FireCell

SETUP GUIDE

MK99-99 (Issue 10) 31/03/2025 AJM

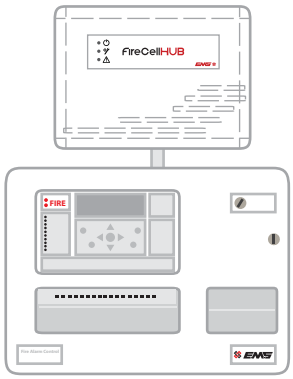
Contents

1 Introduction

This manual provides a brief step by step guide to setting up the system. Refer to the Programming Manual (MK98), for more comprehensive guidelines.

Note: this revision is intended for use with revision 3 software FireCell systems, as previous versions of Hub menu structures will slightly vary. Refer to the legacy version of this document, when using FireCell systems with revision 2 software.

2 Install panel & hub



The control panel and hub require installation into their proposed locations. See the Hub Installation Guide (TSD052) for more information.

Once installed and with power applied, the hub will show the following default screen:

```
TOT001 A000 F000
```

Where:

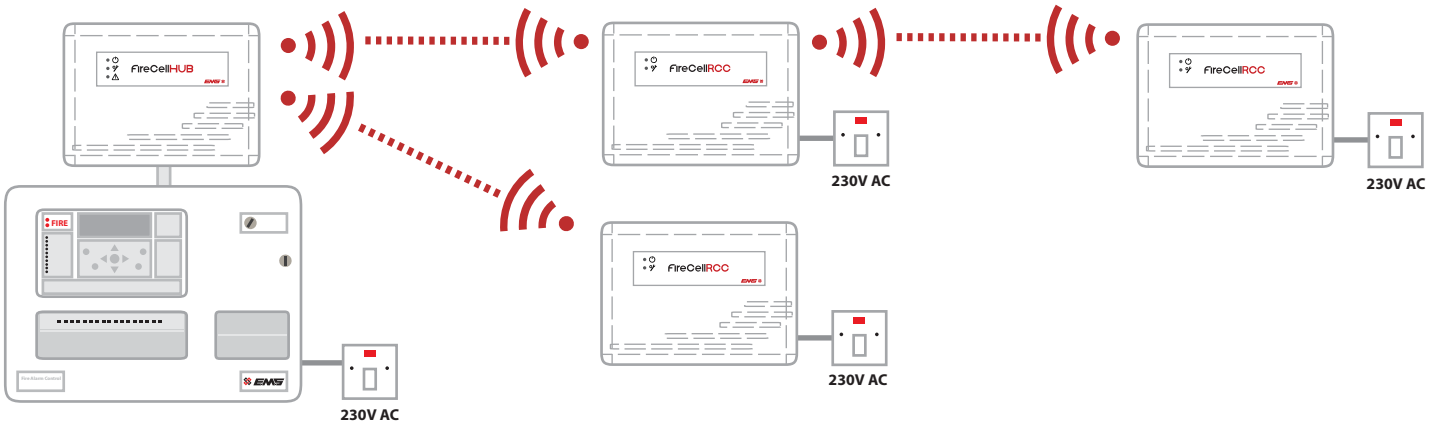
TOT001 = The total number of devices logged to the hub (including the hub itself).

A000 = The number of alarm conditions on the system.

F000 = The number of faults currently on the system

Note: As default, the hub will be set as device address 001 on loop 1. This can be changed if required. Refer to the Programming Manual (MK98) for more information.

3 Install & log on the RCCs



The RCCs (Radio Cluster Communicators) require installing in their proposed locations. Refer to the RCC Installation Guide (TSD053) for more information.

