Concept Pro

# AIR45/50 Range

Weatherproof Colour/Mono IR Camera

# USER MANUAL

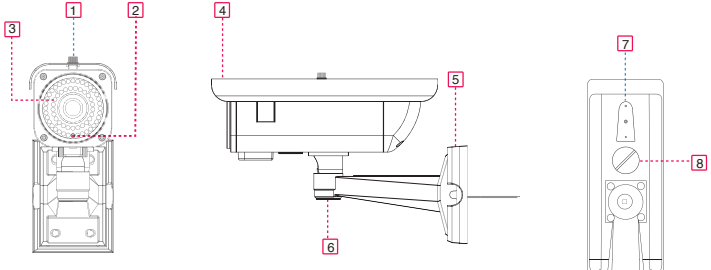
## CAUTION

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.

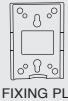
**The Concept Pro AIR45 / 50 range are weatherproof IR cameras, suitable for monitoring areas in hostile conditions and in low light.**




| | | | |
|---|---|---|---|
| 1 | Fixing Bolt for Sunvisor | 5 | Mounting Bracket |
| 2 | Photo Sensor | 6 | Bracket Adjustment |
| 3 | IR LED | 7 | External Lens Adjustment |
| 4 | Sunvisor | 8 | Service Video Output |

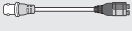
## PACKING CONTENTS

WALL SCREW
**X4**



FIXING PLATE
**X1**

FIXING PLATE LOCATING SCREW
**X2**



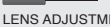
EASY FIT BNC CONNECTOR
**X1**

BRACKET/FIXING PLATE SCREW
**X4**

LENS ADJUSTMENT COVER SCREW
**X1**

ALLEN KEY
**X1**

EASY FIT POWER CONNECTOR
**X1**



LENS ADJUSTMENT TOOL
**X1**

USER MANUAL
**X1**

MOUNTING DRAWING PAPER
**X1**

OSD CABLE
**X1**

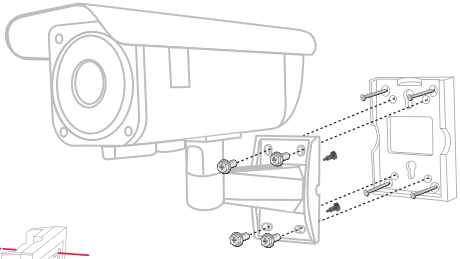
Important: Ensure all cautionary procedures are observed during installation.

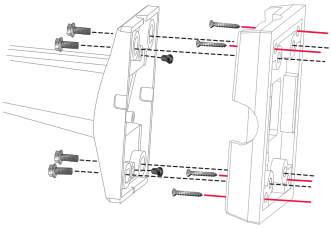
It is recommended the camera is tested during the most demanding environmental conditions such as low light or bright sunlight to ensure continuity of effective CCTV monitoring. You may find the use of an ND filter helpful.

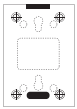
Remove the camera unit carefully from the box, reserving the accessory contents in a safe place.

## 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.



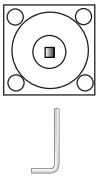


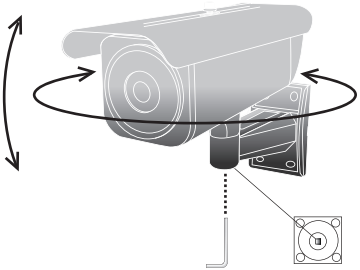


MOUNTING TEMPLATE

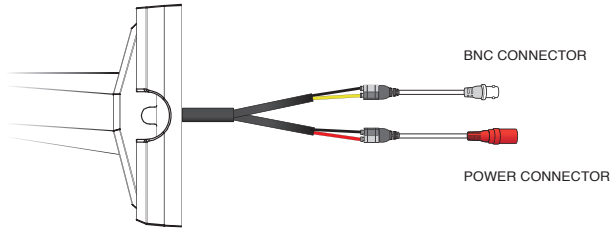
## POSITIONING

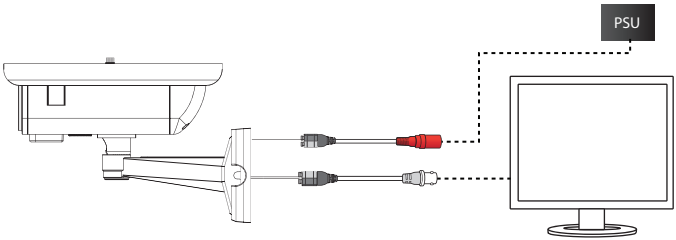
Point the Camera towards the intended area to be monitored.





