Genie
CCTV

Model : MVD83SPX/12

Pixim Digital Day/Night Mini Vandal Dome Camera

Instruction Guide

■ Features

High Resolution colour for crisp, clear video
· 690TVL Effective

Wide Dynamic Range (WDR)
The camera delivers clear, high quality pictures even in backlight, by increasing exposure in dark areas while decreasing it in bright areas; a corrected image with clear details results.
· 120dB maximum dynamic range

DNR (Digital Noise Reduction)
The amount of low illuminance noise has been significantly reduced, and the signal-to-noise ratio (S/N ratio) as well as horizontal resolution, have been improved resulting in a clear and sharp image image even in low light.

Day & Night
The camera identifies whether it is day or night and automatically switches to the appropriate mode, depending on its environment. By day, the camera switches to colour mode in order to maintain optimal colour. At night, it switches to B/W mode so as to obtain better picture definition.

High Sensitivity for low-light images
The built-in high sensitivity PIXIM SEAWOLF Sensor enables a clear image even at 0.1Lux.

Programmable GAMMA Processing

Motion Detection
Since the camera detects motion without any additional external sensor, you can monitor activity more efficient.

Additional Functions
SENS-UP, FREEZE, FLIP (H/V-REV), D-ZOOM, SHARPNESS and PRIVACY functions are provided.
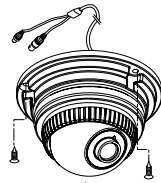
Controlled by OSD Menu
The camera can be controlled by selecting text displayed on the monitor screen.

3 Axis built-in Vandal Resistant Dome Housing

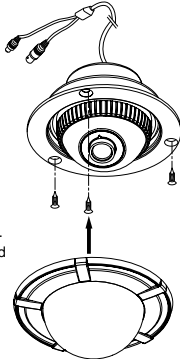**Weather Proof (IP66)**

■ Installation Of Camera

■ Surface mount
· Fix the BASE HOUSING to the desired place with screws supplied.
· Adjust desired scene by turning and moving the CAMERA BRACKET and fix it with STOPPER RING by turning it by hand.
· Put the DOME COVER over the BASE HOUSING and turn it clockwise by hand.
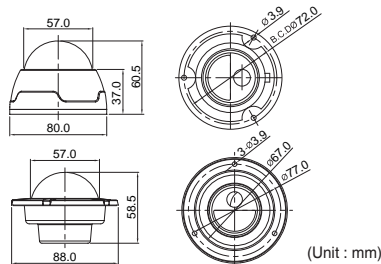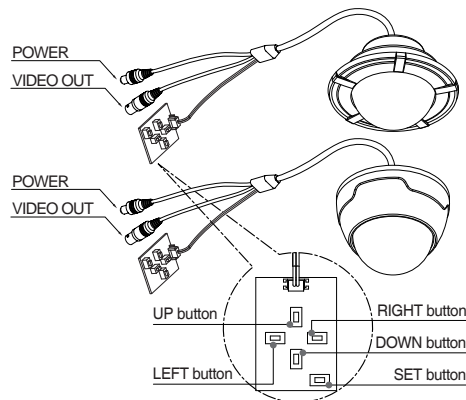· To fix DOME COVER tight, use SET SCREW.

■ Flush mount
· Use "Ceiling processing sticker" on the desired place to install camera and make a hole on that place.
· Place the BASE HOUSING on the hole and fix it with screws supplied.
· Adjust desired scene by turning and moving the CAMERA BRACKET and fix it with STOPPER RING by turning it by hand.
· Put the DOME COVER over the BASE HOUSING and turn it clockwise by hand.
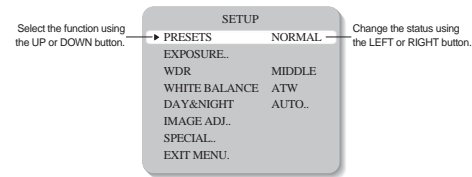
■ Dimensions

(Unit : mm)

■ Cable Connections

POWER
VIDEO OUT

POWER
VIDEO OUT

UP button
RIGHT button
DOWN button
LEFT button
SET button

■ How to Use the Camera

Select the function using the UP or DOWN button.

```
            SETUP
▶ PRESETS          NORMAL
  EXPOSURE..
  WDR              MIDDLE
  WHITE BALANCE    ATW
  DAY&NIGHT        AUTO..
  IMAGE ADJ..
  SPECIAL..
  EXIT MENU.
```

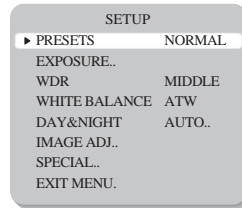Change the status using the LEFT or RIGHT button.

