

# AIR20/60NPC Range

Weatherproof Mono IR Camera

## USER MANUAL



Powered by



ADVANCED INFRARED



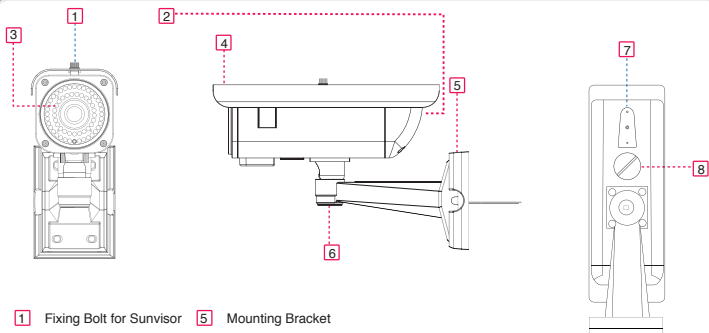
## CAUTION

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 AIR20 / 60NPC range are weatherproof IR cameras, suitable for number plate capture upto speeds of 112mph & 28mph respectively



- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| <b>1</b> Fixing Bolt for Sunvisor | <b>5</b> Mounting Bracket         |
| <b>2</b> Photo Sensor             | <b>6</b> Bracket Adjustment       |
| <b>3</b> IR LED                   | <b>7</b> External Lens Adjustment |
| <b>4</b> Sunvisor                 | <b>8</b> LED Adjustment           |

## PACKING CONTENTS



WALL SCREW

X4



FIXING PLATE

X1



FIXING PLATE LOCATING SCREW

X2



EASY FIT BNC CONNECTOR

X1



BRACKET/FIXING PLATE SCREW

X4



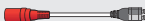
LENS ADJUSTMENT COVER SCREW

X1



ALLEN KEY

X1



EASY FIT POWER CONNECTOR

X1



LENS ADJUSTMENT TOOL

X1



USER MANUAL

X1



MOUNTING DRAWING PAPER

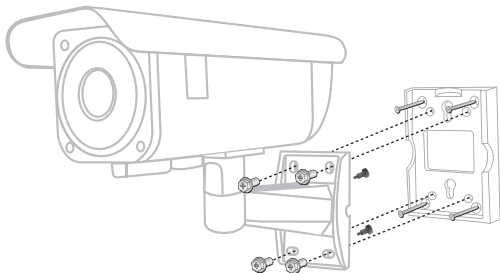
X1

Important: Ensure all cautionary procedures are observed during installation.

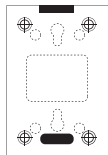
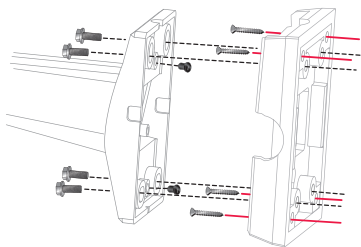
It is recommended the camera is tested during the most demanding environmental conditions such as low light or bright sunlight to ensure continuity of effective CCTV monitoring.

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

### FIXING TO A WALL

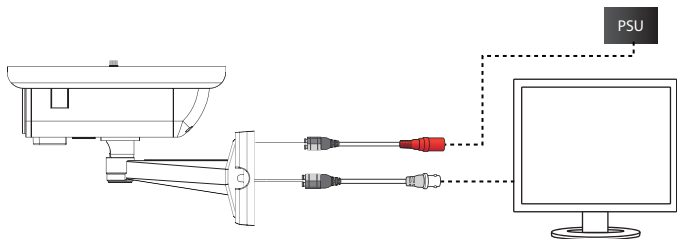
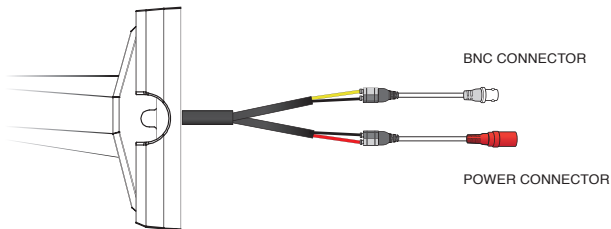


- Use the supplied drill mounting template to mark the spacing for drilling.
- Following drilling, securely attach the bracket and camera to the wall.



MOUNTING TEMPLATE

## CONNECTION

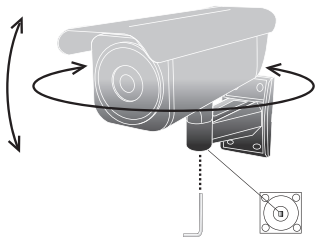
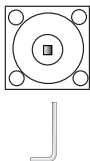


- Connect the video out port to your video cable running to the monitoring recorder.
- Check the power supply is of the correct level and connect your power supply into the power port on the Camera.
- View the picture on a monitoring device to check the power and video connection is working properly.

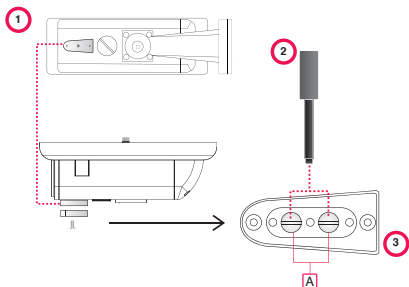
### Troubleshooting

- Ensure all power and cable connections are correct with the Camera, DVR and Test monitor if used.
- 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.

Point the Camera towards the intended area to be monitored.