## CONNECTION

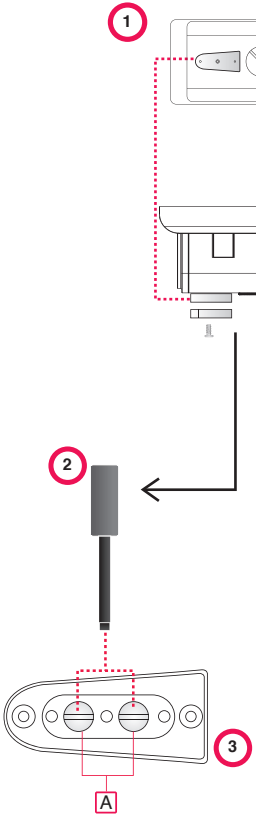



- Connect the video out port to your video cable running to the monitoring recorder.
- Check the power supply is of the correct level and connect your power supply into the power port on the Camera.
- View the picture on a monitoring device to check the power and video connection is working properly.

**Troubleshooting**

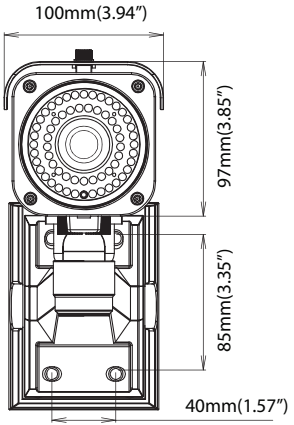
- Ensure all power and cable connections are correct with the Camera, DVR and Test monitor or Telemetry devices if used.
- Power Voltage Check - Remove the OSD cover to see if the green correct power LED is lit. If there red LED is lit the power voltage is too high. If the yellow LED is lit the power 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.

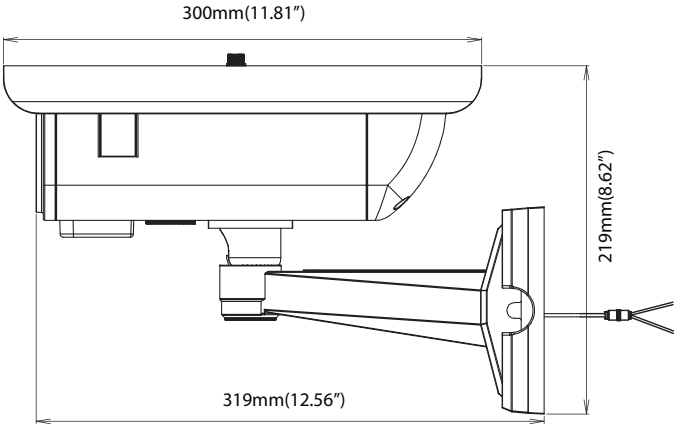


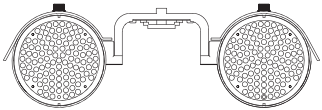

1. Open the lens adjuster cover and adjust focus and zoom. Loose the screw on the lens adjuster cover.

2. Lens Adjustment Tool

3. Focus and Zoom Adjustments
   A **Zoom** Wide / Narrow
   **Focus** Near / Far


100mm(3.94")
97mm(3.85")
85mm(3.35")
40mm(1.57")

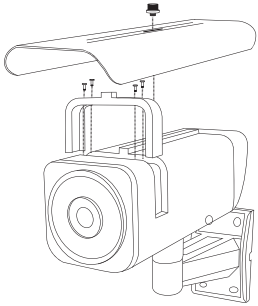

300mm(11.81")
219mm(8.62")
319mm(12.56")

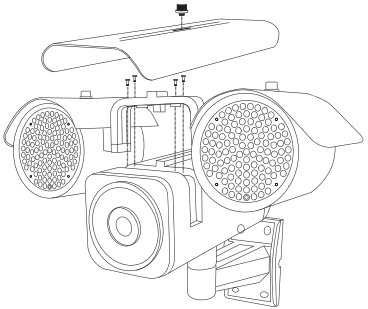


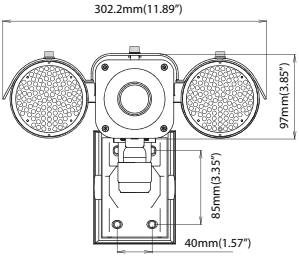
**AIR-IR**
IR LAMPS

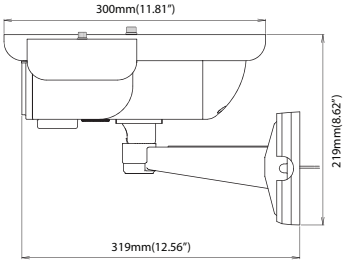
## Extend the IR range up to 80m with AIR-IR.

