



# VEGA™ Rugged Housing With 5MP Camera & Lens



## Installation Guide

2065 Model



**Contact Redvision:**

Redvision CCTV Ltd.  
Alpha House  
Blacknest Road  
Blacknest  
Alton  
Hampshire  
GU34 4PX

Sales & Technical Support: +44 (0) 1420 448 448

[sales@redvisioncctv.com](mailto:sales@redvisioncctv.com)

[techsupport@redvisioncctv.com](mailto:techsupport@redvisioncctv.com)

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## 1.0 Introduction

Thank you for choosing the Redvision VEGA™ rugged camera housing; designed for use in exposed outdoor locations. The Vega™ range of products offers rugged enclosures with features from simple empty enclosure, to intelligent wiper and auxiliary control, with a variety of power supply options. Please study this guide thoroughly before installing, maintaining, and using the product.

## 1.1 Product Features

The Vega™ 2065 offers a rugged, heated, safe enclosure, with a factory-fitted, high-quality camera and lens assembly. The heater is self-regulating and requires no user intervention. The housing can be installed in both upright and hanging (under-canopy) orientations, and provides cable management and a convenient electrical connection point for power and user connections. A motorised wiper can be driven manually or by timed function; allowing complete standalone operation.

## 1.2 Instructions for the Disposal of Electric and Electronic Equipment



The Wheelie Bin symbol on this product or its packaging indicates that the product is required to be disposed of in an acceptable manner. This is in accordance with the WEEE Directive 2002/96/EC. For more information regarding the correct disposal of this unit at the end of its life please contact the company from which this unit was purchased.

### 1.3 Safety



**THIS CAMERA SYSTEM MUST BE INSTALLED, OPERATED AND MAINTAINED  
IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.**

1. Installation of this system should be carried out by suitably trained and qualified technicians in accordance with local electrical codes.
2. To prevent the risk of electric shock do not expose the electrical connectors on the camera or the inside of the control box to water before or during installation. Condensation/ misting may occur if water is allowed to enter the housing before power is applied.
3. Do not drop the product.
4. Avoid the use of alcohol or solvent-based cleaners. The product should be cleaned with clean water and non-abrasive material.
5. The camera system should be installed where it cannot be tampered with by unauthorised personnel.
6. The products should be securely fastened to a structure of sufficient strength to support it. Allowance should be made for additional loads caused by local wind effects.
7. **This product incorporates an automatic heating element; located underneath the housing window. This element will become very hot, touching the element could result in burns or injury. Avoid contact with the heating element!**

## 1.4 Parts Supplied/ Available



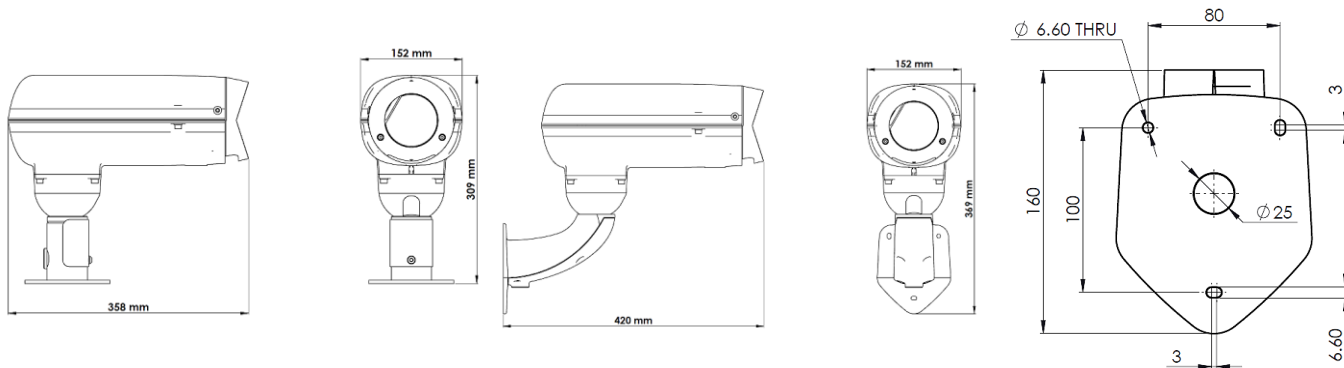
Part	Quantity
1: Vega™ Housing assembly	1
2: Installation Kit:	
Allen Key Large (5mm) – Top cover removal	1
Allen Key Medium (3mm) – Front bezel & wall bracket cover removal	1
Allen Key Small (2.5mm) – Bracket arm lock ring fixing	1
¼" UNC bolt – Camera fixing to base plate	1
3: Bracket locking bar ( <b>optional</b> , must be ordered separately)	1
4: Accessory connecting wires	2

If parts appear to be missing or damaged this should be reported immediately to your supplier.

## 2.0 Specifications

This product is  marked and has been fully tested.

Housing material	Die-Cast Anodised Aluminium with corrosion-resistant plating
Window material	Toughened Glass (Polycarbonate window available as option)
Body colour	RAL 7035 Light Grey (Custom RAL colours available)
Weather-resistance	IP67
Environment regulation	Internal heater, self-regulating.
Impact rating	IK10 (excluding glass)
Power options	12VDC @ 13.8W max. 24VAC @ 6.6W max. PoE+ max. 30W (PSE)
Power input protection	Short-circuit protection, on-board regulation.
External Dimensions	358D x 134H x 152W mm max.
Weight	4.2 Kg (no camera fitted, incl. wall bracket)
Mounting options (Must be specified at time of ordering)	Standard: Wall bracket with cable managed entry PED: Cable managed pendant/pedestal bracket with 4" PCD



### 3.0 Installation

It is strongly recommended that the camera/lens assembly is fitted indoors, before the housing is installed. All attempts should be made to avoid damp air entering the housing enclosure, before sealing and powering. Failure to observe this advice may result in condensation forming on the housing window, causing obscuration of the camera image.

