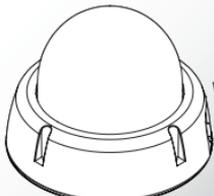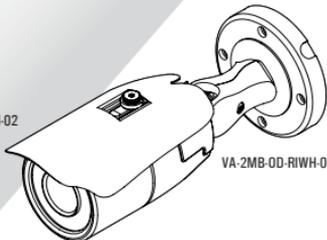# 3xLOGIC

VA-2MD-OD-RIWH-02

VA-2MB-OD-RIWH-02

# VISIX Gen III HD Analog Cameras

*OSD Settings Menu Guide* Ver. 1.0 / 2020.05

Before installing and using the camera, please read this manual carefully.
Be sure to keep it handy for future reference.

**OSD MENU**

※ **NOTE :** Settings can be adjusted using the built-in OSD joystick.  Refer to your camera's quick start guide for details on the location and operation of the OSD joystick. Product documentation is available at the www.3xlogic.com Product Documentation library .

### EXPOSURE

| LENS | MANUAL / AUTO |
|---|---|
| BACKLIGHT | OFF / HME / BLC / WDR |
| DRC | OFF / LOW / MIDDLE / HIGH |
| DEFOG | OFF / ON |
| AGC | 0 ~ 10 |
| SENS-UP | OFF / x2 ~ x32 |
| 3D DNR | OFF / LOW / MIDDLE / HIGH |
| EXIT JUMP | |

### DAY & NIGHT

| MODE | AUTO / COLOR / BW / EXTERN |
|---|---|
| CDS THRES | 0 ~ 20 |
| CDS MARGIN | 0 ~ 20 |
| EXTERN SW | LOW / HIGH |
| EXT LED | OFF / AUTO |
| DELAY | LOW / MIDDLE / HIGH |
| SMART IR | 0 ~ 20 |
| EXIT JUMP | |

### COLOR

| WHITE BAL. | AUTO / AUTO-EX / PRESET / MANUAL |
|---|---|
| COLOR GAIN | 0 ~ 20 |
| RETURN | |

### FUNCTION

| SHARPNESS | 0 ~ 10 |
|---|---|
| GAMMA | 0.45 ~ 0.75 |
| MIRROR | OFF / ON |
| FLIP | OFF / ON |
| EXIT JUMP | |

**MOTION**

| MOTION | OFF / ON |
|---|---|
| DET WINDOW | |
| DET TONE | 0 ~ 4 |
| MDRECT FILL | OFF / ON |
| SENSITIVITY | 0 ~ 10 |
| MOTION OSD | OFF / ON |
| TEXT ALARM | OFF / ON |
| SIGNAL OUT | OFF / ON |
| EXIT JUMP | |

**PRIVACY**

| PRIVACY | OFF / ON |
|---|---|
| ZONE NUM | 0 ~ 15 |
| ZONE DISP | OFF / ON |
| H-POS | 0 ~ 59 |
| V-POS | 0 ~ 33 |
| H-SIZE | 0 ~ 60 |
| V-SIZE | 0 ~ 34 |
| Y LEVEL | 0 ~ 20 |
| CB LEVEL | 0 ~ 20 |
| CR LEVEL | 0 ~ 20 |

| TRANS | 0 ~ 3 |
|---|---|
| EXIT JUMP | |

**SETUP**

| COMMUNICA | |
|---|---|
| CAM TITLE | OFF / RIGHT UP / LEFT DOWN |
| IMAGE RANGE | FULL / COMP / USER |
| FREQ | 50Hz / 60Hz |
| LANGUAGE | ENG / CHN / CHN(S) / JPN / KOR |
| INITIAL | OFF / ON |
| EXIT JUMP | |

**EXIT**

| SAVE & EXT | |
|---|---|
| EXIT | |

**❶ LENS**

MANUAL : Manual mode supports the fixed board lens or the manual iris lens.
AUTO : AUTO mode sets the camera's iris automatically.

```
                EXPOSURE

       ▷LENS          AUTO↵
        BACKLIGHT      OFF
        DRC            OFF
        DEFOG          OFF
        AGC            10
        SENS-UP        X4
        3D DNR         HIGH
        EXIT JUMP      ↵
```

```
                 LENS

       ▷LEVEL         20
        BRIGHTNESS     10
        SHUTTER        AUTO↵
        2-MOTOR        ↵
        RETURN         ↵
```
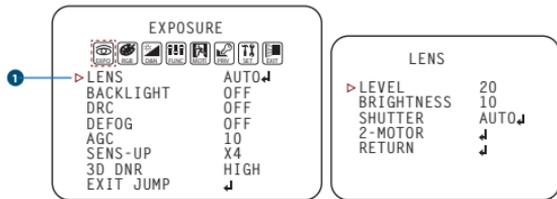
Under the LENS sub-menu, you can adjust the following settings :

**1. LEVEL**

Change the camera's iris value manually. If AUTO is selected, this option is disabled.