* Lens should be used at 6mm or above to achieve even illumination

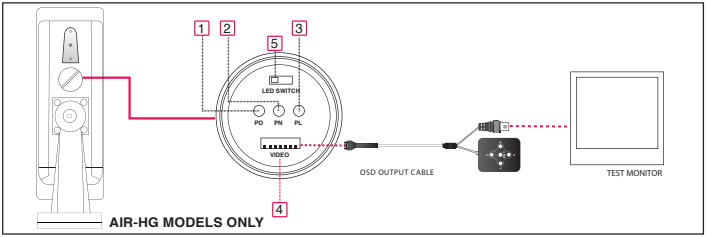






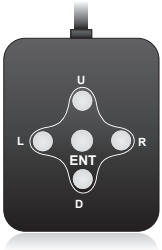



**The Service Video Out panel contains a power indicator and test monitor connection for ease of adjusting the camera settings during installation.**




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. LED Switch: Adjust LED switch to turn IR LEDs of main body on/off




## 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

## MAIN MENU

| | | |
|---|---|---|
| 1 | LENS | MANUAL / DC# |
| 2 | EXPOSURE | # |
| 3 | BACKLIGHT | OFF/BLC#/HSBLC# |
| 4 | WHITE BALANCE | ATW/AWB/AWC-SET/INDOOR |
| | | /OUTDOOR/MANUAL# |
| 5 | DAY&NIGHT | AUTO#/COLOR/B/W#EXT# |
| 6 | NR | # |
| 7 | SPECIAL | # |
| 8 | ADJUST | # |
| 9 | EXIT | SAVE&END/#RESET#/NOT SAVE# |

## LENS

| | | |
|---|---|---|
| 1 | MODE | INDOOR/OUTDOOR# |
| 2 | IRIS | 0-15 |
| 3 | RETURN | RET# |

## EXPOSURE

| | | |
|---|---|---|
| 1 | SHUTTER | AUTO/ 1/25 / 1/50 / FLK / 1/200 / |
| | | 1/400 / 1/1000 / 1/2000 / 1/5000 / |
| | | 1/10000 / 1/50000 / X2 / X4 / X6 / |
| | | X8 / X10 / X15 / X20 / X25 / X30 |
| 2 | AGC | 0-15 |
| 3 | SENS-UP | OFF/AUTO# |
| 4 | BRIGHTNESS | 1-100 |
| 5 | D-WDR | OFF/AUTO/# |
| 6 | DEFOF | OFF/AUTO |
| 7 | RETURN | RET# |

| | | |
|---|---|---|
| 1 | POS/SIZE | POSITION/SIZE/RET AGAIN |
| 2 | GRADUATION | 0-2 |
| 3 | DEFAULT | # |
| 4 | RETURN | RET# |

## BACKLIGHT

| | | |
|---|---|---|
| 1 | LEVEL | MIDDLE/LOW/HIGH |
| 2 | AREA | POSITION/SIZE/RET AGAIN |
| 3 | DEFAULT | # |
| 4 | RETURN | RET# |

## DAY&NIGHT

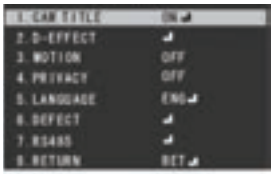
| | | |
|---|---|---|
| 1 | BURST | OFF/ON |
| 2 | IR SMART | OFF/ON# |
| 3 | IR PWM | OFF/0-100 |
| 4 | RETURN | RET# |

| | | |
|---|---|---|
| 1 | D--N (CDS) | 6-255 |
| 2 | D--N (DELAY) | 0-60 |
| 3 | N--D(CDS) | 0-249 |
| 4 | N--D(DELAY) | 0-60 |
| 5 | RETURN | RET# |

## NR

| | | |
|---|---|---|
| 1 | 2DNR | HIGH/MIDDLE/LOW/OFF |
| 2 | RETURN | RET# |

## SPECIAL




| | | |
|---|---|---|
| 1 | CAM TITLE | OFF/ON# |
| 2 | D-EFFECT | FREEZE/MIRRORING/ |
| | | NEG.IMAGE/RETURN |
| 3 | MOTION | OFF/ON# |
| 4 | PRIVACY | OFF/ON# |
| 5 | LANGUAGE | ENG#/CHN1#/CHN2#/GER#/ |
| | | FRA#/ITA#/SPA#/POL#/ |
| | | RUS#/POR#/NED#/TUR# |
| 6 | DEFECT | # |
| 7 | RS485 | # |
| 8 | RETURN | RET# |

| | | |
|---|---|---|
| 1 | FREEZE | OFF/ON |
| 2 | MIRROR | OFF/MIRROR/V-FLIP/ROTATE |
| 3 | NEG.IMAGE | OFF/ON |
| 4 | RETURN | RET# |

| | | |
|---|---|---|
| 1 | LIVE DPC | OFF/AUTO# |
| 2 | WHITE DPC | OFF/MIRROR/V-FLIP/ROTATE |
| 3 | BLACK DPC | OFF/ON |
| 4 | RETURN | RET# |

