ELECTRICAL ADJUSTMENT PROCEDURE

1. ADJUSTMENT SYSTEM

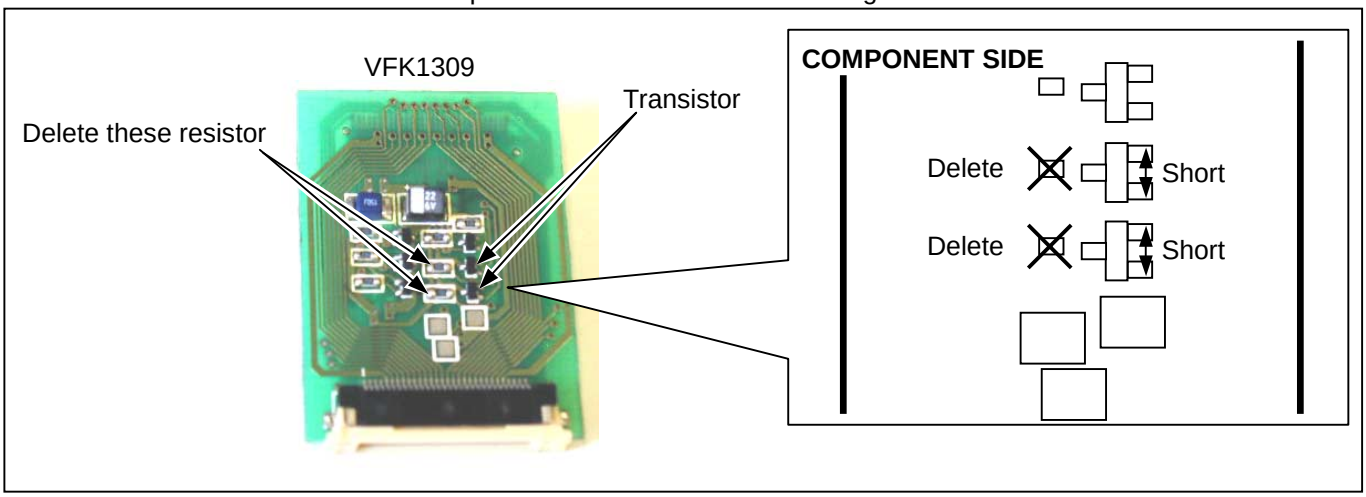
For performing the electrical adjustment, the following tool are required.

NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1308P	1	
EVR Connector Board	VFK1309A	1	NOTE
EVR Extender Board	VFK1694	1	
30pin Flat Cable	VFK1317	2	
DC Cable	VJA0941	1	
9pin RS232C cross cable	---		
AC Adaptor	---		

NOTE:
1. VFK1309 can be use to this adjustment system except LCD adjustment.
2. If you have VFK1309, it can be modified to VFK1309A as following below indicated specification.

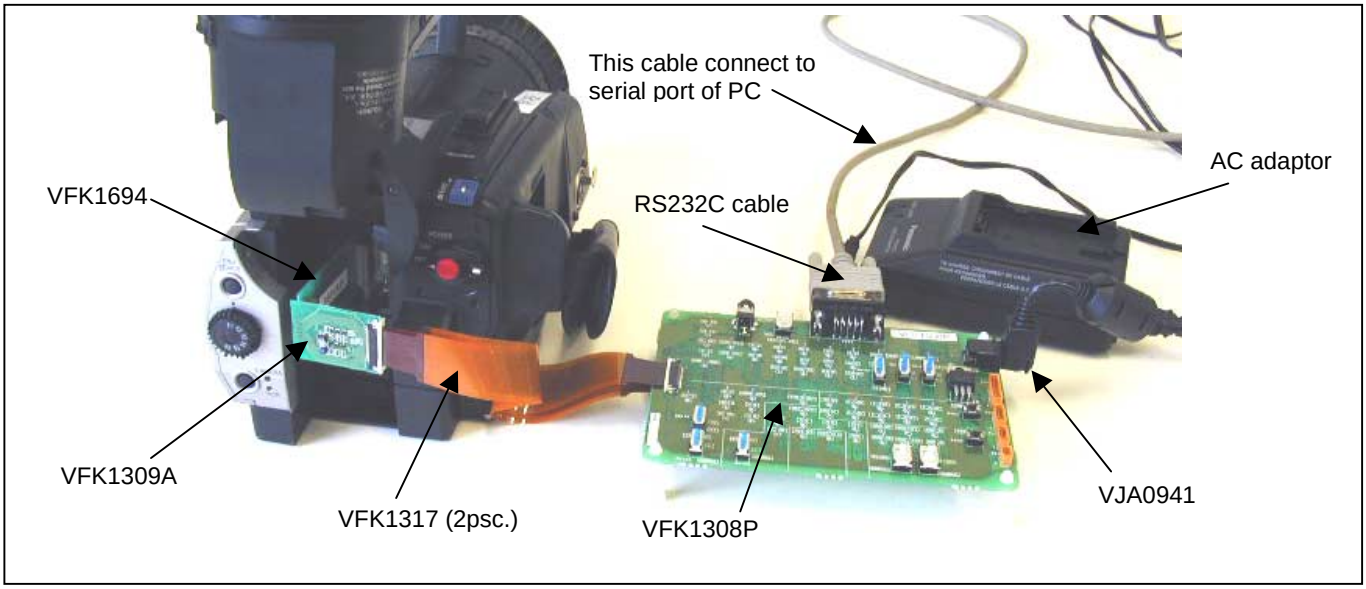
1-1. Modification procedure of VFK1309

1. Delete 2 pieces of resistor as shown figure.
2. Shot between emitter and base of 2 pieces of transistor as shown in figure.



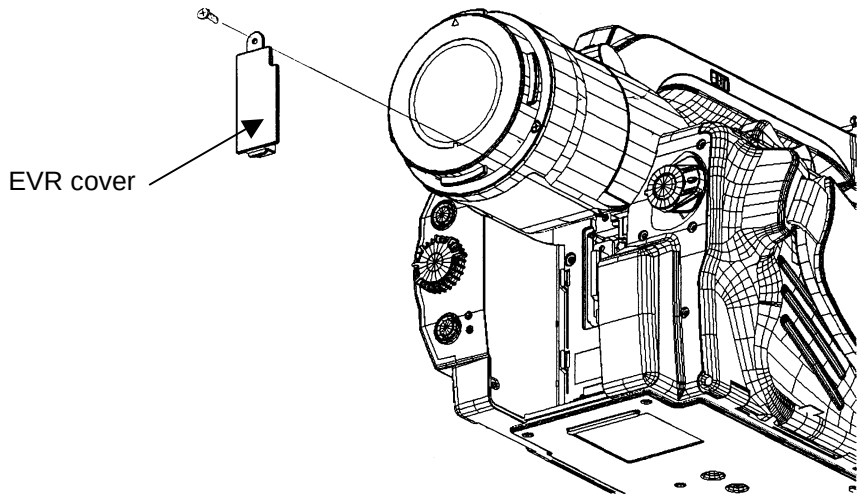
1-2. Connection

Please refer to next item 1-3 as detail explanation.

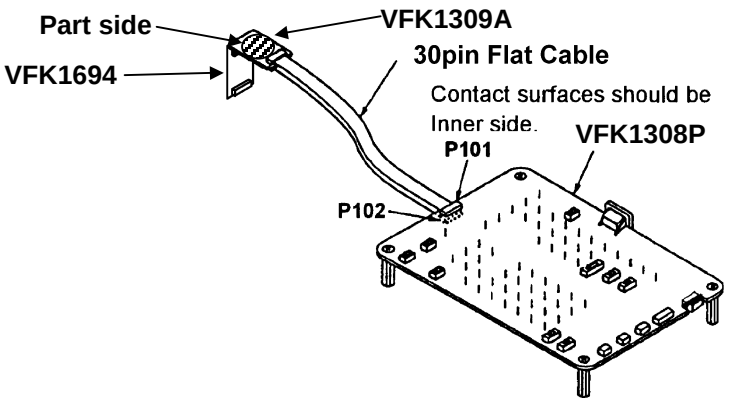


1-3. System Hook up Procedures

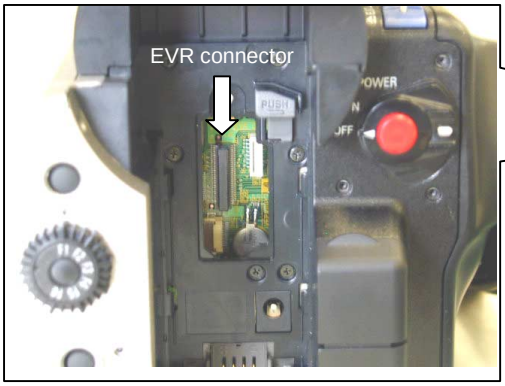
1. Unscrew 1 screw and remove the EVR cover.

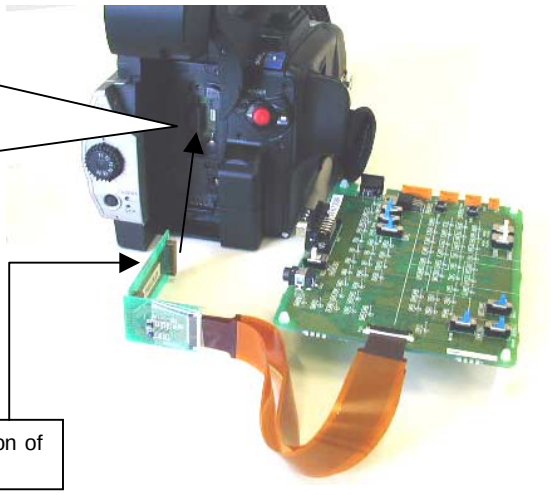


2. Connect the 2 pcs. of 30 pin flat cables (VFK1317) between P101/P102 on the Measuring Board (VFK1308P), and 2 connectors on the EVR Connector Board (VFK1309A). Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connector Board is as shown in Figures. Then connect the Extender board (VFK1694).



3. Connect the EVR Extender board (VFK1694) to EVR connector on EVR connect C.B.A. in AG-DVX100. Then make sure that the direction of the Extender Board is correct as shown in Figure.





When the VFK1694 connect to EVR connector, be careful direction of VFK1694. Please follow as shown in the figure.

4. Supply DC6V to the Measuring Board (VFK1308P). Please use the DC cable (VJA0941) and AC Adaptor to supply DC voltage to Measuring Board.
5. Connect a 9 pin RS-232C cable between the Measuring Board and RS-232C connector on Personal Computer as shown in Figure.
6. Unless otherwise specified on the message of the EVR software or this adjustment procedure, set the switches on the Measuring Board as shown in the table below.

NAME	SETTING POSITION
RS232C SEL(SW101)	D-SUB
VTR TEST(SW103)	NORMAL
BST TEST(SW104)	NORMAL
SW107	CENTER position
SW108	H
SW105	H
SW106	OFF
FLUSH1 (SW102)	NORMAL
FLUSH2 (SW109)	NORMAL

2. REQUIRED TOOL & EQUIPMENT FOR ELECTRICAL ADJUSTMENT

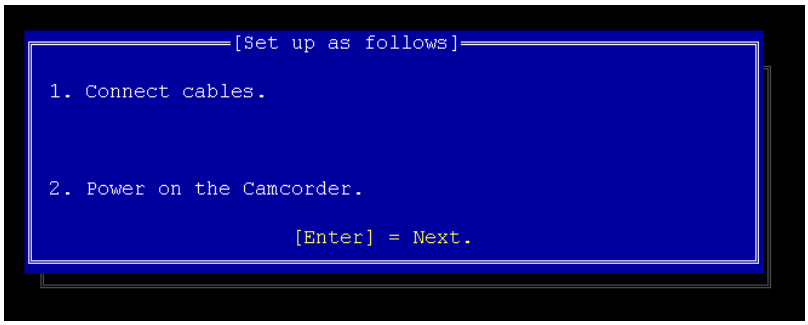
Below indicated tool are required to perform each adjustment except tools introduced item1.

Adjustment	Item	Required Tool
Camera	Hall Amp (Auto)	Unnecessary
	Iris PWM (Auto)	Unnecessary
	OIS (Auto)	Unnecessary
	Zoom Tracking (Auto)	72mm Attachment Ring (VFK1809) 43mm Attachment Ring (VFK1164TAR43) Collimator (VFK1164TCM01)
	White Balance (3100K)	Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (5100K)	CC filter (LB120) (VFK1347) CC filter (LBA2) CC filter (80D) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (4500K)	CC filter (LB120) (VFK1347) CC filter (LBB1) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (3600K)	CC filter (LB40) (VFK1341) CC filter (LBB2) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	CCD White scratch damage revision (Auto)	Unnecessary
	White Shading	Halogen lamp
VTR	Sensitivity adj of Tape sensor (Auto)	Tape End/Beg. Sensor Cassette (VFK1217)
	PG Shifter (Auto)	Oscilloscope
	Luminance Level	Waveform Monitor
	Chroma Level	Waveform Monitor
LCD	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope
EVF	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope

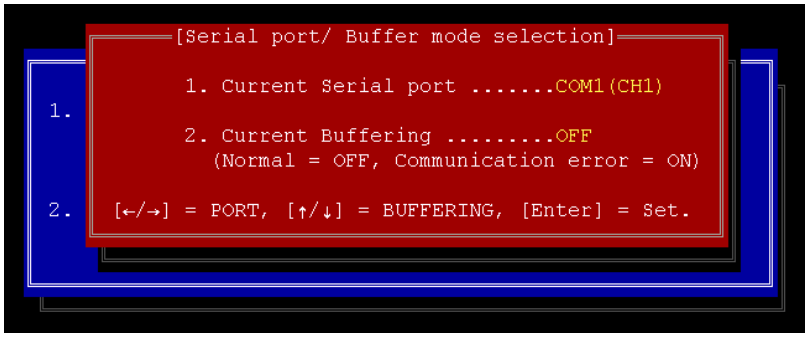
3. PC EVR (ADJUSTMENT) SOFTWARE

3-1. BOOT UP THE ADJUSTMENT SOFTWARE

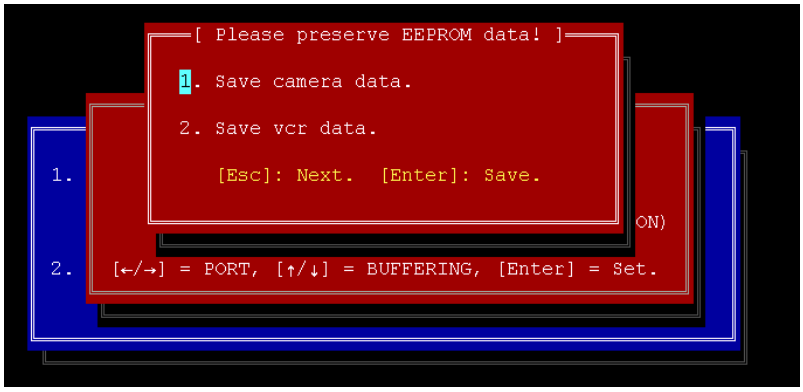
1. Copy all files on the floppy disc (VFK1811: EVR software) to created directly on PC(i.e.; C:¥DVX100).
2. Restart the PC in DOS mode.
3. Type “DVX100” and press ENTER key, then EVR software boot up.
4. Wait for a few seconds so that the EVR adjustment program is started.