#### 3.1 Wall Bracket (Standard fitting):

- Use the three mounting holes to fix the bracket to the wall (Fig 1); the bracket can be removed from the housing body to aid fixing, by removing the Pivot Ball (shown below). The upper-left and bottom holes are elongated to aid levelling during fixing.

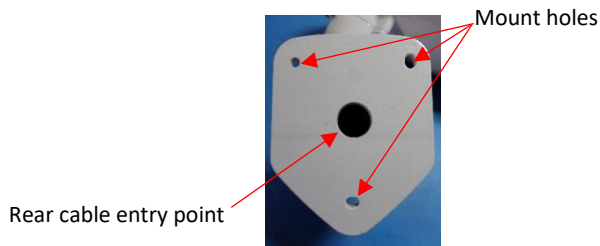


Fig 1

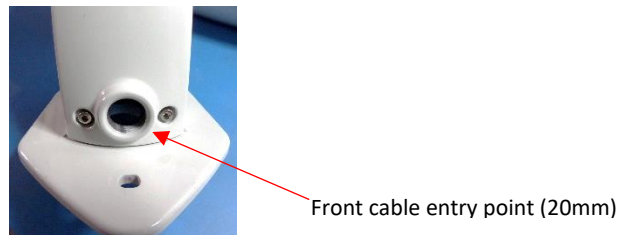


Fig 2

- Two cable entry points are provided (fig 2); at the rear of the baseplate (25mm  $\varnothing$  hole), for cables passed through the wall, and at the front; located at the bottom of the wall arm cover (20mm threaded for conduit). A screw cap is supplied for this access point, in the event it is not used.



### 3.2 Removing the bracket to aid wall fixing:

- Remove the 4 Allen bolts securing the Pivot Ball to the housing body, using the 5mm Allen wrench (Fig 3). Lifting the Pivot Ball and bracket arm away from the housing body reveals 2 cable entry glands for access into the housing enclosure (Fig 4). One gland is split (the larger of the two), allowing a pre-made Ethernet cable to be inserted easily (up to 14mm size); the other a standard gland. Ensure that the rubber O-rings remain on the screws when loosening.

Removing the Pivot Ball assembly

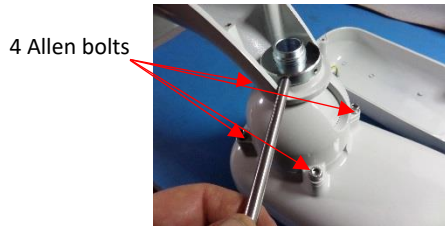
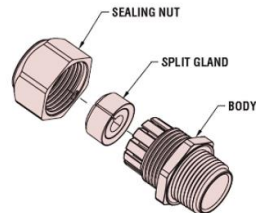


Fig 3

Cable Glands revealed, Split-gland on left



Fig 4



Complete split-gland assembly

- Ensure that any unused Glands are closed off, to avoid damp air entering the housing.
- The wall bracket arm can now be attached to the mounting surface.
- The cable(s) can be passed through the bracket arm by removing the front cover of the arm.

Bracket cover fixing screws



Fig 5

Bracket interior



Cable access  
&  
Locking ring  
assembly

Fig 6

- Remove the wall bracket Allen wrench provided and pull the cover away
- The cable access hole and (Fig 6).
- Pass the cable(s) into the hole (16mm  $\varnothing$ ), into the



Fig 7

front cover (Fig 5). Using the medium (3mm), unscrew the 4 fixing bolts) from the bracket arm. locking ring assembly are now visible

arm and through the cable access Pivot ball assembly (Fig 7):

- Offer the housing body up to the Pivot Ball and pass the cable(s) through the gland(s), ensuring unused glands are closed off to prevent damp air ingress.
- Attach the housing body to the Pivot Ball assembly and refit, using the 4 Allen bolts. Ensure the rubber O-ring seals are still fitted on each bolt. Tighten the locking ring using the optional wrench bar (Fig 8).
- Upon re-fitting the housing body to the bracket arm; position the housing and tighten the locking ring with the wrench bar, and tightening one of the grub screws using the supplied Allen wrench (2.5mm) This fixes the ring in place and ensures the housing remains firmly in position (Fig 9)



Fig 8

Using the optional wrench bar to tighten the lock ring



Fig 9

Grub screw for fixing Locking ring in place

### 3.3 PED mount: fitting instructions

The PED mount is an alternative mounting system, designed to replace the standard wall bracket assembly. The PED is designed to mount the VEGA™ housing to poles and towers using a 4" PCD fitting. The PED attaches to the housing Pivot Ball in the same way as the wall bracket; with the same cable access. Removal is the same process as described in section 3.2, Fig 3.

- To tighten the lock ring in the PED, first remove the PED column cover, by removing the Allen screw as shown in Fig 10 below. Tighten using the optional wrench bar (Fig 11).



Fig 10

Remove the Cover retaining screw



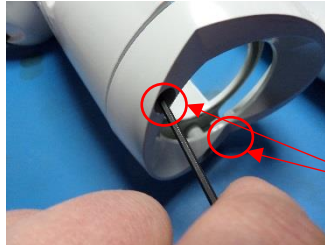
Fig 11

- Fix, pass the cable(s) through; attach the housing body; position the housing and tighten the lock ring as described in section 3.2, figs 8 & 9.

