MTV-63V6HN / MTV-63V6HP CAMERA INSTRUCTION

Dimension   (Unit : mm)


Video LENS	
P1	+9V
P2	N.C.
P3	VIDEO
P4	GND

DC-LENS	
P1	DUMP-
P2	DUMP+
P3	DRIVE
P4	GND
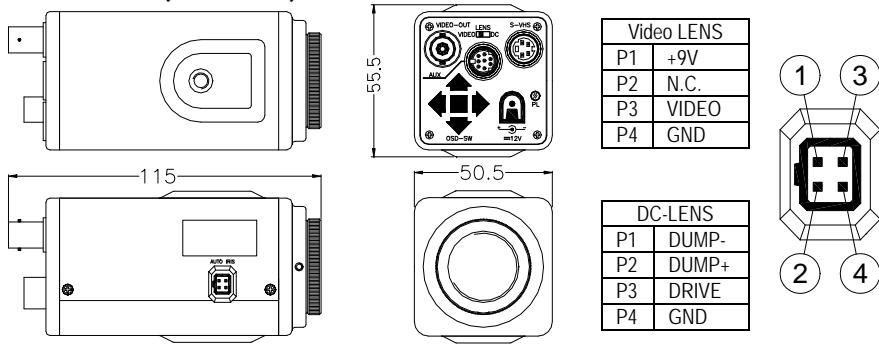
SPECIFICATION

MODE NO.		MTV-63V6HN	MTV-63V6HP
TV SYSTEM		NTSC	PAL
IMAGE SENSOR		1/3-inch CCD Image Sensor	
CCD TOTAL PIXELS		811(H) X 508(V)	795(H) X 596(V)
SCANNING SYSTEM		525 lines, 60 fields/sec	625 lines, 50 fields/sec
SYNC SYSTEM		Internal / VD-Lock / Ext-VBS (Select by OSD)	
MINIMUM ILLUMINATION	Legacy mode	0.8 Lux (F1.2 , 5600ºK 30 IRE)	
	Star light Mode	0.008 Lux (F 0.8 , 5600ºK 10 IRE)	
RESOLUTION		470 TVL / 580 TVL (Enhanced)	
WHITE BALANCE	Mode	ATW / AWC / FIX (Zero color rolling)	
	Range	3200 ~ 10000 ºK (2200 ~ 15000 ºK with S Filter)	
GAIN CONTROL	Mode	AGC (ON / OFF)	
	Range	0 ~ 18dB	
S / N RATIO		52dB (MIN) / 60dB (TYP) (AGC OFF)	
ELECTRONIC SHUTTER		1/60~1/120,000 sec.	1/50~1/120,000 sec.
AUTO IRIS		A.E.S. / DC / Video	
FLICKERLESS		SELECTABLE BY OSD MANUAL	
MIRROR FUNCTION		SELECTABLE BY OSD MANUAL	
B.L.C. FUNCTION		SELECTABLE BY OSD MANUAL	
DIGITAL ZOOM (2X)		SELECTABLE BY OSD MANUAL	
NEGATIVE IMAGE		SELECTABLE BY OSD MANUAL	
MASKING AREA		SELECTABLE BY OSD MANUAL	
AGC GAIN ADJUSTMENT		SELECTABLE BY OSD MANUAL	
PICTURE FREEZE		ON/OFF & Ext.-Trigger	
ALARM OUT		Motion Detect	
RS-485 I/F (No ID)		DIM connector	
PICTURE EHANCE		SELECTABLE BY OSD MANUAL	
HIGH LIGHT SUPPRESS		SELECTABLE BY OSD MANUAL	
COLOR BAR		ON / OFF (SELECTABLE BY OSD MANUAL)	
VIDEO OUTPUT		Composite 1.0V p-p at 75 ohm	
GAMMA CORRECTION		0.45 / 1.0 (SELECTABLE BY OSD MANUAL)	
OPERATION TEMPERATURE		-20℃ TO 50℃	
OPERATIONAL HUMIDITY		within 85% RH	
POWER SUPPLY		DC12V / 200mA	

＊The specifications and appearance of the product may changed without notice.

