

AIR701 /IRH

Weatherproof Zoom Colour/Mono
IR Camera

USER MANUAL

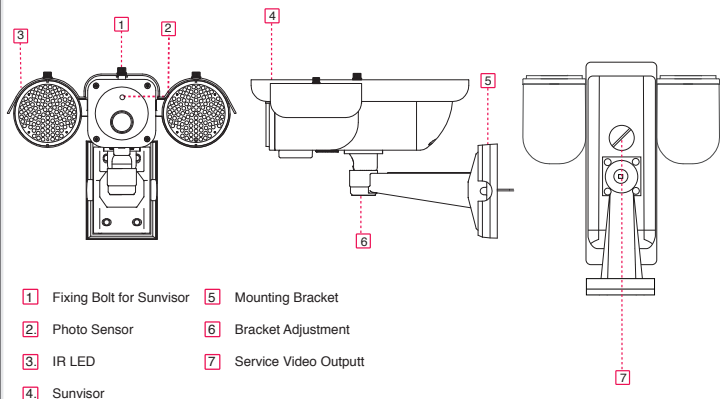


||||| Powered by |||||

AIR
TECHNOLOGY
ADVANCED INFRARED



The Concept Pro AIR701/IRH is a weatherproof IR camera, suitable for monitoring areas in hostile conditions and in low light.



- | | |
|-----------------------------------|-------------------------------|
| 1 Fixing Bolt for Sunvisor | 5 Mounting Bracket |
| 2 Photo Sensor | 6 Bracket Adjustment |
| 3 IR LED | 7 Service Video Output |
| 4 Sunvisor | |

PACKING CONTENTS



WALL SCREW

X4



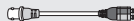
FIXING PLATE

X1



FIXING PLATE
LOCATING SCREW

X2



EASY FIT BNC CONNECTOR

X1



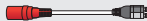
BRACKET/FIXING
PLATE SCREW

X4



ALLEN KEY

X1



EASY FIT POWER CONNECTOR

X1



USER
MANUAL

X1



MOUNTING
DRAWING PAPER

X1



OSD CABLE
(AIR4526HG / 4527HG / 5026HG
MODELS ONLY)

X1

CAUTION

1. This installation should be made by a qualified service person and should abide to all local codes.
2. In order to prevent electronic shock and/or destroy waterproof seals, do not loosen any screws on the camera body.
3. Adjust the sunshield cover to avoid exposure of direct sunlight on the lens.
4. Do not touch the front glass directly. If necessary, use a soft cloth moistened with alcohol to wipe off dust or debris.
5. Avoid installation on a surface subjected to frequent vibration or shocks.
6. Do not operate the camera beyond its temperature range or power source ratings.
7. Should any damage or suspected damage occur, shutdown the power source, unplug and contact your service provider.
8. Do not install the camera under unstable lighting conditions. Severe lighting change or flicker can cause the camera to work improperly.
9. Never use the camera close to a gas or oil leak.
10. Do not disassemble the camera.
11. Do not drop the camera or subject the unit to physical shocks. Never keep the camera face to strong light directly, this can damage the CCD.
12. Ensure all removable covers are replaced to protect the inner components.
13. Do not install near devices which emit a strong electro-magnetic field.
14. Use a dry or damp cloth only for cleaning.

PLEASE FOLLOW THE ABOVE CAUTIONS – FAILURE TO DO SO MAY INVALIDATE THE WARRANTY OR CAUSE SERIOUS INJURY.

Remark: Changes or modifications not expressly approved by the manufacturer can cause the camera to be damaged and become inoperable. This may invalidate the user warranty.

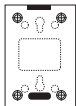
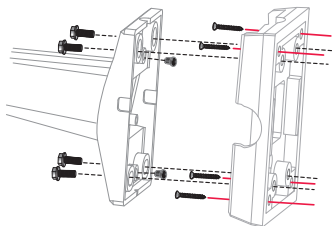
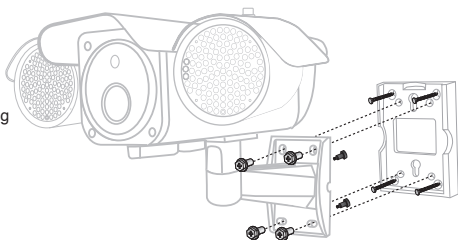
Important: Ensure all cautionary procedures are observed during installation.

