INSTALL MANUAL

EQSS Model6253 – OverWatch
Sinoboom RD-RT Series JTC8 Controller

**** Failure to follow this installation manual will void warranty ****

AUTHORS:	AUTHORISED BY:	CHECKED BY:
Kieren Grogan Bhavani Kacharapu	Kieren Grogan	Andrew Donegan

DOCUMENT ABSTRACT:
This manual details the instructions for installing the Model6253 OverWatch on a Sinoboom RD RT Series JTC8 Controller

PRODUCT NAME:
Model6253 OverWatch Operator Detection System

REFERENCE DOCUMENTS:
DO0001195 Model6253 OverWatch User Manual

CURRENT DOCUMENT REVISION:
1.1

REVISION INFORMATION:

- 1.0 Initial Document Creation for installation on a Sinoboom RD RT Series JTC8 Controller
- 1.1 Update of device configuration to include the OverWatch app

Important Information

Information contained in this publication regarding this device's applications and the like, is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that the application or our equipment meets with your specifications.

EQUIPMENT SAFETY SYSTEMS MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESSED OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION, INCLUDING, BUT NOT LIMITED TO, IT'S CONDITION, QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR PURPOSE.

Equipment Safety Systems disclaims all liability arising from this information and its use. Use of Equipment Safety Systems' products as critical components in life support systems is not authorised except with express written approval by Equipment Safety Systems. No licenses are conveyed, implicitly or otherwise, under any Equipment Safety Systems intellectual property rights.

N23041

This is a class A product certified to AS/NZS CISPR 22:2006. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Table of Contents

Preparation 5
Required Tools 5
Installation Time 5
Installation Instructions 6
Operator Sensor 6
Control Module 9
Device Configuration 12
Harness Drawing AS002544 14
Replacement Parts 15

Preparation

Required Tools

The Overwatch has been designed to be fitted using basic workshop tools. Shown below is a list of tools required to complete the installation.

Item	Tool / Description
1	Electric Drill
2	Centre punch
3	Hammer
4	Side Cutters
5	Drill 6.0mm
6	Drill 5.0mm
7	Step Drill (5 – 30mm)
8	Metric sockets or spanners
9	Needle nose pliers
10	Screw drivers
11	Paint – Green

Installation Time

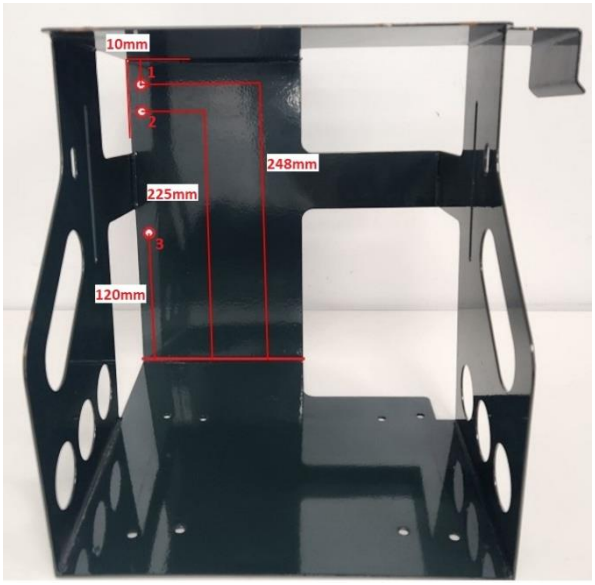
The suggested time required to install the OverWatch is as detailed below.

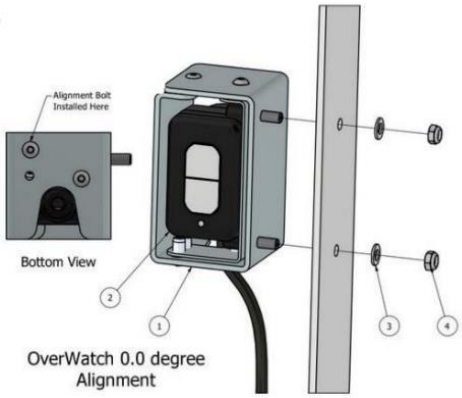
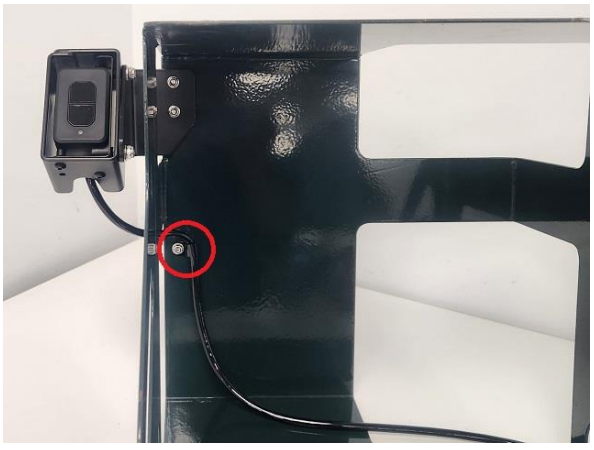
Task	Estimated Time (Minutes)
Drilling of all mounting holes for the various components	10
Mechanical assembly	10
Electrical assembly	10
Post installation system tests	10
Total	**40**