PRESS ENTER KEY

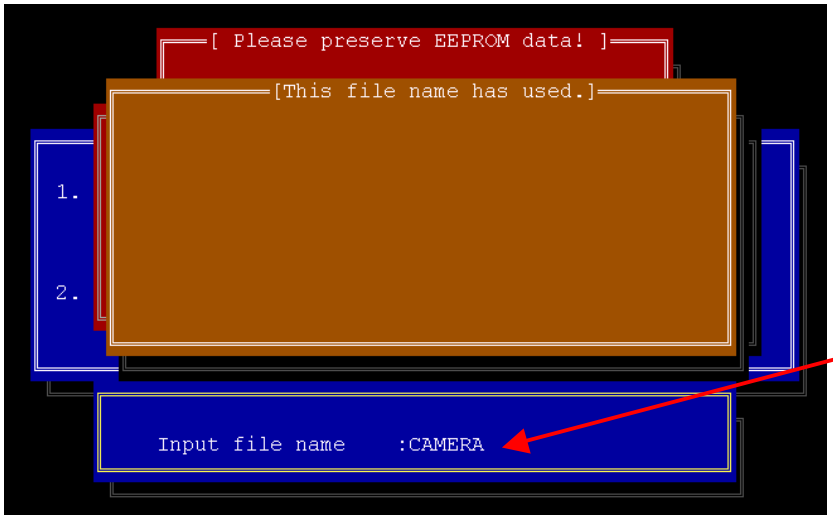


PRESS ENTER KEY

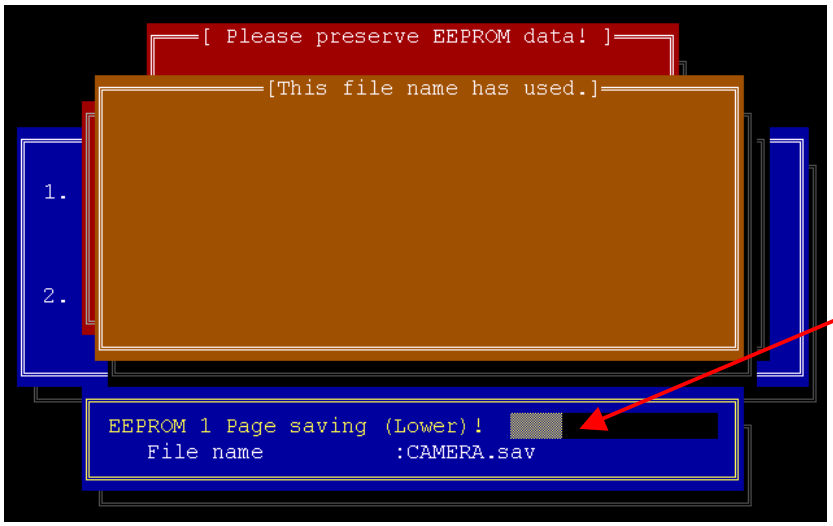


Normally this screen is appeared. We recommended store the EEPROM data before start adjustment. If you want to skip store the data, PRESS ESC KEY, then goes to Main menu.

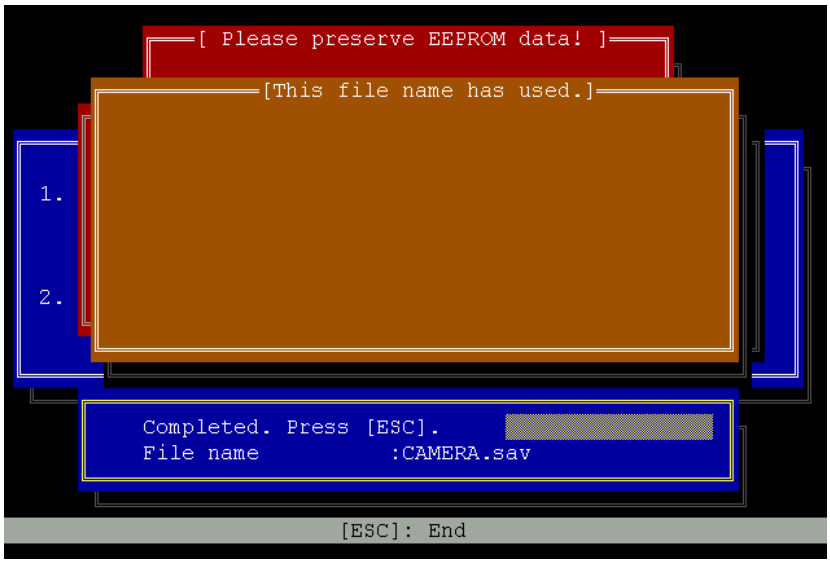
In case of select No.1



Input file name and PRESS ENTER KEY.

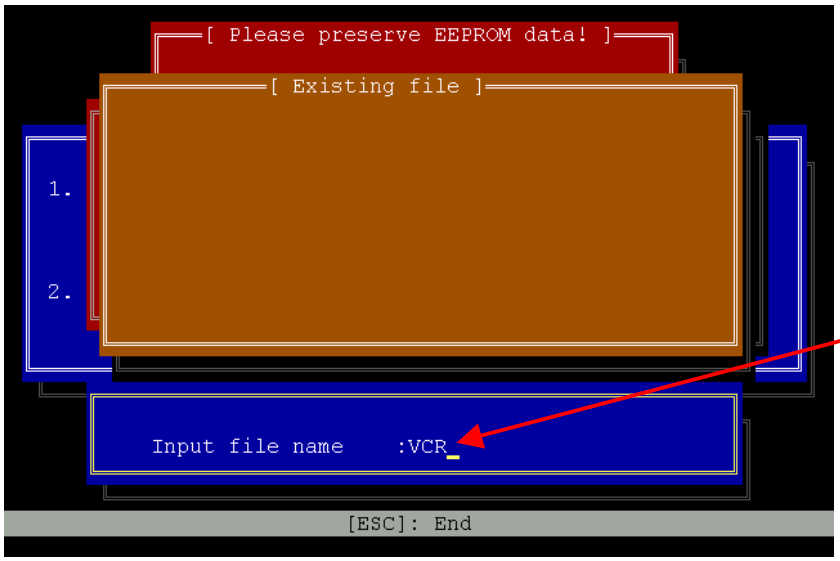


Saving the data is started.

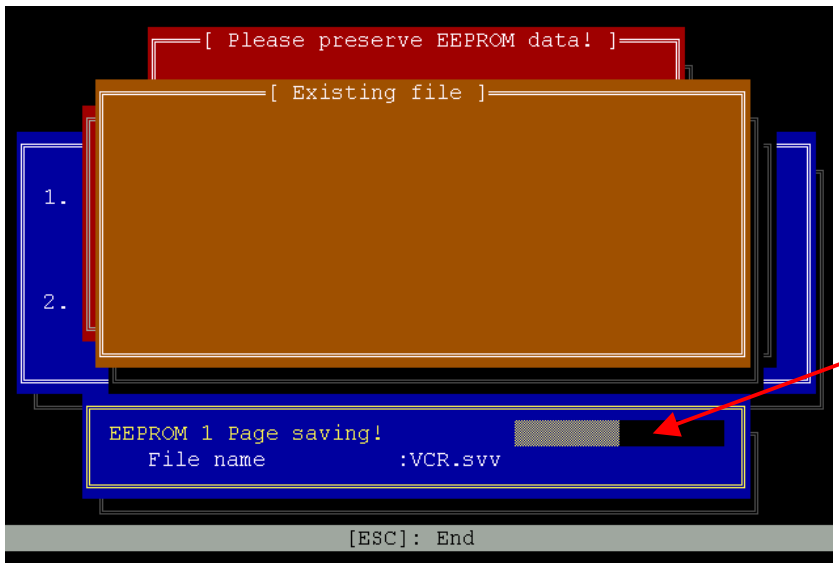


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

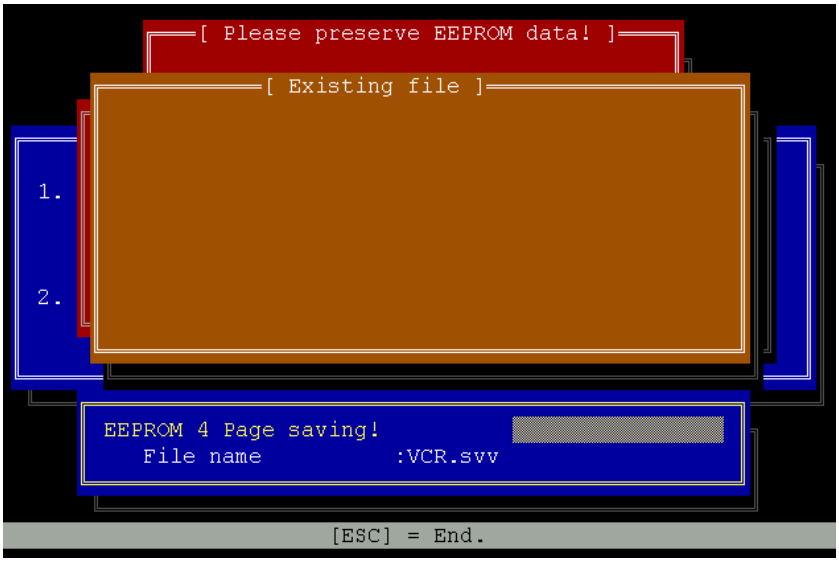
Return to this screen and in case of select No.2. PRESS ENTER KEY.



Input file name and PRESS ENTER KEY.



Saving the data is started.

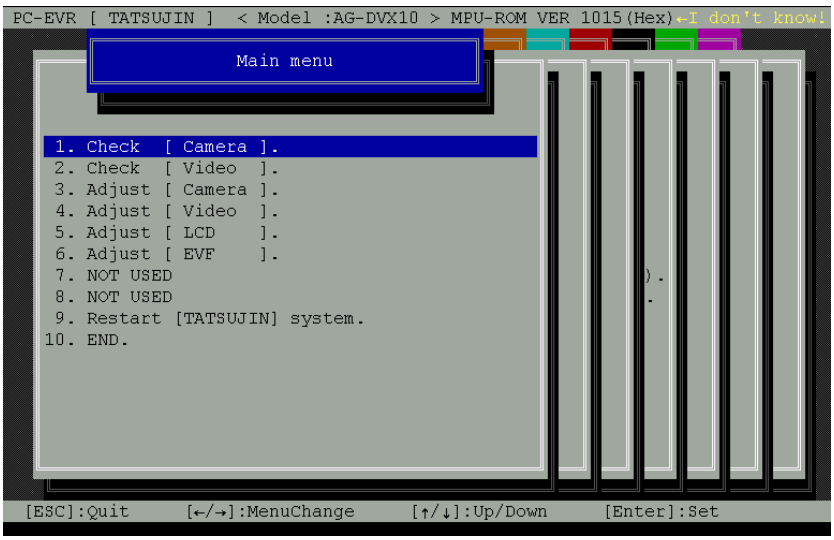


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

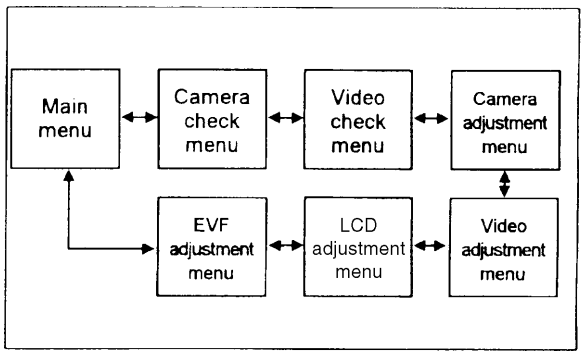
3-2. How to Use the Main Menu

Select a Sub Menu to check, adjust the unit and etc. by pressing ↑↓ (UP/DOWN) Key in Main Menu. Then press "ENTER" Key. the Sub Menu will be displayed.

NOTE: Menu (pages) 3,4,5 and 6 are needed for adjustment.

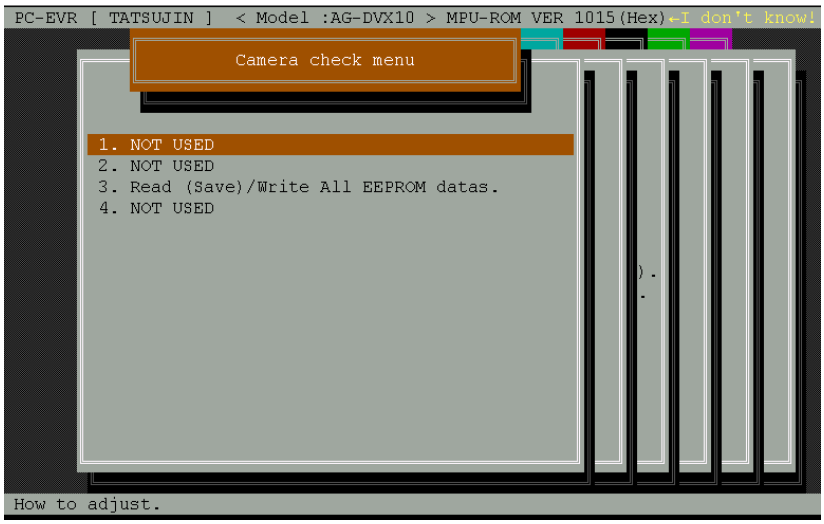


With using ←→ keys, also the menu can be changed.

