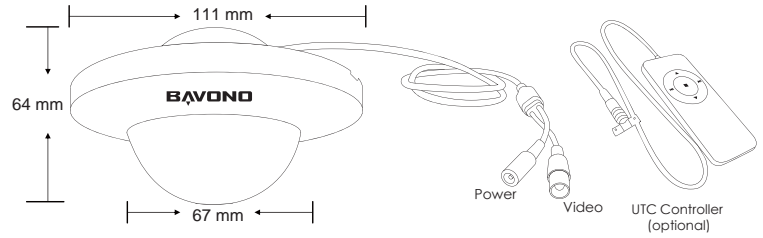


# User Manual

## BAVONO UDT-520D-X 700TVL Vandal Proof UFO Dome Camera



### Product Wiring Diagram



### MENU OPERATION 01



#### Menu Operation

- Connect UTC controller to the video end of the cable to enable remote OSD control
- Press[SET]  
The Menu screen appears on the monitor.  
Check the current settings on the menu.
  - Use [UP] or [DOWN] button to select the [EXIT] then use [LEFT] or [RIGHT] button to select a mode.  
-EXIT: Exit the setup menu.

### EXPOSURE SETTINGS 02



|     |            |                                       |
|-----|------------|---------------------------------------|
| ALC | BRIGHTNESS | 0-20                                  |
|     | SHUTTER    | INDOOR, OUTDOOR, 1/100,1/120 ~ 1/120K |
|     | FLK        | OFF / ON                              |
|     | AGC        | OFF / ON (1-20)                       |
| ELC | BRIGHTNESS | 0-20                                  |
|     | SHUTTER    | AUTO, 1/50,1/60 ~ 1/120K              |
|     | FLK        | OFF / ON                              |
|     | AGC        | OFF / ON (1-20)                       |

### DAY & NIGHT SETTINGS 03



|        |              |                                  |
|--------|--------------|----------------------------------|
| AUTO   | AGC THRS     | 0-20                             |
|        | AGC MARGIN   | 0-20                             |
|        | D/N DELAY    | 0-15 sec                         |
|        | B/W BURST    | OFF / ON                         |
| DAY    | SMART IR     | ANTI-SAT: off-20, SAT AREA: 0-20 |
|        | B/W BURST    | OFF / ON                         |
|        | SMART IR     | ANTI-SAT: off-20, SAT AREA: 0-20 |
|        | EXTERNAL S/W | LOW / HIGH                       |
| EXTERN | D/N DELAY    | 0-15 sec                         |
|        | B/W BURST    | OFF / ON                         |
|        | SMART IR     | ANTI-SAT: off-20, SAT AREA: 0-20 |
|        | CDS D->N     | 0-20                             |
| CDS    | CDS N->D     | 0-20                             |
|        | D/N DELAY    | 0-15 sec                         |
|        | B/W BURST    | OFF / ON                         |
|        | SMART IR     | ANTI-SAT: off-20, SAT AREA: 0-20 |

### WHITE BALANCE SETTINGS 04



|        |                         |
|--------|-------------------------|
| ATW    |                         |
| PUSH   | PUSHING                 |
| MANUAL | RED (0-20), BLUE (0-20) |

### DISPLAY ADJUSTMENT SETTINGS 05



|               |             |
|---------------|-------------|
| GAMMA         | 0.35 ~ 0.70 |
| CHROMA        | 0-20        |
| SHARPNESS     | 0-20        |
| DE-BACK NOISE | 0-10        |
| SHADING       | 0-20        |
| RESOLUTION    | 0-15        |
| WARM COLOR    | 0-20        |
| COOL COLOR    | 0-20        |

### IMAGE SETTINGS 06



|           |            |   |
|-----------|------------|---|
| BACKLIGHT | OFF        | Level(Low/Middle/High), Display (Off/On), Position (Top/Bottom/Left/Right)            |
|           | BLC        | Level(Low/Middle/High)  |
|           | HLC        | Level(Low/Middle/High)  |
|           | OFF        |   |
| CONTRAST  | WDR        | Auto, Manual, Level (Low, Middle, High)   |
|           | DEFOG      | Auto, Manual, Level (Low, Middle, High)   |
| POSI/NEGA | POSI, NEGA |   |
| H-MIRROR  | OFF        |   |
| PRIVACY   | ON         | Mask LV (12 Color), Area No (1-8), Display (Off/On), Position (Top/Bottom/Left/Right) |

