Reactec Analytics Platform

Docking Station Installation

This document provides information about installing a Docking Station.

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TRADEMARKS

ADDRESS

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About this document

This document is supplied as a part of the Reactec Analytics Platform.

Intended Purpose   This document provides information about installing a Docking Station.

Intended Audience   This document is intended for Docking Station installers.

Conventions used   This guide uses the following formats for safety notices:

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in moderate injury, damage the product, or lead to loss of data.

Indicates a hazardous situation which, if not avoided, may seriously impair operations.

Additional information relating to the current section.

Contents

1 Components

This section provides an overview of the components of the Reactec Analytics Platform (HAVwear).

1.1 Docking Stations

Docking stations are central units which provide data archiving, transmission of data to the Reactec Analytics platform and charging for HAVwear Modules. Two variants of the Docking Station are available:

1.2 HAVwear

The HAVwear is an easy-to-use and comfortable device that monitors hand arm vibration (HAV) exposure and breaches of social distance guidelines over the duration of an operator's shift.

A Docking station is used to charge, collect and transmit data from the HAVwear.

Operators sign a HAVwear module out of the Docking station at the start of each shift using their Operator ID Card. This assigns the HAVwear to the operator for that shift.

Figure 1: HAVwear

Before using each tool, press and release the HAVwear button and place the HAVwear face close to a HAVwear Tag, until a beep sounds which will indicate that the HAVwear is connected to a Tool Tag. This should happen within 5 seconds.

It is important to not continue to hold down the button when presenting the HAVwear to a Tool Tag, as a connection is not achievable until the button is released.

Current HAV risk assessment exposure levels are shown on the HAVwear display. The HAVwear indicator lights use a traffic light system (green, amber, red) to indicate when specified exposure action values are reached. This allows the operator to take action to limit further exposure.

A Docking station is used to charge, collect and transmit data from the HAVwear.

Operators sign a HAVwear module out of the Docking station at the start of each shift using their Operator ID Card. This assigns the HAVwear to the operator for that shift and ensures the correct HAV action exposure limits are on the HAVwear for that operator

2 Installation

This section provides information on how to install components of the Reactec Analytics Platform.

2.1 Prerequisites

Before installing the Docking Station, ensure that you have done the following:

- Checked the packaging list to ensure you have all components
- Identified a suitable location
  - ► *For more information, see "Locating the Docking Station" on page 2*
- Provided access to a power supply (240V mains supply or 12V DC vehicle supply)
- Confirmed access to the RAP Reactec Analytics

• Provide an Ethernet cable to a Local Area Network (LAN) if there is no mobile phone signal at the installation location (15 Bay Docking Station only).

2.2 Locating the Docking Station

When identifying a location for the Docking Station, consider the following:

- The Docking Station should be wall mounted on an installation site with at least a 150mm clearance above and below.
- If the Docking Station must be placed horizontally, ensure the area is clear on all sides of the Docking Station, with a 300mm clearance above.
- Ensure that the installation site does not block, cover or insert obstructions through the openings on the Docking Station.
- The Docking Station requires a UK mobile network signal to operate, or access to a Local Area Network (LAN).

  Ensure that there is sufficient mobile network coverage at the location, or accessible using an additional 50 ohm coaxial cable to extend the antenna (available from Reactec), or an available LAN connection can be used on the 15 Bay Docking Station only.

Do not mount or place the Docking Station on an unstable surface or near a heat source, such as a radiator, or in direct sunlight, because this can damage the units.

2.3 Installing the Docking Station

The Docking Station is installed to allow transmission of data to the Reactec Analytics.

Before installing it should be determined if there is mobile phone signal coverage in the area where to mount the Basestation / Communications module will be mounted. If not then the Ethernet connector should be used to connect via a LAN (15 Bay Docking Station only). Before installing for use with a LAN it should be determined if the LAN is to be configured for DHCP or a Static IP address. The following three sections describe the alternative install processes for mobile phone versus LAN configured for DCHP versus LAN configured for a Static IP address.

2.3.1 Installation for Mobile Phone Connection

1. Mount the Docking Station on the installation site, or place on the chosen surface.
2. If using a 15 Bay Docking Station connect the antenna to the Docking Station through the antenna port. The 4 Bay Docking Station features a built in antenna.