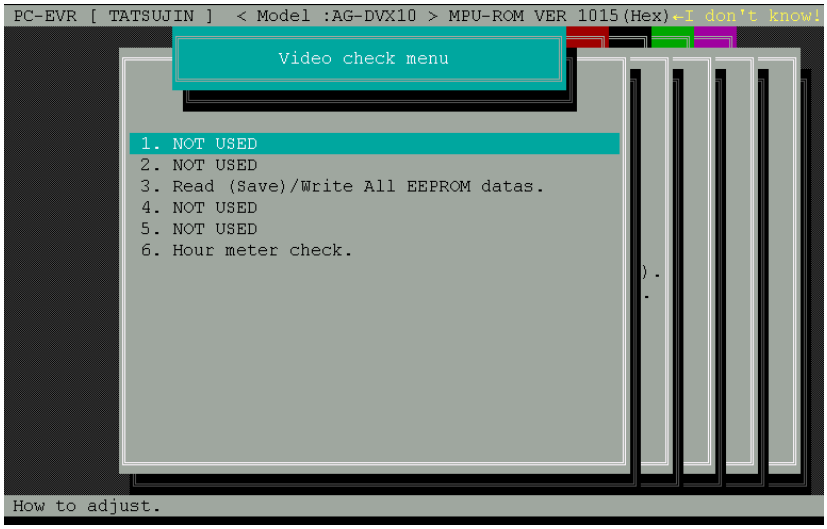


3-3. Introduction of the Sub Menu

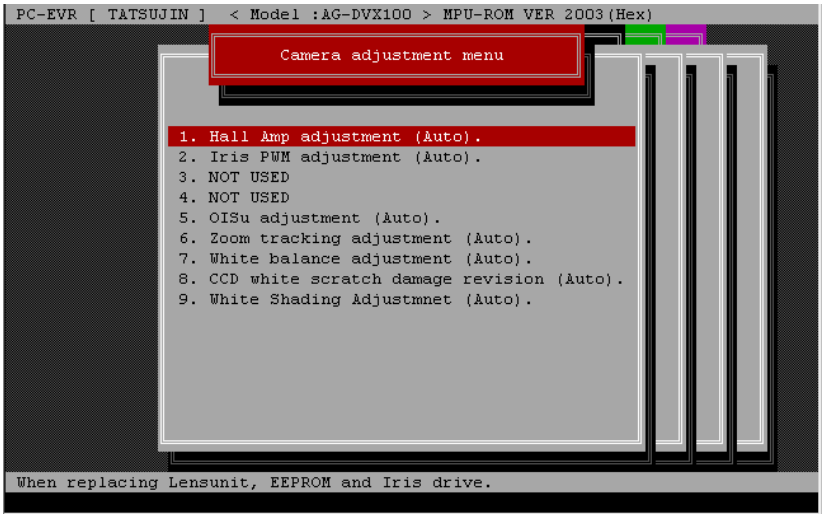
1) Camera Check Menu



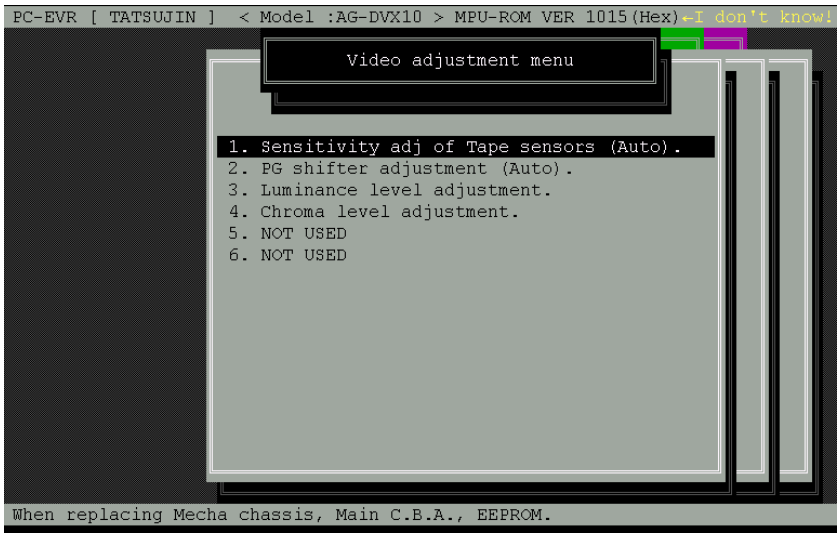
2) Video Check Menu



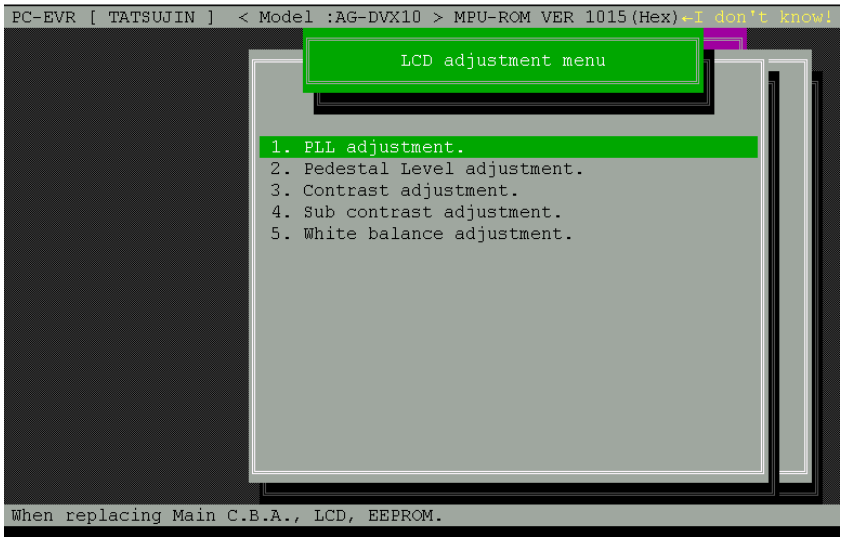
3) Camera Adjustment Menu



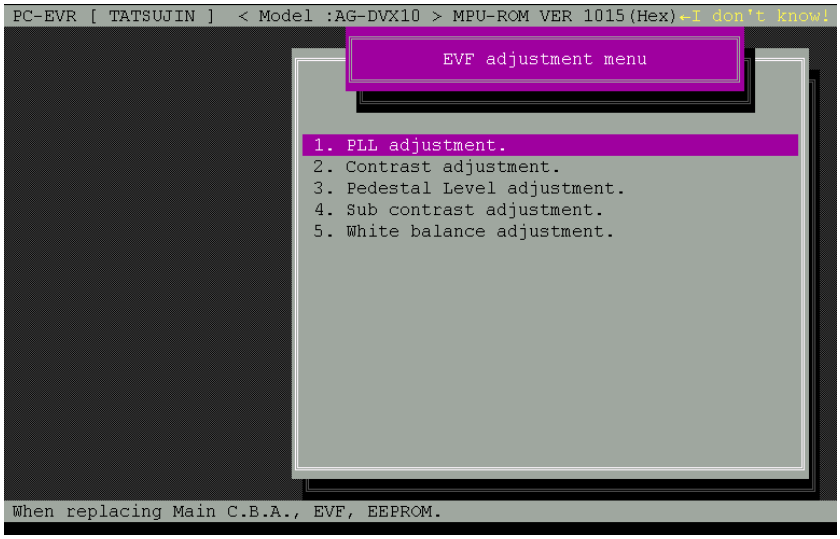
4) Video Adjustment Menu



5) LCD Adjustment Menu



6) EVF Adjustment Menu



4. EEPROM

All adjustment data has been stored in the EEPROM.
There are two EEPROM in this unit as shown in the table below.

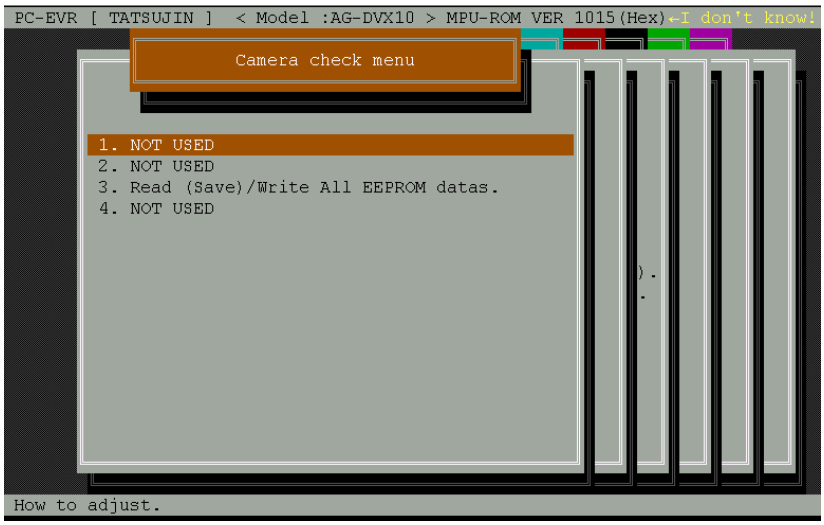
EEPROM LOCATION

C.B.A.	EEPROM IC Ref.No.
Camera C.B.A.	IC307
VTR C.B.A.	IC2008

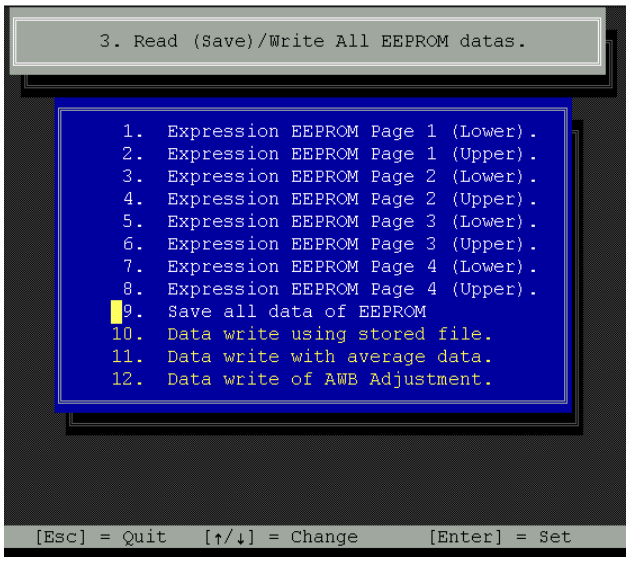
NOTE:
Be sure to save both the EEPROM data into the personal computer before performing service and adjustment, in order to avoid any accidental data loss.

4-1. How to Save Camera EEPROM Data

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.



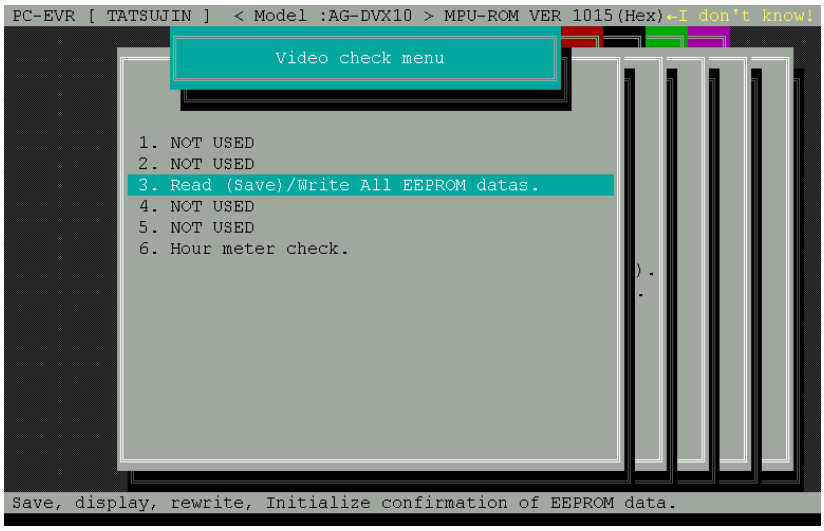
3) Select “9.Save all data of EEPROM” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.



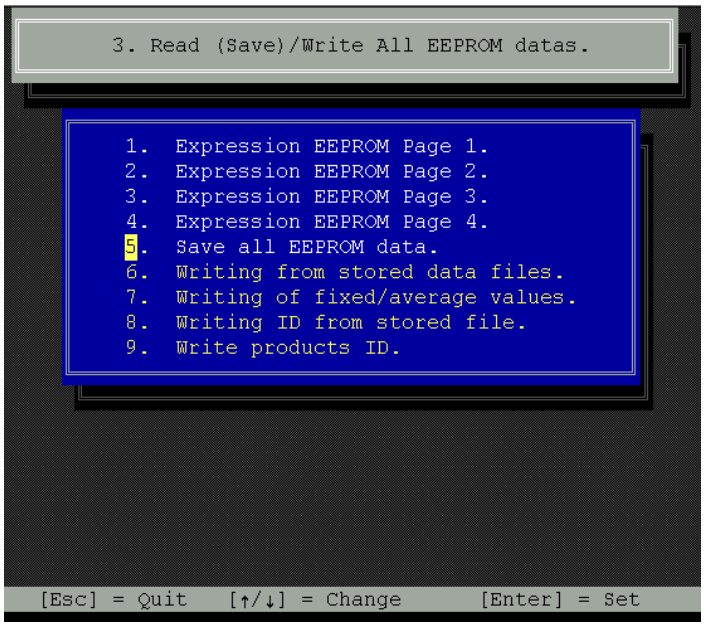
4) Type the File name and, then press the “Enter” key. The data of EEPROM (IC307) can be stored in the personal computer. (Please refer to item “2-1. BOOT UP THE ADJUSTMENT SOFTWARE”)

4-2. How to Save VTR EEPROM Data

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.



3) Select “5.Save all EEPROM data” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.



4) Type the File name, and then press the “Enter” key. The data of EEPROM (IC2008) will be stored in the personal computer.

4-3. REWRITE Saved Data

When Camera or VTR C.B.A is replaced, It becomes impossible to adjustment or repairing during service operation, rewrite the saved data which is stored in EEPROM as follows. And readjust.

4-3-1. How to Rewrite EEPROM data on Camera C.B.A.

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.
3) Select “10.Data write using stored file” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “9.EEPROM ALL (2 Kbyte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC307).

4-3-2. How to Rewrite EEPROM data on VTR C.B.A.

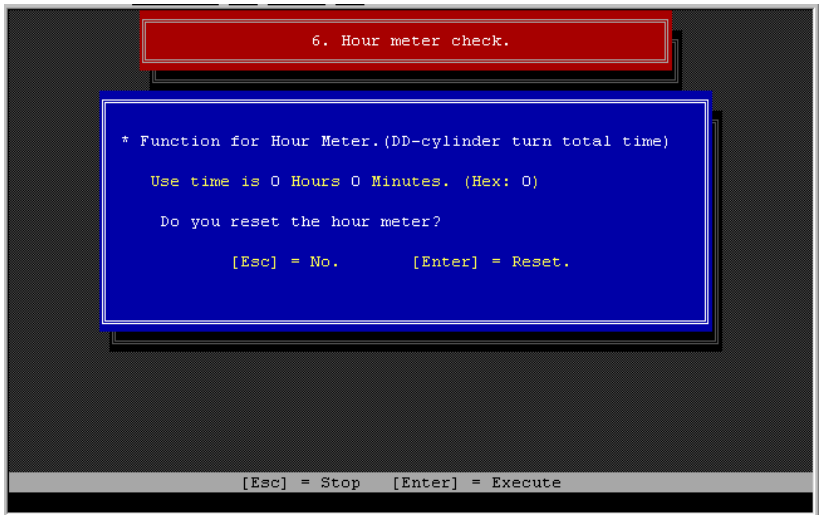
1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.
3) Select “3.Writing from the stored data files” in the Read [Save]/Write All EEPROM data menu, and then press “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “5.Write EEPROM (1024 byte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC2008).

5. HOUR METER RESET

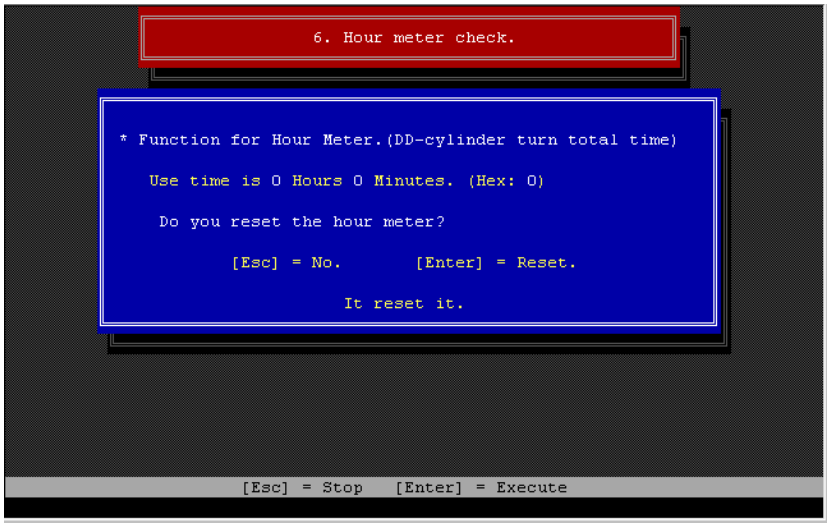
Hour Meter can be reset by use this EVR software.

<How to reset Hour Meter>

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “6.Hour meter check” in the Video check menu, and then press the “Enter” key.



3) Press the “ENTER” key, then reset is executed.



4) After finish this operation, the program goes to “Video Check Menu” automatically.
5) Open the “OTHER FUNCTION” menu in AG-DVX100 and confirm that the HOUR METER display is change to “00000H”.

6. CAMERA ADJUSTMENT PROCEDURE

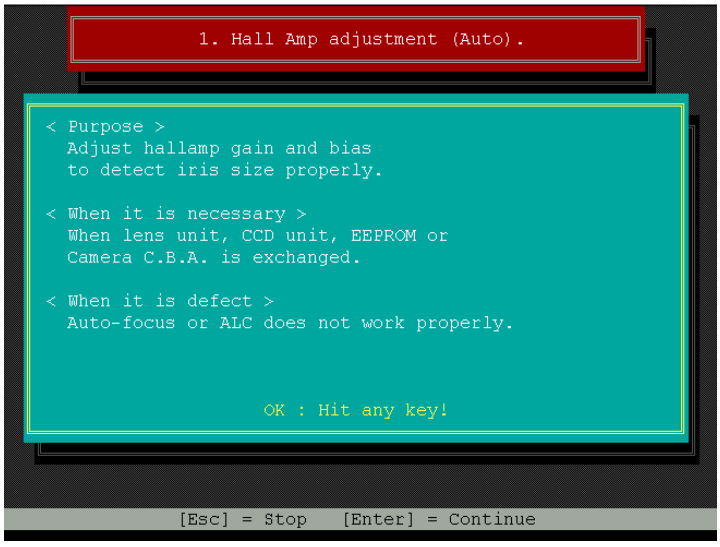
Be sure to save the Camera EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

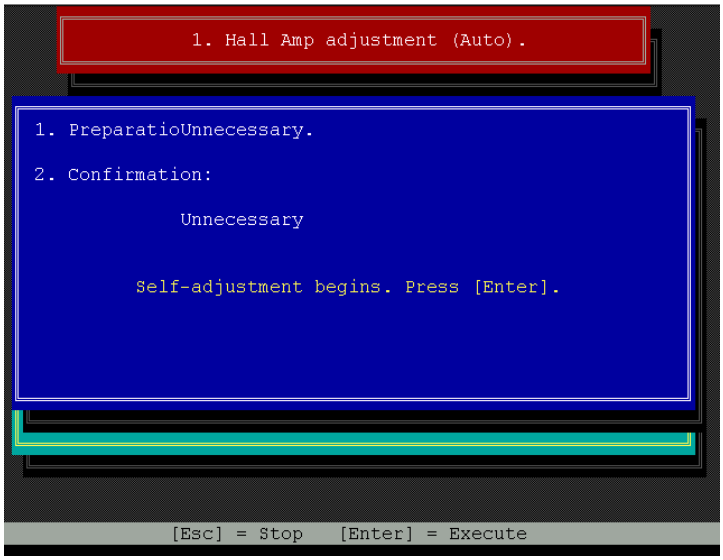
6-1. Hall Amp Adjustment (AUTO)

This adjustment can be adjust automatically.

