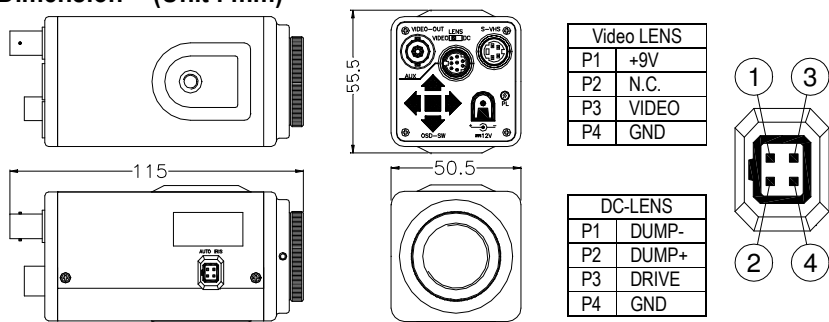


# MTV-12V6H-EX CAMERA INSTRUCTION

Dimension (Unit : mm)

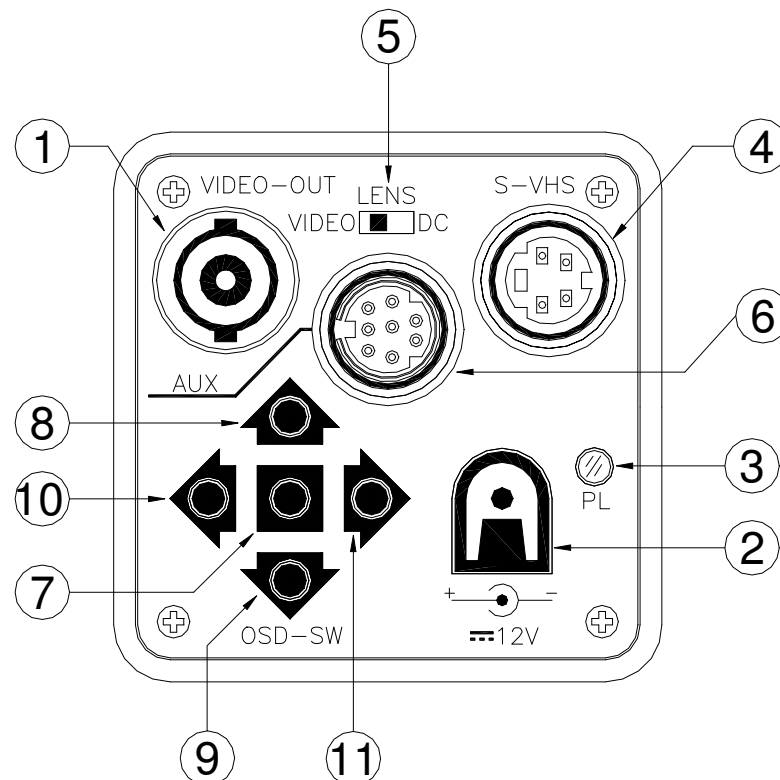


## SPECIFICATION

| MODE NO.              | MTV-12V6HE-EX                                | MTV-12V6HC-EX                    |
|-----------------------|----------------------------------------------|----------------------------------|
| TV SYSTEM             | EIA                                          | CCIR                             |
| IMAGE SENSOR          | 1/2-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) |                                  |
| ILLUMINATION          | Legacy mode                                  | 0.02 Lux (F1.2, 5600°K 30 IRE)   |
|                       | Star light Mode                              | 0.0002 Lux (F1.2, 5600°K 10 IRE) |
| RESOLUTION            | 600 TVL                                      |                                  |
| WHITE BALANCE         | Mode                                         | ---                              |
|                       | Range                                        | ---                              |
| 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)    | Min.DIN 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°C TO 50°C                                |                                  |
| OPERATIONAL HUMIDITY  | within 85% RH                                |                                  |
| POWER SUPPLY          | DC12V / 200mA                                |                                  |

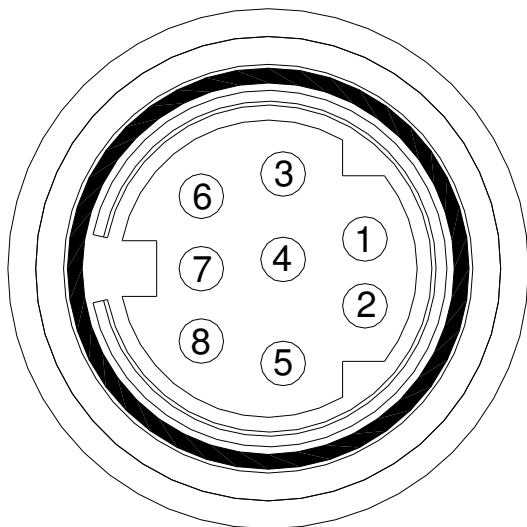
\* The specifications and appearance of the product may changed without notice.