## ADJUST

| | | |
|---|---|---|
| 1 | SHARPNESS | OFF/AUTO# |
| 2 | MONITOR | LCD#/CRT# |
| 3 | LSC | OFF/ON |
| 4 | VIDEO OUT | NTSC/PAL |
| 5 | MONITOR OUT | 4:3/16:9 |
| 6 | COMET | OFF |
| 7 | RETURN | RET# |

## EXIT

| | | |
|---|---|---|
| 1 | EXIT | SAVE&END#/RESET#/NOTSAVE# |

| ITEM | AIR4526HGS |
|---|---|
| Type | Colour/Monochrome (Removable IR Cut Filter) |
| Signal System | PAL |
| Pick Up Device | 1/3" Super DIS |
| Picture Elements | 1280H×1024V |
| Resolution | 1000TVL |
| Min Illumination | 0Lux (60Pieces IR LED ON) |
| Vertical Frequency | 50Hz |
| Horizontal Frequency | 15.625KHz |
| Clock Frequency | 6MHz |
| Scanning System | Progressive |
| S/N Ratio | ≥52dB |
| Electronic Shutter | 1/25-1/50,000s |
| Lens | 3.5-8mm IR Varifocal Lens |
| White Balance | ATW |
| Back Light | OFF |
| Auto Gain Control | OFF |
| GAMMA | 0.45 |
| Video Out-put | 1V p-p,75Ω |
| Power Supply | DC12V ±10%/AC24V±10% |
| Current Consumption | DC:620mA/AC380mA (Max) |
| IR Effect Distance | 30~35m (98.4~114.8ft) (Outdoor) |
| Dimension | 319x219x100mm |
| Weight | 2.4Kg |
| Storage Temperature | -30°+60° (-22°+140°) |
| Operating Temperature | -30°+40° (-22°+104°) |

Design and specification are subject to change without notice.

| ITEM | AIR4527HGS | AIR5026HGS |
|---|---|---|
| Type | Colour/Monochrome (Removable IR Cut Filter) | |
| Signal System | PAL | |
| Pick Up Device | 1/3" Super DIS | |
| Picture Elements | 1280H×1024V | |
| Resolution | 1000TVL | |
| Min Illumination | 0Lux (60Pieces IR LED ON) | |
| Vertical Frequency | 50Hz | |
| Horizontal Frequency | 15.625KHz | |
| Clock Frequency | 6MHz | |
| Scanning System | Progressive | |
| S/N Ratio | ≥52dB | |
| Electronic Shutter | 1/25-1/50,000s | |
| Lens | 9-22mm Varifocal Auto iris IR Lens | 6-50mm Varifocal Auto Iris IR Lens |
| White Balance | ATW | |
| Back Light | OFF | |
| Auto Gain Control | OFF | |
| GAMMA | 0.45 | |
| Video Out-put | 1V p-p,75Ω | |
| Power Supply | DC12V ±10%/AC24V±10% | |
| Current Consumption | DC:770mA / AC:420mA (Max) | |
| IR Effect Distance | 45~50m (Outdoor) | 50~55m (Outdoor) |
| Dimension | 319x219x100mm | |
| Weight | 2.4Kg | |
| Storage Temperature | -30°+60° (-22°+140°) | |
| Operating Temperature | -30°+40° (-22°+104°) | |

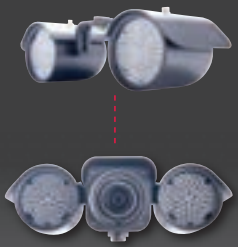
Design and specification are subject to change without notice.

## AIR15 Range

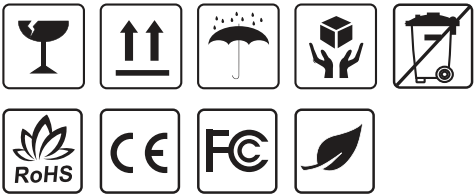
18 IR LEDs
700TVL
3.6mm / 6mm Fixed Lens Options
182 x 70 x 81mm (WxHxD)

## 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)



## AIR-IR

It is possible to extend the IR range of the AIR 45/50 range with an easy to attach bolt-on twin IR lamp. The AIR-IR twin lamp allows the camera unit to view up to 80m.

Concept Pro