3. Set up a selected item by using the Left and Right buttons.
4. To finish and save the settings, select 'EXIT MENU' and press the SET button.

Note
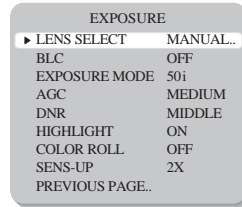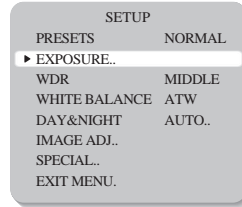• An item with the .. icon also has sub-menus. To select a sub-menu, press the SET button.

PRESETS

```
            SETUP
▶ PRESETS          NORMAL
  EXPOSURE..
  WDR              MIDDLE
  WHITE BALANCE    ATW
  DAY&NIGHT        AUTO..
  IMAGE ADJ..
  SPECIAL..
  EXIT MENU.
```
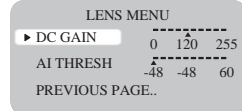
● **NORMAL** : Normal environment.
● **INDOOR** : Indoor environment.
● **OUTDOOR** : Outdoor environment.
● **BACKLIGHT** : Backlight environment.

EXPOSURE

When the SETUP menu screen is displayed, select 'EXPOSURE' by using the Up and Down buttons so that the arrow indicates 'EXPOSURE'.
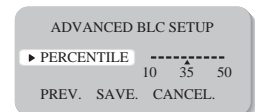
```
            SETUP
  PRESETS          NORMAL
▶ EXPOSURE..
  WDR              MIDDLE
  WHITE BALANCE    ATW
  DAY&NIGHT        AUTO..
  IMAGE ADJ..
  SPECIAL..
  EXIT MENU.
```

```
            EXPOSURE
▶ LENS SELECT      MANUAL..
  BLC              OFF
  EXPOSURE MODE    50i
  AGC              MEDIUM
  DNR              MIDDLE
  HIGHLIGHT        ON
  COLOR ROLL       OFF
  SENS-UP          2X
  PREVIOUS PAGE..
```

● **LENS SELECT** : Using this function, you can control the screen brightness.
  - DC / Manual : Select Lens Type.

```
            LENS MENU
▶ DC GAIN        0   120   255
  AI THRESH     -48  -48   60
  PREVIOUS PAGE..
```
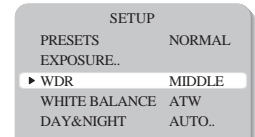
● **BLC** : To optimize the scene when there is a strong backlight behind the object.
  - ON / OFF selectable

■ How to Use the Camera

```
       ADVANCED BLC SETUP
▶ PERCENTILE      ----------
                  10   35   50
  PREV.   SAVE.   CANCEL.
```
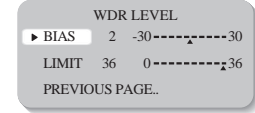
● **EXPOSURE MODE** : To select the number of fields and number of exposure cycles.
  - 50i/25p selectable
● **AGC (AUTO GAIN CONTROL)** : In dark environments, the higher the gain level, the brighter the screen but the higher the noise.
  - OFF / LOW / MEDIUM / HIGH selectable
● **DNR (Digital Noise Reduction)** : The level of background noise in low light decreases automatically as the level of gain changes.
  - OFF / LOW / MIDDLE / HIGH selectable
● **HIGHLIGHT** : To optimise the scene when high dynamic range lighting is detected.
  - ON : bright parts of the image are most visible.
  - OFF : dark parts of the image are most visible.
● **COLOR ROLL** : To control a detector that finds colour fluorescent roll.
  - OFF / LOW selectable
● **SENS-UP** : When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.
  - 2X, 4X, 8X, 16X, 32X
  - OFF : Deactivates the SENS-UP function.

WDR

```
            SETUP
  PRESETS          NORMAL
  EXPOSURE..
▶ WDR              MIDDLE
  WHITE BALANCE    ATW
  DAY&NIGHT        AUTO..
```
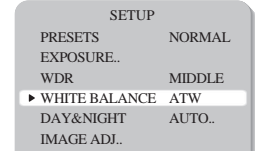
● **WDR** : When the image has simultaneous bright and dark areas, the Wide Dynamic Range makes both areas distinct.
  - LOW / MIDDLE / HIGH / USER selectable.

```
            WDR LEVEL
▶ BIAS     2   -30--------30
  LIMIT    36   0---------36
  PREVIOUS PAGE..
```
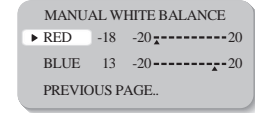
WHITE BALANCE

