

SPECIFICATION

Model No.	HTC-96H36
IMAGE SENSOR	1/3" 960H Color CCD Sensor
EFFECTIVE PIXELS	976(H) X 582(V)
SYNC. FORMAT	INTERNAL
RESOLUTION	HORIZONTAL 700TVL
VIDOE OUTPU T	1.0V (P-P) NTSC COMPOSITE, 75Ω
MIN. ILLUMINATION	0.00LUX (IR LED: On)
IR CONFIGURATION	42 IR LEDs (850nM)
S/N RATIO	52dB (AGC OFF, WEIGHT OFF) OR MORE
OSD	BUILT-IN
AGC	OFF / LOW / MIDDLE / HIGH SELECTABLE
SHUTTER	AUTO / FLK / MANUAL / 1/50
SENS-UP	OFF / AUTO (X2~X256)
BRIGHTNESS	1~100 STEPS (LEVEL ADJUSTABLE)
D-WDR	ON/OFF Level Selectable
BLC	LOW / MIDDLE / HIGH SELECTABLE
HSBLC	LOW / MIDDLE / HIGH SELECTABLE
WHITE BALANCE	ATW / AWB / AWC-SET / MANUAL
DAY / NIGHT	COLOR / AUTO / EXT / B/W SELECTABLE
SMART 3DNR	ON/ OFF SELECTABLE
D-EFFECT	FREEZE / MIRROR/ D-ZOOM / NEG. IMAGE
MOTION DET.	4 AREA
PRIVACY MASKING	8 AREA
D-ZOOM	ON / OFF (X32)
SMART D-ZOOM	ON / OFF (X5)
DIS	ON / OFF SELECTABLE
LESN SHADING CORRECT.	ON / OFF SELECTABLE
LENS	FIXED 3.6MM
POWER SOURCE	12VDC / 24VAC (OPTIONAL)
POWER CONSUMPTION.	650mA @12VDC
OPERATIONAL TEMP.	-10Deg. C ~ +50 Deg. C RH95% MAX.
STORAGE TEMP.	-20Deg. C ~ +50 Deg. C RH95% MAX.
WEIGHT	0.5Kg

GENERAL FEATURES

- 1. HORIZONTAL 700TVL RESOLUTION
- 2. 42 IR LEDs CONFIGURATION WITH 40MTR IR DISTANCE
- 3. DAY / NIGHT
- 4. SMART NOISE REDUCTION
- 5. SENSE-UP X256
- 6. D-WDR (WIDE DYMAIC RANGE)
- 7. DEFOG
- 8. SMART DIGITAL ZOOM
- 9. MOTION DETECTION & PRIVACY MASKING
- 10. DIS (DIGITAL IMAGE STABLIZER)

OSD CONTROL & MENU TREE

 Push the joystick S/W to pop up 0SD Menu and set up your desired value.





1): 2nd Video Out 2): Set/Menu

Lens and Internal 3-Axis Bracket Control



- 2ND Pan(Lens) Location
- 1. Remove IR LED cover and set the desired Pan Location.
- 2. Set the Tilt location by loosening the side screw manually.
- 3. Set the $2^{\mbox{\scriptsize nd}}$ Pan (Lens)location with the lens holder.
- 4. Tighten the side screw manually and recover the IR LED cover.
- 5. Set the desired zoom and focus and put the dome cover.

OSD MENU TREE & MAIN MENU

LENS
● DC LENS ● MANUAL ● VIDEO
EXPOSURE
● SHUTTER ● AGC ● SENS-UP ● RETURN
—— BACKLIGHT
● OFF ● D-WDR ● BLC ● HSBLC
WHITE BAL.
● ATW ● AWB ● AWC->SET ● MANUAL
DAY & NIGHT
● COLOR ● AUTO ● EXT ● B/W
—— SMART 3DNR
■ VALUE ■ SMART NR ■ SMART LEVEL ■ SENSITIVITY ■ RETURN
F-DNR
● OFF ● AUTO ● MANUAL
FUNCTION
 MOTION PRIVACY COMM ADJ. SYNC D-EFFECT IMAGE ADJ. LANGUAGE RETURN
EXIT

1) LENS < DC LENS / MANUAL>

- Recommend Lens set as the designated camera default

DC LENS <Brightness / IRIS Speed / Return>

Brightness: 1-100 steps adjustable

Iris Speed: If necessary, control Iris speed (1-5 steps)

MANUAL < Brightness / Return>





SETUP Menu Functions

2) EXPOSURE

<SHUTTER / AGC / SENS-UP / RETURN>

SHUTTER:

Adjust shutter settings: Auto / FLK / Manual / 1/50 /1/60

- AUTO mode adjust shutter speed automatically.
- FLK mode reduces on-screen flickering.
- Manual mode allows you to adjust the shutter speed from 1/50,1/60, 1/100000 ~X2~X256.