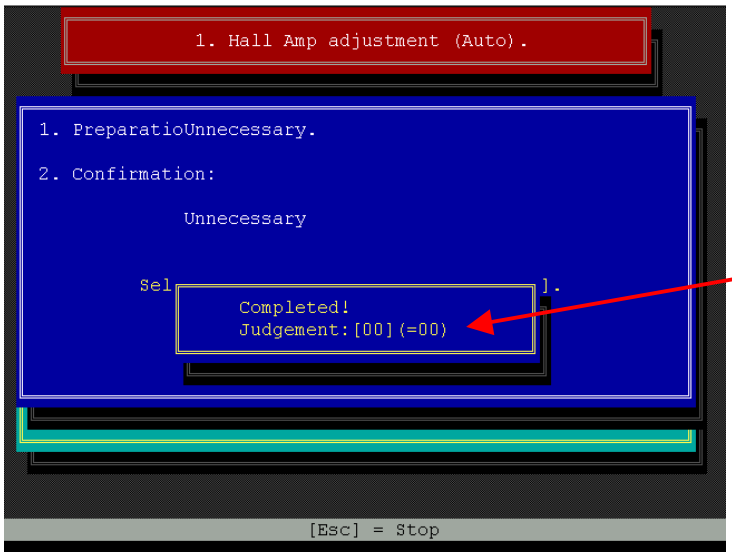
1. Open the “Camera adjustment menu”.
2. Select “1.Hall Amp adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

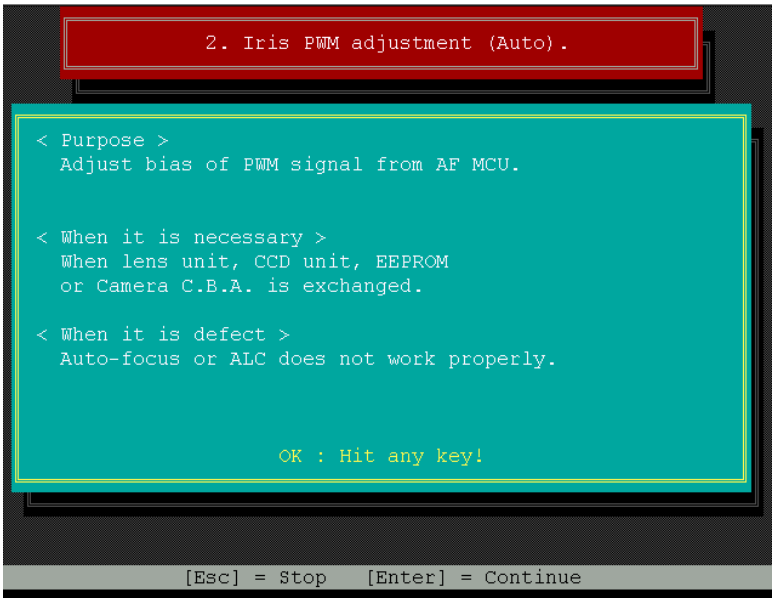


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

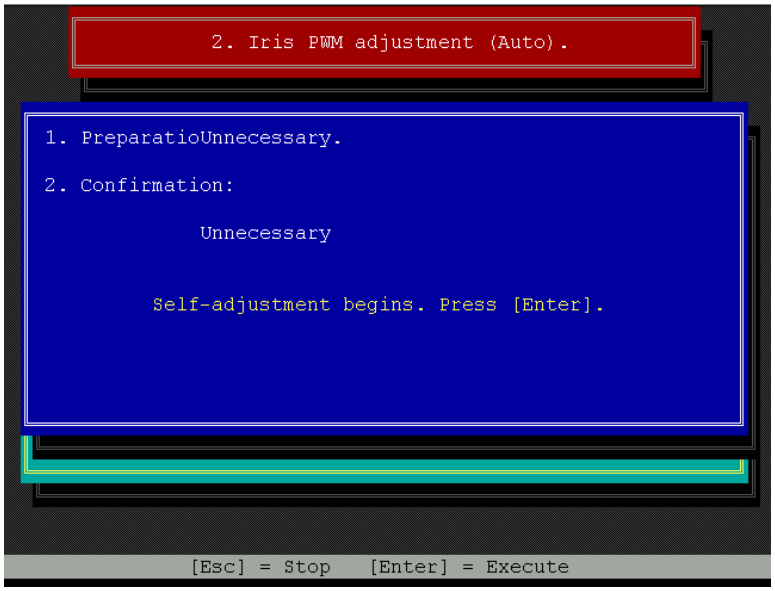
6-2. Iris PWM Adjustment (AUTO)

This adjustment can be adjust automatically.

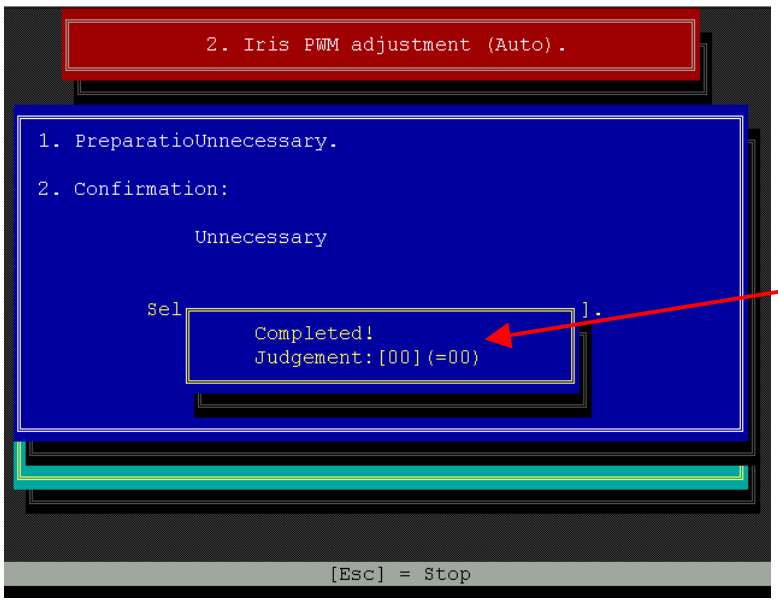
1. Open the “Camera adjustment menu”.
2. Select “2.Iris PWM adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.



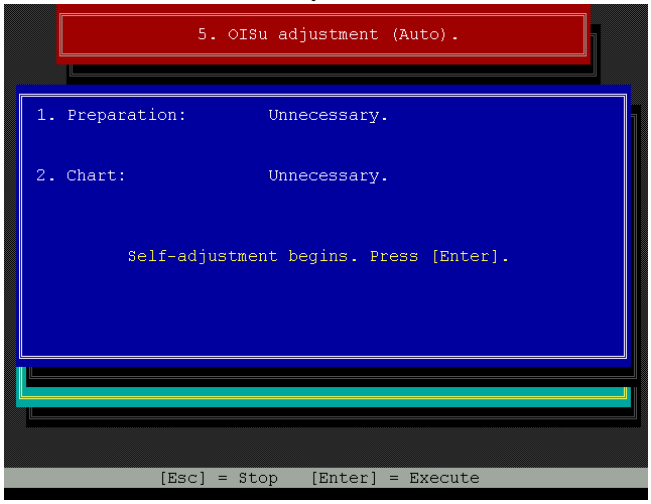
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-3. OISu Adjustment (AUTO)

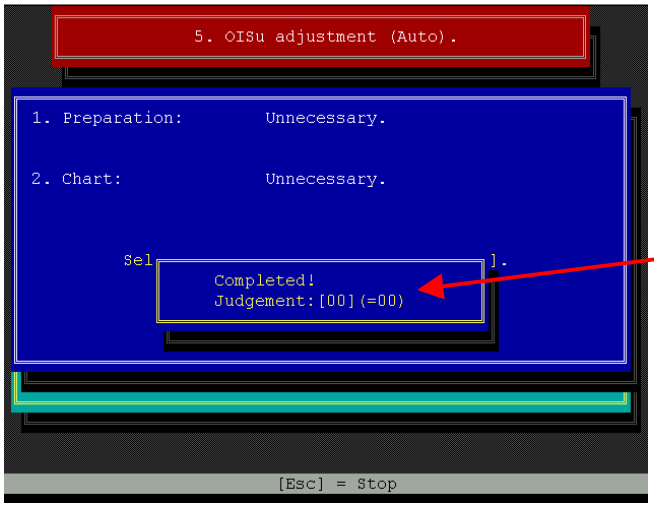
This adjustment can be adjust automatically.

1. Open the “Camera adjustment menu”.
2. Select “5.OISu adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.

PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

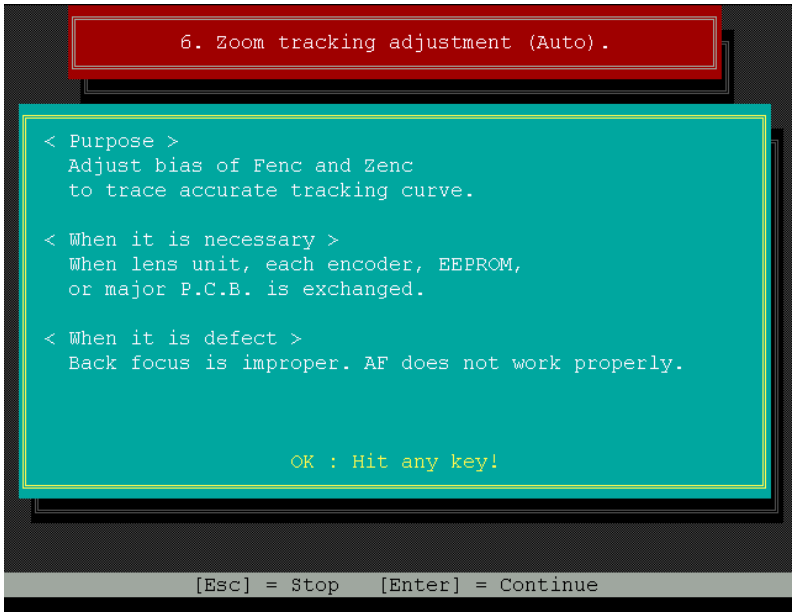


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

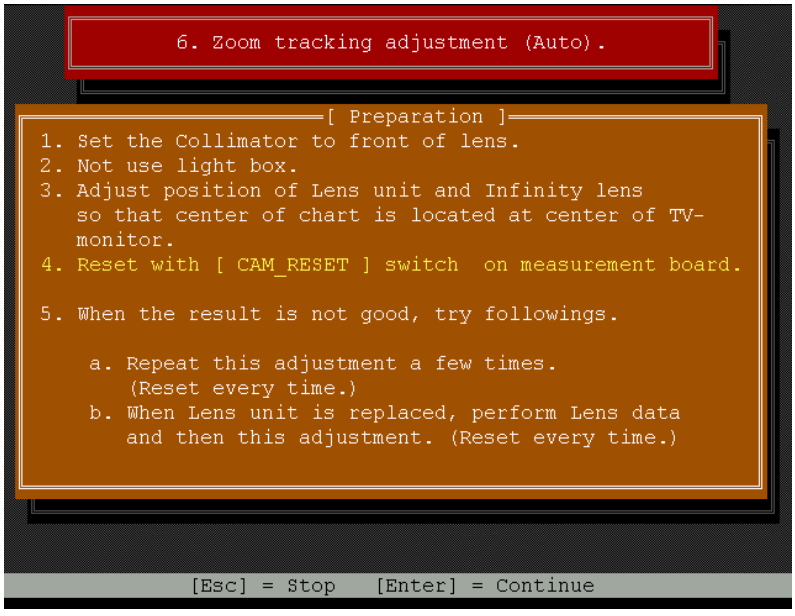
6-4. Zoom Tracking Adjustment (AUTO)

This adjustment can be adjust automatically.

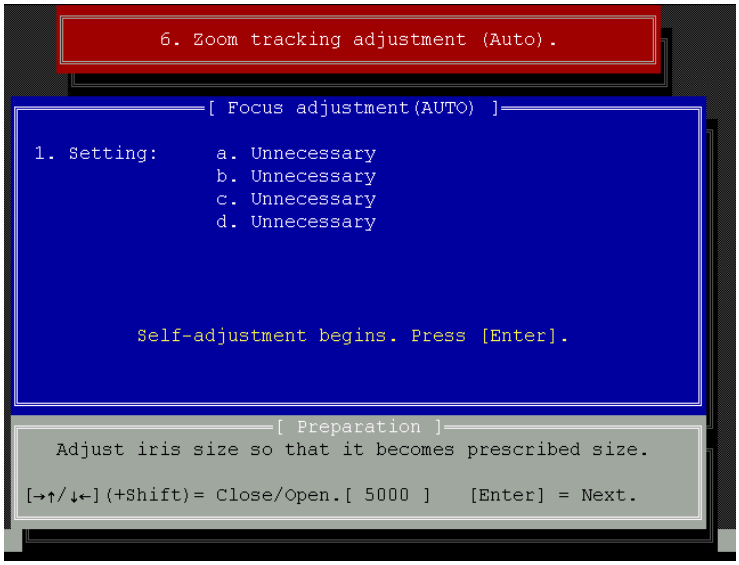
1. Set the 72mm Attachment Ring(VFK1809) to front of the Lens.
2. Set the 43mm attachment ring (VFK1164TAR44) to Collimator (VFK1164TCM01).
3. Set the Collimator (VFK1164TCM01) with the 43mm attachment ring (VFK1164TAR44) to 72mm Attachment Ring(VFK1809).
4. Open the “Camera adjustment menu”.
5. Select “6.Zoom Tracking adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
6. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



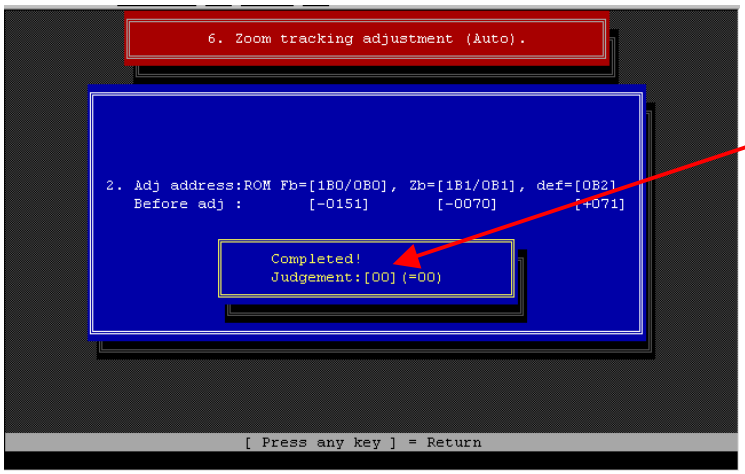
PRESS ENTER KEY.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.



