

# TruVision High Definition TVI Camera Configuration Manual

TVB-2402/TVB-4402

TVD-2402/TVD-4402

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# Introduction

This is the configuration manual for following camera models:

- TVB-2402 (720P TVI Bullet Camera, VF Lens, IR, PAL)
- TVB-4402 (720P TVI Bullet Camera, VF Lens, IR, NTSC)
  
- TVD-2402 (720P TVI Mini Dome, VF Lens, IR, PAL)
- TVD-4402 (720P TVI Mini Dome, VF Lens, IR, NTSC)

## Programming

Once the camera hardware has been installed, the camera can then be configured using the built-in OSD button or an OSD controller (purchased separately).

You can also configure the camera settings via a TVI DVR, select PTZ protocol as TruVision Coax and click the menu button to call the menu.

### **Note:**

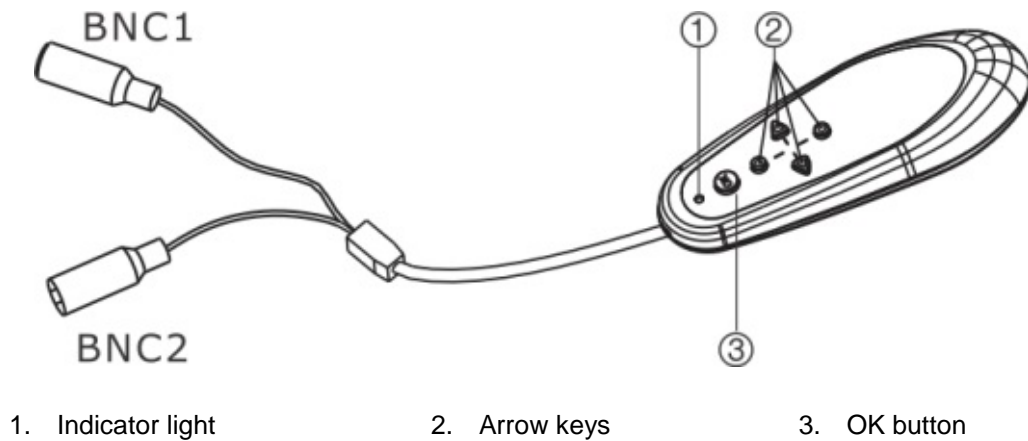
Interlogix offers two different versions of the OSD Controller: the TVS-C100 controller and the TVS-C200 controller. Please choose the corresponding controller by referring to product datasheets.

The cameras listed in the “Introduction” section support TruVision Coax OSD control protocol and require the TVS-C200 for OSD control.

The TVS-C200 is used to program the camera’s 960H CVBS output, not for the TVI video output. Programming the camera’s TVI output can be done via a TVI DVR.

The TVS-C200 has four buttons for the camera functions selection and control. Table 1 below lists the OSD control button functions and describes their use.

Figure 1: TVS-C200 coax controller



The Setup menu provides access to the camera configuration options.

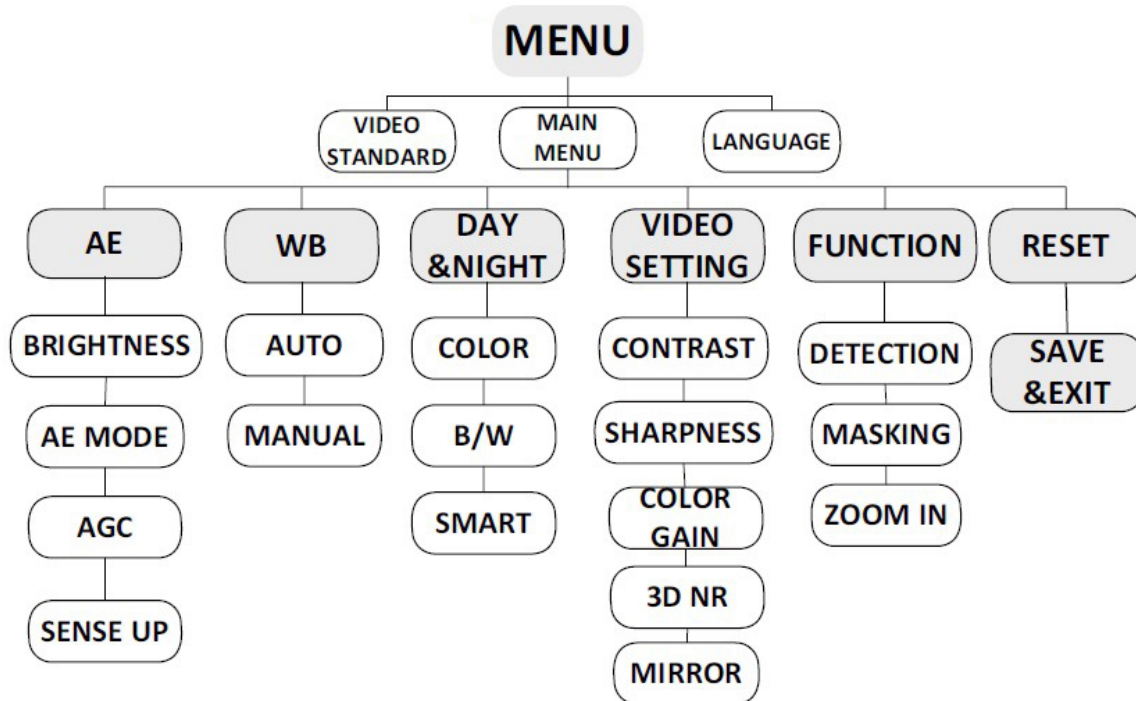
Before using the controller, please check to ensure that the controller has power. Two AAA batteries are required for the controller to work properly.