**2. BRIGHTNESS**

Adjust the camera's brightness from 0~20. The higher the number, the brighter the image will appear.

**3. SHUTTER**

Set the shutter speed to AUTO, Manual, or FLC (Flicker-less mode).
* If AUTO is selected, select from the following options :
- NORMAL : Set when the camera is installed in an indoor environment.
- DEBLUR : Set when the camera is installed in an outdoor environment.
* Select FLC if the camera is experiencing some flickering in the image.
The shutter speed will be set to 1/100 for NTSC, or 1/120 for PAL.
* If Manual is selected, set the shutter speed from the options :
- 1/30(1/25) ~ 1/30000.

**4. 2-MOTOR**

Set the 2-Motor Lens sub-menu.
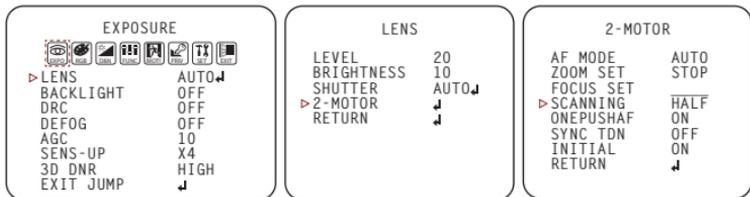
```
┌─────────────────────┐  ┌─────────────────────┐  ┌─────────────────────┐
│      EXPOSURE       │  │        LENS         │  │      2-MOTOR        │
│  ▣▣▣▣▣▣▣▣           │  │                     │  │ AF MODE      AUTO   │
│                     │  │ LEVEL       20      │  │ ZOOM SET     STOP   │
│ ▷LENS       AUTO⏎   │  │ BRIGHTNESS  10      │  │ FOCUS SET           │
│  BACKLIGHT  OFF     │  │ SHUTTER     AUTO⏎   │  │▷SCANNING     HALF   │
│  DRC        OFF     │  │▷2-MOTOR     ⏎       │  │ ONEPUSHAF    ON     │
│  DEFOG      OFF     │  │ RETURN      ⏎       │  │ SYNC TDN     OFF    │
│  AGC        10      │  │                     │  │ INITIAL      ON     │
│  SENS-UP    X4      │  │                     │  │ RETURN       ⏎      │
│  3D DNR     HIGH    │  │                     │  │                     │
│  EXIT JUMP  ⏎       │  │                     │  │                     │
└─────────────────────┘  └─────────────────────┘  └─────────────────────┘
```

**AF MODE**

AUTO : Auto Focus

MANUAL : Manual Focus & Zoom In/Out.

- Zoom Set : Adjust the zoom by operating the OSD keys to left and right.
  OSD R→Tele , L→Wide
- Focus Set : Adjust the focus by operating the OSD keys to left and right.
  OSD R→Far , L→Near (Activate in AF Mode Manual only)

**SCANNING**

Half : Auto focus scanning area operation in half area.

Full : Auto focus scanning operation in full area.

**ONEPUSHAF**

Auto focus operation on current image.

**SYND TDN**

Auto focus operation when Day or Night changes.

**INITIAL**

Two Motor Lens initialization.

**❷ BACKLIGHT**

**OFF**

**HME (HIGHLIGHT MASKING EXPOSURE)**

HME allows objects to appear clearly on the screen by
masking extremely bright areas.

To setup HME, set the level and color.

The lower the setting, the darker the masking areas have to be.

Select from : 0 ~ 20.

Color : Set the color of the HME mask.