If mobile network coverage is poor, use a 50 ohm coaxial cable to locate the antenna in a position with better coverage.

3. Plug the mains power supply into the Docking Station and lock the screw connector in place.
4. Plug the mains cable into a 240V socket and switch on.

Alternatively, the Docking Station can be powered directly from a 12V DC vehicle supply. For this type of supply, a 5A fuse must be fitted and it is recommended that a second battery which provides a minimum of 100 Ah is installed in the vehicle.

Plug the vehicle supply cable into the Docking Station and lock the screw connector in place.

2.3.2 Installation for LAN with DCHP Configuration

1. Mount the Docking Station on the installation site, or place on the chosen surface.

2. Connect the LAN Ethernet connector to the Ethernet connector on the docking station.

3. Plug the mains power supply into the Docking Station and lock the screw connector in place.

4. Plug the mains cable into a 240V socket and switch on.

Alternatively, the Docking Station can be powered directly from a 12V DC vehicle supply. For this type of supply, a 5A fuse must be fitted and it is recommended that a second battery which provides a minimum of 100 Ah is installed in the vehicle.
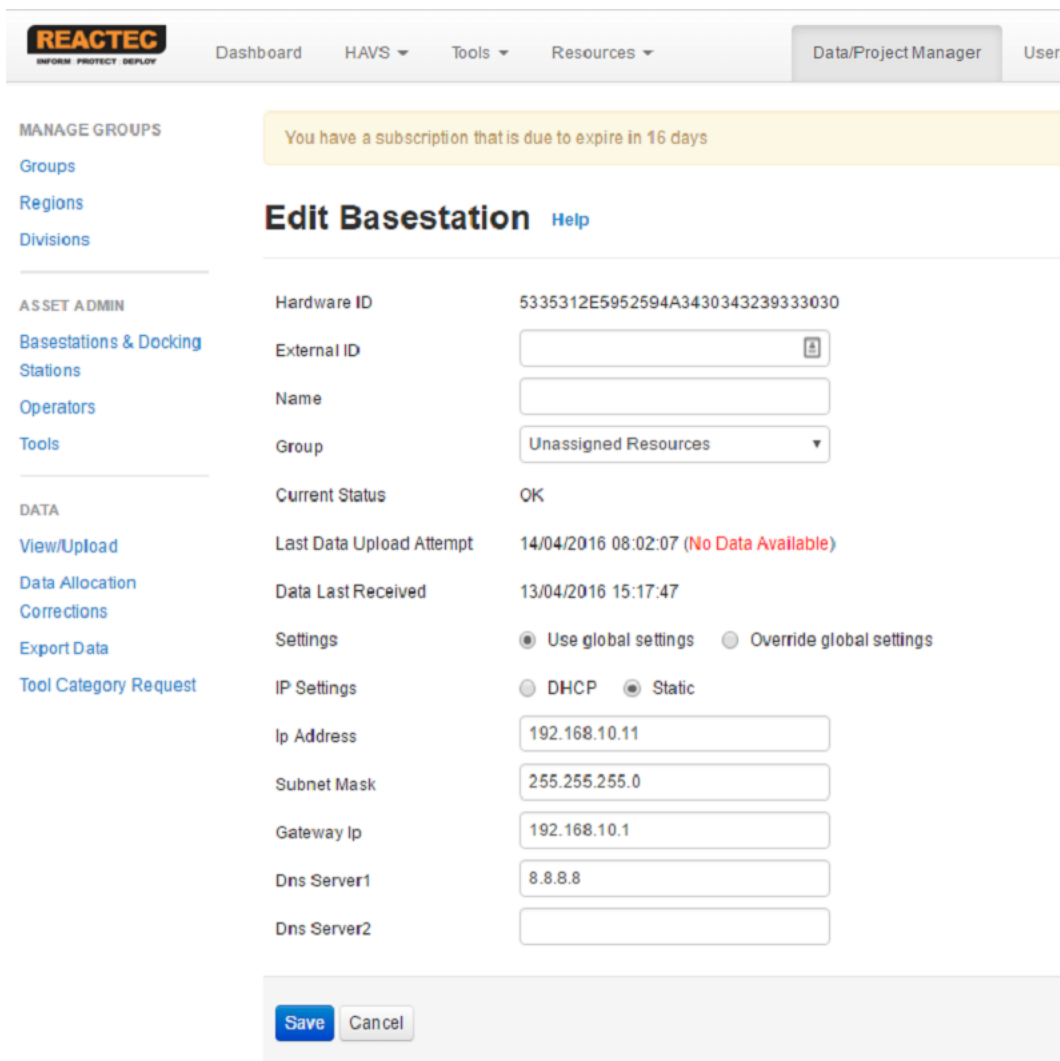
Plug the vehicle supply cable into the Docking Station and lock the screw connector in place.