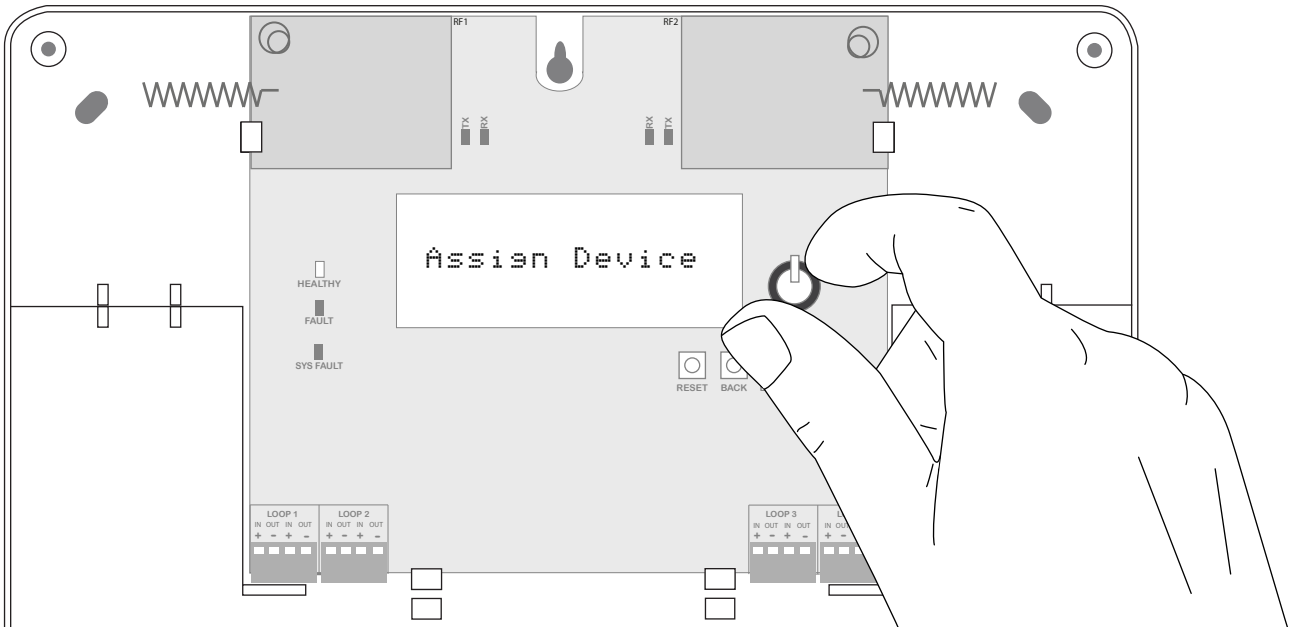
A unique ident number is shown on the side of each RCC. This should be noted as this is required when logging on (adding the RCC to the hub).

From front display **Hub/RCC Options** **Add RCC** Select desired signal path * Select desired loop & device address **Add By Ident** **Add Dev 12345 Y?** 'Enter the RCCs ident **New Addr L1 A002**.

BACK To exit

* = If the RCCs signal path is to be direct to the hub, then hub should be selected. If the RCC's signal path is via another RCC, then the relevant RCC will need to be selected. Each option can be chosen by turning the rotary control.