Select from : BLACK / WHITE / YELLOW / CYAN / GREEN /
MAGENTA / RED / BLUE / CUSTOMIZE

**BLC (BACK LIGHT COMPENSATION)**

If BLC is selected, adjust the size and position of the mask:
- H-POS : Move the Zone position left or right.
    The higher the number, the zone will move to the right.
- V-POS : Move the Zone position up or down.
    The higher the number, the zone will move down.
- H-Size : Reset the zone's size horizontally. The higher the number,
    the right side panel will move further to the right.
- V-Size : Reset the zone's size vertically. The higher the number,
    the bottom side panel will move further down.
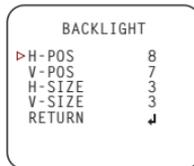
**WDR  (Wide Dynamic Range)**
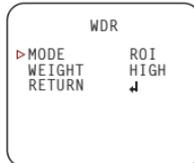
If WDR is selected, adjust the WDR level (Weight) in the sub-menu.
Select from LOW, MIDDLE, or HIGH (Default).

❋ **ROI (Region of Interest)**

To have more efficient scene result, up to 4 regions are able to be selected for WDR effect to maintain the
most suitable color appearances.

❋ WDR&3D-DNR functions can't be operated simultaneously. Once the WDR may activate then the DNR
function shifts to 2D-DNR although DNR functions set by 3D-DNR as default setting.

```
           EXPOSURE
 🎛️🖼️📷🖥️📺🔲📺📺📺
  LENS        AUTO↵
▷BACKLIGHT    HME
  DRC         OFF
  DEFOG       OFF
  AGC         10
  SENS-UP     X4
  3D DNR      HIGH
  EXIT JUMP       ↵
```

```
           WDR
 ▷MODE        ROI
  WEIGHT      HIGH
  RETURN       ↵
```

```
         BACKLIGHT
 ▷H-POS       8
  V-POS       7
  H-SIZE      3
  V-SIZE      3
  RETURN       ↵
```

```
                EXPOSURE
        [icons]

      LENS          AUTO↵
      BACKLIGHT     OFF
  ▷   DRC
  ▷   DEFOG         ON↵
      AGC           10
      SENS-UP       X4
      3D DNR        HIGH
      EXIT JUMP     ↵
```

```
              DEFOG

      MODE      AUTO
      LEVEL     MIDDLE
      RETURN    ↵
```
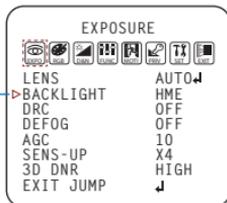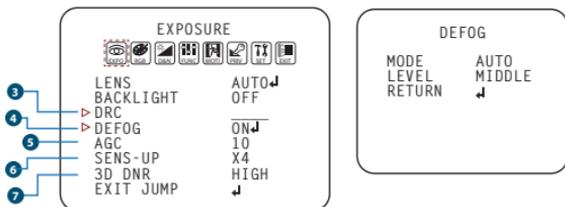
**❸ DRC (DYNAMIC RANGE COMPRESSOR)**

DRC enables dark areas in images to become more visible without overexposing the bright areas to create one perfect image. Select from : OFF / LOW / MIDDLE / HIGH

**❹ DEFOG**

Allows the camera to process a scene that is obscured by fog or weather conditions and provides a visibly improved image. AUTO / MANUAL : Select AUTO to have the WDR and DRC levels adjusted automatically. Set the DEFOG level from LOW / MIDDLE / HIGH.

**❺ AGC (AUTO GAIN CONTROL)**

0~10 - AGC enhances the picture brightness in low light conditions. A higher level AGC setting makes the images brighter, however, it could increase the amount of noise.

**❻ SENS-UP**

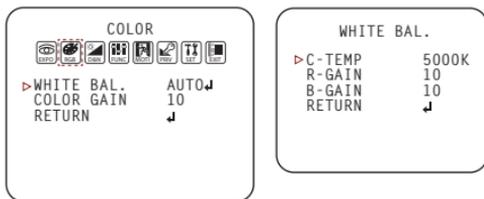OFF / x2 ~ x32(Default : X4) - Automatically activates slow shutter function when the image is too dark. High values are not recommended as they may causes the image to lag. Sens-up menu cannot be controlled if the SHUTTER setting is above 1/30.

**❼ 3D DNR (3D DIGITAL NOISE REDUCTION)**

OFF/LOW/MIDDLE/HIGH - 3D-DNR reduces the noise on the screen in low light conditions and allows for clearer images, even at night.