## 4.0 Accessing the housing interior

### 4.1 Removing the housing cover

- First, loosen the front bezel Allen bolts by 3 turns. This will allow the housing cover to be removed easily (fig 12):



Loosen the 2 Allen bolts to release the front bezel

Fig 12

- Next, loosen the 3 Allen bolts securing the Housing cover (Fig 13):



Unscrew the 3 Allen bolts securing the housing cover

Fig 13

- Gently pull the housing cover backwards and upwards, noting that an earthing strap connects the housing cover to the base. Ensure that the earthing strap remains connected at all times (Fig 14). ⚠ **Take care to ensure that the earth strap is not trapped when refitting the housing cover.**

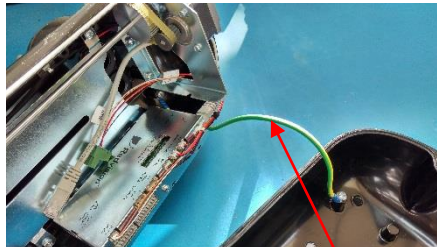


Fig 14

Earthing strap bonding the cover to the housing base

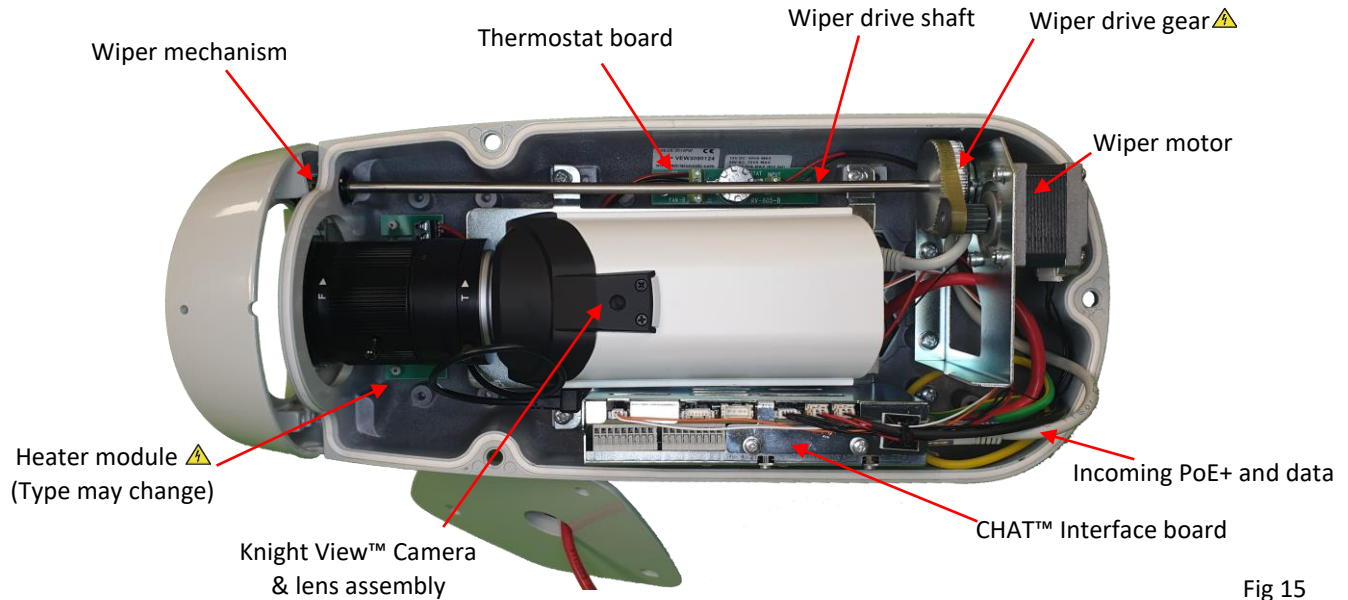


Fig 15

⚠ Keep wiper drive gear, shaft and belt clear of obstructions!

## 4.2 Housing interior and parts

The VEGA 2065 is fitted with the Redvision CHAT™ interface board (Fig 16, below), which provides connection for: Power/ Data/ RS-485 control/ Wash & Wipe control. The CHAT™ board accepts the following voltages:

**12VDC**

**24VAC**

**PoE+ (30W)**

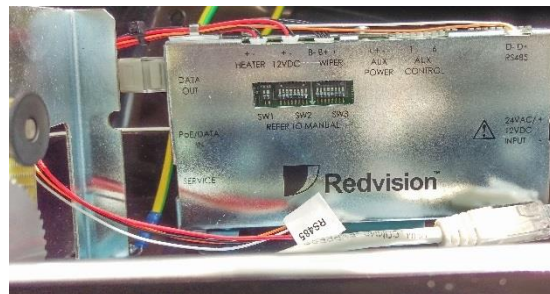


Fig 16



- The CHAT™ board (Fig 11) provides 12VDC power output to power the camera and lens assembly (Ethernet connection is for data only). The 12VDC output is rated at **1A**. Please do not connect any other devices to this power source or damage could occur.

#### 4.25 Removing the camera for servicing purposes

- The CHAT™ interface board is secured to one side of the housing interior. To gain access to the camera mounting plate - first remove the two retaining screws holding the CHAT™ board in place (Fig 12, above). Gently lift the CHAT™ board out of the housing (there will be fixed wires for the wiper attached) to reveal the camera mounting plate:

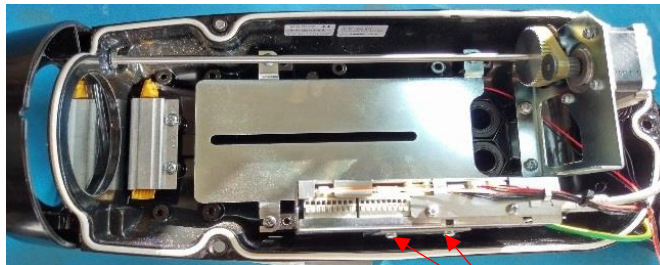


Fig 17

2 retaining screws securing CHAT™ Interface board

- The camera baseplate is secured by 4 screws. The baseplate sits on 4 mount posts. Each post is stepped, allowing 2 mounting height options. The baseplate itself can also be inverted, allowing 4 different heights in total. Ensure that the same mounting position is used when refitting the camera.

- Remove the 4 screws and loosen the camera from the baseplate using the ¼" UNC bolt.  
**When refitting:** Position so that the lens is close to the housing window. Use the baseplate and the stepped mount posts to allow optimum placement of the camera. Best placement allows a slight gap between the lens and the housing window; to allow hot air from the heater to rise and keep the lens and window clear at all times.

