UpWatch

IQ LIFT PRO 10

POP UP PRODUCTS LIMITED

POP UP PRODUCTS

Machine:	IQ LIFT PRO 10
Document:	DO001831
Revision:	R1V3 - 25/07/2026

Installation Manual

EQUIPMENT SAFETY SYSTEMS
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Document Abstract:

UpWatch installation instructions for IQ Lift Pro 10

Product Name:

Model6503-H – UpWatch / Push Around Vertical Lift - Secondary Guarding System

Reference Documents:

DO001795 – UpWatch Operators Manual

Document Revision:

1.3

Revision Information:

1.0 Initial Document Creation
1.1 Addition of installation images and item part numbers
1.2 Update of sensor mounting bracket to provide better coverage
1.3 Update of EQSS App instructions

Important Information

Information contained in this publication regarding this device's installation and applications, is accurate at the date of publication and may be superseded by updates. Always obtain the latest version from our website and avoid printing. The user agrees to all terms and conditions of use for Equipment Safety Systems products as detailed on our website. This product is subject to our standard warranty as detailed on our website.
Failure to follow these installation instructions may void warranty.

The EQSS Model6503-U UpWatch is designed as an aid to the operator. The device detects the operator's position and movement with respect to the EWP's direction of movement and calculates if a crushing event is occurring, at which point it will trigger the cut-out of the machine's operation. The device responds to an event where actual contact occurs to the EWP operator. As a secondary guarding system, the device is designed to minimise the occurrence of an event resulting in serious injury or fatality.

UpWatch is a secondary guarding system only and does not discharge the operator from operating the EWP in accordance with the manufacturer's correct operating procedures. The device does not provide protection against all operational hazards that may be encountered while operating an EWP. It may not work in all situations and environments, it is not intended as a replacement for the safety features installed by the manufacturer of an EWP, and it will not provide adequate protection where an operator has failed to conduct a proper safe work assessment or uses the EWP in an unsafe way. The device should not be relied upon to safely operate the EWP and should not replace the correct operational training and safe work procedures.

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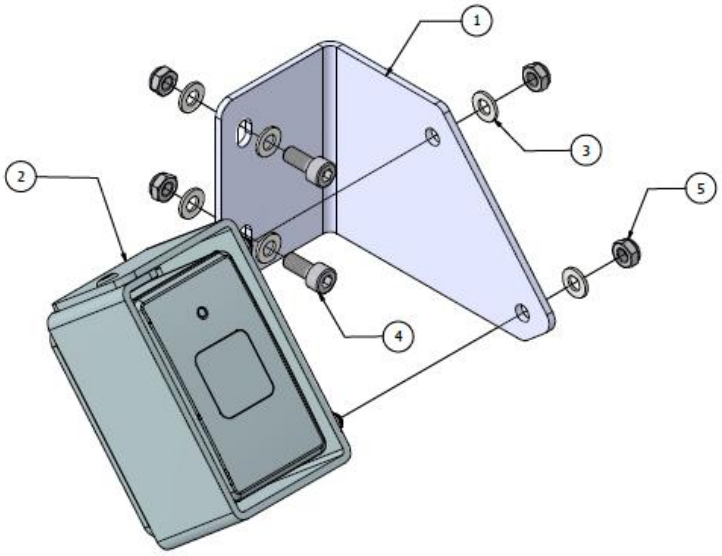
Specifications

The UpWatch is produced to the following specifications.