It is recommended the camera is tested during the most demanding environmental conditions such as low light or bright sunlight to ensure continuity of effective CCTV monitoring. You may find the use of an ND filter helpful.

Remove the camera unit carefully from the box, reserving the accessory contents in a safe place.

FIXING TO A WALL

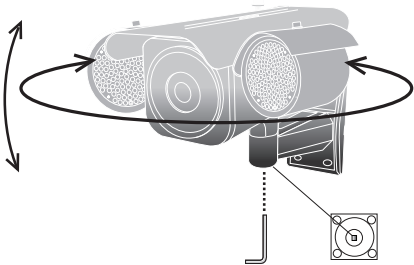
- Use the supplied drill mounting template to mark the spacing for drilling.
- Following drilling, securely attach the bracket and camera to the wall.



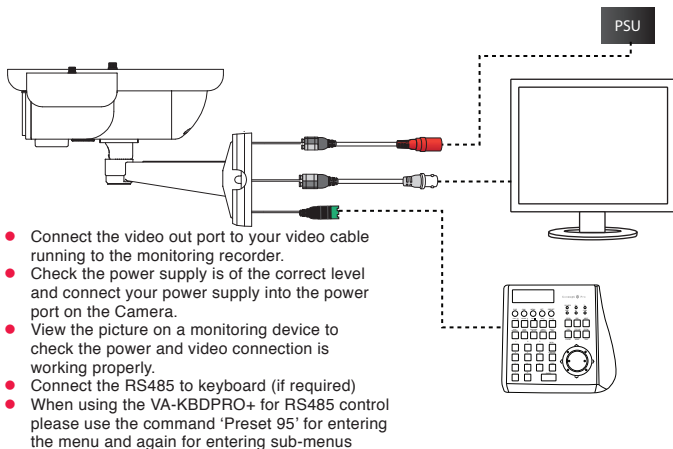
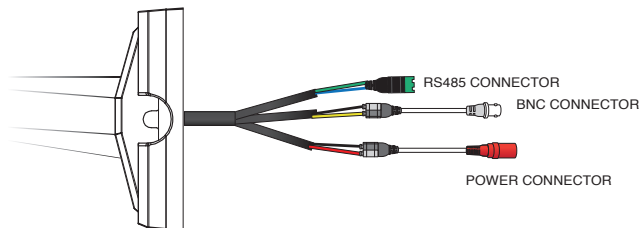
MOUNTING TEMPLATE

POSITIONING

Point the Camera towards the intended area to be monitored.



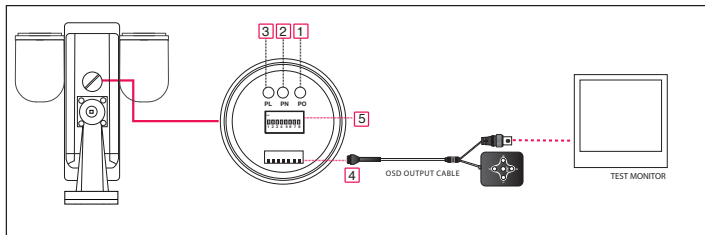
CONNECTION



Troubleshooting

- Ensure all power and cable connections are correct with the Camera, DVR and Test monitor or Telemetry devices if used.
- Power Voltage Check - Remove the OSD cover to see if the green correct power LED is lit. If there red LED is lit the power voltage is too high. If the yellow LED is lit the power voltage is not high enough. If there are no LEDs lit there is no power getting to the camera
- If all power and cable connections are correct and the camera picture can not be produced or configured then contact your supplier for technical support.

The Service Video Out panel contains a power indicator and test monitor connection for ease of adjusting the camera settings during installation.



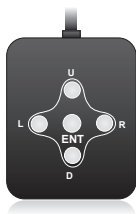
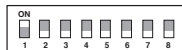
The power indicator LEDs display the power supply being fed into the camera and whether it is too high, low or correct.