#### 4.30 Fixed Connections

- The CHAT™ board will already have some connections fitted. These are:
  - Heater – **1A** maximum
  - Wiper
  - 12VDC (for camera power) – **1A** maximum
  - RS-485 (for Wiper and relay control)
  - Cat 5e flying lead (for camera data only)

You should not need to change or move these connections. A set of auxiliary connection cables is supplied with the housing; a 6-wire cable for auxiliary control and a 2-wire cable (Red/Black) for 12VDC or 24VAC power input to the board. Please connect these cables carefully to avoid damage.

**Note:** The PoE+ power input is to power the CHAT™ board only. It will not power the camera. A separate 12VDC output **(1A)** is provided and wired-in for this function. The flying Cat 5e lead is for camera data connection only.

## 5.0 CHAT™ Interface board connections

5.10 The CHAT™ interface board provides the following inputs and outputs:

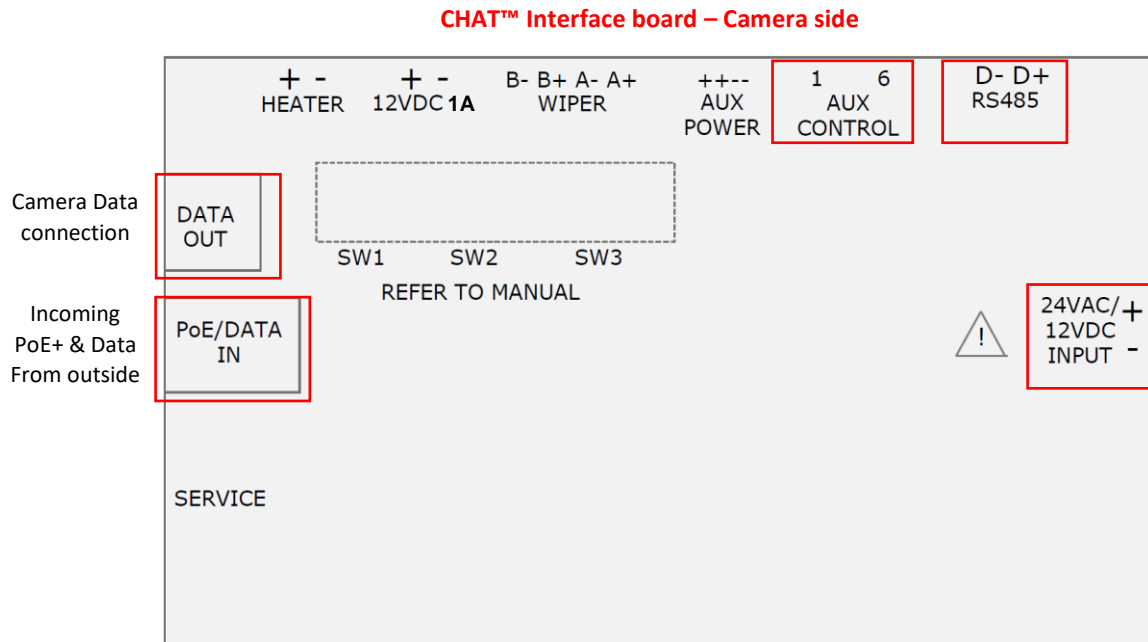


Fig 18: CHAT™ interface board with User connections outlined in red.

## 5.20 Power and Data connections:

NOTE: Only ONE type of power source must be connected at any one time. Connecting multiple power sources will damage the interface board and invalidate the warranty cover for the product.

Please use the connecting leads provided.

## 5.21 PoE+ (802.3at) connection:

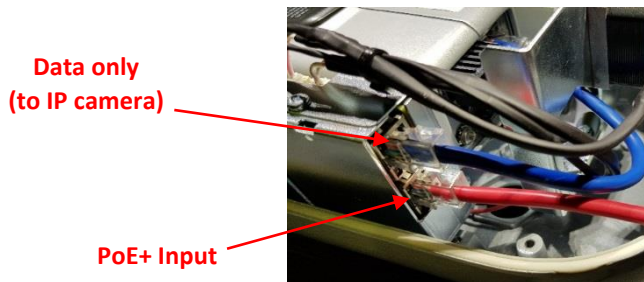


Fig 19 CHAT™ board, showing PoE+ (802.3at) input & data output

The PoE+ input powers the CHAT™ interface board. Camera power is taken from the auxiliary 12VDC power output, located at the top of the board (JP3). The 12VDC power output is rated at 1A maximum, please do not connect any additional devices to this power source or damage may occur to both CHAT™ board and camera.

The top RJ45 connector provides data only connection to the IP camera.

**5.22 12VDC/24VAC connection:**

Use either 12VDC or 24VAC supply to this connector. Note the polarity markings for 12VDC. Do not reverse the connections or damage may occur, invalidating the warranty cover for this product.

**5.30 RS-485 data connection:**

A 2-line connection is provided for RS-485 data control of the CHAT™ board. Please observe standard RS-485 installation practice when using this input. It is possible to connect the RS-485 output of the Knight View camera to the RS-485 input of the CHAT™ board, to allow a remote VMS platform or NVR to control the wiper, via in-band data. **Note:** The VMS/NVR controller **must** be capable of controlling the camera in this way. If in doubt, contact Technical Support +44 (0) 1420 448 448. You may need to test this with a chosen platform before committing to installation.