Use the White Balance function to adjust the screen colours.
1. Position the cursor to point to WHITE BAL on the SETUP menu screen, select using the Up and Down buttons.
2. Select the desired mode using the Left and Right buttons.

```
            SETUP
  PRESETS          NORMAL
  EXPOSURE..
  WDR              MIDDLE
▶ WHITE BALANCE    ATW
  DAY&NIGHT        AUTO..
  IMAGE ADJ..
```

※ Select one of the following 5 modes, as appropriate.
● **ATW** : The ATW mode continuously monitors.
● **INDOOR** : Select when the colour temperature is between 4000°K and 8500°K
● **OUTDOOR** : Select when the colour temperature is between 2000°K and 11000°K
● **AWB** : To obtain the optimum state under the current luminance levels, direct the camera to point toward a sheet of white paper and press the SET button. If the environment changes, including the light source, the white balance will require re-adjustment.
● **MANUAL** : Select to "fine-tune" the White Balance manually. Set White Balance first using the ATW or AWB mode. Afterwards switch to MANUAL mode, fine-tune the White Balance and then press the SET button.

```
       MANUAL WHITE BALANCE
▶ RED    -18   -20---------20
  BLUE    13   -20---------20
  PREVIOUS PAGE..
```

Note

- Under the following conditions White Balance may not work properly. In such cases, select the AWC mode.
① When the colour temperature of the subject environment has a very high temperature range (e.g. clear sky, or sunset)
② When the ambient illumination of the subject is low.
③ If the camera is directed toward a fluorescent light, or is installed in a place where illumination changes dramatically, the White Balance operation may become unstable.

DAY&NIGHT

```
              SETUP
PRESETS             NORMAL
EXPOSURE..
WDR                 MIDDLE
WHITE BALANCE       ATW
▶ DAY&NIGHT         AUTO..
IMAGE ADJ..
SPECIAL..
EXIT MENU.
```

● **AUTO** : This camera has a function which automatically changes to the appropriate mode according to lighting levels. To set up the switching time for the AUTO mode press the SET button.

```
         DAY&NIGHT SETUP
▶ NIGHT MODE        BW +burst
                    BW
                    COLOR
TIME DELAY      0  ▲ 1   255
PREVIOUS PAGE..
```

● **COLOR** : The picture is displayed in colour.
● **B/W** : The picture is always displayed in black and white.

IMAGE ADJ.

When the SETUP menu screen is displayed, select 'IMAGE ADJ.' using the Up and Down buttons.

```
              SETUP
PRESETS             NORMAL
EXPOSURE..
WDR                 MIDDLE
WHITE BALANCE       ATW
DAY&NIGHT           AUTO..
▶ IMAGE ADJ..
SPECIAL..
```

```
              IMAGE
▶ FREEZE            OFF
FLIP                OFF
SHARPNESS     -8 ---▲--- 8
                   0
COLOR GAIN    -8 ---▲--- 8
                   0
GAMMA 45  25---▲-----100
FOCUS..
PREVIOUS PAGE..
```
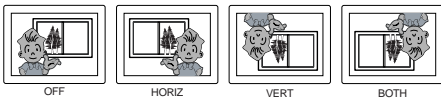
● **FREEZE** : View still pictures.
  - OFF / ON selectable
● **FLIP** : OFF / HORIZ / VERT / BOTH selectable

| OFF | HORIZ | VERT | BOTH |

● **SHARPNESS** : The outline of the video image becomes cleaner and more distinctive as the level of SHARPNESS increases. If the level gose up excessively, however, it may affect the video image and generate noise.
  - The available range of level is -8 ~ 8
● **COLOR GAIN** : To control the colour level in the video.
  - The available range of level is -8 ~ 8
● **GAMMA** : Users can change the gamma setting between 25 and100
● **FOCUS** : To adjust the lens focus.

```
         FOCUS DETECTOR
▶ FOCUS METER  ▬▬▬▬
                      88
SET FOCUS REGION..
PREVIOUS PAGE..
```

```
      SET FOCUS REGION
```

SPECIAL

When the SETUP menu screen is displayed, select 'SPECIAL' by using the Up and Down buttons so that the arrow indicates 'SPECIAL'.

```
              SETUP
PRESETS             NORMAL
EXPOSURE..
WDR                 MIDDLE
WHITE BALANCE       ATW
DAY&NIGHT           AUTO..
IMAGE ADJ..
▶ SPECIAL..
EXIT MENU.
```

```
              SPECIAL
▶ CAMERA ID         OFF
VIDEO OUT..
DZOOM               OFF
MOTION              OFF
PRIVACY MASK..
RESET
PREVIOUS PAGE..
```

● **CAMERA ID** : User can enter a unique name for the respective camera. The maximum length of the ID is ten characters.
  · You can choose the ON and OFF with the selector. If you select ON, the entered camera ID is displayed at the selected position in the video picture (normal operation).
  · Please select the setup button while in On mode.
  · Select the desired position with the selector.

```
           CAMERA ID
▶ ID                CAM-001
POSITION            UP-LEFT
PREVIOUS PAGE..
```