1. "PO": Red LED - Voltage is too high
2. "PN": Green LED - Voltage is correct
3. "PL": Yellow LED - Voltage is too low
4. Extra video out and OSD Connector - Attach your Video test monitor with the service video cable enclosed in your camera box. The camera footage will appear on your test monitor and zoom/focus adjustments can be carried out as the installation requires.
5. Camera ID Setup

ID number of camera is set using binary numbers.

| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------|---|---|---|---|----|----|----|-----|
| ID Value | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 |

The example is shown to the right shows ID 1



OSD Controller

- 1) Press "U" to navigate upwards
- 2) Press "D" to navigate downwards
- 3) Press "L" to navigate left
- 4) Press "R" to navigate right
- 5) Press "ENT" to open menu/sub-menu

FOCUS

```

          FOCUS
┌ FOCUS MODE   MANUAL
├ FOCAL DIST  50CM
├ ZOOM START  X001
├ ZOOM END    X270
├ ZOOM SPEED   3
├ REFRESH MODE OFF
├ REFRESH TIME NOT USED
├ INITIAL     ON
├ EXIT       ↓

```

| | | |
|-------|--------------|------------------------------------|
| FOCUS | FOCUS MODE | AUTO MANUAL PUSH [PRESS ENT] |
| | FOCUS DIST | 1CM ~ 3M |
| | ZOOM START | x001 ~ x027 |
| | ZOOM END | x001 ~ x270 |
| | ZOOM SPEED | 1 ~ 3 |
| | REFRESH MODE | ON / OFF |
| | REFRESH TIME | [SET TIME] |
| | INITIAL | OFF / ON |

EXPOSURE

```

          EXPOSURE
┌ AE MODE      AUTO
├ SHUTTER     NOT USED
├ IRIS        NOT USED
├ AGC         NOT USED
├ BRIGHTNESS  25
├ FLICKERLESS OFF
├ D.S.S.      FLD 4
├ INITIAL     ON
├ EXIT       ↓

```

| | | |
|----------|-------------|---|
| EXPOSURE | AE MODE | AUTO / SHUT MAN / IRIS MAN / AGC MAN |
| | SHUTTER | NORMAL / x125 ~ x10000 |
| | IRIS | 0 ~ 255 |
| | AGC | 0 ~ 255 |
| | BRIGHTNESS | 0 ~ 48 |
| | FLICKERLESS | OFF / ON |
| | D.S.S. | OFF / FLD 2 ~ 128 |
| | INITIAL | OFF / ON |

DAY / NIGHT

```

          MENU
┌ FOCUS       ↓
├ EXPOSURE   ↓
├ DAY/NIGHT  AUTO ↓
├ BLC        NORMAL
├ WHITE BAL  ATW
├ 3D-DNR     OFF
├ SPECIAL    ↓
├ GENERAL   ↓
├ INITIAL    ON
├ EXIT      ↓

```

| | | | |
|-------------|-------|------------|--------------|
| DAY / NIGHT | AUTO | D&N MODE | AE / EXT D&N |
| | | DWELL TIME | 1 ~ 10SEC |
| | | INITIAL | OFF / ON |
| | NIGHT | D&N MODE | AE / EXT D&N |
| | | DWELL TIME | 1 ~ 10SEC |
| | | INITIAL | OFF / ON |
| | DAY | D&N MODE | AE / EXT D&N |
| | | DWELL TIME | 1 ~ 10SEC |
| | | INITIAL | OFF / ON |

BLC

MENU

FOCUS ↓
EXPOSURE ↓
DAY/NIGHT ↓
BLC ↓
WHITE BAL ↓
3D-DNR ↓
SPECIAL ↓
GENERAL ↓
INITIAL ↓
EXIT ↓

| | |
|-----|---|
| BLC | NORMAL / C1 / C2 / L1 / L2 / U1 / U2 / D1 / D2 / R1 / R2 |
|-----|---|

WHITE BALANCE

MENU

FOCUS ↓
EXPOSURE ↓
DAY/NIGHT ↓
BLC ↓
WHITE BAL ↓
3D-DNR ↓
SPECIAL ↓
GENERAL ↓
INITIAL ↓
EXIT ↓

| | | | |
|-----------|---------|-------------|---------|
| WHITE BAL | ATW | | |
| | MANUAL | RED CONT | 0 ~ 255 |
| | | BLUE CONT | 0 ~ 255 |
| | INDOOR | | |
| | OUTDOOR | | |
| | PUSH | [PRESS ENT] | |

