

# Con-X-us

REMOTE MONITORING APP FOR USE WITH  
HERALD™

FLOOR STANDING GAS FIRED CONDENSING BOILERS

FOR USE WITH MODELS:

HCB46CE

HCB61CE

HCB86CE

HCB116CE

HCB146CE

HCB176CE

HCB206CE

HCB236CE

Installation manual\_Con-X-us\_december\_2018



**Lochinvar**<sup>®</sup>  
HIGH EFFICIENCY BOILERS & WATER HEATERS

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## 1.0 INTRODUCTION

- Con-X-us APP is available for use with Herald boilers and your mobile device and allows the building owner user or maintenance engineer to:
  - Monitor the boiler plant at unlimited locations
  - Re-programme SMART SYSTEM control parameters
  - Set up custom text or email alerts for the building owner
- To use Con-X-us the module should be fitted to the boiler, item number LL100281397 is required.

## 2.0 GENERAL DESCRIPTION OF SAFETY SYMBOLS USED



### **BANNED**

A black symbol inside a red circle with a red diagonal indicates an action that should not be performed



### **WARNING**

A black symbol added to a yellow triangle with black edges indicates danger



### **ACTION REQUIRED**

A white symbol inserted in a blue circle indicates an action that must be taken to avoid risk



### **INFORMATION**

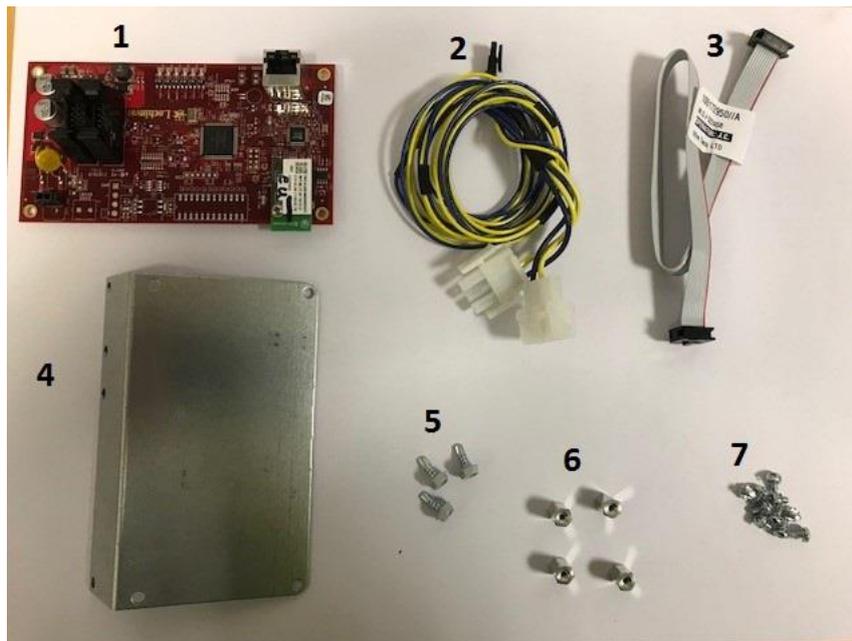
### 3.0 INSTALLATION



If the Con-X-us board has been pre-fitted to the Herald boiler then please start at section 4.0 of the instructions.

#### 3.1 KIT COMPONENTS

The Con-X-us board is supplied loose for onsite fitting, before starting the installation please check you have all the items required. If any items are missing please contact Lochinvar Limited.

