WES

WES3 CONNECT

QUICK START GUIDE

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INTRODUCTION

This guide is designed to help you get your WES3 system up and running as soon as possible.

This guide covers how to easily setup your system using the WES3 CONNECT, which is the central control unit for your whole system. There is also a Trouble Shooting section which outlines some basic issues that could be encountered.

Signing up to the 'VIP' area of the ramtechglobal.com website will allow you access to various 'How To' videos related to the system in addition to other literature, such as a complete User Guide and Operation Manual.

DO NOT OPEN ANY UNIT AS THIS WILL INVALIDATE THE WARRANTY.

The full User Manual and Operation Manual is available by signing up to the Ramtech VIP Area – visit **vip.ramtechglobal.com** today.

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WES3 CONNECT

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SETTING UP WES3

Installing WES3 on your site is easy. You will need to start by activating / powering on each unit and add the units to the group so that they can communicate with each other.

1 INITIAL SETUP

STEP 1 Activate and power on

To activate/power on the WES3 CONNECT control unit, **hold down 'A' and press 'B' three times in quick succession**. All three LEDs will illuminate and then the amber LED will flash.

Initial setup of the WES3 CONNECT is through a series of on-screen options. Language, Inspection Delay and Pre-Alarm mode options can be configured.

STEP 2 Language selection

Select language - the available options are English, German, French, Spanish, Italian, Swedish or Polish. Language settings can be changed at any time.

STEP 3 Set inspection delay

The Inspection Delay setting allows an optional delay period between triggering a call point and the site wide alarm being raised.

The default setting is 00 minutes (i.e. no delay), but can be set in 1 minute increments up to a maximum 10 minutes.

A confirmation screen will be displayed to validate the settings. The Inspection Delay can only be set during the initial activation process.

STEP 4 Pre-alarm function

The Pre Alarm function defines site-wide behaviour of the network during an Inspection Delay period.

With Pre Alarm mode enabled, the entire network will emit a site-wide, intermittent sound and (on strobe-equipped call points) an intermittent flash.

With Pre Alarm mode disabled, only the local call point which has been triggered will sound. All other call points around site will remain in non-alarm mode.

Pre Alarm can only be set during the initial activation process. Once set, the Pre Alarm can only be changed by turning off and reactivating the WES3 CONNECT unit.

On completion of initial set up, settings for Inspection Delay and Pre Alarm mode are displayed on the WES3 CONNECT home screen.

Check the settings displayed on screen are the desired settings, and if not, repeat the Initial Setup process before proceeding. The display is shown for the WES3 CONNECT below.

2 ACTIVATE UNITS

To activate any WES3 unit, **hold down 'A' and press 'B' three times in quick succession**. All three LEDs will briefly illuminate and then the amber LED will flash.

This operation activates the unit – no radio connection is established at this point.

3 UNIT NUMBERING

Call Points, Detectors, and other WES3 units that are already activated can be added to create a WES3 network using the Unit Numbering process.

During Unit numbering, WES3 devices receive details of network configuration from the WES3 CONNECT unit, including Inspection Delay and Pre Alarm settings. This is the only way of creating and adding to a WES3 network.

Access the Unit Numbering option on the WES3 CONNECT main menu screen. This can be accessed by selecting Unit Numbering with the appropriate arrow next to the screen.

Ensure that any WES3 device to be paired is **turned on and has an amber flashing LED**. This indicates the unit is ready to pair.

Units can be numbered any four digit number from 0001 to 9999 in accordance with your site plan. Numbering allows messages and alerts during operation to be referenced to a specific unit location on site, using the project site plan. From the Unit Numbering screen, **use the numeric keypad and/or the + and - buttons to select the desired number for your first unit**.

Press and hold 'A' on both units. The amber LEDs will illuminate followed by the green LEDs on both units to indicate that the units have been successfully paired and a site group created. **Release the 'A' buttons**.

4 ADD UNITS TO AN EXISTING SITE GROUP

Repeat sections 2 and 3.

5 POSITION UNITS

Once activated and paired, WES3 units can be installed on site. Ensure any applicable local guidelines or standards regarding locating units on site are adhered to, such as BS 5839-1 in the UK.

> ⚠ Wherever possible, avoid positioning the unit directly adjacent to metal frames, electric cables and similar equipment that may interfere with the signal strength.

6 SECURELY FIX THE UNITS IN PLACE

Each WES3 unit must be **securely fixed in place and the tamper switch on the rear of the unit must be in contact with the wall or ceiling**.

Detector units are ceiling mounted and intended for indoor use only. Ensure a risk assessment has been carried out and all reasonable safety precautions are in place before commencing work.