4 Assign the RCCs



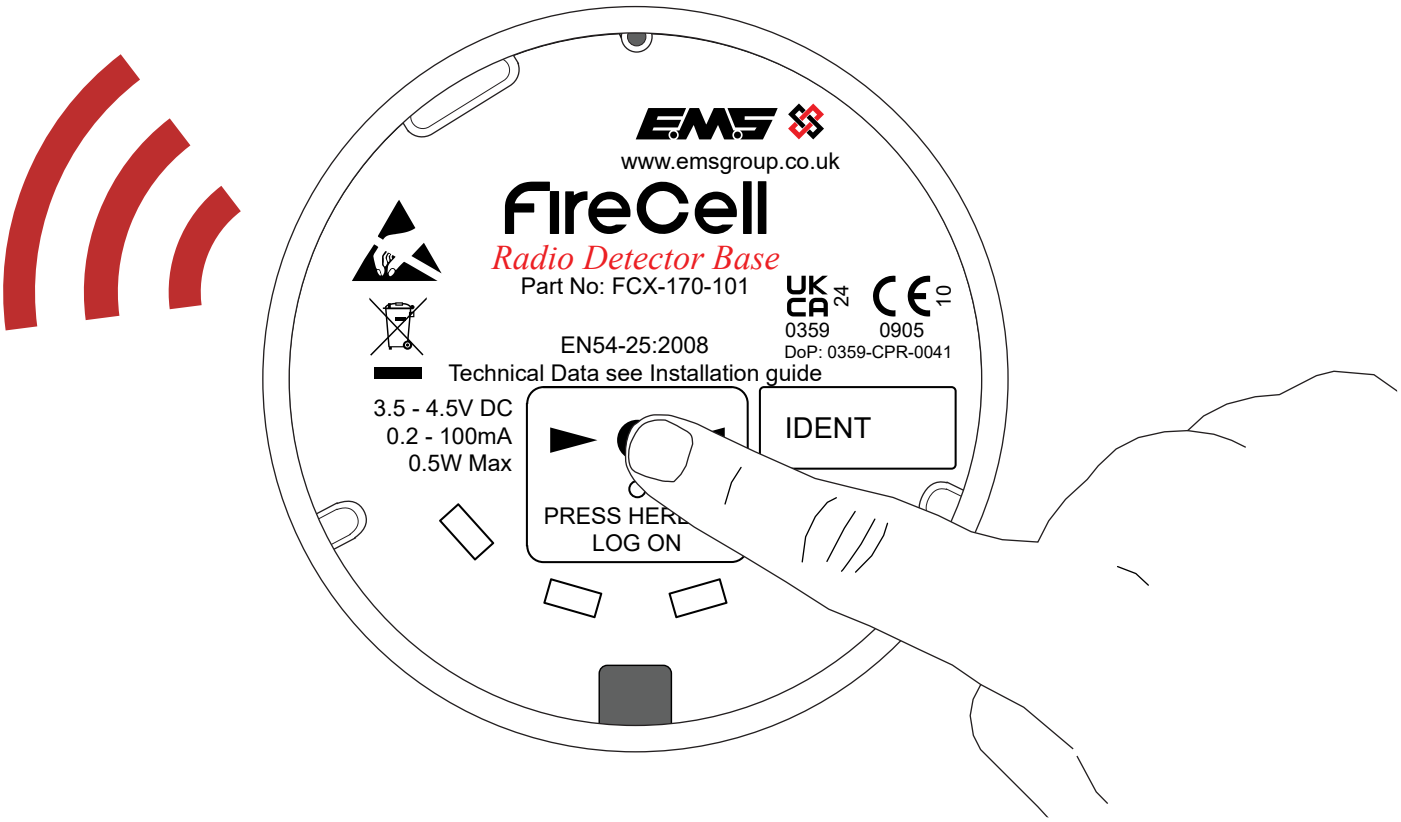
The newly added RCCs should now be assigned.

From Unassigned Dev **Assign Device** **Assign RCCs** **Dev 000 of 001**

changing to **Done 001 of 001** *(once complete)*

BACK *To exit*

5 Add and install the wireless devices



The wireless devices can be added to their relevant RCCs, either by pressing the device's log on buttons or by entering the device's unique ident number. If adding by ident, always make a note of the devices ident numbers and device type prior to installation and refer to the Programming Manual (MK98) for further details.

Note: Ensure the wireless devices are powered before logging on to the system. See the relevant installation guide for more information.

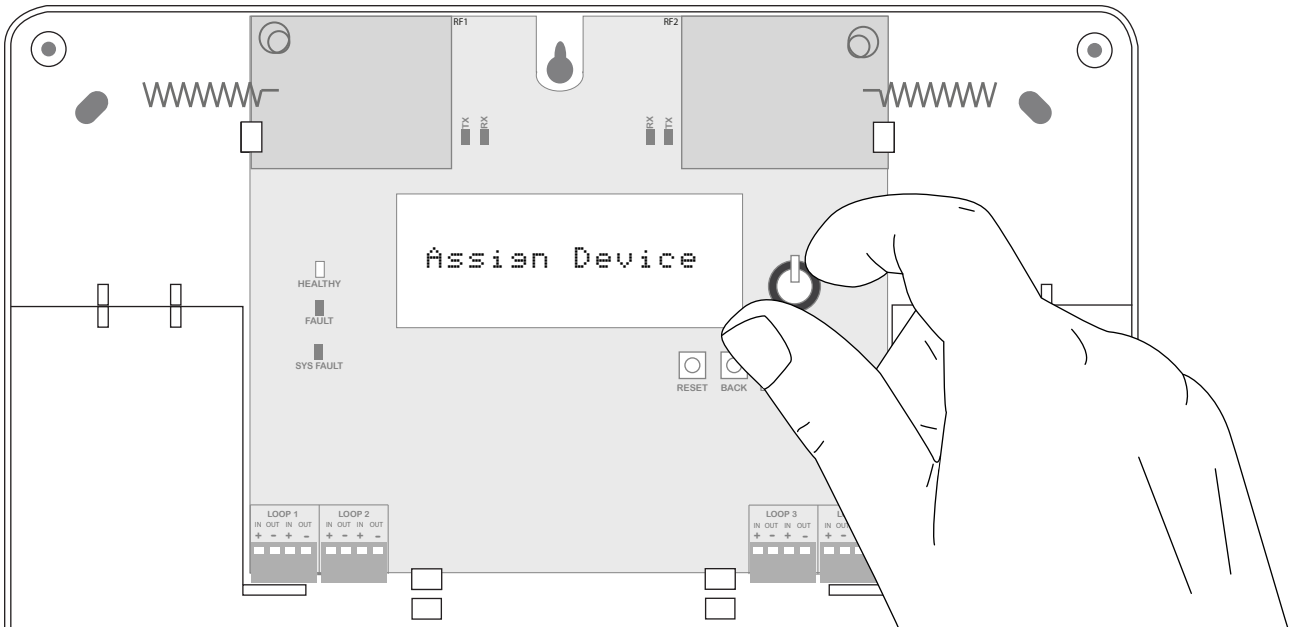
To add devices by log on;