AGC (Auto Gain Control): Off / Low / Middle / High

- Control Gain Noise to get proper image quality.
- Set AGC Mode as High to get brighter image but more noises of the picture.

SENS-UP: On / Off

 Automatically detect light level and maintains a clear picture. Set a desired level upto X256.

Return

3) BACKLIGHT

<SHUTTER / AGC / SENS-UP / RETURN>

D- WDR: (Wide Dynamic Range):

- To distinguish an object in both bright and dare areas
- Set desired Low & High level. 0~15 level selectable
- Return : Return the main menu.

BLC: Deliver a distinctive subject and background at the same time, even when the subject is in backlight

- Value : Low / Middle / High selectable
- Area: Single / Double mode supported. Set the BLC position and size.
- Default : Go back to Factory Default setting value.

HSBLC: To mask a strong light at the designated area.

- Gain: Set the desired HSBLC Gain level. (0-100 Steps)
- Mode : Set the desired mode. (Night only / All Day)
- Mask Level : Set the desired mask level. (0-100 Steps)
- Default : Go back to Factory Default setting.
- M. Skip Area: Designate an area which you want to skip.

Return

4) WHITE BAL.

<ATW / AWB / AWC-SET / MANUAL>

ATW: Auto Tracking White Balance.

 Use this mode when the color temp. is between 1,800~10,000K

AWB: Auto White Balance with the factory default value.

AWC->SET:

 To find the optimal setting for current luminance environment in this mode. Set the point the camera towards a sheet of white paper and press the Joystick S/W. If the environment changes, readjust it.

MANUA

 To fine-tune White Balance manually. Set White balance first by using ATW or AWC mode before Manual mode. After that, if there is still a white balance issue, switch to manual mode and have a fine-tune. Manual mode allows you to increase or decrease the red or blue factor.

5) DAY / NIGHT < COLOR / AUTO / EXT / B/W>

COLOR: Display always color picture

AUTO: Automatic D/N switching according to ambient illumination.

Delay / D-N / N-D / Return Modes are provided.

EXT: Automatic D/N switching by using external signals.

IR LED (Photocell sensor) version must set with EXT mode.

B/W: Display always B/W picture

- IR Smart: IR Saturation Control. Set a designated value & area.

6) SMART 3DNR <On / Off>

- To reduce the background noise in a low luminance environment with 2D + 3D filtering system.

VALUE: Set the desired 3DNR value.

SMART NR: Set Smart NR On for the level and Sensitivity.

SMART LEVEL: Adjust Smart NR level (1-200 Steps).

SENSITIVITY: Set Smart NR sensitivity for activation.

7) F-DNR <AUTO / MANUAL/OFF>

 To defog when the video or the weather is foggy by controlling F-DNR level.

AUTO: Set the detect level for activation.

MANUAL: Set the detect level manually by adjusting level, Color Gain, Edge Gain, Gama value.

8) FUNCTION

8-1) MOTION:

- A signal is generated by the camera whenever motion is detected. You can define 4 areas and control its sensitivity.

8-2) PRIVACY:

To mask area which you want to mask. 8 areas selectable with 16 colors and controllable transparency.

8-3) D-EFFECT:

<D-Zoom/Smart D-Zoom/DIS/FREEZE/MIRROR/NEG. IMAGE>

- **D-Zoom** : Digital Zoom In / Out up to X32.

PAN/TILT: Set Pan/Tilt location when D-Zoom is activated.

- **Smart D-Zoom** : Set the zoom in /out value upto X5.

Range: Set the zoom in/out range from x2 to x5

Position: Designate the zoom area. When a movement is detected, it automatically Zoom in/out with PIP.

Sensitivity: Set the sensitivity level for activation.

Time: Set your desired time value for display of Zoom in/out.

* Smart D-Zoom will not be activated when D-Zoom is acting.

- **DIS** : Digital Image Stabilizer (On/Off)

* DIS will not be activated when D-Zoom & Smart D-Zoom is on

- Freeze: To hold the image to analyze precisely.

- Mirror: Change the video direction. Mirror / V-Flip/Rotate

- Neg. Image: Negative Image (On/ Off)

8-4) IMAGE ADJUST

- **Sharpness**: Set the sharpness level of the picture (3-31 Steps)
- Monitor: CRT / LCD modes are provided.
- LSC : Lens Shading Correction.(On/Off)
- **Defect**: Activate this mode when "White Spot (Dead Pixel)" on screen is occurred.

8-5) COMM ADJ:

- CAM TITLE: To display a title on the monitor. (On / Off)
- **PROTOCOL**: To define a proper protocol for communication.
- RS-485 : Set Camera ID and Baud rate.
- **8-6) SYNC**: Set the synchronization. If the power of the camera is

AC, L/L will be provided

8-7) LANGUAGE: Set the proper language of Main Menu