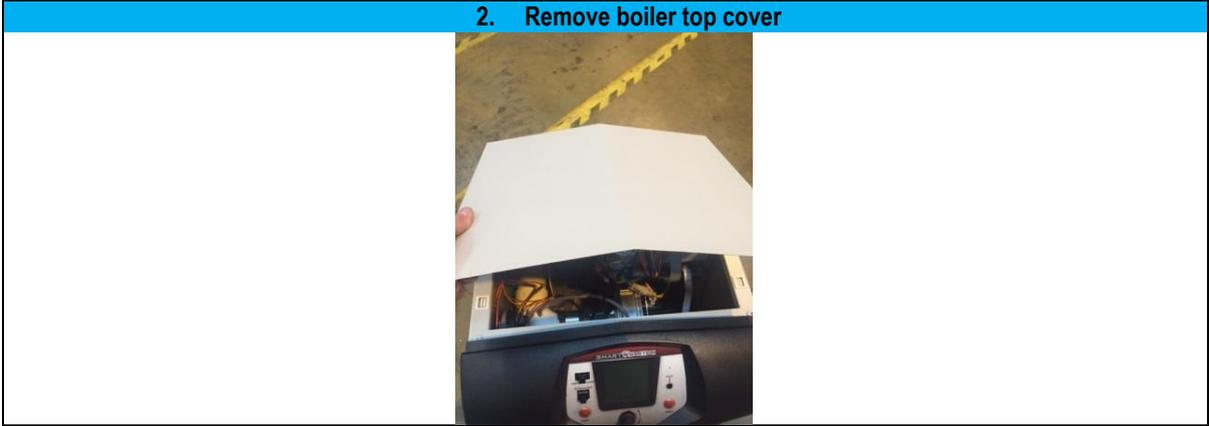


The kit is available for various boiler models – when used with the Herald range not all of the components are required. See the below table for items required within the kit.