Installation Instructions

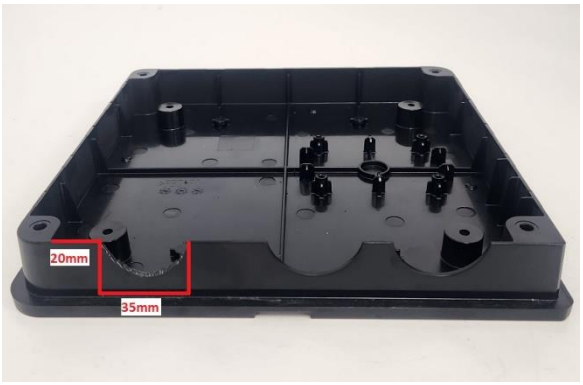
Operator Sensor

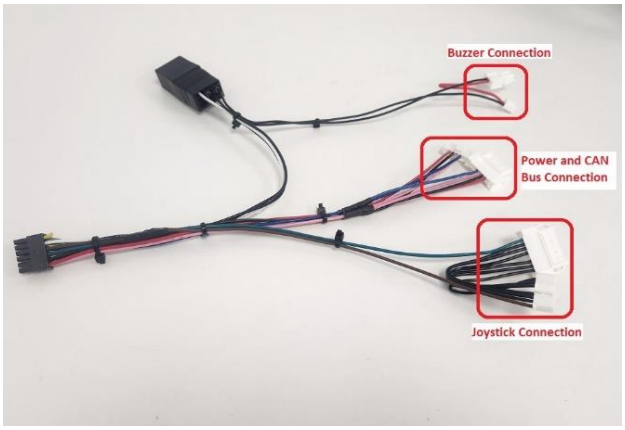
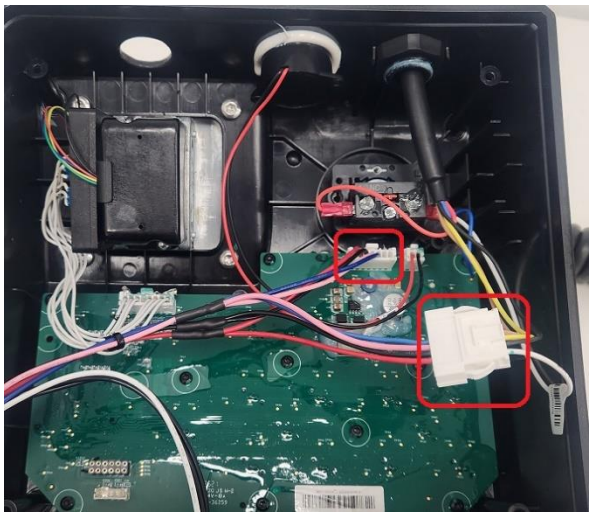
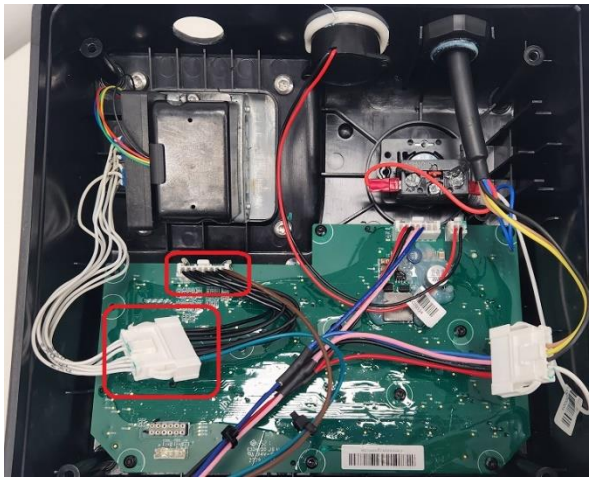
Step	Description	Diagram
1.	Remove the joystick controller from the metal housing.	
2.	Modify the metal housing by removing the left-hand Side mounting rail, trim the rail off and paint the cut joint. This needs to be done to make room for the operator sensor.	