1. Connect a video monitor to one of the BNC connectors of the controller.
2. Connect the camera's 960H CVBS output to the other BNC connector
3. Press the **OK** button for few seconds to display the Setup menu. See Table 1 for instructions on how to move the cursor.

Table 1 Using the OSD control button

Button direction	Description
Up	Moves the cursor upward to select an item
Left	Moves the cursor left to select or adjust the parameters of the selected item.
Right	Moves the cursor to the right to select or adjust the parameters of the selected item.
Down	Moves the cursor downward to select an item.
OK	Press the red button for few seconds to display the Setup menu. If the selected item has its own menu, press the button to enter a submenu.

# Menu



## Automatic Exposure (AE)

Automatic exposure (AE) allows you to automatically set the proper exposure according to the existing light conditions.

Move the cursor to MAIN MENU > AE, to adjust the image brightness using the **BRIGHTNESS**, **AE MODE**, **AGC**, and **SENS-UP** options.

AE	
1. BRIGHTNESS	1- --10
2. AE MODE	DWDR
3. AGC	OFF
4. SENSE UP	0- ---16
5. RETURN	↵

**BRIGHTNESS:** Brightness refers to the brightness of the image. You can set the brightness value from 1 to 10 to darken or brighten the image. The higher the value, the brighter the image.

**AE MODE:** You can set AE mode as GLOBLE AE, and D-WDR:

- **GLOBAL AE:** This refers to the normal exposure mode which is for adjusting the situations including unusual lighting distribution, variations, non-standard processing, or other conditions of under exposure to get an optimum image.
- **DWDR:** The digital wide dynamic range (D-WDR) function helps the camera provide clear images even under back light circumstances. When there are

both very bright and very dark areas simultaneously in the field of view, D-WDR balances the brightness level of the whole image and provide clear images with details.

**AGC:** This is a form of amplification where the camera will automatically boost the image received in much lower light conditions than standard in order to optimize the clarity of image in poor light scene. The **AGC** level can be set to **HIGH**, **MIDDLE**, and **LOW**. Select **OFF** to disable the **AGC**.

**Note:** The noise will be amplified if the AGC is on.

**SENSE UP:** This increases the exposure on a signal frame, which makes a camera more sensitive to light so it can produce images even in low lux conditions. You can set the SENSE UP value from 0 to 16 according to the different light conditions. The higher value is, the more frames integrated in a unit of time.

## White Balance (WB)

White balance is the white rendition function of the camera to adjust the color temperature according to the environment. It can remove the unrealistic color casts in the image. You can set the WB mode as **AUTO** or **MANUAL**.

**AUTO:** The white balance is adjusted automatically according to the color temperature of the scene illumination.

**MANUAL:** You can set the R GAIN/B GAIN value from 1 to 10 to adjust the shades of red/blue color of the image.

MANUAL	
1. R GIAN	1- --10
2. B GAIN	1- --10
3. RETURN	↵

## Day & Night

Move the cursor to MAIN MENU > DAY & NIGHT, and select **COLOR**, **B/W**, or **SMART** as the DAY & NIGHT mode.