When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

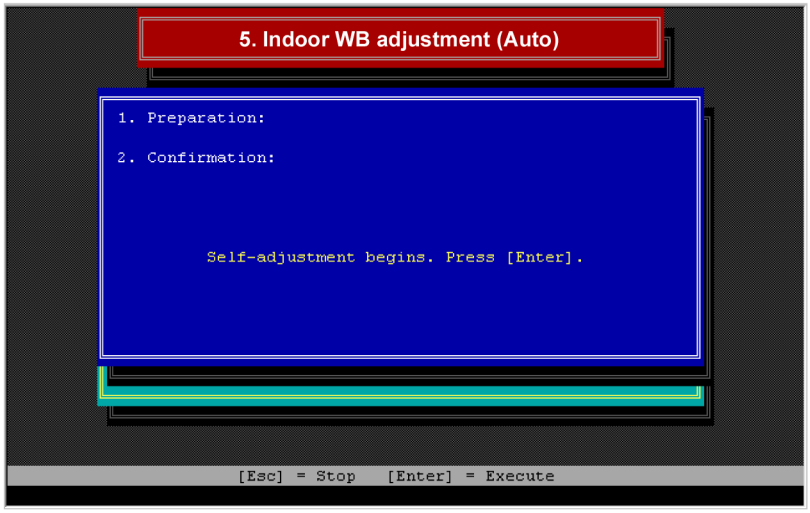
7. After finish this adjustment, press “CAM RESET” switch on Measuring Board(VFK1308P).
NOTE: Please perform this adjustment twice.
8. Confirm that the AG-DVX100 set to Auto Focus mode.
9. Connect the VIDEO OUT to Monitor TV.
9. Press the Zoom button to set maximum TELE side.
10. Confirm that the focus chart appeared clear and Numerical value of Focus control information display. (The value should be appeared “AF95 +/- 1”
11. Set the AG-DVX100 to manual focus mode.
12. Press the Zoom button to change zoom position to maximum WIDE from maximum TELE side, then confirm that the focus chart appeared clear and Zoom position display number changed smoothly.

6-5. White Balance Adjustment (AUTO)

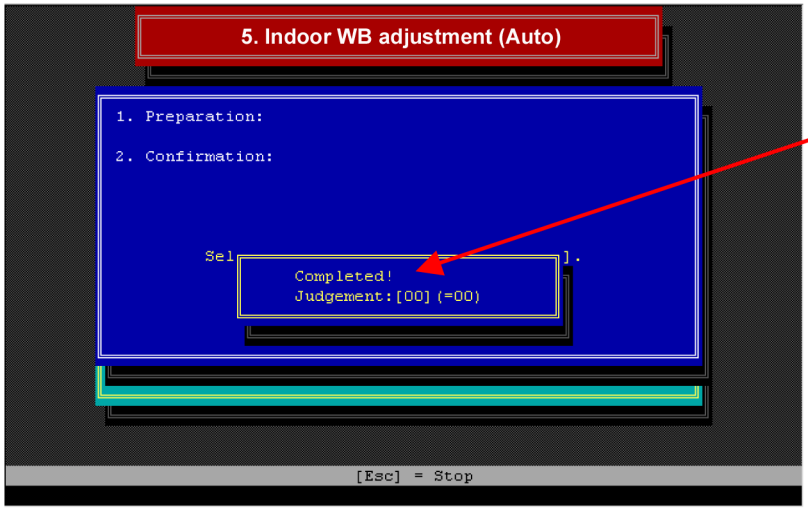
This adjustment can be adjust automatically.
Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.
<Preparation>
1. Set the ND FILTER SW to 1/8 position.
2. Set the DVX100 to ATW mode.
3. Execute the ABB.

6-5-1. Indoor (3100K) White Balance Adjustment (AUTO)

1. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
2. Open the “Camera adjustment menu”.
3. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
4. Select “5.Indoor (3100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY, then adjustment is started.

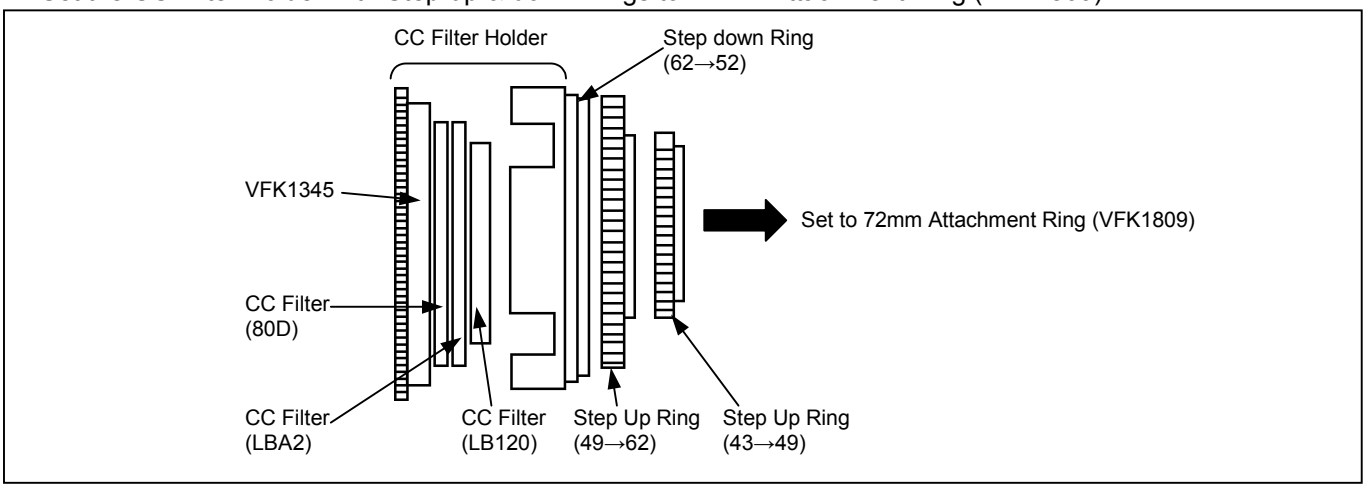


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

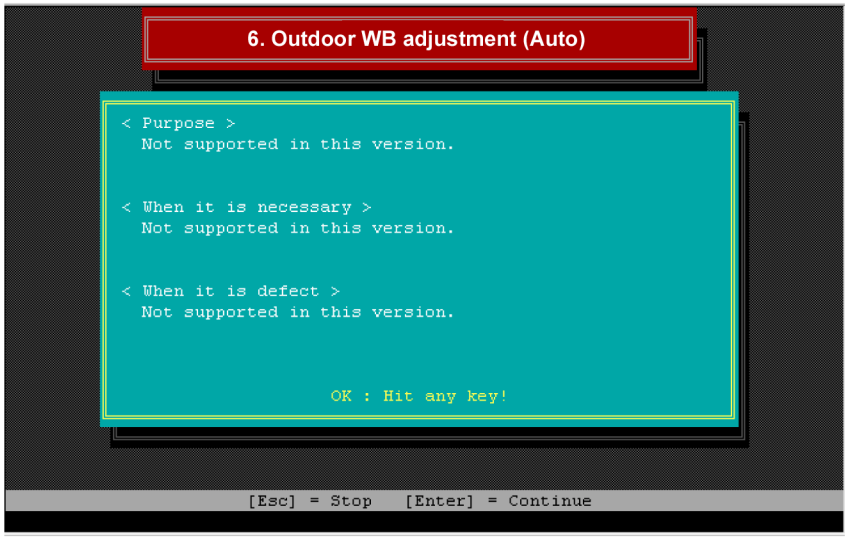
5. Press the “CAM_RESET” SW on VFK1308P and then press the “Enter” key.

6-5-2. Outdoor (5100K) White Balance Adjustment (Auto)

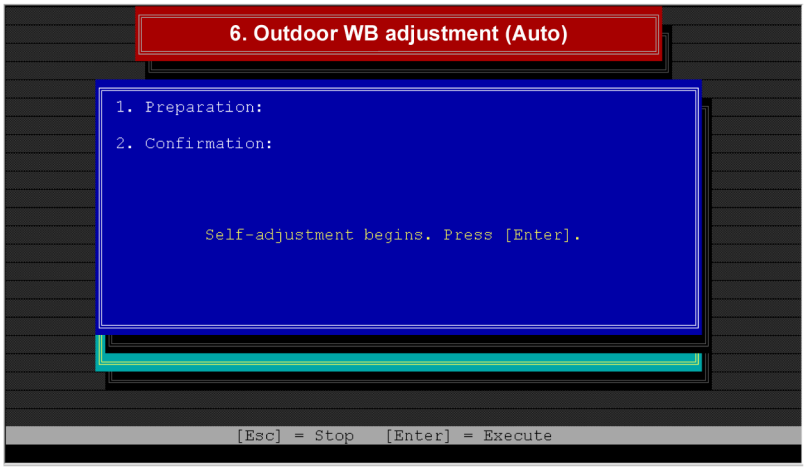
1. Set the Color Conversion filters (LB120 : VFK1347), (LBA2) and (80D) to CC Filter Holder(VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



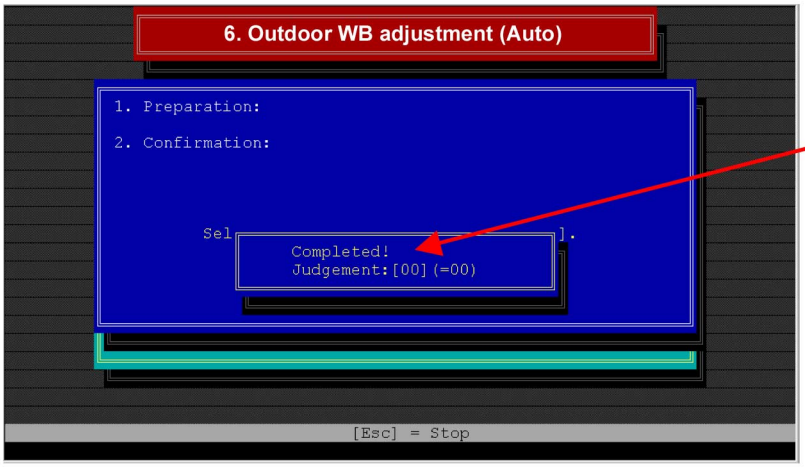
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “6.Outdoor (5100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

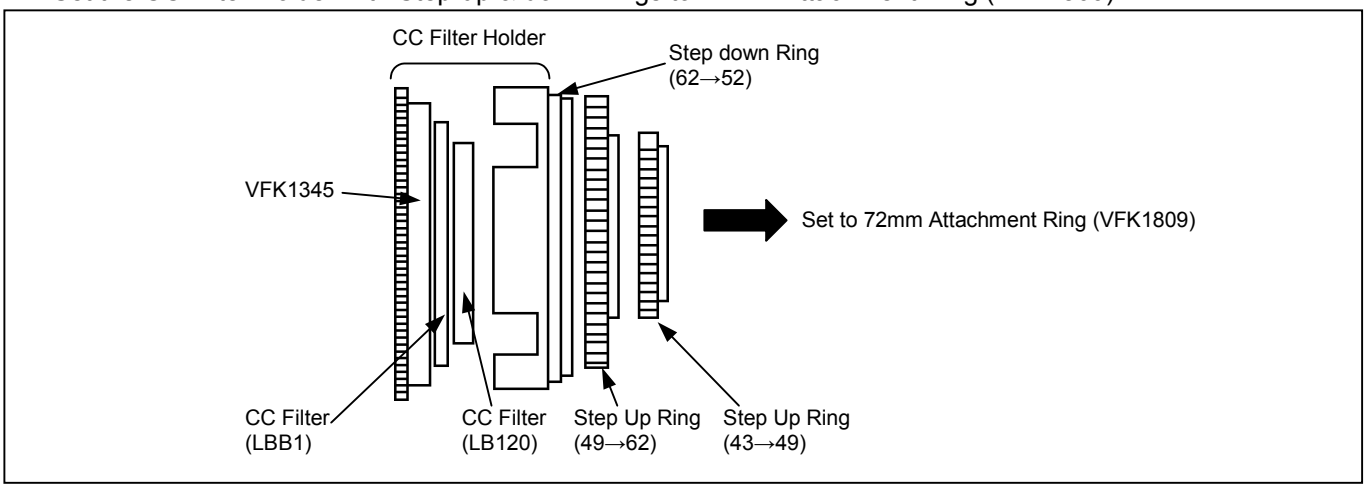


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

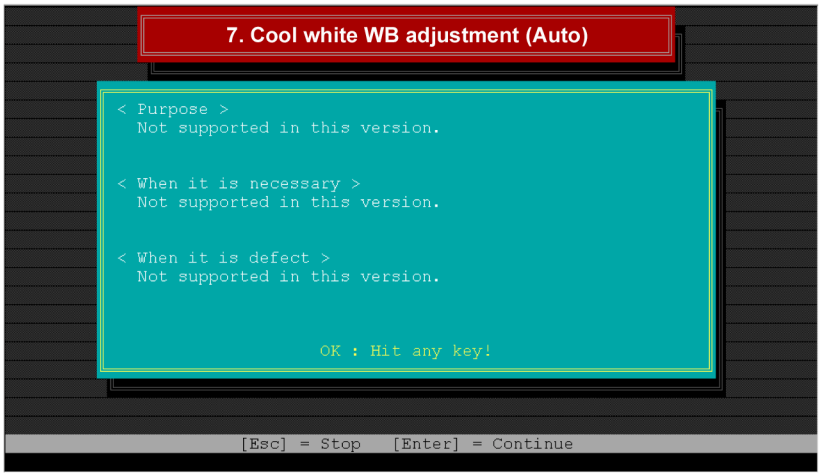
9. Press the “CAM_RESET” SW on VFK1308P , and then press the “Enter” key.

6-5-3. Cool white (4500K) White Balance Adjustment (Auto)

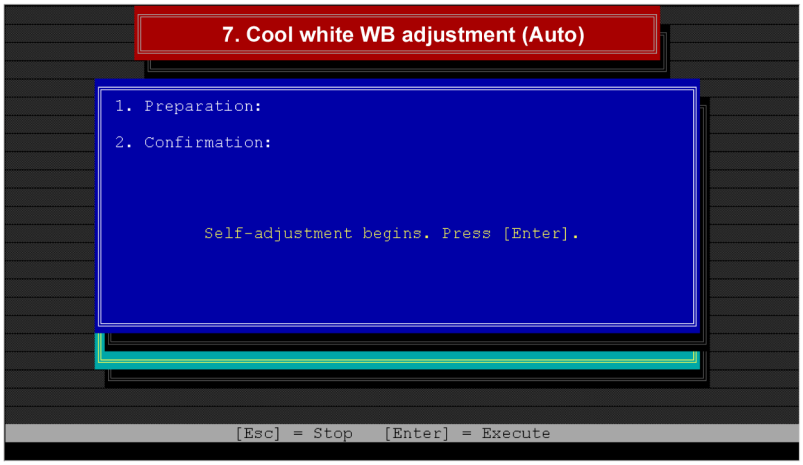
1. Set the Color Conversion filters (LB120 : VFK1347) and (LBB1) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



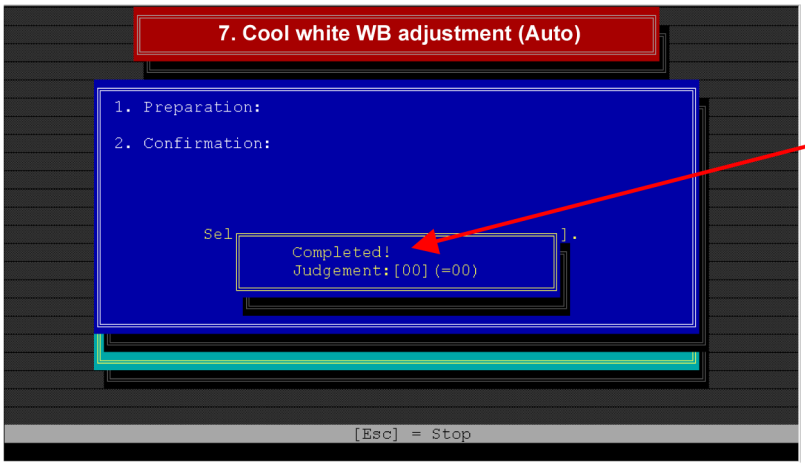
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “7.Cool white (4500K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