When using with 3<sup>rd</sup> party controllers/encoders:

D-	=	Data <b>B</b>
D+	=	Data <b>A</b>

### 5.31 DIP Switch settings

- Three DIP switch blocks are provided, to provide control of the following aspects:
  - RS-485 Baud Rate
  - Camera Device ID 1-256
  - Wiper operation Manual (On), Auto (timed), or Off

The switches are located on the camera-side of the CHAT™ interface board:

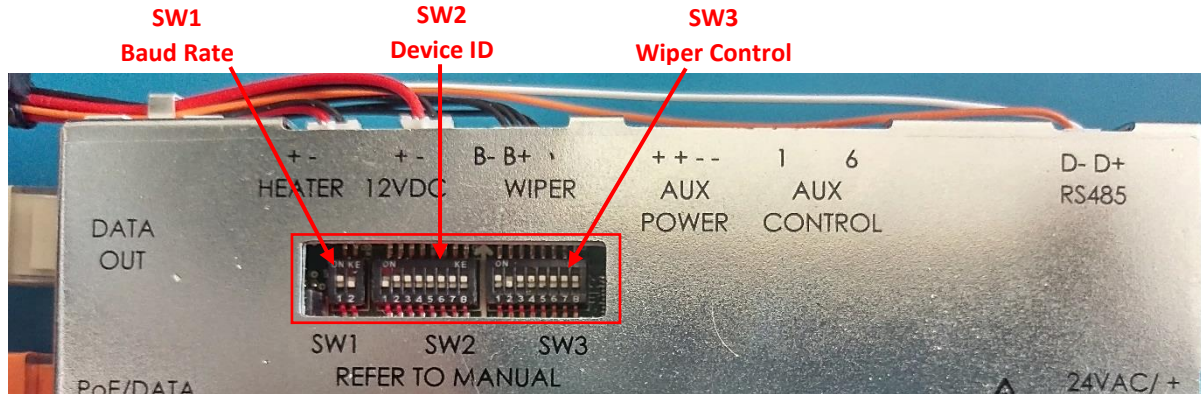


Fig 20 CHAT™ board, showing DIP switch blocks

**Note: All DIP switch settings must be made whilst the housing is powered OFF. The CHAT™ board will read the settings on power-up. If DIP switches are changed whilst powered up, simply power-cycle the housing and the new settings will apply.**

**5.32 RS-485 protocol settings:**

The RS-485 control protocol is fixed at Pelco-D type; N,8,1. The baud rate however, can be changed, and the camera device ID can be set between 1 and 255. **Ignore the labelling on the switch blocks themselves;** for all switches, UP = OFF (0) and DOWN = ON (1). If using the camera's RS-485 connection, the camera will need to be configured to match these settings.

**5.33 SW1 switch settings (Baud Rate):**

**UP = OFF (0) DOWN = ON (1)**

<b>1</b>	<b>2</b>	<b>Baud</b>
0	0	19200
0	1	9600
1	0	4800
1	1	2400

Fig 21 SW1 Baud rate settings

### 5.40 SW2 Settings (Camera ID):

Switches 1-8 set the unique camera ID address: **UP = OFF (0) DOWN = ON (1)**

	8-WAY DIP SWITCH									8-WAY DIP SWITCH									8-WAY DIP SWITCH									8-WAY DIP SWITCH								
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
not used	0	0	0	0	0	0	0	0	16	0	0	0	0	1	0	0	0	128	0	0	0	0	0	0	0	1	144	0	0	0	0	1	0	0	1	
1	1	0	0	0	0	0	0	0	17	1	0	0	0	1	0	0	0	129	1	0	0	0	0	0	0	1	145	1	0	0	0	1	0	0	1	
2	0	1	0	0	0	0	0	0	18	0	1	0	0	1	0	0	0	130	0	1	0	0	0	0	0	1	146	0	1	0	0	1	0	0	1	
3	1	1	0	0	0	0	0	0	19	1	1	0	0	1	0	0	0	131	1	1	0	0	0	0	0	1	147	1	1	0	0	1	0	0	1	
4	0	0	1	0	0	0	0	0	20	0	0	1	0	1	0	0	0	132	0	0	1	0	0	0	0	1	148	0	0	1	0	1	0	0	1	
5	1	0	1	0	0	0	0	0	21	1	0	1	0	1	0	0	0	133	1	0	1	0	0	0	0	1	149	1	0	1	0	1	0	0	1	
6	0	0	1	1	0	0	0	0	22	0	0	1	1	0	1	0	0	134	0	0	1	1	0	0	0	1	150	0	0	1	1	0	1	0	0	1
7	1	1	1	0	0	0	0	0	23	1	1	1	0	1	0	0	0	135	1	1	1	0	0	0	0	1	151	1	1	1	0	1	0	0	1	
8	0	0	0	1	0	0	0	0	24	0	0	0	1	1	0	0	0	136	0	0	0	1	0	0	0	1	152	0	0	0	1	1	0	0	0	1
9	1	0	0	1	0	0	0	0	25	1	0	0	1	1	0	0	0	137	1	0	0	1	0	0	0	1	153	1	0	0	1	1	0	0	0	1
10	0	1	0	1	0	0	0	0	26	0	1	0	1	1	0	0	0	138	0	1	0	1	0	0	0	1	154	0	1	0	1	1	0	0	0	1
11	1	1	0	1	0	0	0	0	27	1	1	0	1	1	0	0	0	139	1	1	0	1	0	0	0	1	155	1	1	0	1	1	0	0	0	1
12	0	0	1	1	0	0	0	0	28	0	0	1	1	1	0	0	0	140	0	0	1	1	0	0	0	1	156	0	0	1	1	1	0	0	0	1
13	1	0	1	1	0	0	0	0	29	1	0	1	1	1	0	0	0	141	1	0	1	1	0	0	0	1	157	1	0	1	1	1	0	0	0	1
14	0	1	1	1	0	0	0	0	30	0	1	1	1	1	0	0	0	142	0	1	1	1	0	0	0	1	158	0	1	1	1	1	0	0	0	1
15	1	1	1	1	0	0	0	0	31	1	1	1	1	1	0	0	0	143	1	1	1	1	0	0	0	1	159	1	1	1	1	1	0	0	0	1
32	0	0	0	0	0	1	0	0	48	0	0	0	0	1	1	0	0	160	0	0	0	0	0	1	0	1	176	0	0	0	0	1	1	0	1	
33	1	0	0	0	0	1	0	0	49	1	0	0	0	1	1	0	0	161	1	0	0	0	0	1	0	1	177	1	0	0	0	1	1	0	1	
34	0	1	0	0	0	1	0	0	50	0	1	0	0	1	1	0	0	162	0	1	0	0	0	1	0	1	178	0	1	0	0	1	1	0	1	
35	1	1	0	0	0	1	0	0	51	1	1	0	0	1	1	0	0	163	1	1	0	0	0	1	0	1	179	1	1	0	0	1	1	0	1	
36	0	0	1	0	0	1	0	0	52	0	0	1	0	1	1	0	0	164	0	0	1	0	0	1	0	1	180	0	0	1	0	1	0	1	0	
37	1	0	1	0	0	1	0	0	53	1	0	1	0	1	1	0	0	165	1	0	1	0	0	1	0	1	181	1	0	1	0	1	1	0	1	
38	0	1	1	0	0	1	0	0	54	0	1	1	0	1	1	0	0	166	0	1	1	0	0	1	0	1	182	0	1	1	0	1	1	0	1	
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40	0	0	0	1	0	1	0	0	56	0	0	0	1	1	1	0	0	168	0	0	0	1	0	1	0	1	184	0	0	0	1	1	1	0	1	
41	1	0	0	1	0	1	0	0	57	1	0	0	1	1	1	0	0	169	1	0	0	1	0	1	0	1	185	1	0	0	1	1	1	0	1	
42	0	1	0	1	0	1	0	0	58	0	1	0	1	1	1	0	0	170	0	1	0	1	0	1	0	1	186	0	1	0	1	1	1	0	1	
43	1	1	0	1	0	1	0	0	59	1	1	0	1	1	1	0	0	171	1	1	0	1	0	1	0	1	187	1	1	0	1	1	1	0	1	
44	0	0	1	1	0	1	0	0	60	0	0	1	1	1	1	0	0	172	0	0	1	1	0	1	0	1	188	0	0	1	1	1	1	0	1	
45	1	0	1	1	0	1	0	0	61	1	0	1	1	1	1	0	0	173	1	0	1	1	0	1	0	1	189	1	0	1	1	1	1	0	1	
46	0	1	1	1	0	1	0	0	62	0	1	1	1	1	1	0	0	174	0	1	1	1	0	1	0	1	190	0	1	1	1	1	1	0	1	
47	1	1	1	1	0	1	0	0	63	1	1	1	1	1	1	0	0	175	1	1	1	1	0	1	0	1	191	1	1	1	1	1	1	0	1	