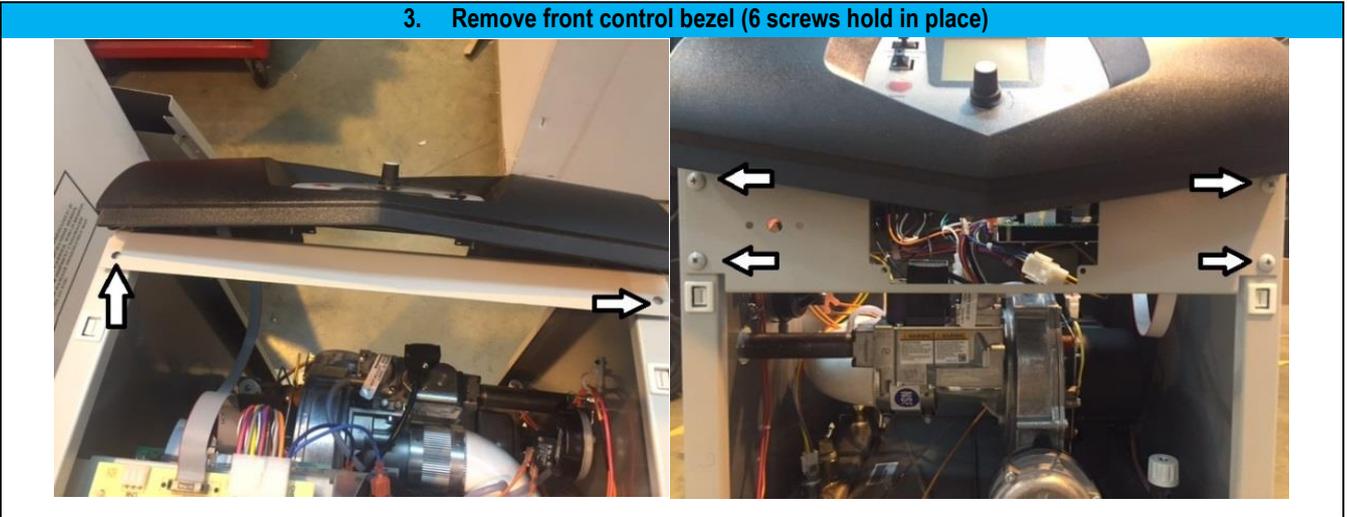
#### 1. Remove boiler front cover



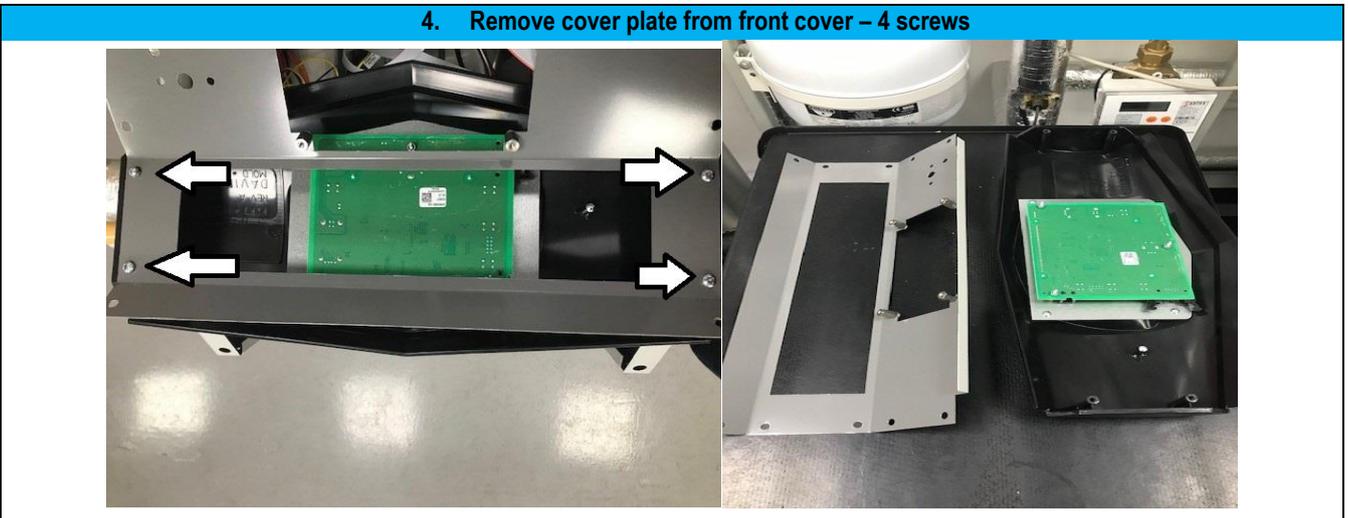
2. Remove boiler top cover



3. Remove front control bezel (6 screws hold in place)

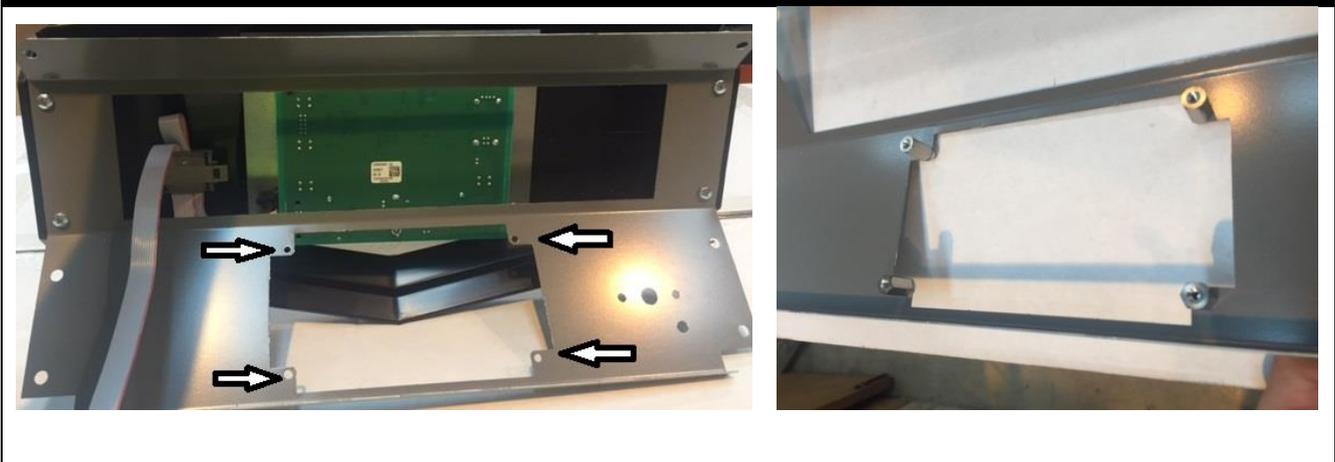