Call Points must be securely fixed, with the antenna upright, to a robust vertical surface such as a wall or trolley. Where the existing surface is unsuitable for direct fixing, use backing board such as plywood or similar sheet material.

Each unit should be securely mounted using its two integrated mounting points with M4 x 50mm pan head screws and wall plugs or other fixings selected for the particular wall or ceiling type.

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For more information on System Test, refer to the full WES3 User Guide and Operation Manual available in the VIP area of **ramtechglobal.com**.

Note: Following initial installation, wait for a minimum of 60 minutes before starting the first system test. During this time, the WES3 units will self-calibrate to adjust for background radio noise which may impact the accuracy of the system test.

Note: Powering off the WES3 CONNECT unit will reset the entire system as a 'factory reset', so avoid powering off unless necessary.

7 TESTING THE WES3 CONNECT SYSTEM

After installation of the units, it is essential to perform a system alarm test to confirm proper operation of the system. **It is also best practice to conduct a full system test on a weekly basis**. This test should also be performed following any significant change to the site environment (new structure, wall or construction equipment installed) that may affect the network signal.

The System Test is started from the Tests selection via the WES3 CONNECT Main Menu.

From the Test Menu, **select System Tests to start test mode**.

The WES3 CONNECT unit will display a confirmation message that the test has started. Walk the site to check all units in the network.

During System Test mode, the WES3 network isolates all devices in the network, allowing full physical test of each unit, without activating the site-wide alarm. Call Points can be triggered manually, and Detectors can be triggered using standard test equipment such as smoke spray or heat probe.

Once the System Test is complete, **return to the WES3 CONNECT unit and press either ⊘ or ⊗ button to complete the test and exit System Test mode**.

The test result is indicated as follows:		
Pass	🟢	Green LED solid illumination
Radio OK, other fault detected	🔴	Red LED flashes followed by Amber LED group flashes to indicate fault (see 'Amber LED Indication').
No Radio Signal	🟠	Amber LED group flashes to indicate fault (see 'Amber LED indication').

⚠ It is important to be aware that, whilst in System Test mode, the WES3 network is inactive and a site-wide alarm cannot be triggered from any unit. System Test mode must be exited from the CONNECT in order to reactivate the network.

WES3
IN ACTION

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TROUBLE SHOOTING

1 LED CODES

Description	Flash Type
Group Flash 1 - Low Battery	◉
Group Flash 2 - Low signal	◉ ◉
Group Flash 3 - Unpaired	◉ ◉ ◉
Group Flash 4 - Tamper	◉ ◉ ◉ ◉
Group Flash 5 - Re-arm or Unit latched (potentially input latched on Interface unit only)	◉ ◉ ◉ ◉ ◉

◉ **Green LED** Active units with no faults will flash their green LEDs once every 4 seconds to indicate that the unit is operational.

◉ **Amber LED** Each WES3 unit monitors itself for a number of faults. These are indicated via the amber LED, which will flash in grouped patterns with longer than usual gaps in between them.

Units displaying one of these patterns require further investigation and should not be relied upon as part of the evacuation alarm and detection system until the fault has been corrected. **Use the chart on page 13 to determine the nature of the issue**.

◉ **Red LED** If a Sensor triggers the alarm, its red LED indicator will flash during an alarm. If a sensor has raised the alarm, its red LED indicator will flash during an alarm.

⊙ It is recommended that the system is tested weekly or whenever a significant change has been made to the installation or the building under construction.

2 WARNING CODES

The WES3 CONNECT will alert you to various system faults using the codes below:

Warning Codes	Warning	Description	Self-Clearing
'MED or MD'	Medical Alert	Medical assistance required at Unit NNNN	No
'BAT or BT'	Low Battery	Unit NNNN has a low battery	No
'DET or DT'	Detector Tamper	Unit NNNN has had sensor head removed	Yes
'EXT or EX'	External Tamper	Unit NNNN has been removed from wall/ceiling	Yes
'FLT or BF'	Flat Battery	Unit NNNN has turned off, its battery is flat	No
'INT or IN'	Internal Tamper	Unit NNNN has been opened	No
'LAT or LT'	Latched	Call point button on unit NNNN is still depressed	Yes
'REM or RM'	Removed	Unit NNNN has been deactivated and removed	No
'SIG or SG'	Low Signal	Unit NNNN has a low radio signal	Yes
'TST or ST'	System Test	Unit NNNN initiated a System test	Yes
'NEW or NW'	Unexpected Unit	Unit NNNN added since last system poll	No
'GON or GN'	Unit Missing	Unit NNNN removed since last system poll	No

It is important to be aware that, whilst in System Test mode, the WES3 network is inactive and a site-wide alarm cannot be triggered from any unit. System Test mode must be exited from the CONNECT in order to reactivate the network.