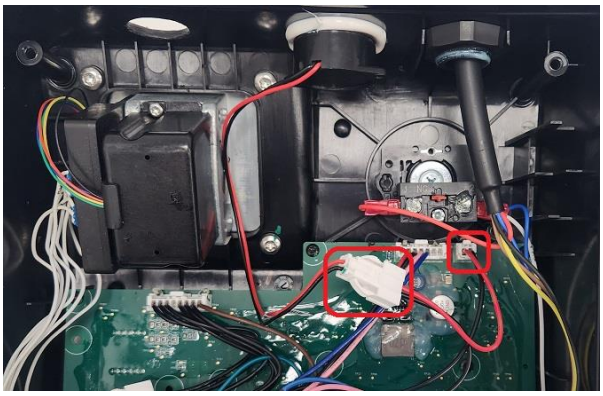
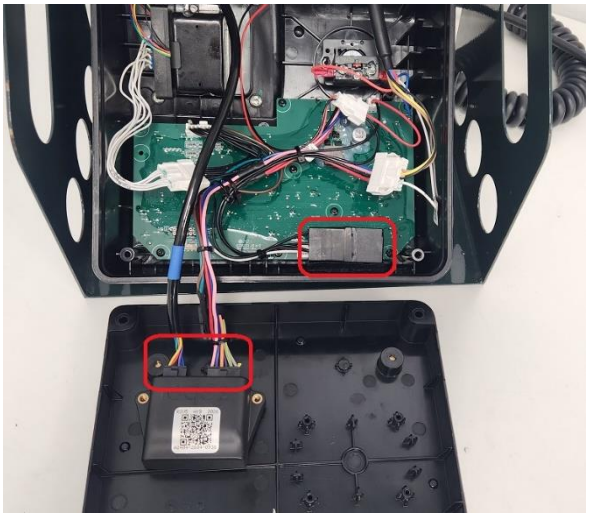
3.	Drill three **6 mm** holes to mount the operator sensor and a P- clip on the outside of the metal housing. Distance is measured from the vertical and horizontal edge of the metal cover. **Hole #1**- **248mm** from the vertical and **10mm** from horizontal. **Hole #2**- **225mm** from the vertical and **10mm** from horizontal. **Hole #3**- **120mm** from the vertical and **10mm** from horizontal.	
4.	Mount the operator sensor bracket using the supplied nuts, bolts, and washers. 2 x M5 x 12mm button head bolts 4 x M5 washer 2 x M5 lock nut	

5.	**Sensor Mounting Guard** Mount the operator sensor in the **30-degree position** on the mounting bracket using the supplied M5 washers and nuts. Make sure that the sensor is on the 0.0-degree angle, such that it is **not** twisted away from the joystick. **The 0.0-degree angle is achieved by using the bolt hole as show in the image.**	 
6.	Route the operator sensor cable as shown in the diagram. Use the P-Clip to secure the cable to the metal box.	

Control Module

Step	Description	Diagram
1.	Remove the bottom cover from the joystick control box to expose the inside wiring and electronics.	
2.	Drill a 20 mm hole to run the operator sensor M20 gland into the metal joystick enclosure. The position of the hole is detailed as in the image. It is recommended to use a step drill for this hole.	
3.	Cut the area on the bottom plastic cover shown in the image so that the cable gland nut does not interfere when closing the control box.	

4.	Wiring connections are made with the **AS002544** harness.	
5.	**Power and CAN Bus Connection:** Disconnect the 7-pin connector from the circuit board and install the OverWatch harness in series with the connectors.	
6.	**Joystick Connection:** Disconnect the 8-pin joystick connector from the circuit board and install the OverWatch harness in series with the connectors.	

7.	**Buzzer Connection:** Disconnect the 2-pin buzzer connector from the circuit board and install the OverWatch harness in series with the connectors.	
8.	Mount the OverWatch ECU inside the joystick control box, the ECU is mounted to the bottom cover using adhesive Velcro tape. Run the operator sensor cable through the predrilled 20 mm hole and secure the cable gland. Connect the 8-pin connector from the operator sensor and the 12-pin connector from the OverWatch loom to the ECU. Secure the relay to the control box using adhesive Velcro tape.	
9.	Re-assemble the joystick control box and mount to the metal shroud. Make sure the operator sensor cable runs clear to the joystick enclosure and tighten the M20 gland to seal the cable entry point.	

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 OverWatch.