ELECTRICAL	
Supply Voltage	7VDC to 36VDC
Current	350mA @ 12VDC
Protection	1000mA Regulation
CONNECTIVITY	
CAN	2.0
Inputs	2 x Analogue - 12 bit
Outputs	1 x SSR 4A | 1 x Digital 0.5A
Wi-Fi	802.11 b/g/n
Bandwidth	2.4GHz
Diagnostics	Embedded Server
Static IP	192.168.1.5
PROCESSOR	
Architecture	32Bit LX6 140MHz
RAM	524KB
Flash	16MB – Data Storage
Watchdog	250mS
Data Logging	1024
Bootloader	OTA
AUDIO	
Feedback	Voice & Alarms
Language	Multilingual
Power	4W, 8Ω
Sound Level	100dB @ 10cm
SENSOR	
Type	LIDAR
Light Source	VCSEL
Wavelength	905nm
Field of View	Typ. 14 x 1
Eye Safety	Class 1 Eye Safe [EN60825]
ENVIRONMENTAL	
Operating Temp	-20°C to +65°C
Storage Temp	-25°C to +90°C
Sensor Protection	IP64
Humidity	5% to 98%
Vibration	EN60068-2-6
Shock	EN60068-2-7
EMC	EN61006-6-1 /2 /3/ 4
SAFETY	
Function Safety	SIL1 / CAT2 Plc

Mechanical Quick Start

The UpWatch sensor bolts onto an angled support bracket which mounts to the machine. It is necessary to use the provided bracket as this ensures the sensor is positioned and angled correctly. This allows for the UpWatch sensor to target the operator at the central mid chest region. It is critical to mount the sensor exactly as specified in the manual for correct operation.

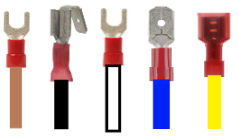


Item	Quanty	Part Number	Description
1	1	ME001905	UpWatch - Sensor Bracket 50D
2	1	AS002550	UpWatch - Sensor 6503-4-1
3	6	FA001174	M5 Washer
4	2	FA001067	M5 x 12mm Socket Head
5	4	FA001219	M5 Lock Nut

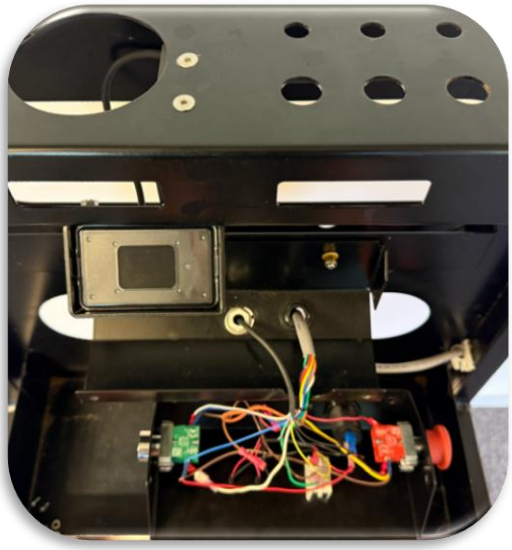
Follow the mounting instructions in this manual, it is critical that the sensor is positioned correctly such that it has a visible sight of the operator's mid chest region when standing in the normal operational position.

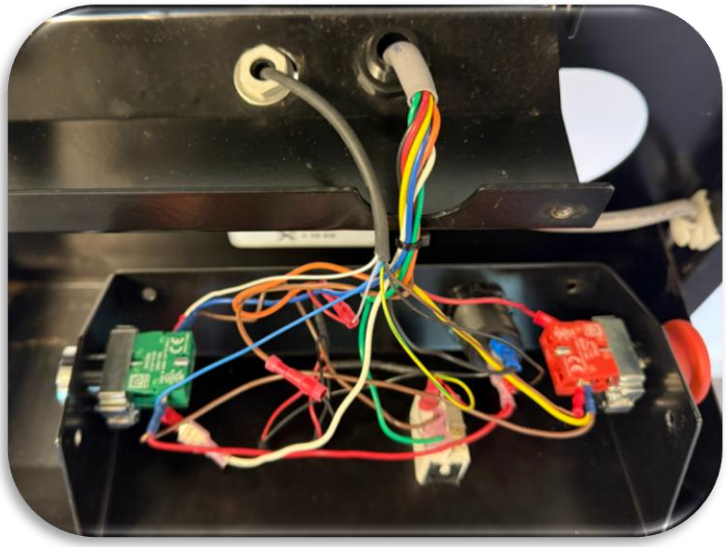
Electrical Quick Start

The UpWatch is an embedded single node sensor and is hardwired to the controller box directly. The system connects to the machine inside the controller box and interfaces with power, elevate and deadman signals.