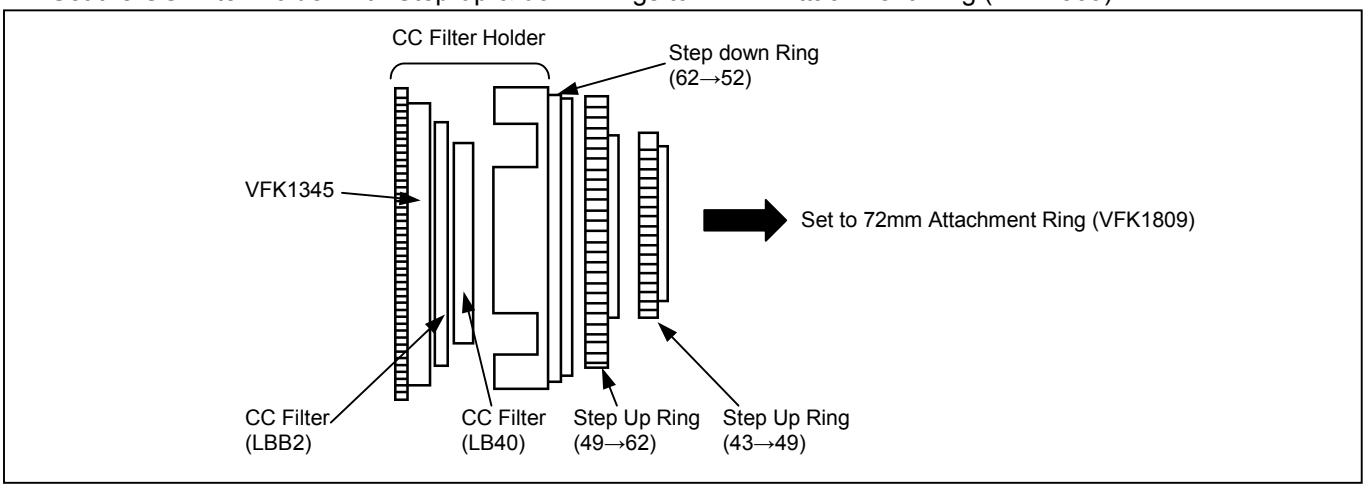


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

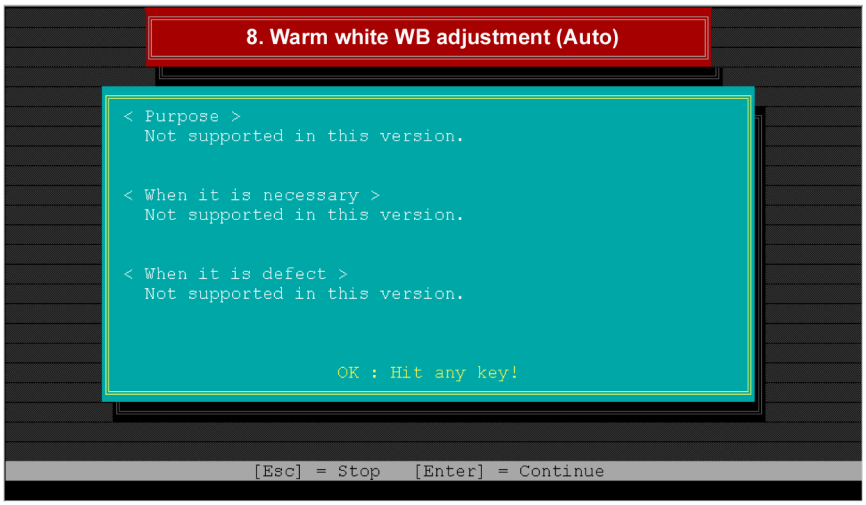
9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

6-5-4. Wram white (3600K) White Balance Adjustment (Auto)

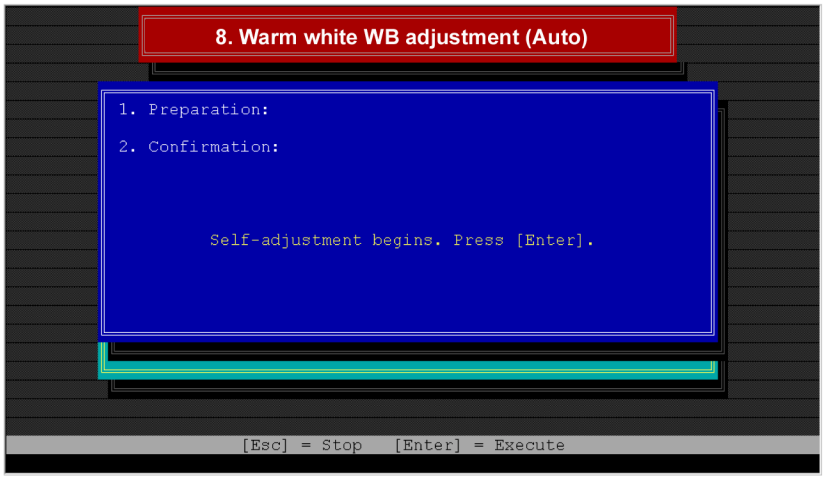
1. Set the Color Conversion filters (LB40 : VFK1341) and (LBB2) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



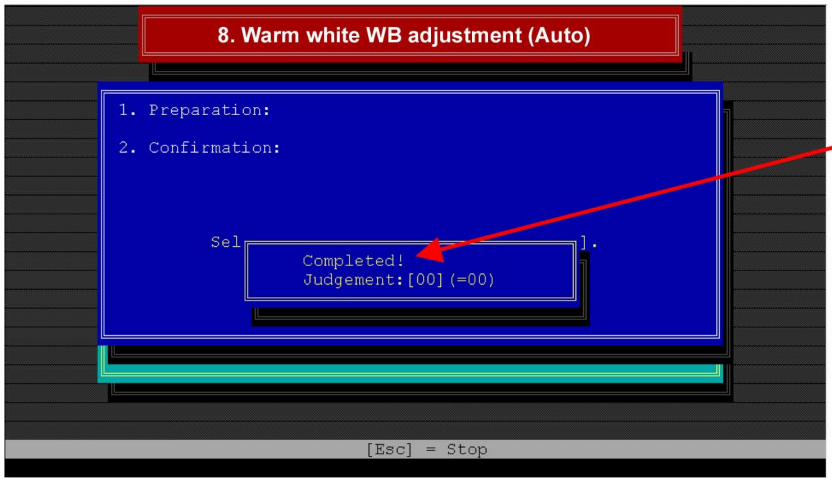
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “8.Wram white (3600K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.



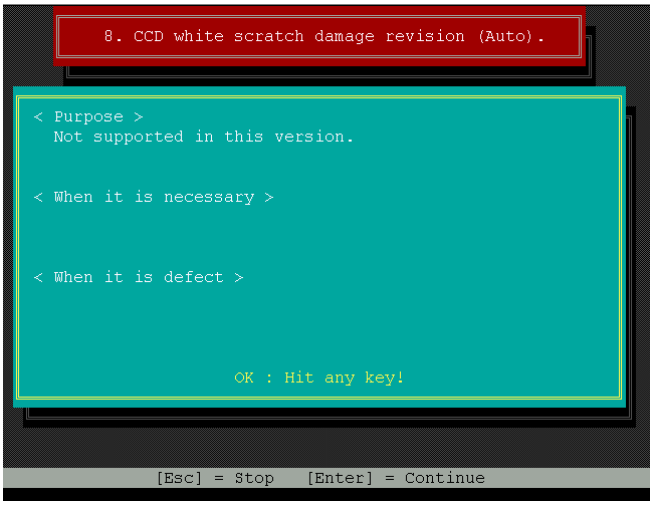
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

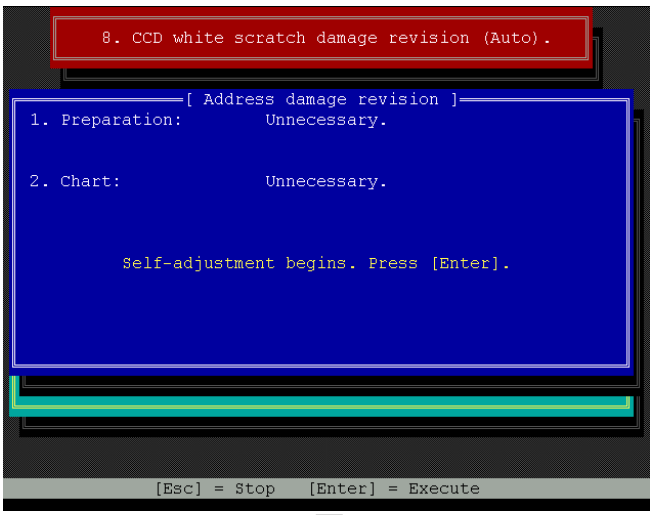
6-6. CCD white scratch damage revision Adjustment (AUTO)

This adjustment can be adjust automatically.

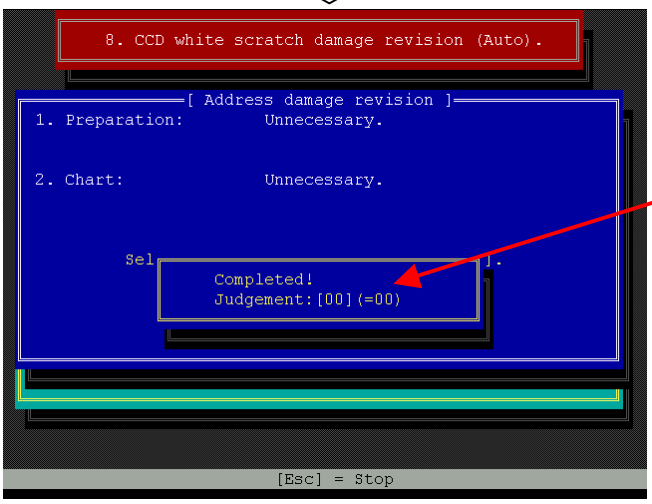
1. Open the “Camera adjustment menu”.
2. Select “8.CCD white scratch damage revision adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

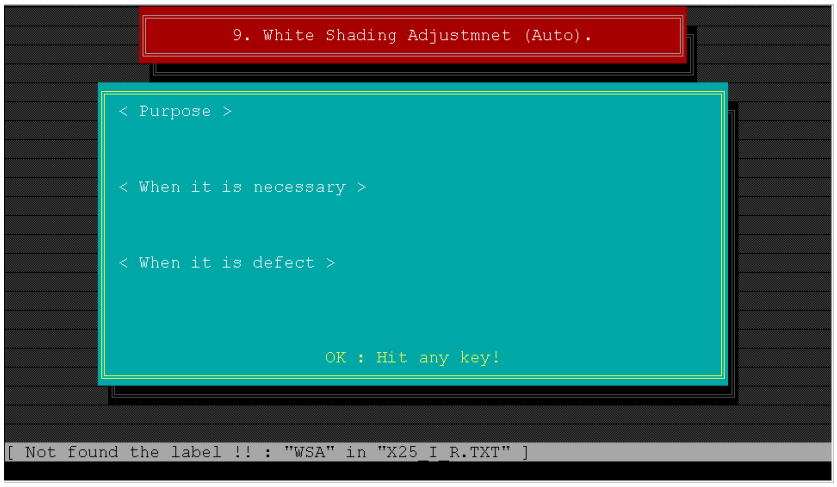


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-7. White Shading Adjustment

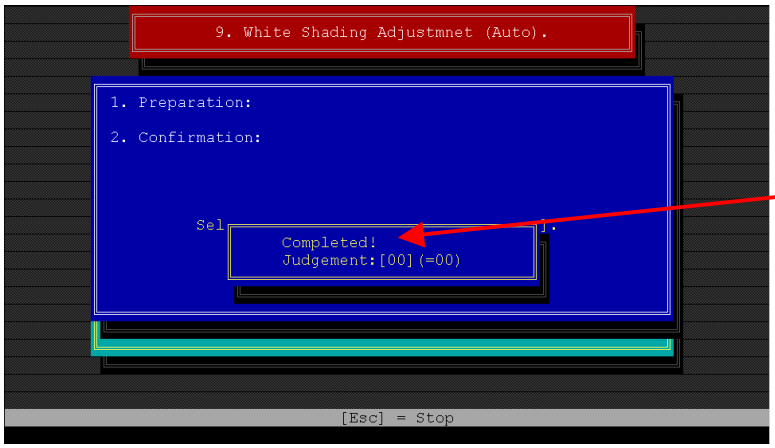
This adjustment can be adjust automatically.

1. Set the GAIN SW to L (0dB) of AG-DVX100.
2. Open the SW mode menu in CAMERA menu.
3. Select the item “ATW” and set to OFF.
4. Open the SCENE FILE menu in CAMERA menu.
5. Confirm that the set to OFF on item PROGRESSIVE in SCENE FILE menu.
6. Aim the unit at white paper (it can be use clear white paper) under the Halogen lamp condition.
7. Shoot the white paper to become fully screen.
8. Set the White Balance by press AWB SW and confirm that the message “AWB OK” on center of screen.
9. Open the DISPLAY SETUP menu in CAMERA menu.
10. Select the item “MARKER” and set to ON.
11. Press the ZEBRA SW and confirm that the marker is appears on screen.
12. Adjust the Iris dial to the luminance level to become 70 to 80% (luminance level can be confirm by numerical value, which displayed lower left corner of screen.
13. Open the “Camera adjustment menu”.
14. Select “9.White Shading Adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
15. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.

PRESS ENTER KEY, then adjustment is started.



When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

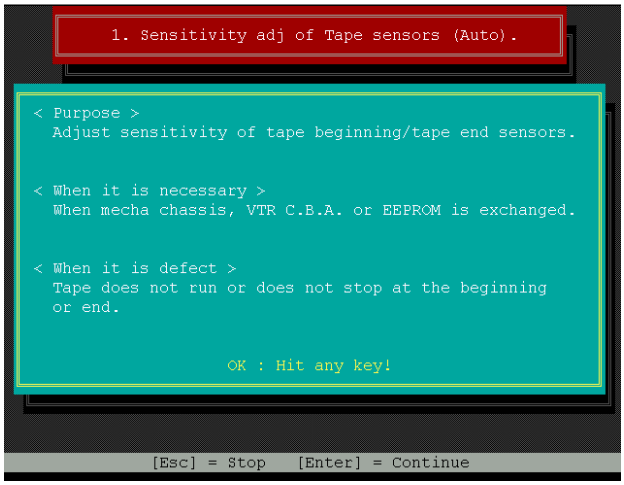
7. VTR ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

7-1. Sensitivity adj of Tape sensors Adjustment (AUTO)

This adjustment can be adjust automatically.

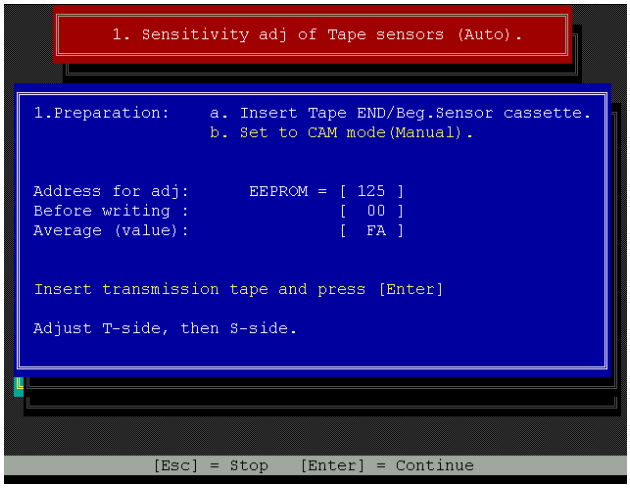
1. Insert the Tape End/Beg. Sensor Cassette (VFK1217) into the Unit.
2. Open the “Video adjustment menu”.
3. Select “1.Sensitivity adj of Tape sensors (Auto)” in the Video adjustment menu, and then press the “Enter” key.