**WB MODE**

```
            COLOR
   🔲🔲🔲🔲🔲🔲🔲🔲
  ▷WHITE BAL.    AUTO↵
   COLOR GAIN    10
   RETURN          ↵
```

```
        WHITE BAL.
  ▷C-TEMP      5000K
   R-GAIN        10
   B-GAIN        10
   RETURN        ↵
```

**AUTO**       Auto Tracking White Balance Control mode compensates for color
               temperature changes between 2500K˚ and 12000K˚.

**AUTO-EX**    Auto White Balance Control mode compensates for color temperature
               changes lower than 2500K˚ and higher than 12000K˚.

**PRESET**     Preset fixes the white balance based on the current lighting automatically.

**MANUAL**     Users can control the white balance manually by changing RED GAIN and
               BLUE GAIN. (see blow)
               C-TEMP : Select the color temperature for the white balance setup.
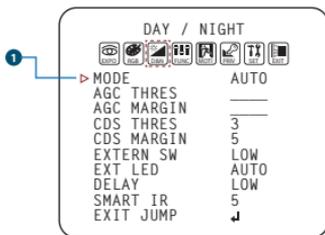               If enabled, the Red and Blue Gain settings will be set automatically according
               to the C-TEMP selected.
               RED GAIN : 0 ~ 20. Adjusts the amount of red in the image.
               BLUE GAIN : 0 ~ 20. Adjust the amount of blue in the image.

**COLOR GAIN** Set the color gain from 0~20.

```
            DAY / NIGHT
     🔲🔳◣🎛️📲📷🎚️📊
  ▷ MODE           AUTO
    AGC THRES
    AGC MARGIN      ___
    CDS THRES       3
    CDS MARGIN      5
    EXTERN SW       LOW
    EXT LED         AUTO
    DELAY           LOW
    SMART IR        5
    EXIT JUMP       ↵
```

❶ **MODE**
AUTO : Day/ Night switch will be based on the CDS levels.
COLOR : The camera always stays in day/color mode.
B&W : The camera always stays in night/B&W mode.
EXTERN : Day/ Night switch will be based on using IR LED lights.

\* WITHOUT LED
- AGC Threshold : Set when the camera switches between Day & Night.
- AGC Margin : Set the value added to the AGC Threshold. Adjust the value based on the
  environment in which the camera is installed. If the margin is too low, the camera will
  switch from color to B/W and back.

\* WITH LED
- CDS Threshold : Marks the light level at which the camera will switch between color and B/W.
  The lower the value, the camera will require less light (more darkness) to switch to Night
  Mode.
- CDS Margin : The value added to the CDS Threshold. Adjust this based on the environment
  in which the camera is installed. If the margin is too low, the camera will switch from color
  to B/W and back.
- EXTERN SW : Select Extern SW according to the LED signal from : LOW/HIGH

```
            DAY / NIGHT

MODE            AUTO
▷AGC THRES      ____
▷AGC MARGIN     ____
 CDS THRES       3
 CDS MARGIN      5
 EXTERN SW      LOW
 EXT LED        AUTO
 DELAY          LOW
 SMART IR        5
 EXIT JUMP       ↵
```

**❷ EXT LED**

AUTO : The LEDs are enabled/ disabled by the CDS Sensor on the LED Board.
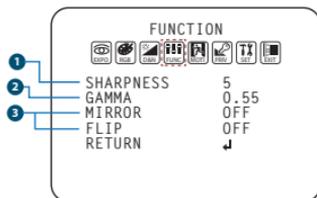OFF : The camera's LEDs are disabled manually.

**❸ DELAY**

LOW/MIDDLE/HIGH : Time interval delay before switching from day mode to night mode.

**❹ SMART IR**

0 ~ 20 : Enable Smart IR and set the level. Higher values will make Smart IR stronger.

```
              FUNCTION
        [icons row]
❶ ─── SHARPNESS       5
❷ ─── GAMMA           0.55
❸ ─── MIRROR          OFF
      FLIP            OFF
      RETURN          ↵
```

❶ **SHARPNESS**
   0 ~ 10 - Sets the image sharpness. The higher the number, the sharper the image.

❷ **GAMMA**
   0.45 ~ 0.75 - Select the desired gamma level. 0.55 is default setting.

❸ **MIRROR / FLIP**
   OFF
   MIRROR : Reflects the camera horizontally.
   FLIP : Reflects the camera vertically.