## EXTERNAL LENS ADJUSTMENT



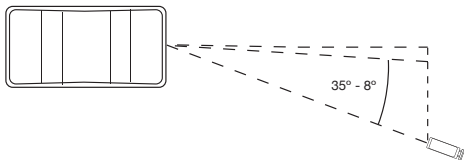
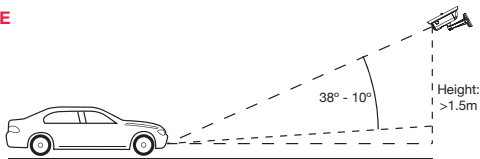
1 Open the lens adjuster cover and adjust focus and zoom. Loosen the screw on the lens adjuster cover.

2. Lens Adjustment Tool

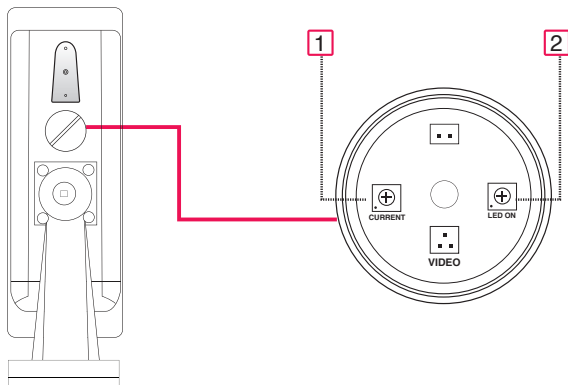
3 <sup>A</sup> Focus and Zoom Adjustments  
 Zoom Wide / Narrow  
 Focus Near / Far

## NUMBER PLATE CAPTURE

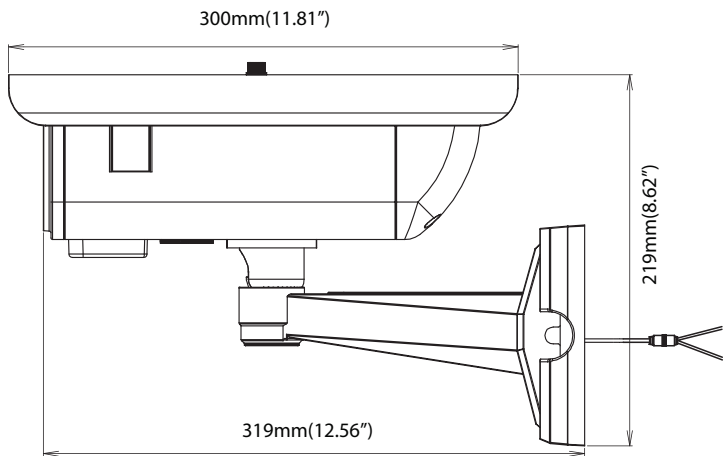
For optimum number plate capture please position the camera at a minimum height of 1.5m above the number plate and at an angle of between  $8^{\circ} \sim 35^{\circ}$  to the side of the number plate.



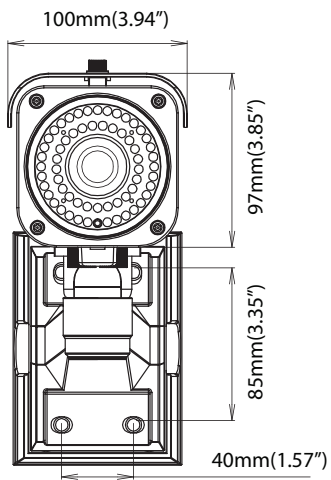
The LED Adjustment contains adjusters for both brightness & length of time the LED's are on for.



- 1.** "CURRENT" - This adjusts the brightness of the IR LED light
- 2.** "LED ON" - This adjusts the time at which the LED's will come on.  
' - ' (minus) adjustment for the LED to work only in darker conditions  
and ' + ' (plus) to work in brighter conditions







# SPECIFICATION

Model	AIR20NPC	AIR60NPC
Max NPC Speed	112MPH - (180kmph)	28MPH - (45kmph)
NPC Distance	5-30M - (16.3-98.3ft)	2-15M - (6.56-49.18ft)
IP Rating	IP66	
Type	Monochrome	
Signal System	NTSC/PAL	
Pick Up Device	1/3" Sony High Resolution CCD	
Picture Elements	NTSC:811Hx508V; PAL:795Hx596V	
Resolution	550TVL	
LED	0Lux (20 Pieces Super High Power LED ON)	0Lux (60 Pieces IR LED ON)
Vertical Frequency	NTSC:60Hz; PAL:50Hz	
Horizontal Frequency	NTSC:15.734KHz; PAL:15.625KHz	
Clock Frequency	NTSC:28.636MHz; PAL:28.375MHz	
Scanning System	2:1 Interlace	
S/N Ratio	≥50dB	
Electronic Shutter	1/2,000s	
Lens	6-50mm Varifocal Auto iris IR Lens	9-22mm Varifocal Auto iris IR Lens
White Balance	AUTO Tracking	
Back Light	ON	
Auto Gain Control	ON	
GAMMA	0.45	
Video Out-put	1V p-p,75Ω	
Power Supply	DC12V ±10%	
Current Consumption	200mA(Max)	
Dimension	319x219x100mm	
Weight	2.5Kg	
Storage Temperature	2.5Kg-30~+60°C (-22~+140°F)	
Operating Temperature	-30~+40°C (-22~+104°F)	

Design and specification are subject to change without notice.

The AIR range includes a number of other housed Infra Red cameras for external use. Please note that the cameras below are not Number Plate Capture cameras.



### 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.



### 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