REAR PANEL
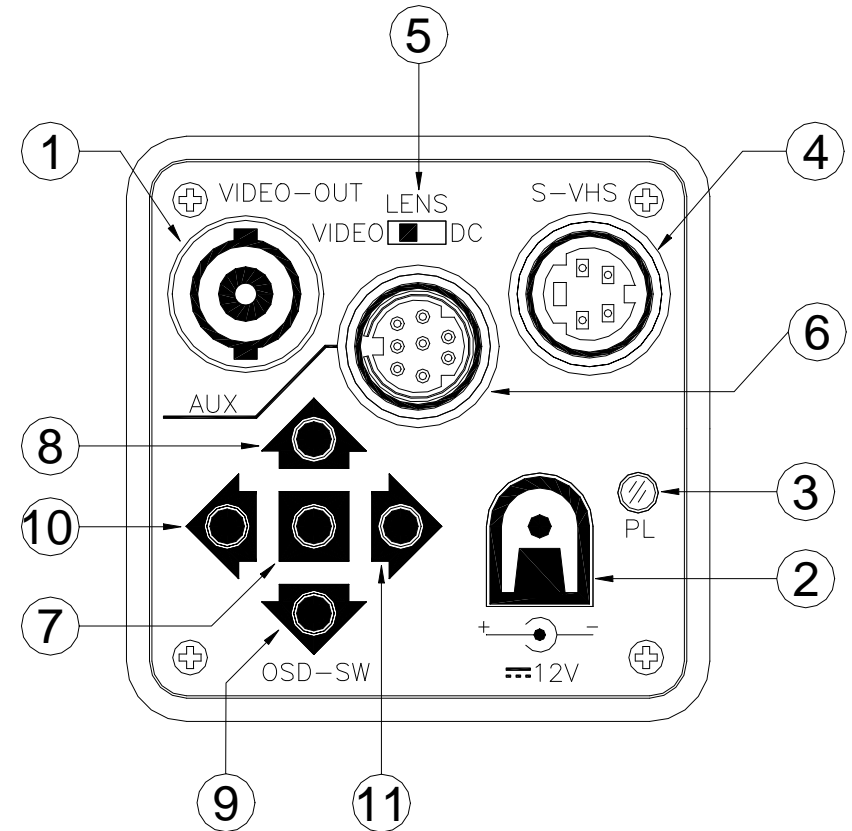
1	VIDEO OUTPUT
2	POWER INPUT
3	POWER ON INDEX LED
4	S-VHS Y/C OUTPUT
5	AUTO IRIS LENS SELECT SW.
6	AUX CONNECTOR
7	OSD-SW "ENTER"
8	OSD-SW "UP"
9	OSD-SW "DOWN"
10	OSD-SW "LEFT"
11	OSD-SW "RIGHT"

AUX CONNECTOR
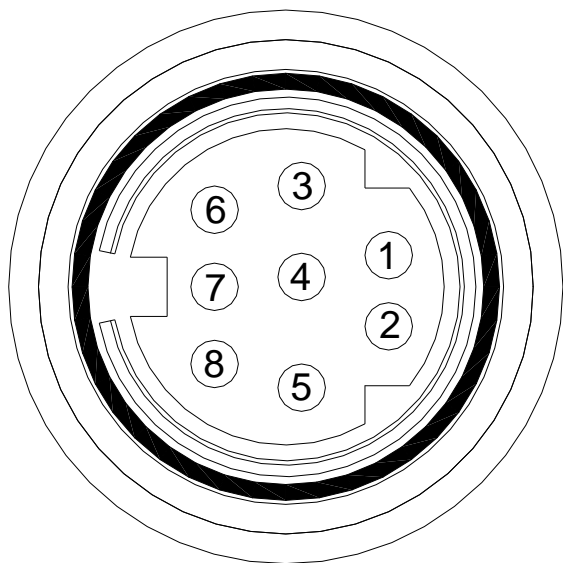
P1	485+	
P2	GND	RS-485 Connector TO PC
P3	485-	
P4	GND	
P5	ALARM-OUT	Open collector output
P6	GND	Max sink DC50V/30mA
P7	FREEZE Trigger-IN	Current Loop
P8	GND	DC12V/10mA