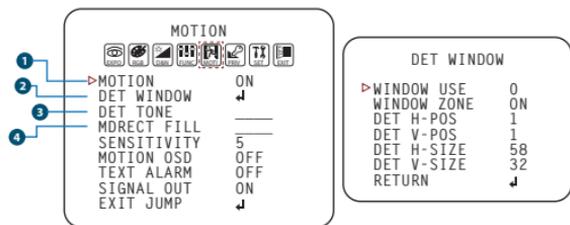| MIRROR / FLIP OFF | MIRROR ON | FLIP ON | MIRROR / FLIP ON |

# Motion Settings

The camera can detect movement and display an alarm on the screen, when movement is detected.

```
                  MOTION
        ⬜🎨◨🏠📋🖼️📺📱
      ▷MOTION        ON                DET WINDOW
       DET WINDOW    ↵              ▷WINDOW USE    0
       DET TONE      ___             WINDOW ZONE   ON
       MDRECT FILL   ___             DET H-POS     1
       SENSITIVITY   5               DET V-POS     1
       MOTION OSD    OFF             DET H-SIZE    58
       TEXT ALARM    OFF             DET V-SIZE    32
       SIGNAL OUT    ON              RETURN        ↵
       EXIT JUMP     ↵
```

**❶ MOTION**
  To use the motion detection settings, before Motion is ON.

**❷ DET WINDOW**
  - WINDOW USE : Select which one of the motion areas to enable.
  - WINDOW ZONE : The camera supports up to 4 different masks. Select which ones to display.
  - DET H-POS : Move the zone left or right.
                 The higher the number, the zone will move to the right.
  - DET V-POS : Move the zone up or down.
                 The higher the number, the zone will move down.
  - DET H-SIZE : Adjust the zone's size horizontally.
                 The higher the number, the right side panel will move further to the right.
  - DET V-SIZE : Reset the zone's size vertically.
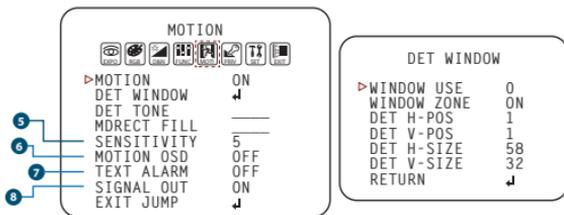                 The higher the number, the bottom panel will move down.

**❸ DET TONE**
  Four each dierent motion tone color available.

**❹ MDRECT FILL**
  Color setting for operating motion zone.

The camera can detect movement and display an alarm on the screen, when movement is detected.

```
                MOTION
    ⊙⊙⊿⊞⊞⊠⊞▯
  ▷MOTION          ON
   DET WINDOW      ↵
   DET TONE        ___
   MDRECT FILL     ___
   SENSITIVITY     5
   MOTION OSD      OFF
   TEXT ALARM      OFF
   SIGNAL OUT      ON
   EXIT JUMP       ↵
```

```
              DET WINDOW
  ▷WINDOW USE      0
   WINDOW ZONE     ON
   DET H-POS       1
   DET V-POS       1
   DET H-SIZE      58
   DET V-SIZE      32
   RETURN          ↵
```

**⑤ SENSITIVITY**

The smaller the movement you want to detect, the higher the sensitivity value must be.

**⑥ MOTION OSD**

MOTION ZONE display. MOTION OSD interoperable with 'DET TONE' and 'MDRECT FILL'.

**⑦ TEXT ALARM**

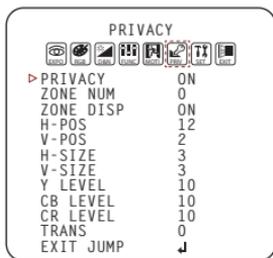Setup a text to appear on the screen when motion is detected explaining the alarm situation.
- WINDOW MOTION: Will appear when a motion alarm is detected.
- CAMERA MOVING : Will appear if the camera is shaken abruptly.

**⑧ SIGNAL OUT (ON/OFF)**
- ON : 'HIGH' SIGNAL OUT upon ALARM.
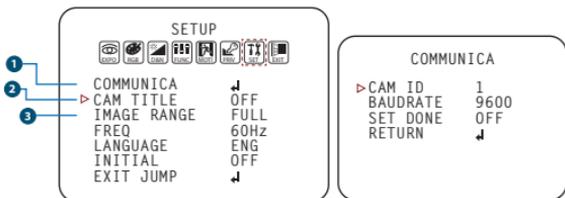- OFF : 'SIGNAL OUT' o regardless of ALARM.