**COLOR:** The image is colored in day mode all the time.

**B/W:** The image is black and white all the time, and the IR LED turns on in low-light conditions.

**SMART:** Turn on/off the INFRARED\_LAMP and set the Smart IR level from 1 to 16.

SAMRT	
1. INFRARED_LAMP	OFF
2. SMART IR	0- --5
3. RETURN	↵

## Video Setting

Move the cursor to the MAIN MENU >VIDEO SETTING.

**CONTRAST:** This feature enhances the difference in color and light between parts of an image. Set the **CONTRAST** value from 1 to 10.

**SHARPNESS:** Sharpness determines the amount of detail an imaging system can reproduce. You can also adjust the **EDGE/DETAIL** sharpness value. Set the edge and detail sharpness value from 1 to 10. A higher value of sharpness results in a clearer and sharper image.

**COLOR GAIN:** Adjust this feature to change the saturation of the color. Set the color gain from 1 to 10.

**3D NR:** Compared to traditional general 2D NR technology, 3D NR processes the noise reduction between two frames instead of in one frame. It can decrease the noise effect, especially when capturing moving images in low light conditions and delivering more accurate and sharp image quality. Set the 3D NR level as **High**, **Middle**, and **Low**. Select **OFF** to disable the 3D NR.

**MIRROR:** Set the mirror mode as **OFF**, **H**, **V**, or **HV**.

- **OFF:** The mirror function is disabled.
- **H:** The image flips 180 degree horizontally.
- **V:** The image flips 180 degree vertically.
- **HV:** The image flips 180 degrees both horizontally and vertically.

VIDEO SETTING	
1. CONTRAST	1- --10
2. SHARPNESS	↵
3. COLOR GAIN	1- --10
4. 3D NR	OFF
5. MIRROR	OFF
6. RETURN	↵

## Function

Move the cursor to the MAIN MENU > FUNCTION. You can set **DETECTION**, **MASKING**, **ZOOM IN** and **LANGUAGE** of the camera in this menu.



FUNCTION	
1. DETECTION	↵
2. MASKING	↵
3. ZOOM IN	50- --100
4. LANGUAGE	ENGLISH
5. RETURN	↵

**DETECTION:** In the user-defined detection surveillance area, the moving object can be detected and the alarm will be triggered. Set the motion sensitivity as **WEAK, LOW, MIDDLE** or **HIGH**. Select an AREA to enter the motion detection AREA menu.

DETECTION	
1. SENSITIVITY	HIGHT
2. AREA NO.0	↵
3. AREA NO.1	↵
4. AREA NO.2	↵
5. AREA NO.3	↵
6. RETURN	↵

**MASKING:** Masking allows you to cover certain areas that you do not want to be viewed or recorded. Up to eight masking areas are configurable. Select a masking back ground color. Select an AREA to enter the masking AREA menu.

MASKING	
1. COLOR	WHITE
2. AREA NO.0	↵
3. AREA NO.1	↵
4. AREA NO.2	↵
5. AREA NO.3	↵
6. AREA NO.	↵
7. AREA NO.5	↵
8. AREA NO.6	↵
9. AREA NO.7	↵
10.RETURN	↵

**ZOOM IN:** The ZOOM IN value can be adjusted from 50 to 100.

**LANGUAGE:** Select either Chinese or English.

**AREA:** There are four surveillance areas set for motion detection. Select one and set the status as **OFF/ON**. Select a color for area border. Move the joystick up/down and right/left to set the horizon/vertical size and position.

AREA	
1. STATUS	OFF
2. COLOR	WHITE
3. HORIZON SIZE	0
4. VERTICAL SIZE	0
5. HORIZON MOVE	0
6. VERTICAL MOVE	0
7. RETURN	↵

**AREA:** There can be eight masking areas set for motion detection. Set the status as **OFF/ON**. Move the joystick up/down and right/left to set the horizon/vertical size and position.

AREA	
1. STATUS	OFF
2. HORIZON SIZE	0
3. VERTICAL SIZE	0
4. HORIZON MOVE	0
5. VERTICAL MOVE	0
6. RETURN	↵

## Reset

Move the cursor to the MAIN MENU >RESET. This resets all the settings to default.

**SAVE & EXIT:** Move the cursor to **SAVE & RESET** and press OK to save the settings and exit the menu.