### DNR SETTINGS 07



|     |                           |
|-----|---------------------------|
| DNR | OFF / LOW / MIDDLE / HIGH |
|-----|---------------------------|

### MOTION DETECTION SETTINGS 08



|          |             |                       |
|----------|-------------|-----------------------|
| OFF / ON | SENSITIVITY | 0-30                  |
|          | AREA NO.    | 1 ~ 4                 |
|          | AREA USE    | OFF / ON              |
|          | POSITION    | TOP/BOTTOM/LEFT/RIGHT |

### SYSTEM SETTINGS 09



|            |                             |     |
|------------|-----------------------------|-----|
| CAM TITLE  | OFF / ON                    |     |
| CAM ID     | 0 ~ 255                     |     |
| ID DISPLAY | OFF / ON                    |     |
| SYNC       | INT / L/L(AC Power)         |     |
| BAUDRATE   | 2400/4800/9600/57600/115200 |     |
| PROTOCOL   | PELCO-D / PELCO-P           |     |
| LANGUAGE   | ENGLISH / CHINESE           |     |
|            | DETECT DETECTION            |     |
| SPECIAL    | FONT COLOR                  | 1-8 |
|            | VERSION                     |     |

### Specifications

| Model                         | UDT-520D-X   |
|-------------------------------|--|
| Video Standard                | NTSC / PAL   |
| Image Sensor                  | 1/3" Sony Super-HAD II CCD   |
| Total Picture Elements        | 1020(H) X 508(V) / 1020(H) X 596(V)  |
| Effective Picture Elements    | 976(H) X 494(V) / 976(H) X 582(V)  |
| Synchronizing System          | Internal, AC Line Lock   |
| Horizontal Resolution         | Color: More than 700 TVL<br>B/W: More than 800 TVL   |
| Minimum Illumination          | Color: 0.05 Lux@F1.2(50IRE) / 0.06 Lux(15IRE)<br>B/W: 0.01Lux@F1.2(50IRE) / 0.006 Lux(15IRE) |
| Video S/N Ratio               | 52dB   |
| OSD Language                  | English / Simplified Chinese / Traditional Chinese   |
| Day / Night Mode              | Auto / Day / Night / Ext / CDS   |
| High/Light Compensation (HLC) | Low / Middle / High  |
| High Speed Shutter            | Indoor Outdoor (1/80(1/50) ~ 1/120Ksec)  |
| Flickerless Mode              | OFF / ON   |
| WDR                           | AUTO / MANUAL (Low / Middle / High)  |
| Auto Gain Control (AGC)       | Level Setting  |
| ALC (Auto Level Control)      | AI Lens (DC)   |
| Defog                         | AUTO / MANUAL (Low / Middle / High)  |
| Digital Noise Reduction (DNR) | Off / Low / Middle / High (Adaptive 2D)  |
| Gamma                         | 0.35 ~ 0.70  |
| White Balance                 | ATW / Push / Manual  |
| Camera No. / ID               | Off / On (Max. 255 NO, 8ea ID/1Line)   |
| Motion Detection              | 4 zones (On/Off, Position, Sensitivity)  |
| Privacy Masking               | 8 zones (On/Off, Color, Position)  |
| Lens                          | 2.8 / 3.6mm  |
| Video Output                  | VBS 1.0V p-p (75ohm Terminated)  |
| Power Input                   | DC12V ± 10%  |
| Power Consumption             | Less than 1.2W   |
| Operating Temperature         | -10°C ~ +50°C  |
| Operating Humidity            | Less than 90%  |
| Shell Material                | Vandal Proof Metal   |
| Dimension (mm)                | 110 (Ø) x 64 (H)   |
| Gross Weight (g)              | 434  |

### Note

- Please use the connector of the camera to a DC 12V regulated power supply.
- The tolerance of this unit is DC 12V ± 10 %
- Over the maximum DC 12V power input will damage the video output connector (VIDEO OUT)

**CAUTION**  
RISK OF ELECTRIC SHOCK

**Caution:**  
To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. Only operate this apparatus from the type of power source indicated on the label. The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.