	8-WAY DIP SWITCH									8-WAY DIP SWITCH									8-WAY DIP SWITCH									8-WAY DIP SWITCH							
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
64	0	0	0	0	0	0	1	0	80	0	0	0	0	1	0	1	0	192	0	0	0	0	0	0	1	1	208	0	0	0	0	1	0	1	1
65	1	0	0	0	0	0	1	0	81	1	0	0	0	1	0	1	0	193	1	0	0	0	0	0	1	1	209	1	0	0	0	1	0	1	1
66	0	1	0	0	0	0	1	0	82	0	1	0	0	1	0	1	0	194	0	1	0	0	0	0	1	1	210	0	1	0	0	1	0	1	1
67	1	1	0	0	0	0	1	0	83	1	1	0	0	1	0	1	0	195	1	1	0	0	0	0	1	1	211	1	1	0	0	1	0	1	1
68	0	0	1	0	0	0	1	0	84	0	0	1	0	1	0	1	0	196	0	0	1	0	0	0	1	1	212	0	0	1	0	1	0	1	1
69	1	0	1	0	0	0	1	0	85	1	0	1	0	1	0	1	0	197	1	0	1	0	0	0	1	1	213	1	0	1	0	1	0	1	1
70	0	1	1	0	0	0	1	0	86	0	1	1	0	1	0	1	0	198	0	1	1	0	0	0	1	1	214	0	1	1	0	1	0	1	1
71	1	1	1	0	0	0	1	0	87	1	1	1	0	1	0	1	0	199	1	1	1	0	0	0	1	1	215	1	1	1	0	1	0	1	1
72	0	0	0	1	0	0	1	0	88	0	0	0	1	1	0	1	0	200	0	0	0	1	0	0	1	1	216	0	0	0	1	1	0	1	1
73	1	0	0	1	0	0	1	0	89	1	0	0	1	1	0	1	0	201	1	0	0	1	0	0	1	1	217	1	0	0	1	1	0	1	1
74	0	1	0	1	0	0	1	0	90	0	1	0	1	1	0	1	0	202	0	1	0	1	0	0	1	1	218	0	1	0	1	1	0	1	1
75	1	1	0	1	0	0	1	0	91	1	1	0	1	1	0	1	0	203	1	1	0	1	0	0	1	1	219	1	1	0	1	1	0	1	1
76	0	0	1	1	0	0	1	0	92	0	0	1	1	1	0	1	0	204	0	0	1	1	0	0	1	1	220	0	0	1	1	1	0	1	1
77	1	0	1	1	0	0	1	0	93	1	0	1	1	1	0	1	0	205	1	0	1	1	0	0	1	1	221	1	0	1	1	1	0	1	1
78	0	1	1	1	0	0	1	0	94	0	1	1	1	1	0	1	0	206	0	1	1	1	0	0	1	1	222	0	1	1	1	1	0	1	1
79	1	1	1	1	0	0	1	0	95	1	1	1	1	1	0	1	0	207	1	1	1	1	0	0	1	1	223	1	1	1	1	0	1	1	1
96	0	0	0	0	0	1	1	0	112	0	0	0	0	1	1	1	0	224	0	0	0	0	0	1	1	1	240	0	0	0	0	1	1	1	1
97	1	0	0	0	0	1	1	0	113	1	0	0	0	1	1	1	0	225	1	0	0	0	0	1	1	1	241	1	0	0	0	1	1	1	1
98	0	1	0	0	0	1	1	0	114	0	1	0	0	1	1	1	0	226	0	1	0	0	0	1	1	1	242	0	1	0	0	1	1	1	1
99	1	1	0	0	0	1	1	0	115	1	1	0	0	1	1	1	0	227	1	1	0	0	0	1	1	1	243	1	1	0	0	1	1	1	1
100	0	0	1	0	0	1	1	0	116	0	0	1	0	1	1	1	0	228	0	0	1	0	0	1	1	1	244	0	0	1	0	1	1	1	1
101	1	0	1	0	0	1	1	0	117	1	0	1	0	1	1	1	0	229	1	0	1	0	0	1	1	1	245	1	0	1	0	1	1	1	1
102	0	1	1	0	0	1	1	0	118	0	1	1	0	1	1	1	0	230	0	1	1	0	0	1	1	1	246	0	1	1	0	1	1	1	1
103	1	1	1	0	0	1	1	0	119	1	1	1	0	1	1	1	0	231	1	1	1	0	0	1	1	1	247	1	1	1	0	1	1	1	1
104	0	0	0	1	0	1	1	0	120	0	0	0	1	1	1	1	0	232	0	0	0	1	0	1	1	1	248	0	0	0	1	1	1	1	1
105	1	0	0	1	0	1	1	0	121	1	0	0	1	1	1	1	0	233	1	0	0	1	0	1	1	1	249	1	0	0	1	1	1	1	1
106	0	1	0	1	0	1	1	0	122	0	1	0	1	1	1	1	0	234	0	1	0	1	0	1	1	1	250	0	1	0	1	1	1	1	1
107	1	1	0	1	0	1	1	0	123	1	1	0	1	1	1	1	0	235	1	1	0	1	0	1	1	1	251	1	1	0	1	1	1	1	1
108	0	0	1	1	0	1	1	0	124	0	0	1	1	1	1	1	0	236	0	0	1	1	0	1	1	1	252	0	0	1	1	1	1	1	1
109	1	0	1	1	0	1	1	0	125	1	0	1	1	1	1	1	0	237	1	0	1	1	0	1	1	1	253	1	0	1	1	1	1	1	1
110	0	1	1	1	0	1	1	0	126	0	1	1	1	1	1	1	0	238	0	1	1	1	0	1	1	1	254	0	1	1	1	1	1	1	1
111	1	1	1	1	0	1	1	0	127	1	1	1	1	1	1	1	0	239	1	1	1	1	0	1	1	1	255	1	1	1	1	1	1	1	1