4. Remove cover plate from front cover – 4 screws





8. Fit the 4 stand-off screws (item 7) using 4 screws (item 8) to the bezel in the location shown.



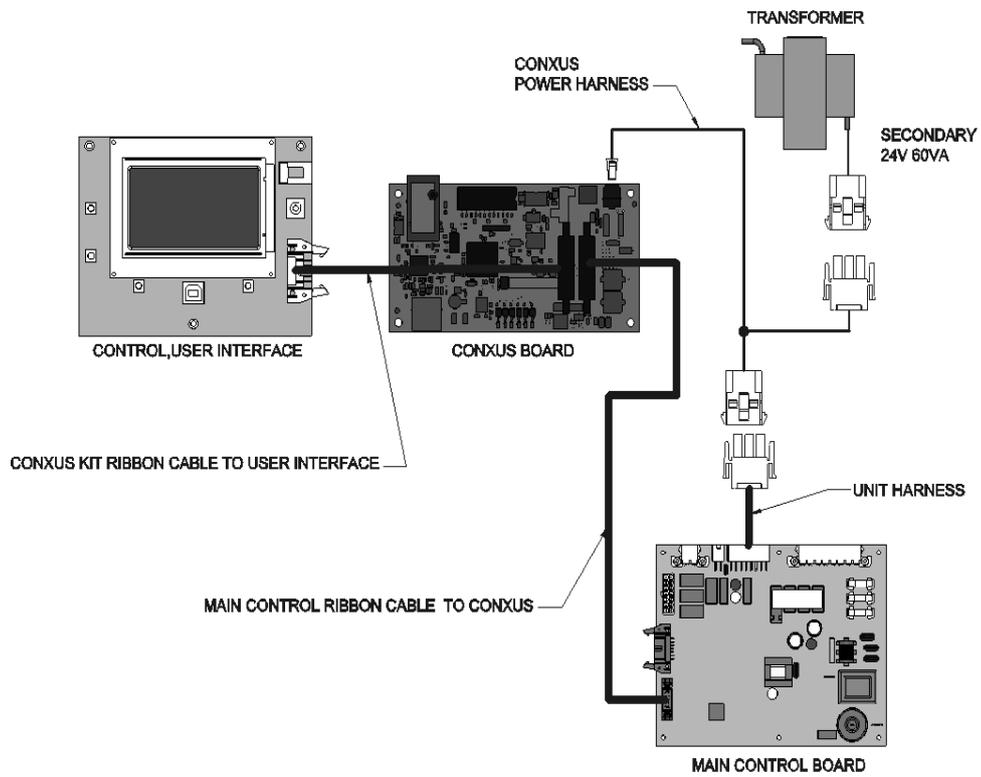
9. Fit the Con-X-us Board (item 1) using 4 screws (item 8) to the previously fitted stand-off screws.