From front display **Add New Device** *Select desired* **RCC 01** **Set Loop 1** **Addr 003** **Add By Log On** **Press Dev Log On** *'press the devices log on button, followed by* **Add Dev 03456 Y?** **New Addr L1 A003.**

BACK *To exit*

The device has now been added to the hub and should be installed in its location, prior to the next step of assigning the device to its relevant RCC. See the relevant devices installation instructions, for more information.

6 Assign the devices



The newly added devices must now be assigned.

From Unassigned Dev **Assign Device** **Assign All** **Dev 000 of 003**

changing to **Done 003 of 003** *(once complete)*

BACK *To exit*

7 Control Panel Programming

Program the panel; ensuring loop number and addresses programmed at the hub correspond to that programmed at the panel.

SYNCRO PANEL

Write switch on > Menu > Access Level 3 > *Enter PIN* > Edit Config > Add device > *Select loop, address and device type*

TAKTIS PANEL

Activate controls > *Enter PIN* > Engineer options > Configuration > Edit configuration > Panel modules > *Select module and loop number* > Add devices > Add wireless device > *Select device type and address* > Submit

2X-A PANEL

Add device:
Main menu > Field setup > Autosetup > Select all loops > Apply

Set device as wireless:
Main menu > Field setup > Loop device config > *Select loop & device* > *Check radio tick box*

8 Check device signal levels

The signal levels for all wireless devices and RCCs must be checked. This menu will display the signal levels in dB for each wireless device and RCC over a 24 hour period, listed in loop and address number order. After the system has been running for a 24 hour period, the device signal levels should display 20dB or above and the RCC signal levels should also display 20dB or above. If any devices are under the signal level requirements, check the flowchart on 'How to improve device signal levels' section for guidance.