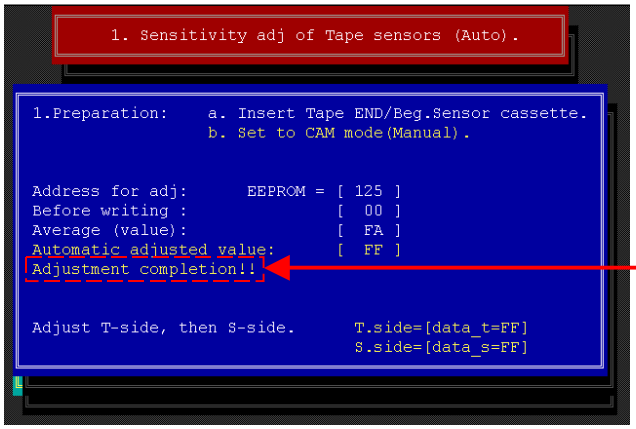
PRESS ENTER KEY.

Unnecessary open the door, PRESS ENTER KEY.

4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



In case of the “Tape END/Beg. Sensor cassette(VFK1217) is already inserted, PRESS ENTER KEY.

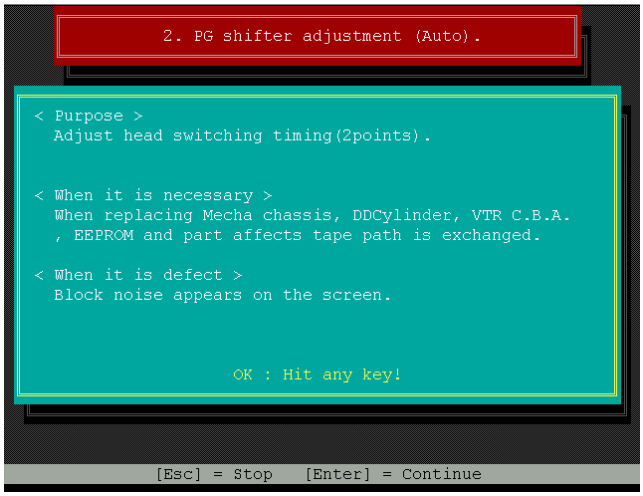


Please confirm this message appeared on screen, then adjustment is finished.

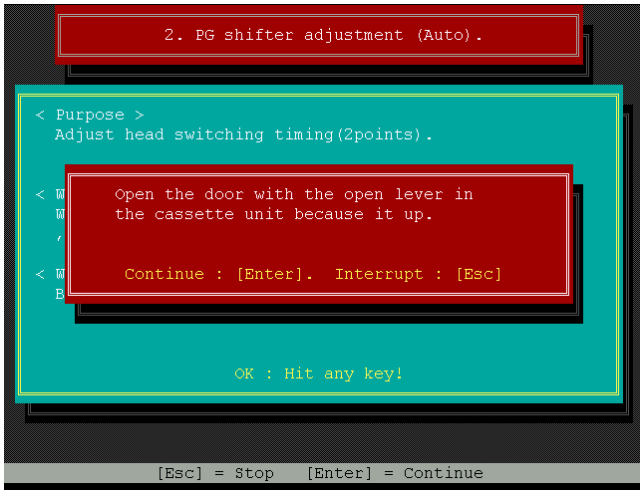
7-2. PG shifter Adjustment (AUTO)

This adjustment can be adjust automatically.

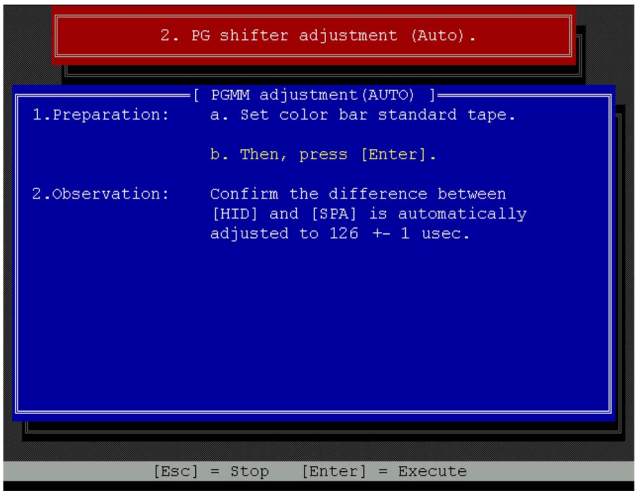
1. Connect the oscilloscope to “HID” and “SPA” on the VFK1308P.
2. Insert the DV color bar alignment tape(VFM3010EDS) into the Unit.
3. Open the “Video adjustment menu”.
4. Select “2.PG shifter adjustment (Auto)” in the Video adjustment menu, and then press the “Enter” key.
5. Set to VCR mode in AG-DVX100 follow the message ”Manually set to VCR mode.”, and then press the “Enter” key.



PRESS ENTER KEY.

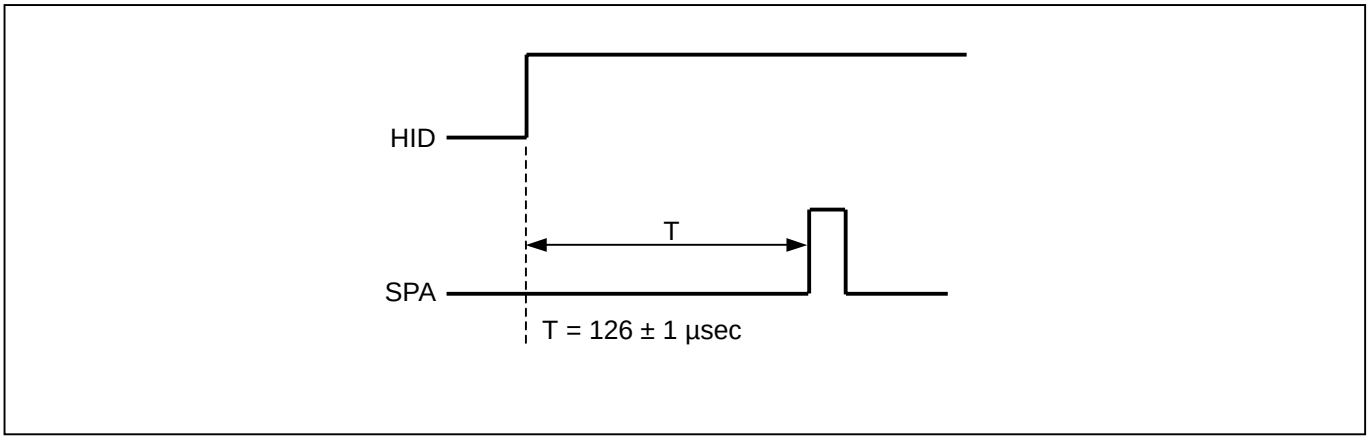


Unnecessary open the door, PRESS ENTER KEY.



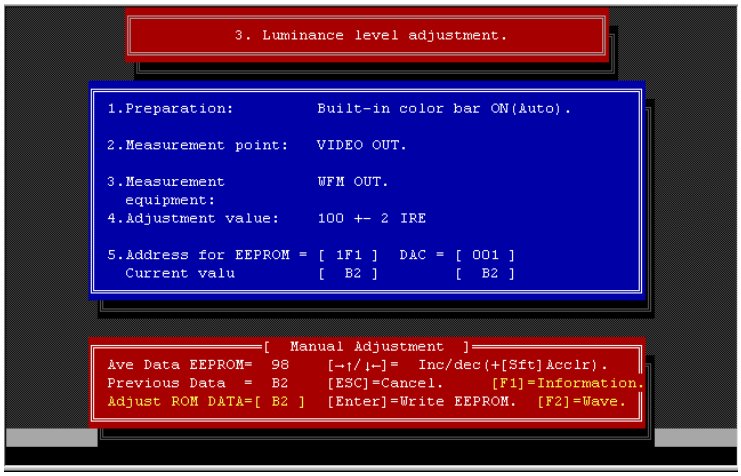
In case of the “DV color bar alignment tape (VFM3010EDS) is already inserted, PRESS ENTER KEY, then adjustment is started.

After finish adjustment, please confirm portion “T” is within the specification as shown in figure.



7-3. Luminance level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “3.Luminance level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



5. Adjust the Y level to become 100±2 IRE by press arrow keys.

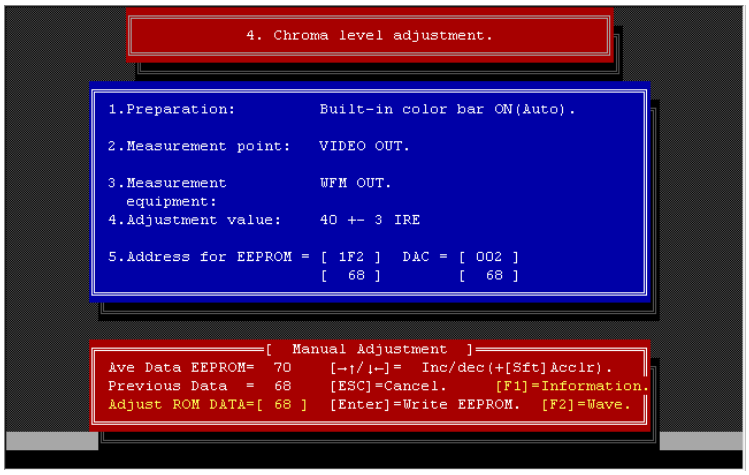
Note:

1) Y level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

7-4. Chroma level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “4.Chroma level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



5. Adjust the C level to become 40±3 IRE by press arrow keys.

Note:

1) C level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8. LCD ADJUSTMENT PROCEDURE

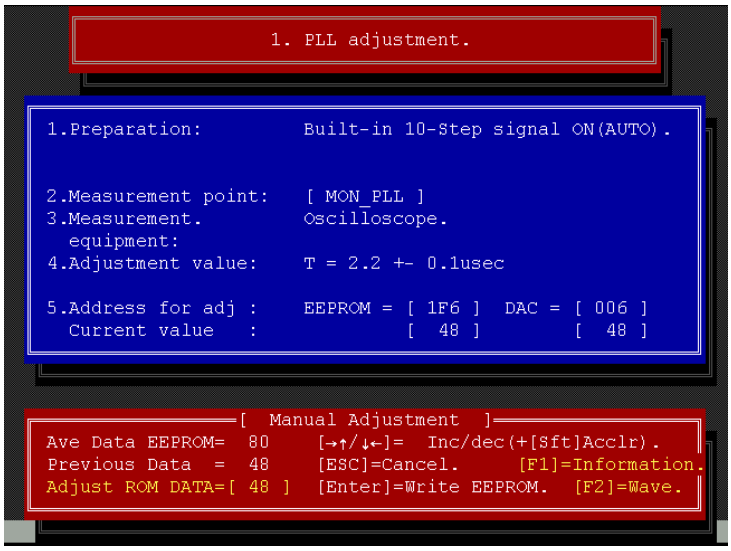
Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

Note: Set to CAMERA mode in AG-DVX100.

8-1. PLL Adjustment

1. Connect the oscilloscope to “NON_PLL” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.



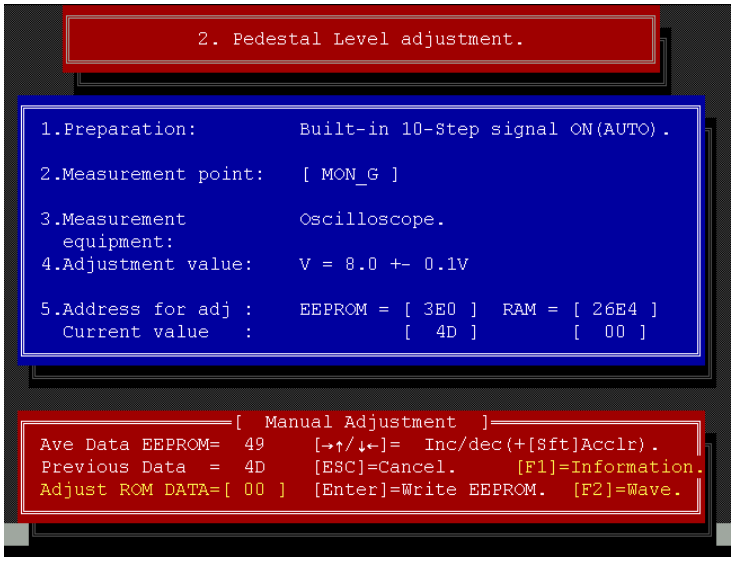
4. Adjust the width (T) to become 2.2±0.1µsec as shown in figure.

Note:

1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-2. Pedestal Level Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.



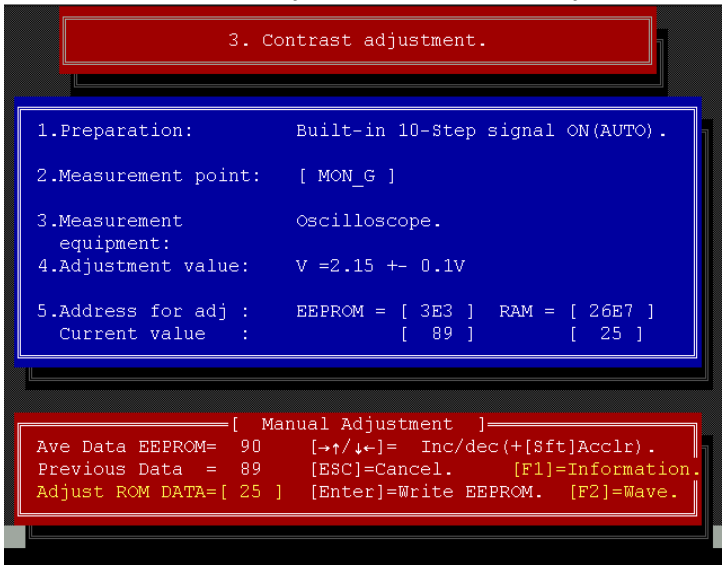
4. Adjust the differential amplitude both 0 step-level (portion “a” in figure) to become 8.0±0.1V as shown in figure.

Note:

1) Level (a) can be by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-3. Contrast Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “3.Contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.



4. Adjust the differential amplitude between 0 step-level and 7 step-level (portion “V” in figure) to become 2.15±0.1V as shown in figure.

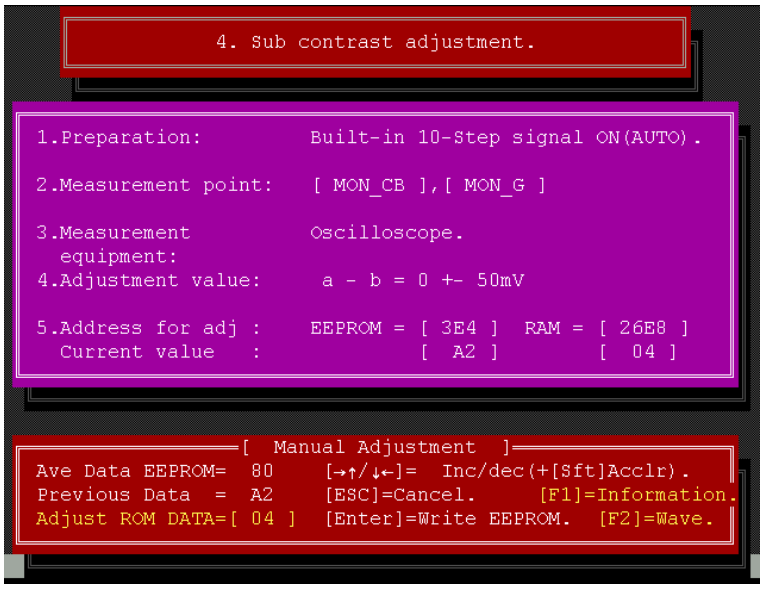
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-4. Sub contrast Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “4.Sub contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.