## 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



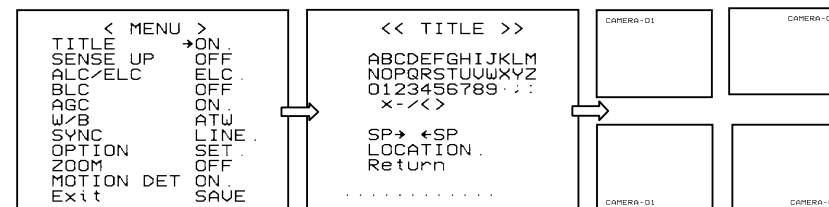
|    |                   |                        |
|----|-------------------|------------------------|
| P1 | 485+              | RS-485 Connector TO PC |
| P2 | GND               |                        |
| P3 | 485-              |                        |
| P4 | GND               |              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

## OSD MANUAL

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.

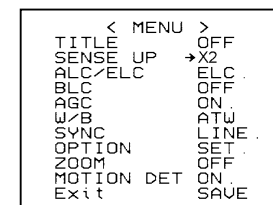
### 1. TITLE



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.

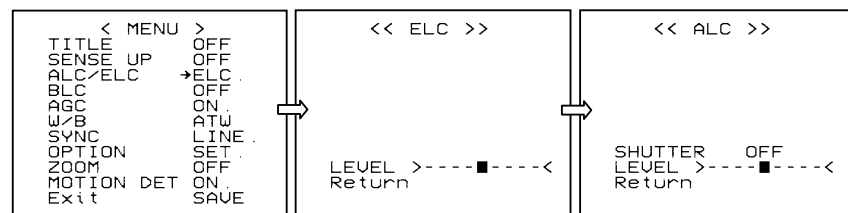
Move cursor to "SENSE UP" row. Push "right" or "left" bottom to choose how many time of frame integration you want, from X2,X4,X6,X8,X12,X16,X24,X32,X48,X96,X128, times.

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



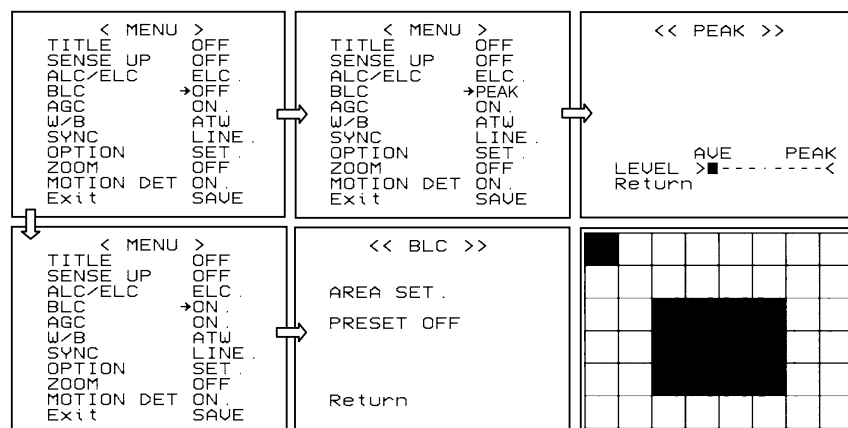
To choose variety of exposure mode, there are two exposure control mode available on this camera. **ELC mode:**

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



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)

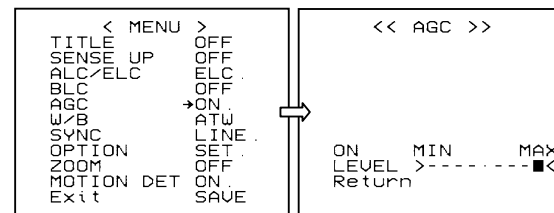
In the PEAK menu you may move "LEVEL" bar to choose different strength of BLC

**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

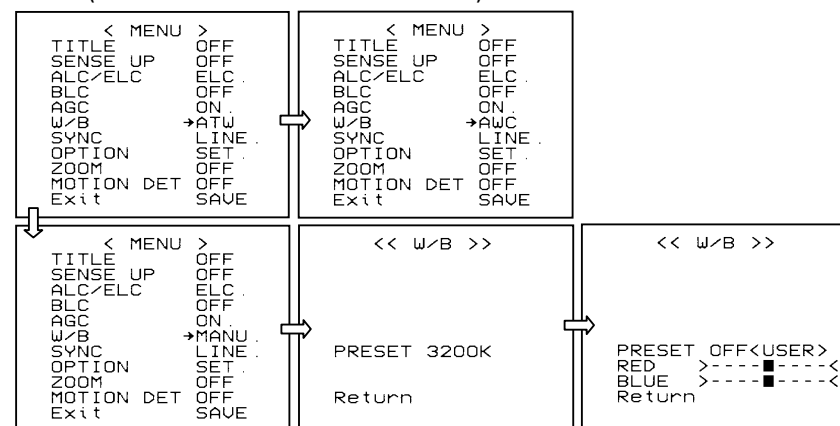


Move cursor to AGC row push right bottom can be select OFF mode and ON mode.