MTV-63V6 OSD MAMUAL

There are 5 push bottoms on rear panel, after push the center bottom for 2 second, a pretty menu will be pop-up on your screen.
You may now push "up" or "down" bottom to browse around menu.

1. TITLE
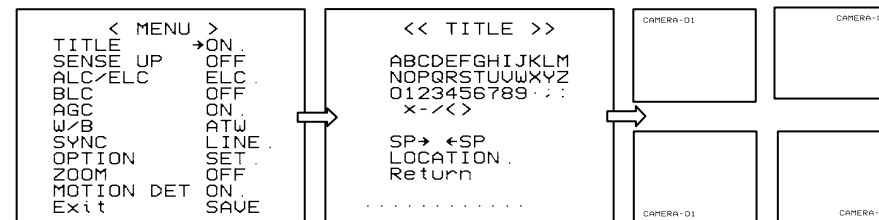
You can choose a name for this camera and display it on the monitor
Move cursor to TITLE row, push right bottom to change from OFF mode to ON mode. Push center bottom one more time, you will see the TITLE menu. Decide the name of this camera. Move cursor around alphabetical, push center bottom to enter the character you choose, after finished editing, move cursor to LOCATION row then push center bottom once. The name you choose is now on the screen. You may push , up, down, left, right, bottom to move the Title name at the screen four corners. Push center bottom once to go back to TITEL menu. Move cursor again to "Return" in the menu, push center bottom once more to return to main Menu.

2. SENSE UP
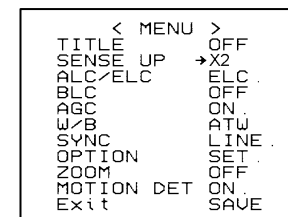
You can increase sensitivity of this camera by turning frame integration mode on.
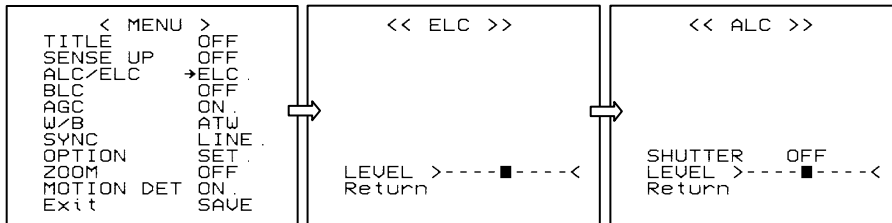Move cursor to "SENSE UP" row. Push "right" or "left" bottom to choose how many time of frame integration you want, from X2,X4,X6,X8,X12,X16,X24,X32,X48,X96,X128, times.
The Minimum illumination of the camera will be increased respectively.
let you see through star light night.
Due to the nature of frame integration as sensitivity is increased the frame refresh rate will be decreased respectively