Front display **Advanced** **Global Sig Stat**

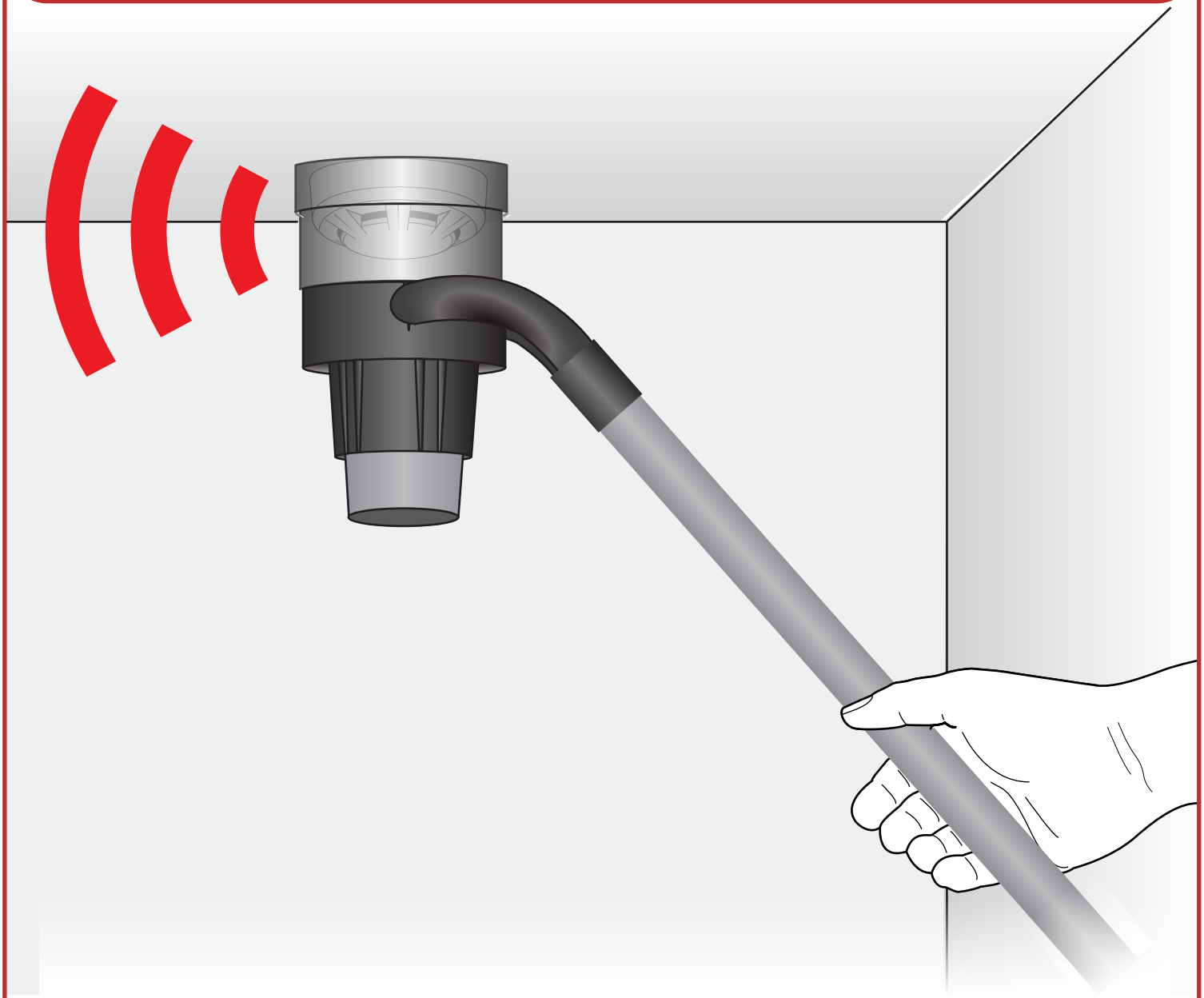
Examples of good signal levels are shown below:

Device type	Loop / address	Shown on display	Acceptable level
Hub	Loop 1 address 1	N/A	✓
RCC	Loop 1 address 2	L1 A002 21dB	✓
Optical detector	Loop 1 address 3	L1 A003 27dB	✓
Optical detector	Loop 1 address 4	L1 A004 45dB	✓
Manual call point	Loop 1 address 5	L1 A005 35dB	✓
Optical detector	Loop 1 address 6	L1 A006 38dB	✓
Optical detector	Loop 1 address 7	L1 A007 30dB	✓
Manual call point	Loop 1 address 8	L1 A008 32dB	✓
Optical detector	Loop 1 address 9	L1 A009 24db	✓
Heat CS detector	Loop 1 address 10	L1 A010 45dB	✓
Optical detector	Loop 1 address 11	L1 A011 45dB	✓
Heat A1R detector	Loop 1 address 12	L1 A012 45dB	✓

Examples of both good and bad signal levels are shown below:

Device type	Loop / address	Shown on display	Acceptable level
Hub	Loop 1 address 1	N/A	✓
RCC	Loop 1 address 2	L1 A002 19dB	✗
Optical detector	Loop 1 address 3	L1 A003 27dB	✓
Optical detector	Loop 1 address 4	L1 A004 45dB	✓
Manual call point	Loop 1 address 5	L1 A005 17dB	✗
Optical detector	Loop 1 address 6	L1 A006 18dB	✗
Optical detector	Loop 1 address 7	L1 A007 30dB	✓
Manual call point	Loop 1 address 8	L1 A008 32dB	✓
Optical detector	Loop 1 address 9	L1 A009 24db	✓
Heat CS detector	Loop 1 address 10	L1 A010 19dB	✗
Optical detector	Loop 1 address 11	L1 A011 45dB	✓
Heat A1R detector	Loop 1 address 12	L1 A012 45dB	✓