SENSOR CONNECTIONS			
Series			Cable PUR, 22 AWG
Contacts			5 Core
Cable Length			1000mm – Trim to length
Cable Outer			PUR Black
Wire 1		Power 12/24V DC	Wires are to be crimped with connectors 
Wire 2		GND, 0V	
Wire 3		Dead Man Input 0-24VDC	
Wire 4		Elevate Input 0-24VDC	
Wire 5		Elevate Output 4A	

The UpWatch connects directly to the operator control box. The sensor is supplied with an open-ended cable; this cable is run through a gland into the operator control box. The cable is cut to length and the and the wires are terminated with the supplied crimp connectors.



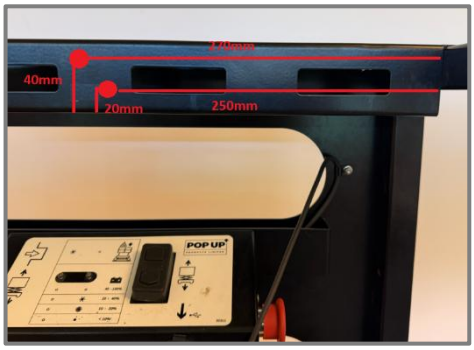


Sensor Mounting

Sensor Bracket Holes:

Drill two **6mm** holes to mount the UpWatch sensor bracket. Note the hole locations must be exact to ensure the sensor is mounted in the correct position

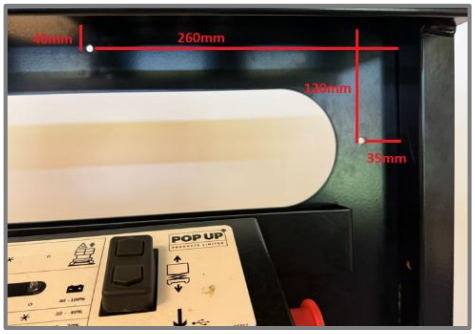
Hole 1 – 270mm from the right and 40mm from the bottom edge
Hole 2 – 250mm from the right and 20mm from the bottom edge



P-Clip Holes:

Drill two **5mm** holes to mount the P-Clips to support the UpWatch cable.

Hole 1 – 260mm from the right and 40mm down from the top
Hole 2 – 35mm from the right and 120mm down from the top



Mount the Sensor Bracket:

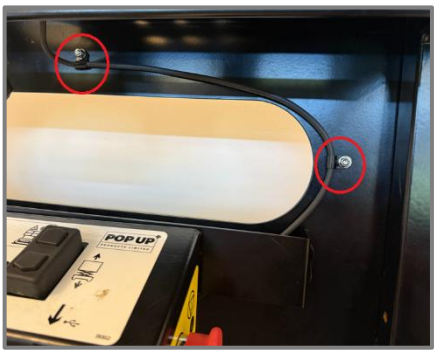
Mount the sensor bracket (ME001905) to the machine using the M5 nuts and washers

Mount the UpWatch:

Mount the UpWatch to sensor bracket (ME001905) using the M5 nuts and washers

Attach P-Clips and Run the Cable:

Mount the two remaining P-Clips to support the UpWatch sensor cable using the M4x12 bolts, nuts and washers

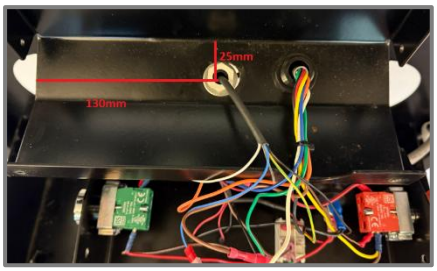


Install the Cable Gland:

Open the operator control box and drill one **12mm** hole for the M12 cable gland