3. ALC / ELC

```
   < MENU >              << ELC >>              << ALC >>
TITLE      OFF
SENSE UP   OFF
ALC/ELC   →ELC.
BLC        OFF
AGC        ON .
W/B        ATW
SYNC       LINE .
OPTION     SET .        SHUTTER   OFF
ZOOM       OFF          LEVEL >----■----<       SHUTTER   OFF
MOTION DET ON .         Return                  LEVEL >----■----<
Exit       SAVE                                 Return
```
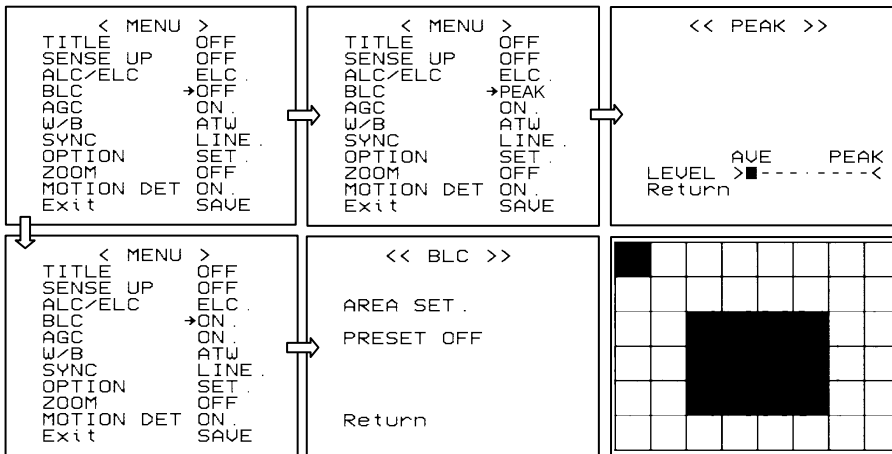
To choose variety of exposure mode, there are two exposure control mode available on this camera. **ELC mode:**
Move cursor to ALC/ELC row, push right bottom to select ELC mode. Push center bottom to enter ELC menu. In the ELC menu you may move "LEVEL" bar around to choose different style of exposure.

ALC mode:
Move cursor to ALC/ELC row, push right bottom to select ALC mode. Push center bottom to enter ALC menu. In the ALC menu you can adjustable DC-IRIS Lens "LEVEL" and select fix shutter speed from, OFF,1/100,1/120,1/180,1/250,1/350,1/500,1/750,1/1000,1/1500,1/2000,1/3000,1/4000,1/6000,1/8000, 1/12000, sec.

4. BLC

```
   < MENU >                 < MENU >              << PEAK >>
TITLE      OFF           TITLE      OFF
SENSE UP   OFF           SENSE UP   OFF
ALC/ELC    ELC.          ALC/ELC    ELC .
BLC       →OFF           BLC       →PEAK
AGC        ON .          AGC        ON .
W/B        ATW           W/B        ATW
SYNC       LINE .        SYNC       LINE .
OPTION     SET .         OPTION     SET .
ZOOM       OFF           ZOOM       OFF              AVE      PEAK
MOTION DET ON .          MOTION DET ON .          LEVEL >■------<
Exit       SAVE          Exit       SAVE          Return
```

```
   < MENU >                << BLC >>
TITLE      OFF
SENSE UP   OFF
ALC/ELC    ELC.          AREA SET .
BLC       →ON .
AGC        ON .
W/B        ATW           PRESET OFF
SYNC       LINE .
OPTION     SET .
ZOOM       OFF
MOTION DET ON .          Return
Exit       SAVE
```