**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 (MONOCHROME CAMERA IS NO FUNCTION)



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)

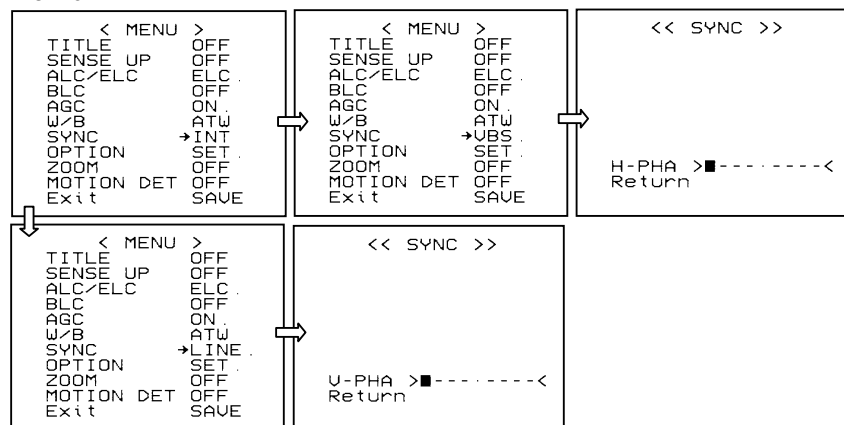
**MANU mode:** (White Balance Manually)

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



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 menu, 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.

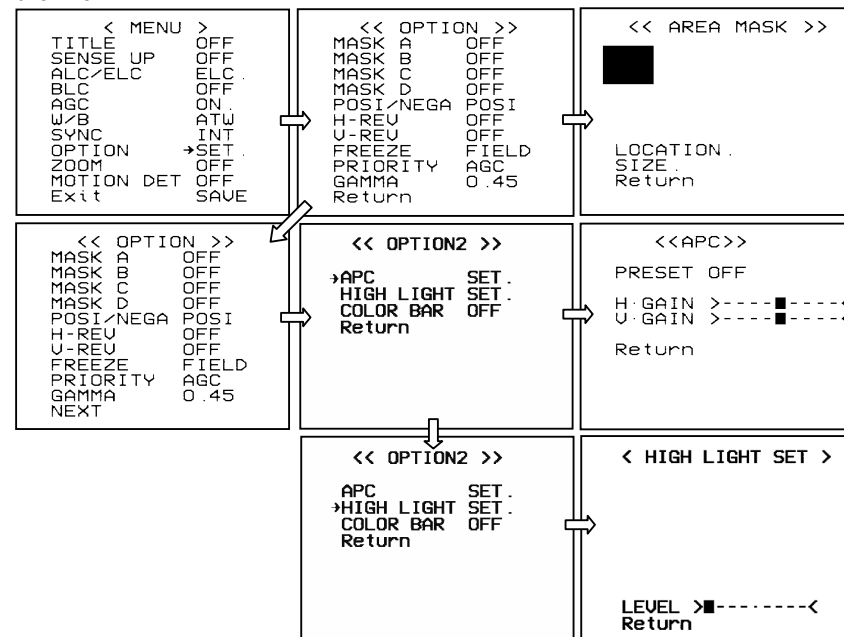
### LINE mode:

Camera is synchronization by AC-LINE sync-signal.

Push center bottom to enter SYNC menu, 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



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.

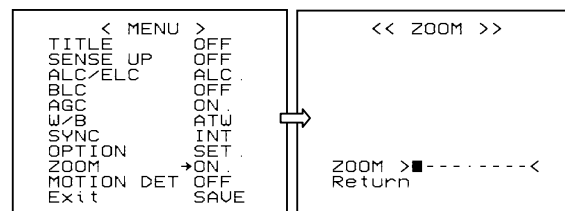
### HIGH LIGHT SET function:

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

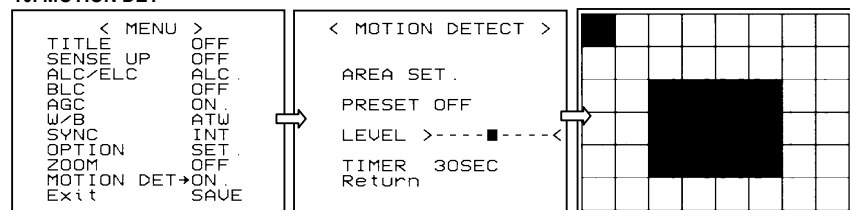


Move cursor to ZOOM row push right bottom can be select OFF mode and ON mode.

### 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



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.