3D-DNR

MENU

FOCUS ↓
EXPOSURE ↓
DAY/NIGHT ↓
BLC ↓
WHITE BAL ↓
3D-DNR ↓
SPECIAL ↓
GENERAL ↓
INITIAL ↓
EXIT ↓

| | |
|--------|---------------------------|
| 3D-DNR | OFF / LOW / MIDDLE / HIGH |
|--------|---------------------------|

SPECIAL

SPECIAL

| | |
|------------|-----|
| Ⓞ D-EFFECT | OFF |
| SHARPNESS | 6 |
| FREEZE | OFF |
| COLOR | OFF |
| MOTION | ↕ |
| PRIVACY | ↕ |
| INITIAL | ON |
| EXIT | ↕ |

| | | | |
|---------|-------------|--------------------------------|--|
| SPECIAL | D-EFFECT | OFF / V-FLIP / ROTATE / MIRROR | |
| | SHARPNESS | 1 ~ 16 | |
| | FREEZE | OFF / ON | |
| | COLOUR | ON / OFF | |
| MOTION | ZONE SELECT | CENTRE / WHOLE / UPPER / OUT | |
| | ZONE STATE | OFF / ON | |
| | SENSITIVITY | 1 ~ 15 | |
| | INITIAL | OFF / ON | |
| PRIVACY | MASK NUMBER | 0 ~ 3 | |
| | MASK STATE | OFF / ON | |
| | MASK COLOUR | GREY / BLACK / WHITE / YELLOW | |
| | TOP | (SELECT SIZE) | |
| | BOTTOM | (SELECT SIZE) | |
| | LEFT | (SELECT SIZE) | |
| | RIGHT | (SELECT SIZE) | |
| | INITIAL | OFF / ON | |
| | INITIAL | OFF / ON | |

GENERAL

GENERAL

| | |
|-------------|----------|
| CAM ID | NOT USED |
| ID DISPLAY | NOT USED |
| Ⓞ CAM TITLE | ON↕ |
| LANGUAGE | ENG |
| PROTOCOL | NOT USED |
| BAUDRATE | NOT USED |
| VERSION | VER 1.5J |
| INITIAL | ON |
| EXIT | ↕ |

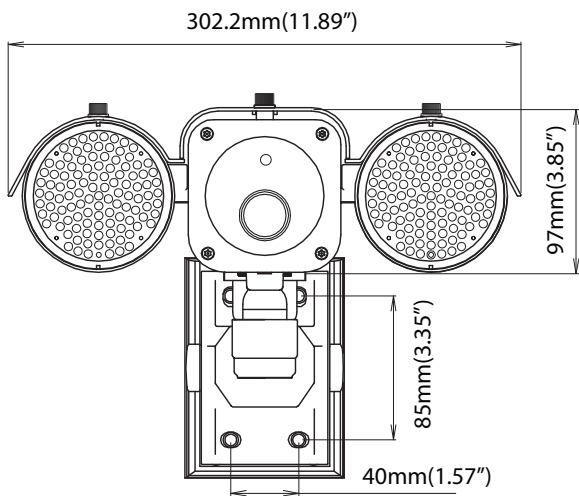
| | | |
|---------|------------|----------|
| GENERAL | CAM ID | NOT USED |
| | ID DISPLAY | NOT USED |
| | CAM TITLE | ON / OFF |
| | LANGUAGE | ENG |
| | PROTOCOL | NOT USED |
| | BAUDRATE | NOT USED |
| | VERSION | |
| | INITIAL | OFF / ON |