> ⊙ **Note:** Alerts will appear as either a 2-character or 3-character code, depending on your firmware version.

4 UNIT SOUNDS

Sound Issue: **Call Point unit periodically beeping after an alarm has been reset**

The Call Point is latched and needs to be manually reset using the key provided.

Sound Issue: **WES3 CONNECT beeps frequently**

System warning. If alarm has been raised, LCD screen will display 'ALARM ALARM ALARM' together with details of which unit has raised the alarm.

If another warning is given, check the warning code against the warning code table on page 13.

5 SILENCING THE ALARM

The alarm must be silenced either by using the reset key or on the WES3 CONNECT unit.

The alarm will automatically silence **30 minutes** after activation. The evacuation alarm can be manually cancelled from a call point that has been pressed using the reset key provided. If necessary, a call point on a nearby call point can be pressed and then reset to cancel the alarm.

Please wait for 5 seconds between pressing and resetting a call point. After the alarm has cleared the system has a short (2 minute) re-arm period during which the sirens will sound intermittently, and the amber warning LEDs flash in groups of 5, following which the system is re-armed and ready for use.

During the re-arm period, the alarm cannot be reactivated. It is therefore vital to confirm that there is no hazard before silencing the alarm.

> **Note:** It is vital to confirm that there is no hazard before silencing the alarm. Do not attempt to open the unit or deactivate by removing the battery.
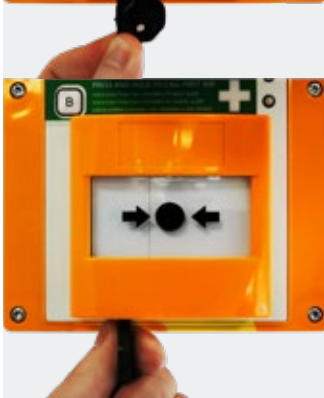
6   RESETTING THE CALL POINT

All call points which have been activated must be manually reset using the key. Any call point units with activated call points will periodically beep after the re-arm period has ended as a reminder that the call points need to be mechanically reset using the key before they can be used to raise a alarm.

STEP 1   Insert reset key with tab to the right as shown below.
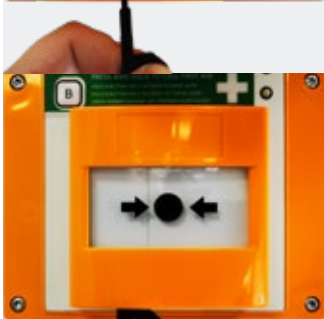
STEP 2   Push key in as far as possible

STEP 3   Turn key anti-clockwise until a loud mechanical click is heard. Remove key.

Ensure the call point is fully reset before removing the key. Partially resetting a latched call point after the alarm has been cancelled can re-trigger the evacuation alarm.

RADIO EQUIPMENT STATEMENT

Model Name	Model Number	FCC ID of radio module	Radio module
Emergency Control Unit	W3-SCU-STD-U-9X	2AHNO2-RD0-9X	Ramtech radio module
Interface	W3-INF-I2O-N-9X, W3-INF-MNT-N-9X	2AHNO2-RD0-9X	Ramtech radio module
CONNECT	W3-CON-U-9X	2AHNOW2CTRLMK2	Ramtech MK2 radio module
		XPY1EIQ24NN	Ublox R202-02B-02 4G modem
All other WES3 models contain:		2AHNOW2CTRLMK2	Ramtech MK2 radio module

The following should be present on all products that are subject to radio approval under Part 15 of the FCC Rules.

FCC warning statement:

This device complies with Part 15 of the FCC Rules Operation is subject to the following two conditions:

- This device may not cause harmful interference, and

- This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

End users must follow the specific operating instructions for satisfying RF exposure compliance.

Changes or modifications not expressly approved by the party responsible for compliance could void the use's authority to operate the equipment.

WES3 products contain the following ISED radio modules:

Model Name	Model Number	FCC ID of radio module	Radio module
Emergency Control Unit	W3-SCU-STD-U-9X	21246-W2RDO9X	Ramtech radio module
Interface	W3-INF-I2O-N-9X, W3-INF-MNT-N-9X	21246-W2RDO9X	Ramtech radio module
CONNECT	W3-CON-U-9X	21246-W2CTRLMK2	Ramtech MK2 radio module
		8595A-1EIQ24NN	Ublox R202-02B-02 4G modem
All other WES3 models contain:		21246-W2CTRLMK2	Ramtech MK2 radio module

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.
Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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