Hole 1 – 130mm from the left and 25mm down from the top

Finally mount the cable gland and run the UpWatch sensor cable into the operator control box

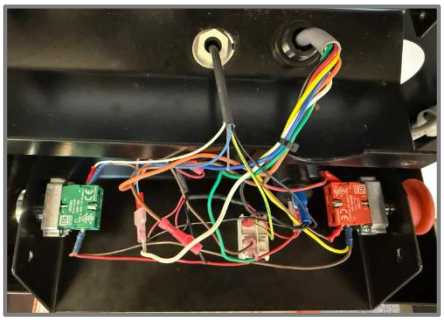


Control Box Wiring

Crimp Terminals:

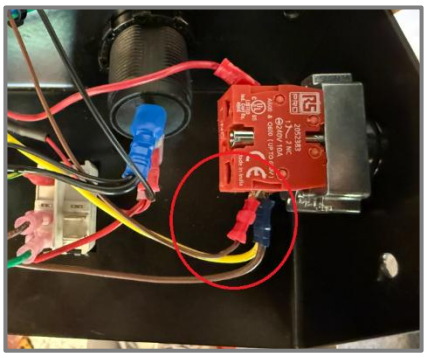
Cut the UpWatch cable inside the control box to 250mm and strip back the outer jacket 150mm to prepare the 5 signal wires for the crimp connectors.

1. Crimp a Red fork to the Brown Wire
2. Crimp a Red piggy-back terminal to the Black wire
3. Crimp a Red fork to the White wire
4. Crimp a Red male spade to the Blue wire
5. Crimp a Red female spade to the Yellow wire



Brown Wire:

Connect the brown wire to the back of the E-Stop terminal block on contact position # 2.

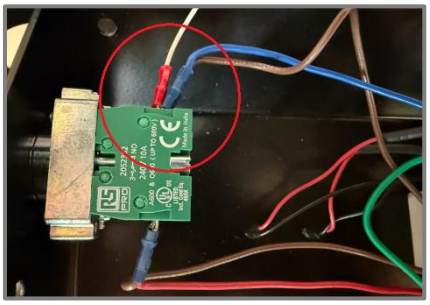


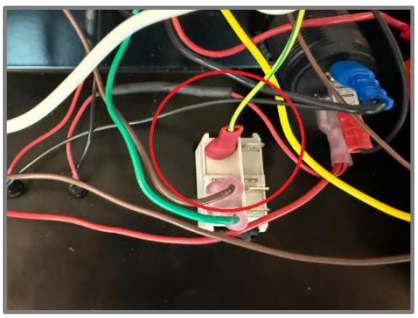
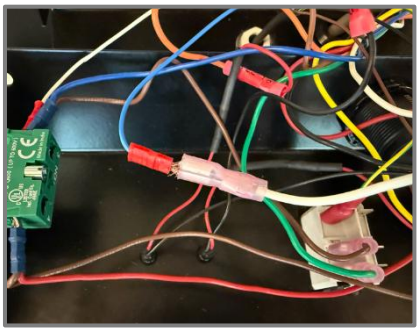
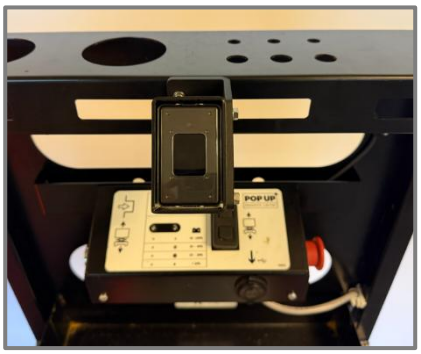
Black Wire:

Connect the UpWatch black wire with the piggy-back terminal to the negative side of the USB charger

White Wire:

Connect the UpWatch white wire to the back of the dead man switch on contact position # 3



Yellow Wire: Remove the white wire in position # 6 from behind the elevate rocker switch. Once removed connect the UpWatch yellow wire into position # 6 of the elevate rocker switch	
Blue Wire: Connect the blue wire from the UpWatch to the white wired previously removed from the elevate rocker switch	
Final Assembly: Re assemble the operator control box, when putting everything back together make sure no wires become trapped or pinched	

Device Configuration

After the system has been installed it must be configured with the parameters to suit the machine. Follow the instructions below to configure the UpWatch.