9 Test the system

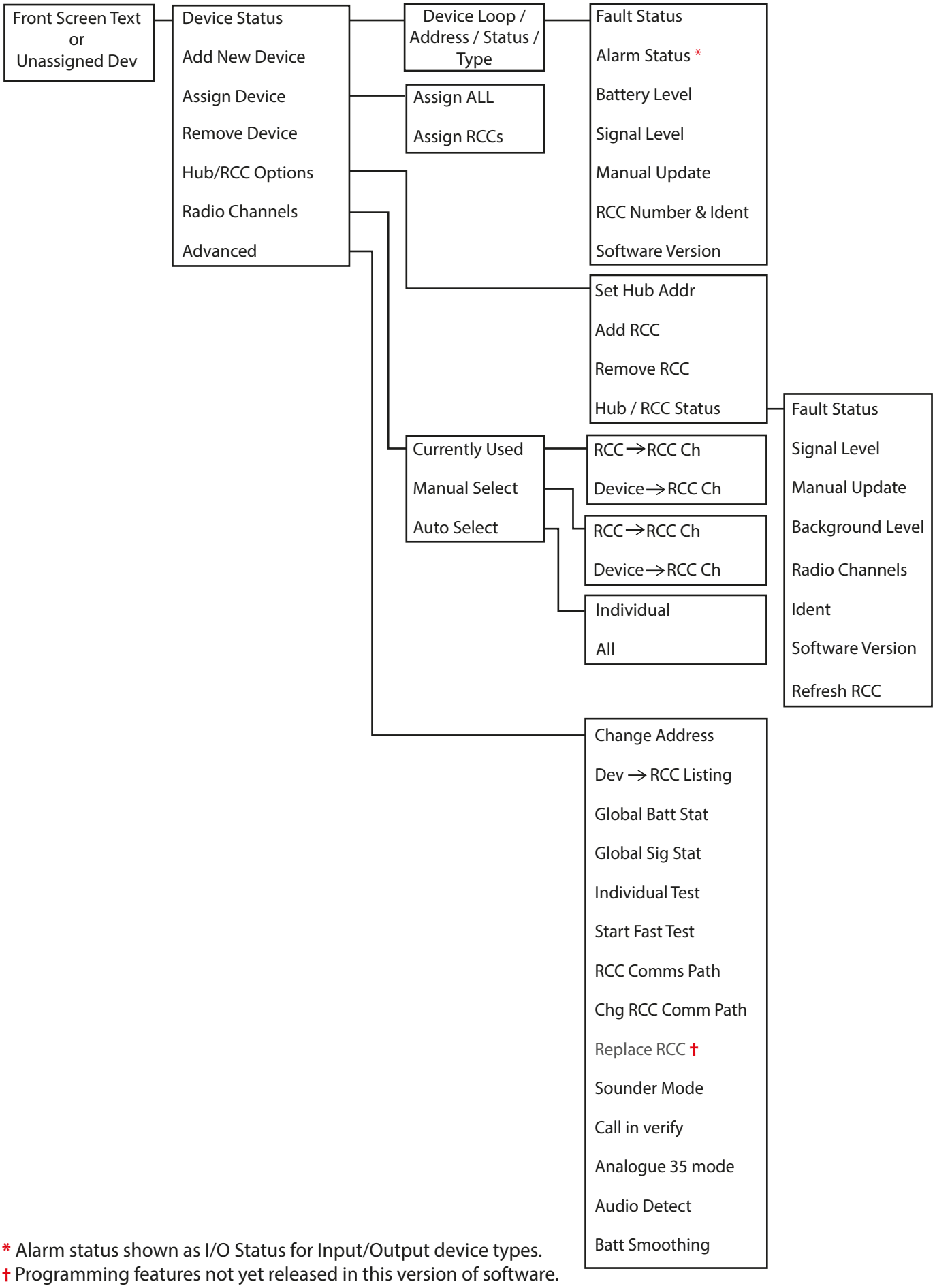


Note: loops can be entered into fast test for ease of testing. This allows the detectors on the selected loops to be triggered into an alarm condition quicker than normal. The led on the device will flash to indicate it is in this fast test mode. A time period of between 1 and 30 minutes is selectable which decrements and is then re-generated on a fire alarm event. The devices automatically come out of fast test mode when the timer expires or the fast test mode is exited.