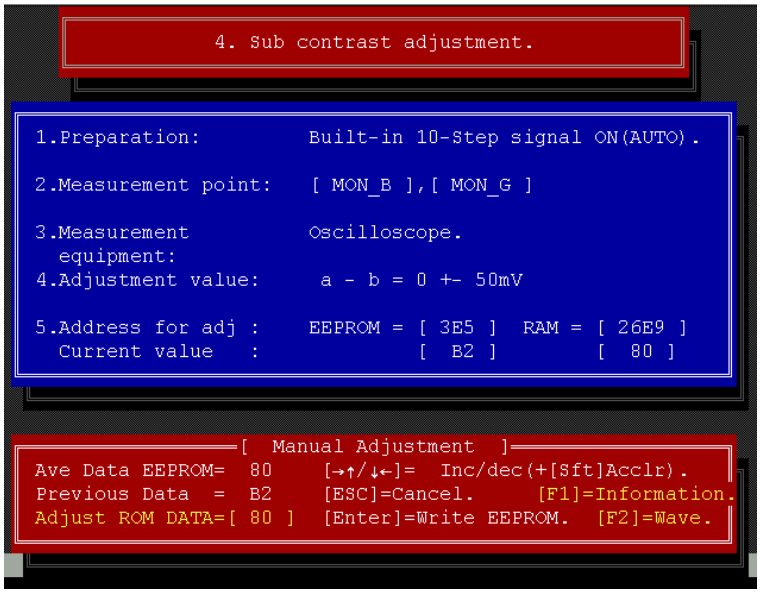


4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.



6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become 0±50mV as shown in figure.

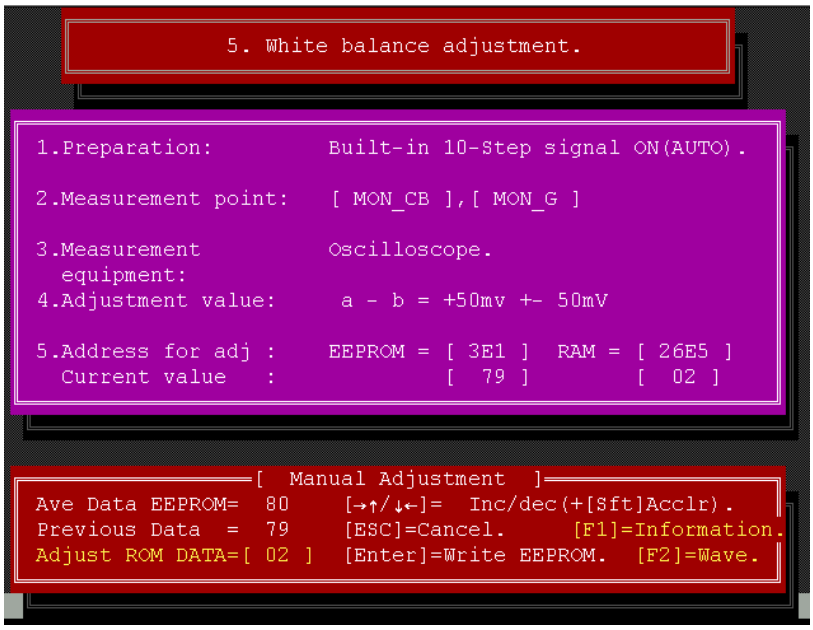
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-5. White balance Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “5.White balance adjustment” in the LCD adjustment menu, and then press the “Enter” key.

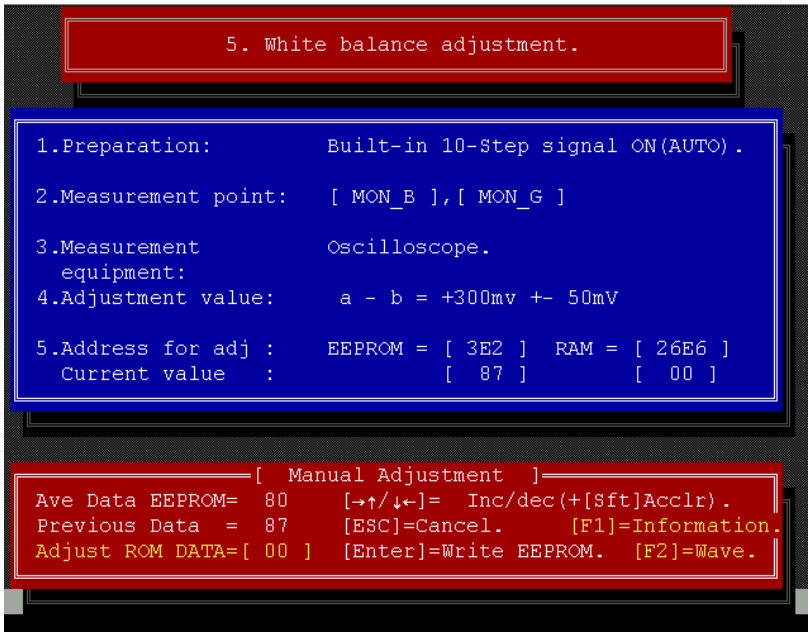


4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become +50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.



6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become +300mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

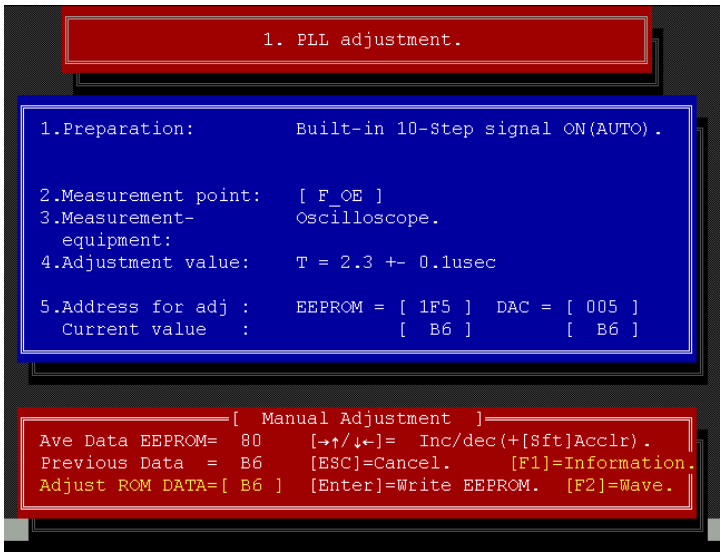
8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9. EVF ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.
Note: Set to CAMERA mode in AG-DVX100.

9-1. EVF PLL Adjustment

1. Connect the oscilloscope to “F_OE” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “1.PLL adjustment” in the EVF adjustment menu, and then press the “Enter” key.

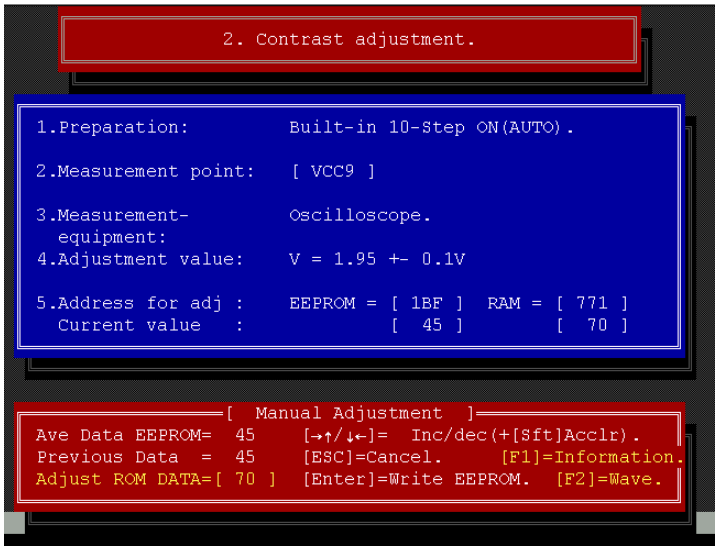


4. Adjust the width (T) to become 2.3±0.1µsec as shown in figure.

Note:
1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-2. EVF Contrast Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “2.Contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

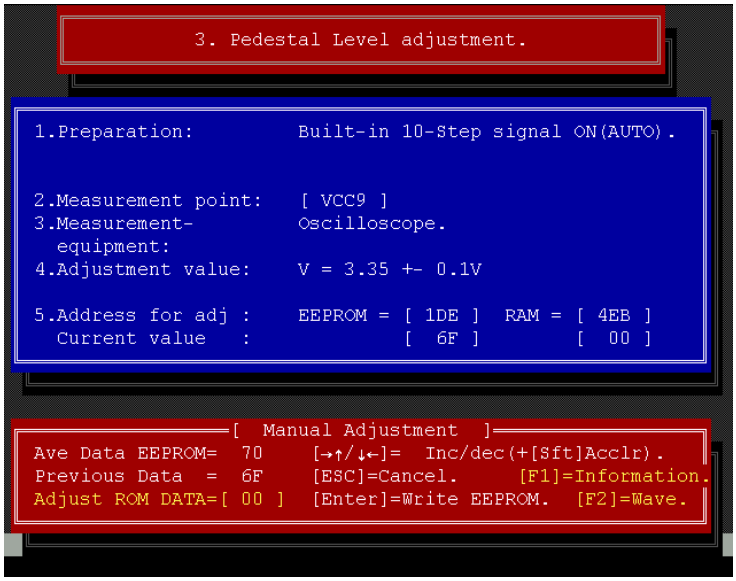


4. Adjust the differential amplitude between 1 step-level and 10 step-level (portion “V” in figure) to become 1.95±0.1V as shown in figure.

Note:
1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-3. EVF Pedestal Level Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “3.Pedestal Level adjustment” in the EVF adjustment menu, and then press the “Enter” key.



4. Adjust the differential amplitude both 10 step-level (portion “V” in figure) to become 3.35±0.1V as shown in figure.

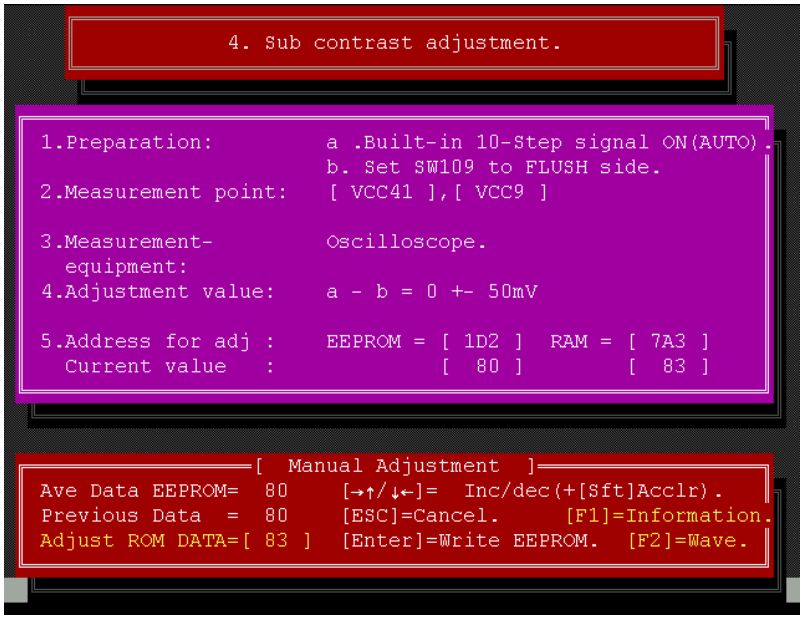
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-4. EVF Sub contrast Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “4.Sub contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

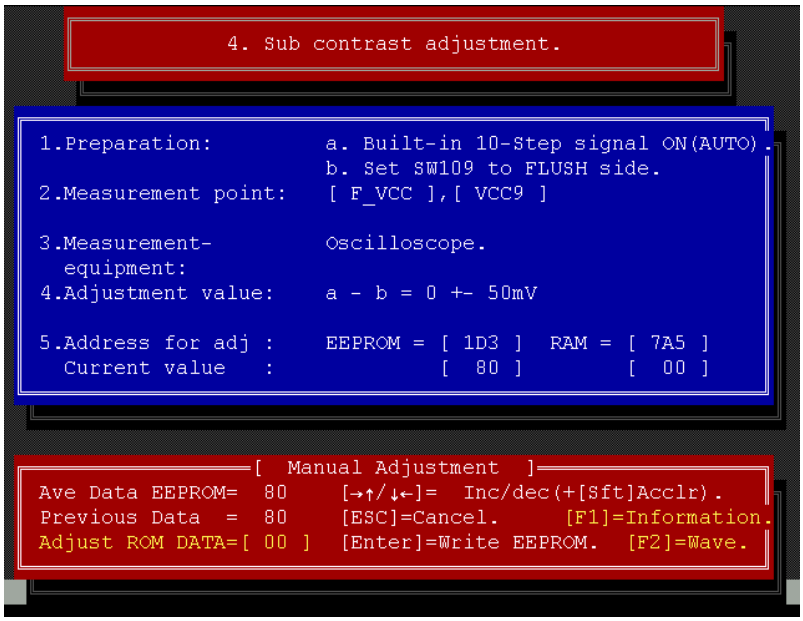


5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.



7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become 0±50mV as shown in figure.

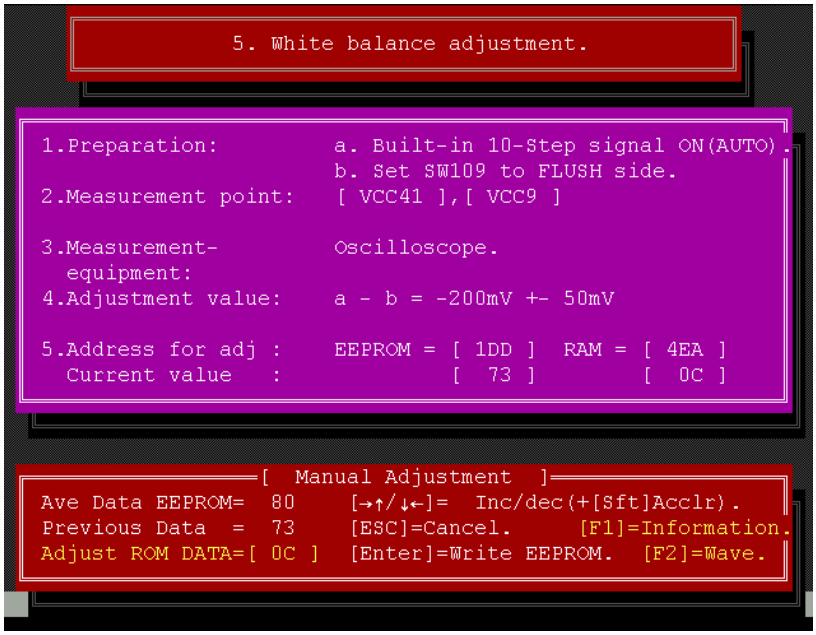
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-5. EVF White balance Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “5.White balance adjustment” in the EVF adjustment menu, and then press the “Enter” key.

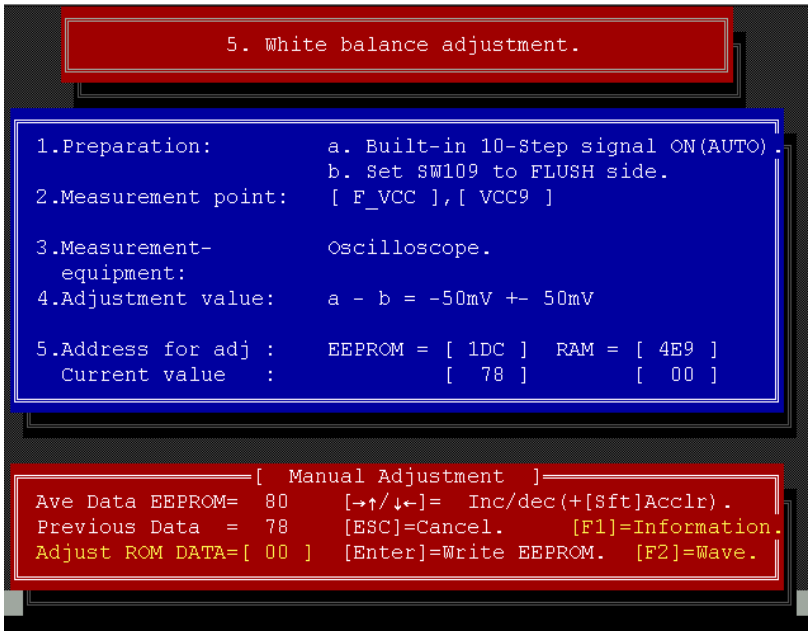


5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become -200mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.



7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become –50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.