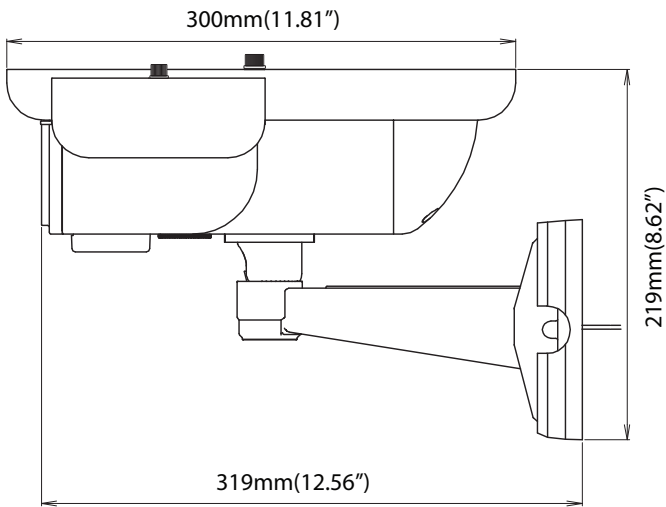
INITIAL

MENU

| | |
|-----------|--------|
| FOCUS | ↕ |
| EXPOSURE | ↕ |
| DAY/NIGHT | AUTO↕ |
| BLC | NORMAL |
| WHITE BAL | ATW |
| 3D-DNR | OFF |
| SPECIAL | ↕ |
| GENERAL | ↕ |
| Ⓞ INITIAL | ON |
| EXIT | ↕ |

| | |
|---------|----------|
| INITIAL | OFF / ON |
|---------|----------|





| ITEM | AIR701/IRH |
|---------------------------|---|
| Type | Twin IR Zoom Colour/Monochrome (Removable IR Cut Filter) |
| Signal System | PAL |
| Image Sensor | 1/4 inch SONY Exview CCD |
| Total Pixels | 795(H)x596(V) 470K |
| Effective Pixels | 752(H)x582(V) 440K |
| Lens | 27x. F1.6(W) ~ 3.7(T) (± 7 %), f = 3.6 ~ 97.2 mm (± 7 %) |
| Digital Zoom | x10 |
| Resolution | 580 TV Lines |
| Min Illumination | 0 Lux (220pcs IR LED ON) |
| Focus | Auto/Manual/Push |
| Frequency | (H) 15.625 KHz (V) 50 Hz |
| Scanning System | 2:1 Interlace |
| S/N (Y signal) | More than 50 dB |
| Electronic Shutter Speed | Normal / x125 ~ x10000 |
| White Balance | ATW, Manual, Indoor, Outdoor, Push |
| Back Light Comp. | Normal / C1 / C2 / L1 / L2 / U1 / U2 / D1 / D2 / R1 / R2 |
| Auto Gain Control | Auto / 0 ~ 255 |
| 3D-DNR | Off / Low / Middle / High |
| DSS | Off / Up to 128x |
| Video Output | CVBS : 1.0Vp-p / 75Ω |
| Communication | RS-485 |
| Protocol | Pelco-D |
| Power Supply | DC12v (± 10%) AC 24v (±10%) |
| Current Consumption (Max) | DC: 2000mA AC: 1400mA |
| IR Effect Distance | 75~80m (245.9~262.3ft) (Outdoor) |
| Dimension | 302.2mm (11.98") (W) x 219mm (8.62") (H) x 319mm (12.56") (D) |
| Weight (Product) | 3.9kg |
| Storage Temperature | -30° to +60° |
| Operating Temperature | -10° to +40° |

Design and specification are subject to change without notice.



AIR15 Range

18 IR LEDs
420 TVL / 520 TVL Options
3.6mm / 6mm Fixed Lens Options
182 x 70 x 81mm (WxHxD)



AIR30 Range

42 IR LEDs
Varifocal Lens Options
Service Video Output Option
On Screen Display Option
External Lens / Zoom Adjustments
202 x 85 x 118mm (WxHxD)



AIR45 / 50 Range

60 IR LEDs
Varifocal Lens Options
Service Video Output Option
On Screen Display Option
External Lens / Zoom Adjustments
340 x 219 x 100mm (WxHxD)



Extend the IR range up to
80m with AIR-IR.

Concept Pro