**5.41 Wiper control settings (SW3):**

The wiper has 3 states: On/Off/Auto. On enables manual control via the RS-485 interface. Auto enables a built-in timer, so that the wiper operates for one cycle at specific intervals. Timed options are: 5/10/15/30-minute intervals, and are selected by **SW3** switch block:

**UP = OFF (0) DOWN = ON (1)**

1	2	3	4	5	6	7	8
Off	On	Auto	(Reserved)	30m	15m	10m	5m

Switches 1 to 3: Only select one DIP switch at any time.

For example: Manual, RS-485 control is DIP switch 2 = ON (all others off)

Auto/15m is DIP switch 3 = ON, switch 6 = ON (all others off)

When Switch 2 is set to ON, but no RS-485 control is used, alarm input 1 (pins 1&2 on JP6) can be used to manually activate the wiper as a voltage-free closing contact. **The wiper will run for as long as the contact remains closed.**

**Note: The Auto-timer function requires one wipe command to be sent via RS-485 to start the timer cycle. Once the manual wipe cycle has ended, the timed cycle will begin and the wiper will activate at the intervals set by DIP switches 6,7 & 8 accordingly. If the power supply to the VEGA™ is cycled, a new RS-485 command will need to be sent to start the auto-wipe timer again.**

## 5.50 JP6 Aux control connections

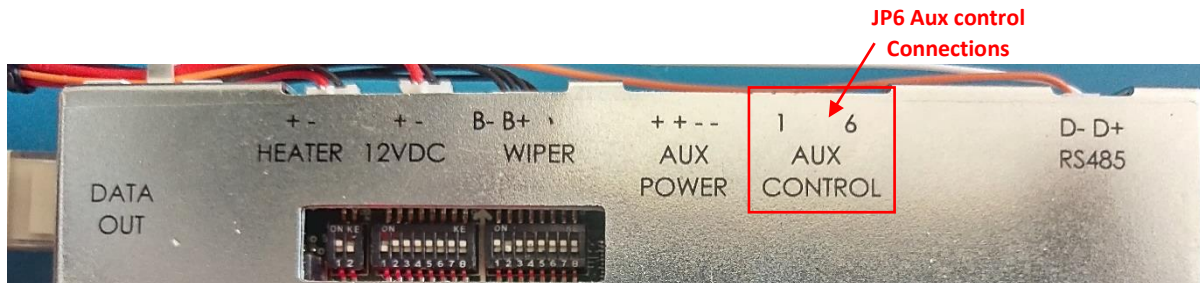


Fig 22 JP6 Aux control connections

### Connections, L-R

1	Control input 1 +	Short these to manually control wiper	
2	Control input 1 Com		
3	Aux Relay out +	Preset 88 controls	Max. cable distance to secondary device <b>10m*</b>
4	Aux Relay out Com		
5	Relay out 2 +	Preset 87 controls	Max. cable distance to secondary device <b>10m*</b>
6	Relay out Com		

\* 10m cable distance tested using BS4737 Type 2 Security cable.

- Shorting wires 1 & 2 together activates the wiper. Removing the short will stop the wiper.
- Wires 3 & 4 provide an alarm relay output (voltage-free), controlled by sending Preset 88 to the board.
- Wires 5 & 6 provide a wash relay output (voltage-free), controlled by sending Preset 87 to the board.