Install the OverWatch App

The OverWatch App is available for download on the Apple App Store and the Google Play Store. Search for the "EQSS OverWatch" App or download using the QR codes below

Download on the App Store

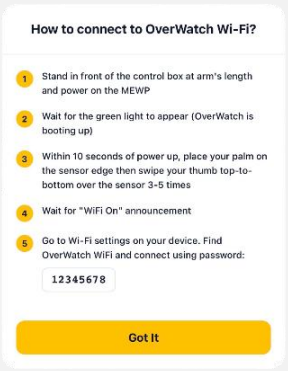
GET IT ON Google Play

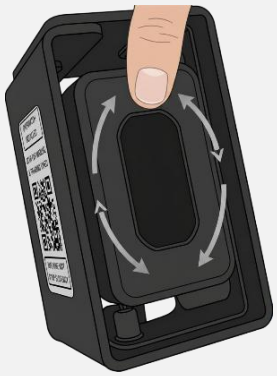
Open the App

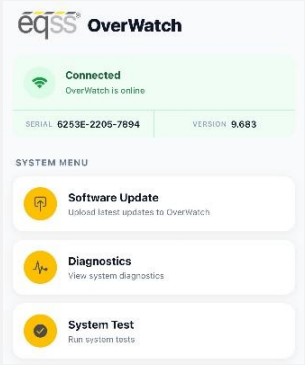
Open the EQSS OverWatch App on your device, when the App starts it will automatically download the latest UpWatch software from the web.

Enable Wi-Fi on the UpWatch

The UpWatch connects to the App via Wi-Fi. Follow the onscreen instructions under **Connect to UpWatch Wi-Fi** in the App



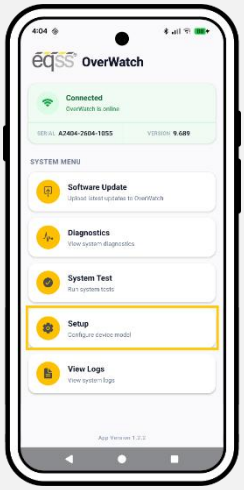


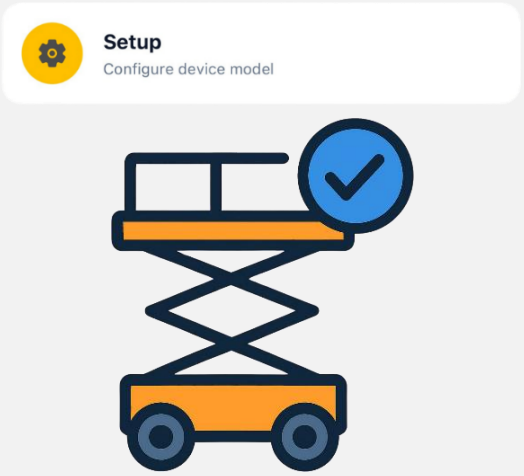


Machine Setup

Set the Machine Model to IQ Lift PRO-10

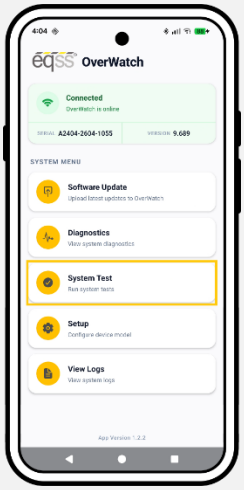
After a new kit installation or a software update, the UpWatch must be told what machine model it is installed on. Each machine model has unique settings such as input thresholds from the electronics and parameters relating to the sensor mounting position. When the UpWatch is connected to the App on Wi-Fi, select setup to select the scissor lift model. Refer to the specific machine installation manual for more information.

