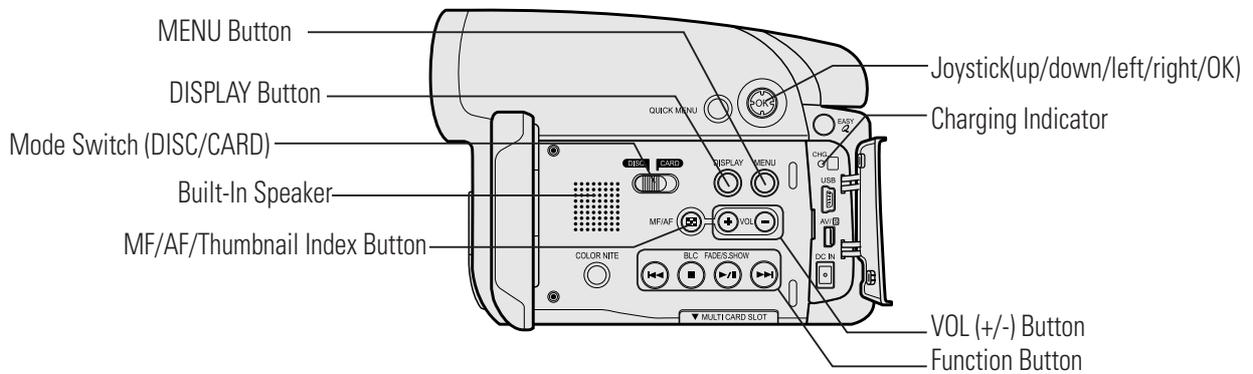


Fig. 3-1

3-1-2 Camera Adjustment

Note : "XX XX" indicate the previous preset value and adjusted value.
Press the "Joystick(OK)" (Confirm) to store the adjusted value.

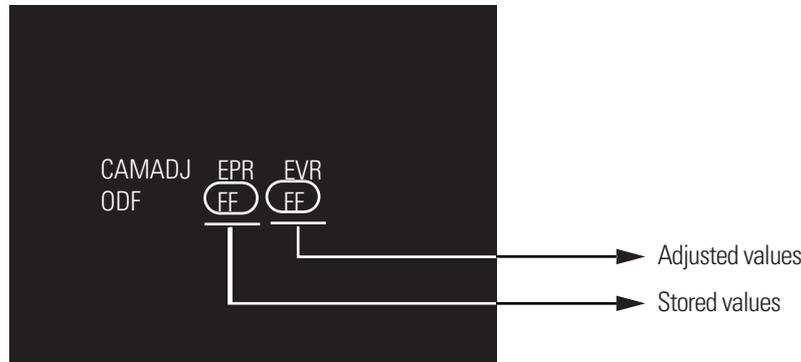


Fig. 3-2

1) EEPROM Data Initialize

Caution : These adjustments must be done when installing a new EEPROM (ICM04) in Main PCB.

- ❶ Move the "[Joystick] UP or DOWN (Mode UP/DOWN)" until CAMADJ displays "0DF XX XX".
- ❷ Press the "Vol + or - (data UP/DOWN)" so that display of EVR is "AA".
- ❸ Press the "Joystick(OK)" (Confirm).
- ❹ The OSD shows "OK" after finishing the initialize.

(Show Fig. 3-2)

2) Lens Zoom Track

Caution : For whole zoom range, it shall be in focus.

The location of a focus lens is moving depending on the location of Zoom Lens.

During adjusting, microm measures the focus location from a near distance to a long.

- ❶ Camera is set to E-E mode.
- ❷ Set the Focus chart.
- ❸ Center the camera about 3m from a focus chart which, should be placed on a flat surfaced white or gray all.
- ❹ Connect the video output terminal to a TV.
- ❺ Move the "[Joystick] UP or DOWN (Mode UP/DOWN)" until OSD Shows "0DE XX XX".
- ❻ Press the "Joystick(OK)" (Confirm).

Never impact on the lens when adjusting zoom and focus Lens.

The OSD Show "OK" after finishing the adjustment

(Show Fig. 3-3)

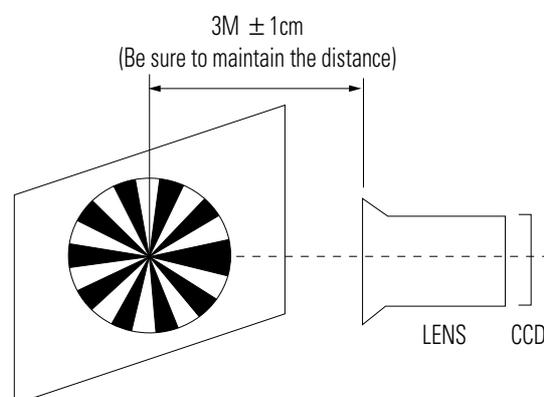


Fig. 3-3

3) Zoom VR Center

- ❶ Connect a video output terminal to a TV.
- ❷ Move the “[Joystick] UP or DOWN (Mode UP/DOWN)” so that OSD shows “0D6 XX XX”.
- ❸ Press the “Joystick(OK)” (Confirm).
- ❹ Then Micom finds out Zoom VR center position.
Store Zoom VR center value in OB7.
(Show Fig. 3-4)