2.3.3 Installation for LAN with a Static IP Address Configuration

Before installing the Docking Station at the location of use the Docking Station will need to be configured while accessing a mobile phone signal to configure the Static IP address via Reactec's Analytic Platform software. To carry out this process will require access as an administrator to the Reactec Analytic Platform software.

1. Using a web browser, navigate to www.reactecanalyticsplatform.com.
2. Enter Username and Password to *Login*.
3. On the Toolbar, click *Data/Project Manager*. The Groups page opens by default.
4. Click *Basestations & Docking Stations*.
5. Click *Edit* for the Basestation / Docking Station. The Edit page opens.
6. Select *static* for the *IP Settings*.
7. Enter the required information to define the Static IP address for the connection.
8. Click *Save*.

9. Plug the mains power supply into the Docking Station and lock the screw connector in place.

10. Plug the mains cable into a 240V socket and switch on.

11. Leave unit connected until the next download is configured for the Docking Station. Should be no more than 24 hours. When a Docking Station has been successfully configured for a Static IP address, the Docking Station LCD will display 'ethernet' in place of the mobile network provider.

12. Disconnect the power supply from the Docking Station and move it to the desired installation location.

13. Mount the Docking Station at the desired installation location.

14. Re-connect the power supply to the Docking Station.

15. Connect the LAN Ethernet connector to the Ethernet connector on the Docking Station.

2.4 Confirm communications

After you have installed the Docking Station, perform a test to check that data is transmitted to the Reactec Analytics.

► For more information, refer to the "Software Administration Guide"

1. Login to the Reactec Analytics.

2. Click **Data/Project Manager**.

3. Under **ASSET ADMIN**, click **Basestations & Docking Station**.

4. Set data upload to minimum of every 2 hours.

5. Complete a test shift with a HAVwear.

    a. Sign out a HAVwear from the Docking Station.

    b. Connect to a HAVwear Tag, and use for a short time.

    c. Return the HAVwear to the Docking Station.

    d. Wait 2 hours.

6. In the Reactec Analytics under **ASSET ADMIN**, click **Basestations & Docking Station**. The Docking Station is added to the group of **Unassigned Resource**s. Check that the time and date for that Docking Station is up to date.

The data is automatically sent to the Reactec Analytics at the next scheduled data upload time set in the Reactec Analytics. Disconnecting and reconnecting the unit from the power supply can be used to trigger an immediate data upload.

3   Troubleshooting

This section provides information about troubleshooting issues that may arise.

3.1 Troubleshooting installation

The installation may be unsuccessful for the following reasons:

- The Docking Station antenna does not have an adequate UK mobile network signal at the installation site.

Adequate mobile network signal is defined as a GPRS signal of more than 10 when displayed on a 15 Bay Docking Station LCD display, or one or more white LEDs illuminated on a 4 Bay Docking Station

To resolve this, the Docking Station antenna may be positioned remotely (15 Bay Docking Station only).

1. Connect the 50 ohm coaxial cable to the antenna port.
2. Connect the antenna to the other end of the cable.
3. Position the antenna remotely where it will receive an adequate signal.

    A mobile phone which receives an EDGE GPRS or 2G signal can be used to determine where there is an adequate signal.

If using a 4 Bay Docking Station and inadequate mobile signal is detected then it will be necessary to physically relocate the complete Docking Station into an area where mobile phone signal is adequate.

3.2 Contacting Reactec support

Contact Reactec support with any issues using one of the following options:

Tel: +44 (0) 131 221 0920

Email: helpdesk@reactec.com

Website: www.reactec.com/support/customer_zone_support