Front display **Advanced** **Start Fast Test**

BACK *To exit*

Hub menu structure



* Alarm status shown as I/O Status for Input/Output device types.
† Programming features not yet released in this version of software.

Fault rectification

Device type	Symptom	Rectification process
All	Battery missing	Check battery connections and voltages.
RCC	Mains fail	Check the RCCs mains supply.
Detector	Head fault	Check that the device is correctly assembled. Failing this, it is recommended that the detector is replaced.
Sounder	No audio output	Check the devices audio monitoring switches are set correctly. See the devices installation instructions for more information.
Hub	Receiver failure	Try resetting the hub.
Detector	Head missing	Check that the device is correctly assembled. The fault will clear upon successful relocation.
Sounder	Head missing	Check that the device is correctly assembled. The fault will clear upon successful relocation.
All	Tamper	Check that the device is correctly assembled. The fault will clear upon successful relocation.
I/O Units	Input short/open circuit	Check the 20k end of line resistor is in place and that connections are secure.
Hub	Aerial tamper	Check for the 47k end of line resistor when measuring between the centre pin and the outer screen of both aerials cables and that connections are secure.
RCC	Aerial tamper	Check for the 47k end of line resistor when measuring between the centre pin and the outer screen of both aerials cables and that connections are secure.
Hub	Radio interference	Has any electrical equipment recently been installed in close proximity of the hub. If so it may need to be moved to an acceptable distance. See hub installation instructions for details.
All	Batteries low	Replace all batteries. See the installation instructions for more details on specified batteries.