You can hide some parts of the screen for privacy masking. A total of 16 dierent privacy masking zones are available. The cameras support square privacy masks or advanced polygon masks.

```
              PRIVACY
    🖼️🎨📶🎛️🅰️✏️🎛️📱
  ▷PRIVACY        ON
   ZONE NUM       0
   ZONE DISP      ON
   H-POS          12
   V-POS          2
   H-SIZE         3
   V-SIZE         3
   Y LEVEL        10
   CB LEVEL       10
   CR LEVEL       10
   TRANS          0
   EXIT JUMP      ↵
```

- ZONE NUM : Select the zone number between 0~15.
- ZONE DISP : Zone display ON/OFF
- H-POS : Move the Zone position Left or right. The higher the number, the zone will move to the right.
- V-POS : Move the Zone position up or down. The higher the number, the zone will move down.
- H-SIZE : Reset the zone's size horizontally. The higher the number, the right side panel will move further to the right.
- V-SIZE : Reset the zone's size vertically.
  The higher the number, the bottom side panel will move further down.
- Y LEVEL : The higher the number, the brighter the color will appear.
- CR LEVEL : The higher the number, the more red tone will be added to the zone's color. The lower the number, the more green will be added to the zone's color.
- CB LEVEL : The higher the number, the more red tone will be added to the zone's color. The lower the number, the more red will be added to the zone's color.
* High CB Level + High CR Level = Pink
* High CB Level + Low CR Level = Sky Blue
* Low CB Level + High CR Level = Orange
- TRANS : Set the mask's transparency level from 0~3. The default value is 0.

```
                    SETUP
         🎦🎦🎛🎚🄰🄰🖋🗂🗓📋
  ❶       COMMUNICA        ↵
  ❷     ▷ CAM TITLE        OFF
  ❸       IMAGE RANGE      FULL
          FREQ             60Hz
          LANGUAGE         ENG
          INITIAL          OFF
          EXIT JUMP        ↵
```

```
                  COMMUNICA

          ▷ CAM ID      1
            BAUDRATE     9600
            SET DONE     OFF
            RETURN       ↵
```

❶ **COMMUNICATION**

Adjust the camera's ID and Baudrate. Default Protocol is Pelco-D.
- CAM ID : Provide an ID number for the camera (0 ~ 255).
- BAUDRATE : 9600bps is default. Select the baudrate from the following options :
            2400/4800/9600/57600/115200 bps.
- SET DONE : Set the value of CAM ID and BAUDRATE.

❈ **NOTE :** Be sure to press "Save&Exit" button on the EXIT menu before exiting.
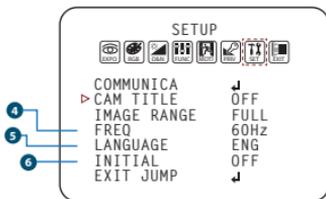
❷ **CAM. TITLE**

Add a name to the camera. Set the title by using the OSD joystick.

❸ **IMAGE RANGE**

Image Range allows you to set the proper Black and White levels according to the external display you use.
- FULL : Display all BLACK level and WHITE level without compression.
- COMP : Display BLACK level and WHITE level with compression.
- USER : Reset the BLACK level by changing the OFFSET value.

```
                SETUP
      ⬚⬚⬚⬚⬚⬚⬚⬚

      COMMUNICA      ↵
    ▷ CAM TITLE      OFF
      IMAGE RANGE    FULL
      FREQ           60Hz
      LANGUAGE       ENG
      INITIAL        OFF
      EXIT JUMP      ↵
```
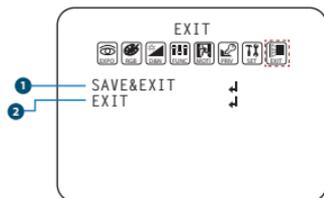
**④ FREQ**

When the camera's image appears to have flickering issues, change the frequency value to adjust the image.

**⑤ LANGUAGE**

Select from the following: English (Default), Chinese, Chinese (S), Japanese, and Korean.

**⑥ INITIAL**

Reset the camera to its default settings. Press and hold the select button for 5 seconds.

```
                EXIT
```

**❶ SAVE&EXIT**
EXIT

**❶ SAVE & EXIT**
Exit the OSD menu after saving the recent changes.

**❷ EXIT**
Exit the OSD menu without saving any changes.

# 3xLOGIC

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Simple. Scalable. Secure.