### 5.60 User pass-through connections

The CHAT™ board provides two 8-way connector blocks, located on the top of the board; these are voltage-free, and have no direct connection to the CHAT™ board. They are simple pass-through connectors, to allow easy routing and management of user cables. Each pin on the left-hand connector links to the same pin on the right-hand connector; 1~1, 2~2, 3~3 etc. These can be used for linking alarm, audio, or other auxiliary wires as required.

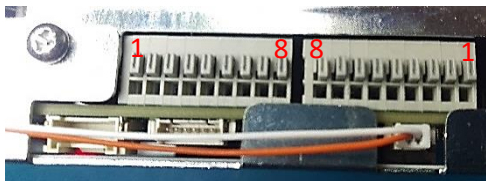


Fig 23 JP6 Aux control connections

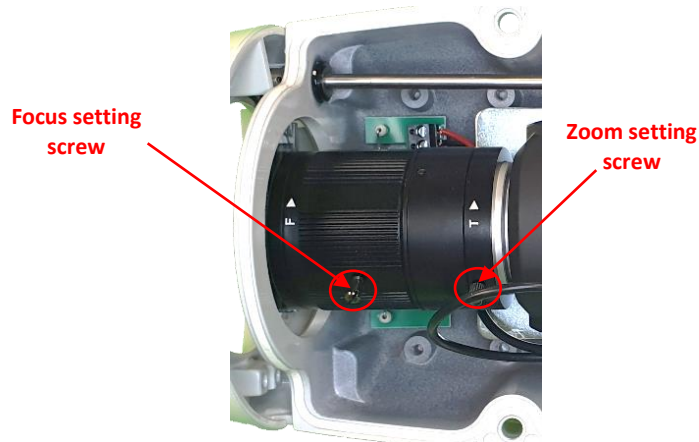
### 5.61 Refitting the Housing cover

- Once connection and final testing is complete; re-fit the top cover using the 3x 6mm Allen screws, then fasten the 2x 4mm Allen screws on the front bezel; ensuring the gasket seal, cover and bezel are fitted flush and evenly all round. Your Vega™ 2065 housing is now ready to use.

**⚠ Take care to ensure that the earth strap is not trapped when refitting the housing cover.**

## 6.0 Adjusting the camera lens Focus & Zoom

The Knight View™ high-definition camera is factory-fitted with a high-quality, Varifocal lens. The lens offers a focal length range of 3.8mm~18mm. The lens is manually adjusted, utilising standard locking screws for each function. Each screw unlocks anti-clockwise, allowing the screw to act as an adjustment lever, to set near and far focus, wide or telephoto zoom. Ensure that these screws are not over-tightened or damage to the lens may occur.



Lens terminology:

F = Focus Far

N = Focus Near

T = Zoom In

W = Zoom Out

## 7.0 Vega range and accessories

### Vega-2010 Series:



Rugged, Durable, Marine-grade Vega™ Housing, with optional pedestal or wall mounting bracket options. The Vega is fully cable-managed and has an optional Tru-park wiper to keep the window clear.

The Redvision VEGA™ 2010 housing accommodates camera and lens assemblies of 228 x 80 x 100 (D x W x H) mm with Tru-park wiper and 290 x 80 x 100 mm without Tru-park wiper.

### Vega-2050 Series:



Solid, Rugged, Durable Vega™ Housing, with integral high-resolution (2MP) 2.8mm-12mm motorised AF lens camera and 60m IR LED. Video Analytics, Audio, Alarm, SD recording (up to 128GB).

Available in Wall or Ped versions. 12VDC or PoE power.

Contact Redvision Sales Team on +44 (0) 1420 448 448 for further information.

## 8.0 WARRANTY INFORMATION

This product is  marked and has been fully tested.

Redvision CCTV limited (Redvision) warrants the buyer that the product will, on the date of shipment, be free from defects in material & workmanship and will conform to Redvision's specifications, provided to the buyer. If any defect in material or workmanship appears in the product, Redvision will, at its discretion, either repair or replace the defective product without charge at Redvision's customer service centre or authorised repair facility or credit or refund the purchase price of the defective product, provided:

- The defect appears within **36** months from the date of purchase.
- Examination of the product confirms that the claimed defect actually exists.

Buyer shall follow Redvision's instructions regarding return of the defective product and no product will be accepted for repair, replacement, credit or refund without:

- Buyer or an authorised representative of the buyer first contacting Redvision Technical Support for assistance and actual confirmation of suspected defect or fault.
- Written authorisation of Redvision or in accordance with Redvision's written instructions, including an official **Return Merchandise Authorisation number (RMA)**, issued by Redvision CCTV Ltd.

In the case of any such return the buyer shall bear the risk of loss or damage and shall prepay all transportation charges to Redvision. The replaced product shall become Redvision's property. In no event shall Redvision be responsible for de-installation or reinstallation of the product or for the expenses thereof. If it is determined that returned product is not defective, the buyer shall pay Redvision all costs of handling, inspection, repairs and transportation at Redvision's then prevailing rates.

With respect to product not manufactured by Redvision, to the extent permitted, extends the warranties and affords the remedies to the buyer given to Redvision by its vendor of said products.

The foregoing warranties do not extend:

- to expendable items, including SD Cards and Hard Disks
- to experimental or development products
- to product which has been subjected to misuse, neglect, accident or abuse;
- to the unauthorised repair or alteration by anyone other than Redvision;
- to improper installation, storage or maintenance by anyone other than Redvision; to product used in material violation of Redvision's instruction or to product which has had its serial number or month and year of manufacture or shipment removed, defaced or altered or to software.

The term "**software**" means a set of logical instructions and table of information which guide the functioning of a processor. Such set may be contained in any medium whatsoever including, without limitation, hardware containing a pattern of bits representing such set, provided, however, the term "software" does not mean or include the medium.

Redvision shall charge for the repair of all product returned out of warranty. Call Redvision customer service +44 (0)1420 448 448 for an RMA number or visit [www.redvisioncctv.com](http://www.redvisioncctv.com) for more information.

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