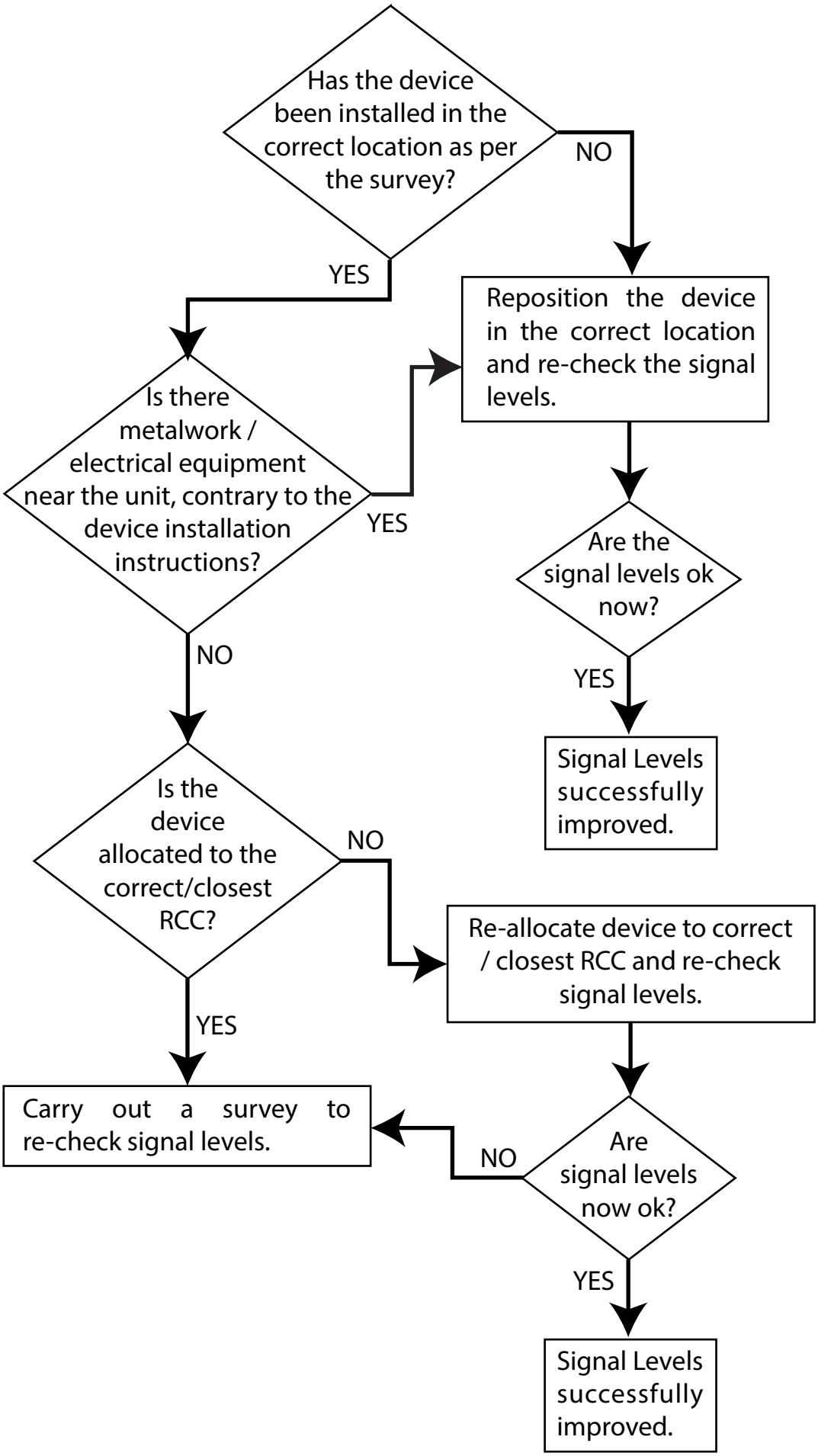
Fault rectification continued

RCC	Batt/charger fail	Check the RCCs battery connection voltage.
All	Signal strength caution	Check devices location to ensure no visible cause can be seen. Check device signal level in the Global Sig Stat menu. Refer to the 'How to improve device signal levels' section.
RCC	Signal strength caution	Has any electrical equipment recently been installed in close proximity of the RCC. If so it may need to be moved to an acceptable distance. See RCC Installation instructions for details.
Hub	Background level caution	Has any electrical equipment recently been installed in close proximity of the hub. If so it may need to be moved to an acceptable distance. See hub Installation instructions for details.
All	Signal strength low	Check devices location to ensure no visible cause can be seen. Check device signal level in the Global Sig Stat menu. Refer to the 'How to improve device signal levels' section.
RCC	Signal strength low	Has any electrical equipment recently been installed in close proximity of the RCC. If so it may need to be moved to an acceptable distance. See RCC Installation guide for more information.
Hub	Background level medium	Has any electrical equipment recently been installed in close proximity of the hub. If so it may need to be moved to an acceptable distance. See hub Installation guide for more information.
Call Point, Sounder & I/O	Signal strength good/medium	No action required.
RCC	Signal strength good/medium	No action required.
Hub	Background level good	No action required.
Detector	Signal strength medium	No action required.

Fault rectification continued

Detector	Signal strength good	No action required.
Detector	Head dirty	It is recommended that the detector is replaced for new. Note: Where temporary work involving the generation of dust, smoke, paint spray, and other aerosols is to be carried out in an area protected by smoke detectors, the supplied dust covers must be temporarily fitted to prevent contamination or false alarms. The devices should also be temporarily disabled at the panel. Care must also be taken to ensure that the dust covers are removed and the devices re-enabled once the environment is clear. Warning: DO NOT open the case to clean inside the detector.
Detector	Pre alarm	Check device is free from smoke. If no smoke can be seen, it is recommended that the detector is replaced for new. Note: Where temporary work involving the generation of dust, smoke, paint spray, and other aerosols is to be carried out in an area protected by smoke detectors, the supplied dust covers must be temporarily fitted to prevent contamination or false alarms. The devices should also be temporarily disabled at the panel. Care must also be taken to ensure that the dust covers are removed and the devices re-enabled once the environment is clear. Warning: DO NOT open the case to clean inside the detector.
Call Point	Alarm	Check the devices glass is in tact.
Detector	Alarm	Ensure that the environment of the devices location is free of smoke residue and dust.

How to improve signal levels



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