Install the OverWatch App

The OverWatch App is available for download on the Apple App Store and the Google Play Store. The App is used to replace the tradition web browser method for software updates, diagnostics and configuration of the EQSS OverWatch Secondary Guarding System. Search for the “EQSS OverWatch” App or download using the QR codes below

Download on the App Store

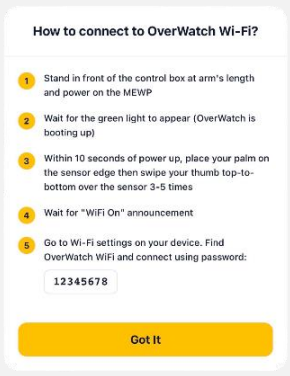
GET IT ON Google Play

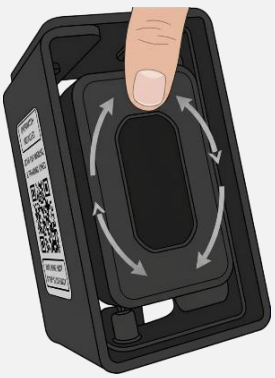
Open the App

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

Enable Wi-Fi on the Overwatch

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

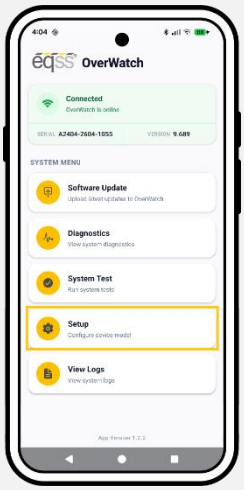


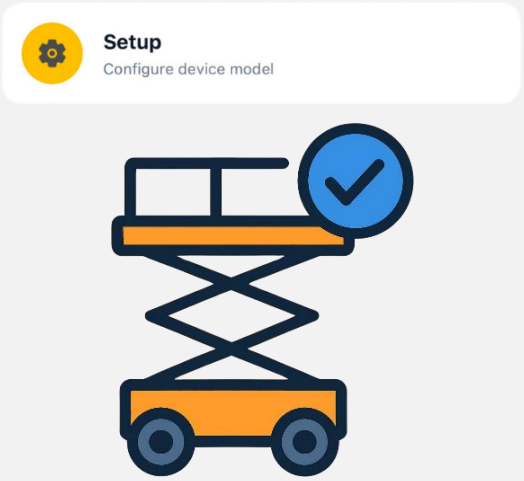


Machine Setup

Set the Machine Model to Sinoboom RD-RT JTC8 Controller

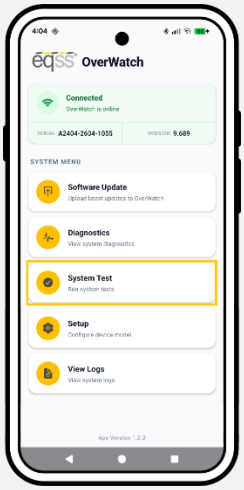
After a new kit installation or a software update, the OverWatch must be told what machine model it is installed on. Each machine model has unique settings such as input thresholds from the electronics and parameters relating to the sensor mounting position. When the OverWatch is connected to the App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

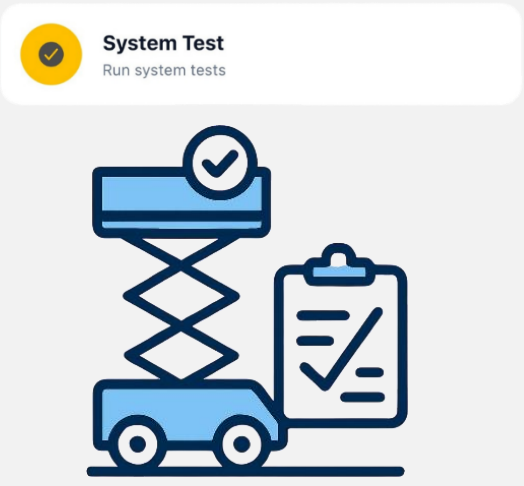




System Test

The system test is used to verify the OverWatch 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 OverWatch to become operational.





Harness Drawing AS002544

Replacement Parts

Replacement parts for this OverWatch kit are available from EQSS, please email sales@eqss.com.au

Shown below are the part numbers for the major components included in this model specific kit.

Part Number	Description
AS002545	OverWatch - Complete kit for Sinoboom RD-RT Series JTC8 Controller
AS002406	OverWatch - Operator Sensor with M20 gland
AS002404	OverWatch - Electronic Control Unit (ECU) – Hybrid CAN configuration
AS002544	OverWatch – Sinoboom RD-RT Series JTC8 Controller Harness
AS002326	OverWatch - Sensor Guard V2
ME001818	OverWatch – L Bracket 30/45