4) Auto HALL

- ❶ Connect a video output terminal to a TV.
- ❷ Move the “[Joystick] UP or DOWN (Mode UP/DOWN)” OSD shows "0CD XX XX".
- ❸ Press the “Joystick(OK)” (Confirm).
- ❹ Then micom finds out max. Hall value with an iris opened and min. Hall value with an iris closed.
Store max. and min. value of Hall in OAD and OAC respectively.
- ❺ The OSD shows “OK” after finishing the adjustment.
(Show Fig. 3-4)

5) Auto IRIS Level

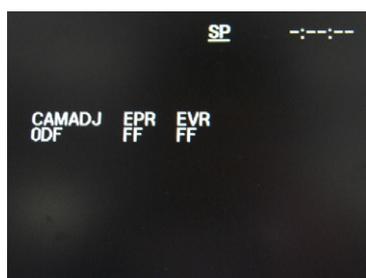
- ❶ Connect a video output terminal to a wave form monitor and a TV.
- ❷ Move the “[Joystick] UP or DOWN (Mode UP/DOWN)” so that OSD shows "0CE XX XX".
- ❸ Press the “Joystick(OK)” (Confirm).
- ❹ Then micom finds out max. Hall value with an iris opened and min. Hall value with an iris closed. Store max. and min. value of in 00BC, 00BD and 00BB respectively.
- ❺ The OSD shows “OK” after finishing the adjustment.
(Show Fig. 3-4)

6) Auto White Balance (indoor)

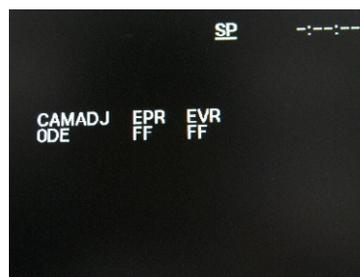
- ❶ Camera mode & 3100° K gray scale chart.
- ❷ Connect a video output terminal to a vectorscope and a TV.
- ❸ Move the “[Joystick] UP or DOWN (Mode UP/DOWN)” so that OSD shows "0D4 XX XX".
- ❹ Ensure that camera picks up image 40µs on 3100°K gray scale chart precisely and the illumination is 1500~2000 Lux.
- ❺ Press the “Joystick(OK)” (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
- ❻ The OSD shows “OK” after finishing the adjustment.
(Show Fig. 3-4)

7) Auto White Balance (outdoor)

- ❶ Camera mode & 5100° K gray scale chart.
- ❷ Connect a video output terminal to a vectorscope and a TV.
- ❸ Move the “[Joystick] UP or DOWN (Mode UP/DOWN)” so that OSD shows "0D5 XX XX".
- ❹ Ensure that camera picks up image 40 µs on 5100 gray scale chart (3100 gray scale chart + C16 filter) precisely and the illumination is 1500~2000 Lux.
- ❺ Press the “Joystick(OK)” (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
- ❻ The OSD shows “OK” after finishing the adjustment.
(Show Fig. 3-4)

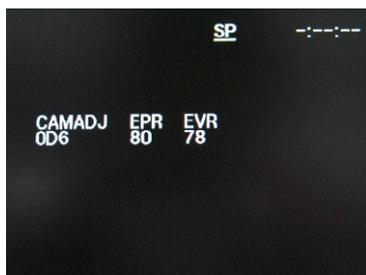


EEPROM Data Intialize



When #0DE is not adjusted, adjust by #0D0.

Lens Zoom Track



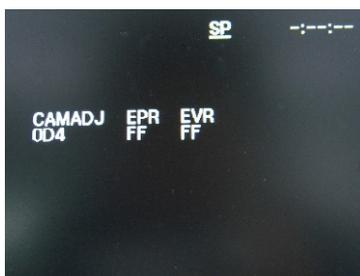
Zoom VR Center



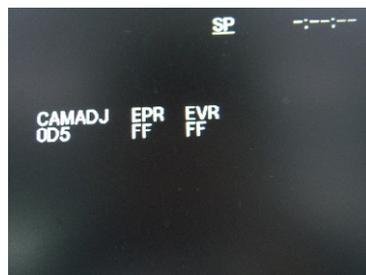
Auto HALL



Auto IRIS Level



Auto White Balance(indoor)



Auto White Balance(outdoor)

Fig. 3-4

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