① Move the cursor to the letter required by using the Set-Up button.
② Select an ID from A,B~Y,Z, a,b~y,z, 0,1~8,9 by using the LEFT and RIGHT buttons.
③ Repeat the above steps until the ID is complete.

```
           CAMERA ID
ID                  CAM-001
▶ POSITION          UP-LEFT
PREVIOUS PAGE..
```

① Select the position where the ID is to be displayed by using the LEFT and RIGHT buttons.
● **VIDEO OUT** : Move the cursor to select the video system
  - VIDEO STANDARD : You can control NTSC / PAL, Video level, Sync level, Burst level.

```
         VIDEO STANDARD
▶ VIDEO SELECT      PAL
VIDEO LEVEL  80  110  150
SYNC LVL  0 -16----▲----15
BURST LVL  0 -16----▲----15
COLOR BAR           OFF
PREVIOUS PAGE..
```

● **DZOOM** : Digital P/T/Z are used to create a zoom lens effect. Zoom Factor (1X to 4X), Pan (±100%, center of image can be moved to left and right edges of screen), Tilt (±100%, center of image can be moved to top and bottom edges of screen)

```
              DZOOM
▶ ZOOM       1   1------- 4
PAN          0  -100----▲100
TILT         0  -100----▲100
PREVIOUS PAGE..
```

● **MOTION** : This product has a feature that allows you to observe movements of objects in on the screen, hence a single individual can conduct supervision efficiently.
The camera detects an object's movement by sensing disparity of outline, and level of brightness and colour.

```
         MOTION DETECTION
▶ ACTIVITY THR.  ---▲------
                0   25  255
MESSAGE TIME  ---▲------
              1   3   10
SETUP MOTION ZONE..
PREVIOUS PAGE..
```

```
       MOTION ZONE SETUP
```

· White : MOTION ZONE Position movement
  Green : MOTION ZONE Size enlargement
  Red : MOTION ZONE Size reduction
· For MOTION ZONE Confirm, long press SET button

● **PRIVACY MASK** : Hide an area you want to hide on the screen.

```
        PRIVACY MASK SETUP
▶ PRIVACY MASK      OFF
MASK COLOR          WHITE
PREVIOUS PAGE..
```

```
ENABLE MASKS (1 to 6)        ENABLE MASKS (7 to 12)
▶ MASK 1       ON            ▶ MASK 7        OFF
MASK 2         OFF           MASK 8          OFF
MASK 3         OFF           MASK 9          OFF
MASK 4         OFF           MASK 10         OFF
MASK 5         OFF           MASK 11         OFF
MASK 6         OFF           MASK 12         OFF
PREV.  NEXT.                 PREVIOUS PAGE..
```

· White : PRIVACY-ZONE Position movement
  Blue : PRIVACY-ZONE Size enlargement or reduction
· For PRIVACY-ZONE Confirm, long press SET button

● **RESET** : Resets the camera.

EXIT MENU.

```
           EXIT MENU
▶ VERSION :     7.3.2-7.0.281
SAVE&EXIT
DEFAULT
CANCEL
```

● **VERSION** : 7.3.2-7.0.281
● **SAVE&EXIT** : Saves all the setting menus and then exits.
● **DEFAULT** : Resets the camera settings to the factory defaults.
● **CANCEL** : Cancel to the camera settings.

■ Specifications

ITEM	SPEC.
Power Consumption	12VDC (Max.150mA)
Image Sensor	PIXIM 1/3" High Sensitivity Digital Sensor
Signal processing	17-bit Digital Signal Processing
Transfer Format	Progressive with Segmented Frames
Sync. System	Internal
Effective Pixels	758(H) x 540(V)
Dynamic Range	120dB(Max), 102dB(Typical)
Horizontal Resolution	690TVL Effective
Min. Illumination	0.1Lux
Day & Night	AUTO / COLOR / B/W
White Balance	ATW / AWB / INDOOR / OUTDOOR / MANUAL
WB Range	2000˚K~11,000˚K
Shutter Speed	up to 1/30, 720 sec
Sens-up	AUTO / OFF (Selectable x2 ~ x32)
Privacy Masking	12 Zones
AGC	OFF / LOW / MEDIUM / HIGH
Image Flip	OFF / HORIZ / VERT / BOTH
Camera ID	ON / OFF
S/N Ratio	More than 50dB
Video Output	Composite video output 75 ohm terminated
OSD	Built-in
Operating Humidity	30% ~ 90% RH
Operating Temp.	-10˚C to 50˚
Weatherproof	IP66
Weight	Appro. 230g