Move cursor to BLC row push right bottom can be select PEAK mode and ON mode.
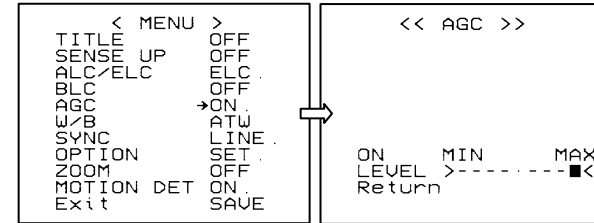**PEAK mode:** (Push center bottom to enter PEAK menu)
In the PEAK menu you may move "LEVEL" bar to choose different strength of **BLC**
ON mode: (Push center bottom to enter BLC menu)
In the BLC sub-menu, move cursor to PERSET row, push right bottom to choose OFF mode, move cursor to AREA SET row push center bottom once to enter 48 zone programming screen.
Now you will see a 8 by 6 = 48 zone lattice, move cursor around to any block push center bottom   once to turn the block gray (gray= chosen block), move to another location and repeated above step till all block is programmed properly. The effect is affected immediately, push center bottom for 2 sec. to escape from 48zone screen, move cursor to "Return" row push center bottom return to main menu.
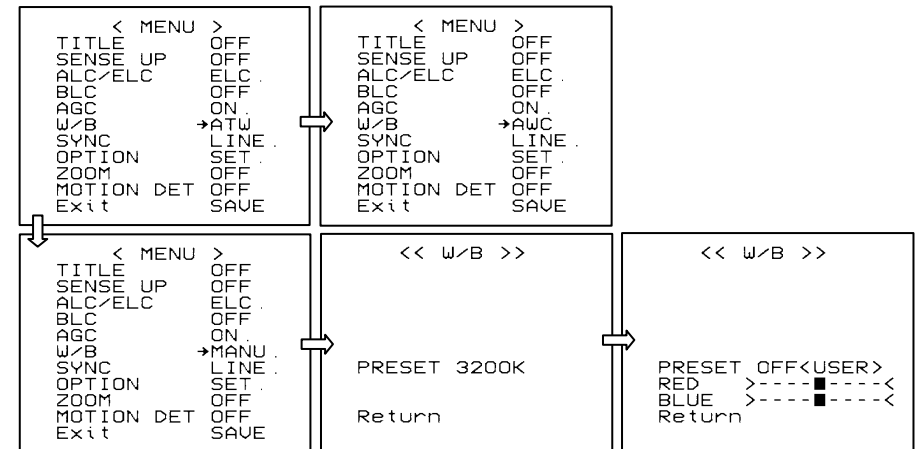
5. AGC

```
   < MENU >              << AGC >>
TITLE      OFF
SENSE UP   OFF
ALC/ELC    ELC.
BLC        OFF
AGC       →ON .
W/B        ATW
SYNC       LINE .         ON    MIN     MAX
OPTION     SET .        LEVEL >-------■<
ZOOM       OFF          Return
MOTION DET ON .
Exit       SAVE
```

Move cursor to AGC row push right bottom can be select OFF mode and ON mode.
ON mode: (Push center bottom to enter AGC menu)
In the AGC menu you may move "LEVEL" bar to choose different AGC gain.

6. W / B

```
   < MENU >                 < MENU >
TITLE      OFF           TITLE      OFF
SENSE UP   OFF           SENSE UP   OFF
ALC/ELC    ELC.          ALC/ELC    ELC .
BLC        OFF           BLC        OFF
AGC        ON .          AGC        ON .
W/B       →ATW           W/B       →AWC
SYNC       LINE .        SYNC       LINE .
OPTION     SET .         OPTION     SET .
ZOOM       OFF           ZOOM       OFF
MOTION DET OFF           MOTION DET OFF
Exit       SAVE          Exit       SAVE
```

```
   < MENU >              << W/B >>               << W/B >>
TITLE      OFF
SENSE UP   OFF
ALC/ELC    ELC.
BLC        OFF
AGC        ON .
W/B       →MANU.                                PRESET OFF<USER>
SYNC       LINE .        PRESET 3200K           RED  >----■----<
OPTION     SET .                                BLUE >----■----<
ZOOM       OFF                                  Return
MOTION DET OFF           Return
Exit       SAVE
```