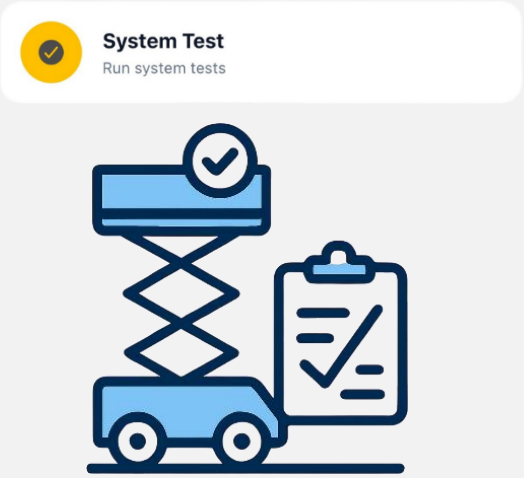




System Test

The system test is used to verify the UpWatch is installed correctly and all signals are working. The system test is used on a new installation or after a software update. The onscreen prompts will guide the test process, and the test must pass for the UpWatch to become operational.





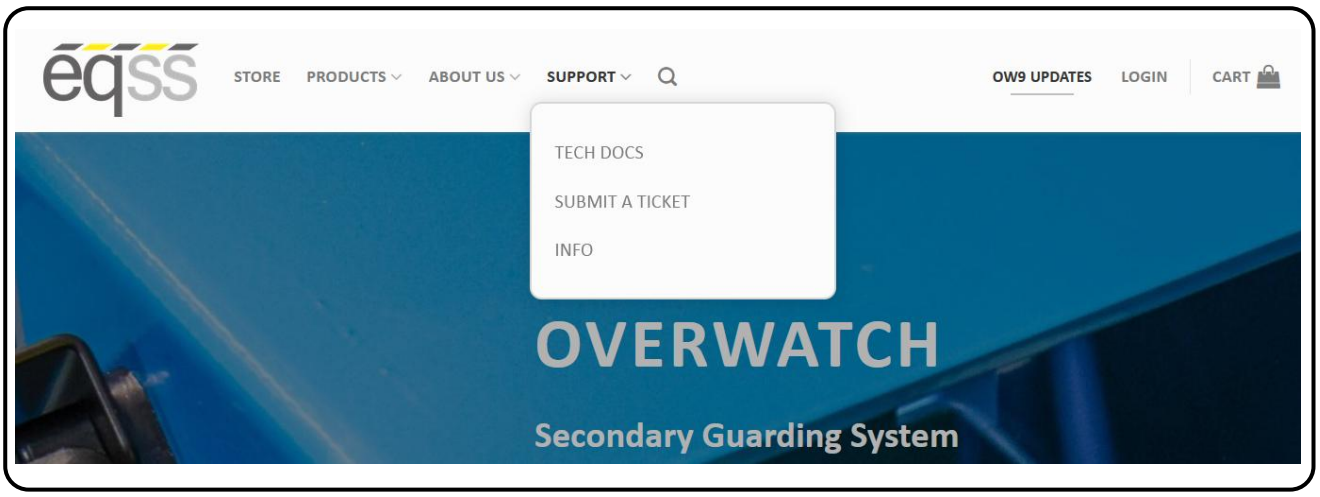
Replacement Parts

Replacement parts for this UpWatch kit are available from the EQSS online store (https://eqss.com.au/store) Shown below are the part numbers for the components included in this model specific kit.

Part Number	Description
UPW-PUP-IQ-10-1	UpWatch – Complete Kit for Pop Up Products, IQ Lift Pro 10
AS002550	UpWatch – Operator Sensor 6503-3-4-1
ME001905	UpWatch - Universal Sensor Bracket 50D
ME001901	UpWatch - Sensor Protection Cover

Support

The best place for support is the EQSS knowledge base and Tech Docs on the website, this contains detailed solutions to common questions. You can also submit a support request which will be responded to immediately.



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