Move cursor to W / B row push right bottom can be select ATW mode, AWC mode, MANU mode.
ATW mode: (Auto Trace White Balance)
According to the current environmental color to automatically adjustment of "White Balance"
AWC mode: (One Push Auto White Balance)
To fix the current environmental (Subject) color as a standard "White Balance"
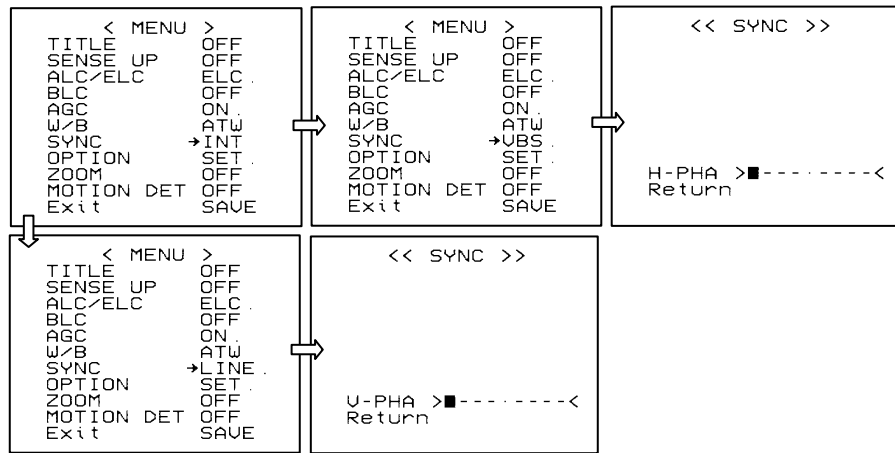(Push center bottom again to execute another color setting)
MANU mode: (White Balance Manually)
Push center bottom to enter W / B menu, Push "right" or "left" bottom to select / PRESET 5600°K / PRESET 3200°K / PRESET OFF<USER>.
In the PRESET OFF<USER> state can be adjustment RED color and BLUE color by manual.
Move cursor to "Return" row and push the center bottom to get back to the MAIN MENU.

7. SYNC

```
   < MENU >              < MENU >            << SYNC >>
TITLE      OFF         TITLE      OFF
SENSE UP   OFF         SENSE UP   OFF
ALC/ELC    ELC.        ALC/ELC    ELC.
BLC        OFF         BLC        OFF
AGC        ON.         AGC        ON.
W/B        ATW         W/B        ATW
SYNC      →INT         SYNC      →VBS.      H-PHA >■---·----<
OPTION     SET.        OPTION     SET.      Return
ZOOM       OFF         ZOOM       OFF
MOTION DET OFF         MOTION DET OFF
Exit       SAVE        Exit       SAVE
```

```
   < MENU >             << SYNC >>
TITLE      OFF
SENSE UP   OFF
ALC/ELC    ELC.
BLC        OFF
AGC        ON.
W/B        ATW
SYNC      →LINE.
OPTION     SET.
ZOOM       OFF        V-PHA >■---·----<
MOTION DET OFF        Return
Exit       SAVE
```

Move cursor to SYNC row push right bottom can be select INT mode, VBS mode, LINE mode.

INT mode:

Camera is synchronization by internal sync-signal.

VBS mode:

Camera is synchronization by external input video signal.

Push center bottom to enter SYNC mamu, in the SYNC menu you can adjustable phase for horizontal.
Move cursor to "Return" row and push the center bottom to get back to the MAIN MENU.
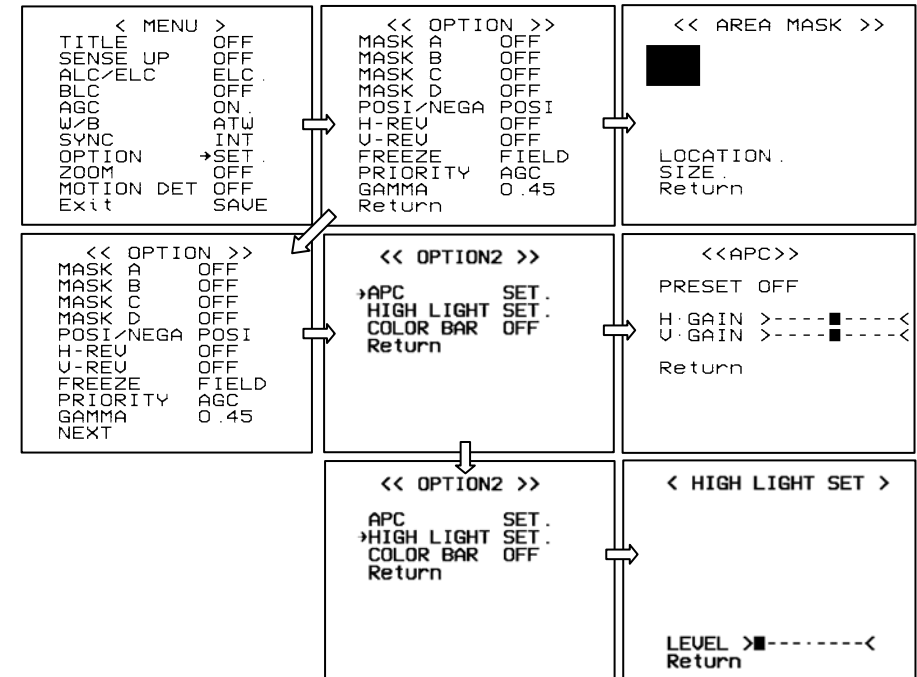
LINE mode:

Camera is synchronization by AC-LINE sync-signal.

Push center bottom to enter SYNC mamu, in the SYNC menu you can adjustable phase for vertical.
Move cursor to "Return" row and push the center bottom to get back to the MAIN MENU.

8. OPTION

```
   < MENU >            << OPTION >>        << AREA MASK >>
TITLE      OFF       MASK A      OFF
SENSE UP   OFF       MASK B      OFF          ■
ALC/ELC    ELC.      MASK C      OFF
BLC        OFF       MASK D      OFF
AGC        ON.       POSI/NEGA POSI
W/B        ATW       H-REV       OFF
SYNC       INT       V-REV       OFF       LOCATION.
OPTION    →SET.      FREEZE    FIELD       SIZE.
ZOOM       OFF       PRIORITY    AGC       Return
MOTION DET OFF       GAMMA      0.45
Exit       SAVE      Return
```

```
  << OPTION >>         << OPTION2 >>        <<APC>>
MASK A      OFF
MASK B      OFF      →APC        SET.    PRESET OFF
MASK C      OFF       HIGH LIGHT SET.
MASK D      OFF       COLOR BAR   OFF    H·GAIN >----■----<
POSI/NEGA POSI       Return             V·GAIN >----■----<
H-REV       OFF
V-REV       OFF                         Return
FREEZE    FIELD
PRIORITY    AGC
GAMMA      0.45
NEXT
```

```
  << OPTION2 >>       < HIGH LIGHT SET >
 APC        SET.
→HIGH LIGHT SET.
 COLOR BAR   OFF
 Return

                      LEVEL >■--------<
                      Return
```

Move cursor to OPTION row push center bottom to enter OPTION menu.
There are 4 mask areas (MASK A,B,C,D),POSI/NEGA, H-REV, V-REV, FREEZE, PRIORITY, GAMMA, APC SET, HIGH LIGHT SET, COLOR BAR function can be selected.

MASK function: (Preset is at OFF condition)

Push up / down bottom to select mask area, then push right / left bottom to select mask area ON/OFF.
Select MASK A (MASK B, MASK C, MASK D) / ON, it will show a square zone on the picture.
Push center bottom to enter the next setting page AREA MASK, on AREA MASK page, by up / down Bottom to select LOCATION and SIZE mode then push center bottom to enter the adjustment mode.
Push up / down bottom and right / left bottom select the location and size for the masking zone.
Push center bottom to get back to the previous page.

POSI/NEGA function: (Preset is at POSI condition)

Move cursor to POSI/NEGA row. Then push right or left bottom to select Positive / Negative effects.

H-REV function: (Preset is at OFF condition)

Move cursor to H-REV row. Then push right or left bottom to select ON (Mirror effects) / OFF (Normal).

V-REV function: (Preset is at OFF condition)

Move cursor to V-REV row. Then push right or left bottom to select ON(Vertical Reverse)/OFF(Normal).

FREEZE function: (Preset is at FIELD condition)

Move cursor to FREEZE row. Then push right or left bottom to select FIELD(image freeze in field mode) / FRAME(image freeze in frame mode).

PRIORITY function: (Preset is at AGC condition)

Move cursor to PRIORITY row. Then push right or left bottom to select AGC / SENSE

GAMMA function: (Preset is at 0.45 condition)

Move cursor to GAMMA row. Then push right or left bottom to select gamma 0.45 / gamma 1

OPTION2

Move cursor to "Return" row. Then push right or left bottom to select NEXT, then push center bottom enter to OPTION 2 menu page.

APC SET function:

Move cursor to APC SET row, push center bottom to enter APC menu page, in the page can be adjust picture enhance level.
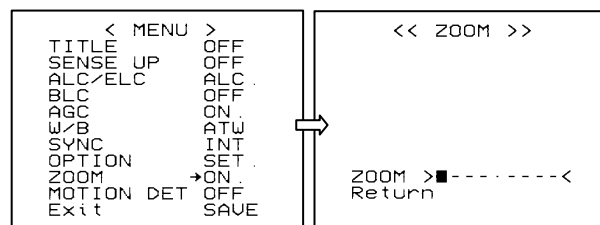
HIGH LIGHT SET function:

Move cursor to HIGH LIGHT SET row, push center bottom to enter HIGH LIGHT SET menu page, in the page can be adjust picture high light part depressing level.

COLOR BAR function: (Preset is at OFF condition)

Move cursor to COLOR BAR row. Then push right or left bottom to select ON (Display color bar) / OFF (Display normal image).
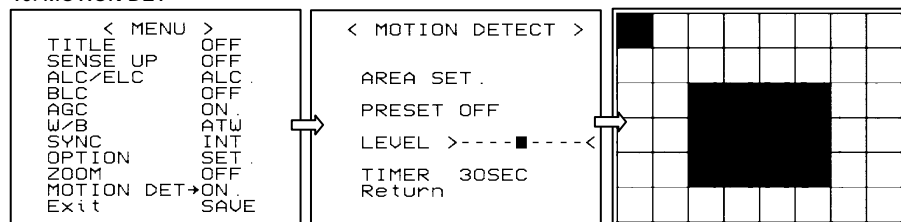
9. ZOOM

```
      < MENU >                    << ZOOM >>
TITLE        OFF
SENSE UP     OFF
ALC/ELC      ALC.
BLC          OFF
AGC          ON.
W/B          ATW
SYNC         INT
OPTION       SET.
ZOOM       →ON.             ZOOM >■---·-----<
MOTION DET OFF             Return
Exit         SAVE
```

Move cursor to ZOOM row push right bottom can be select OFF mode and ON mode.

ON mode: (Push center bottom to enter ZOOM menu)

In the ZOOM menu you may move "ZOOM" bar to choose different ZOOM effects (Maximum: 2X).

10. MOTION DET

```
      < MENU >           < MOTION DETECT >
TITLE        OFF
SENSE UP     OFF
ALC/ELC      ALC.           AREA SET.
BLC          OFF
AGC          ON.            PRESET OFF
W/B          ATW
SYNC         INT            LEVEL >----■----<
OPTION       SET.
ZOOM         OFF            TIMER  30SEC
MOTION DET→ON.             Return
Exit         SAVE
```

Move cursor to "MOTION DET" row push right bottom can be select OFF mode and ON mode.

ON mode: (Push center bottom to enter MONTION DETECT menu)

In the MONTION DETECT menu page, move cursor to PERSET row, push right bottom to choose OFF mode, move cursor to AREA SET row push center bottom once to enter 48 zone programming screen. Now you will see a 8 by 6 = 48 zone lattice, move cursor around to any block push center bottom once to turn the block gray (gray= chosen block), move to another location and repeated above step till all block is programmed properly. The effect is affected immediately, push center bottom for 2 sec. to escape from 48zone screen.

Move cursor to "LEVEL" row push "right" / "left" bottom select motion detect sensitive.

Move cursor to "TIMER" row push "right" / "left" bottom select alarm output time,10sec.,30sec.,60sec.

Move cursor to "Return" row and push the center bottom to get back to the MAIN MENU.