10. Refit the bezel back to the front of the boiler.

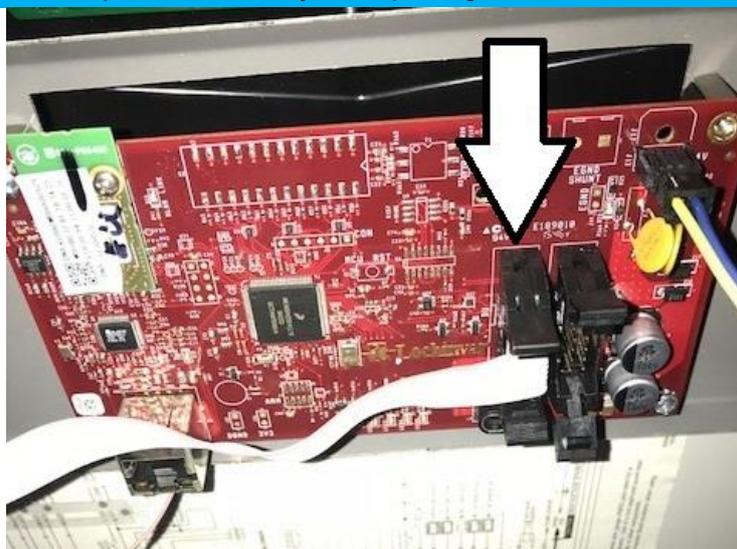


### 3.2 FITTING THE WIRING HARNESSES



#### 3.2.1 INSTALLATION OF WIRING HARNESSES

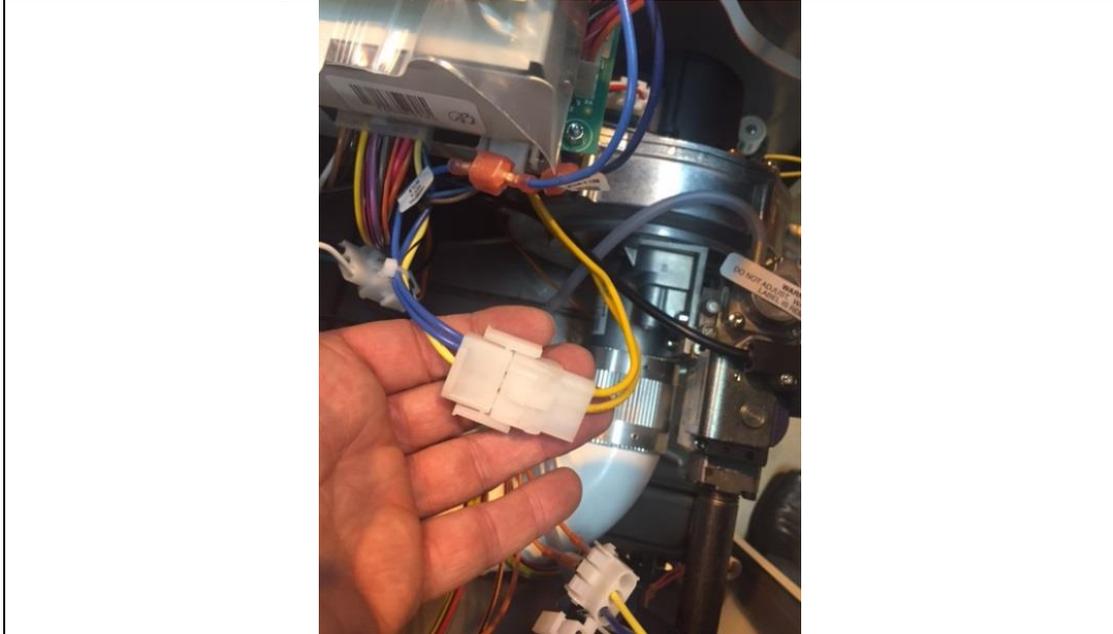
11. Fit the other end of the ribbon cable fitted to the display PCB in step 6. Make sure the plug connector is positioned correctly before pushing onto the Con-X-us board.



12. Fit the ribbon cable previously removed in step 5 to the Con-X-us board; make sure the plug connector is positioned correctly before pushing onto the Con-X-us board. The other end of this ribbon cable should already be connected to the main control board.



13. Disconnect the power supply connection from the transformer to the main control PCB.



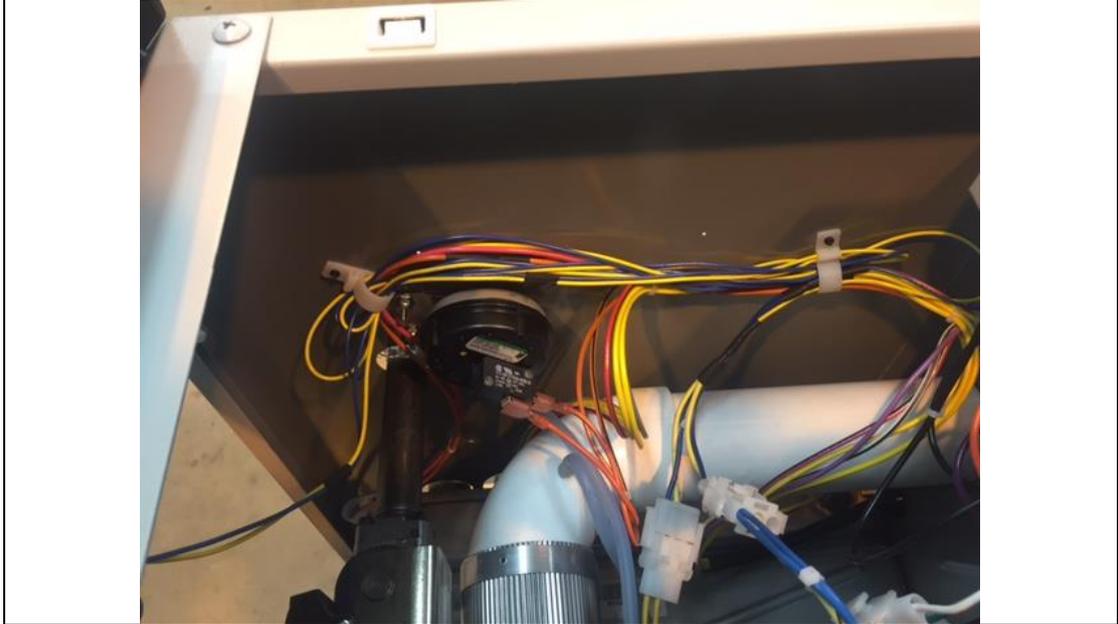
14. Fit the Con-X-us power harness to the connections removed in step 11



15. Fit the other end of the Con-X-us power harness to the Con-X-us board. Make sure the plug connector is positioned correctly before pushing onto the Con-X-us board.



**16. Tidy all loose cables into the cable clamps fitted within the unit.**



**17. Check all the connections are good and cable work is tidy.**

## 4.0 COMMISSIONING

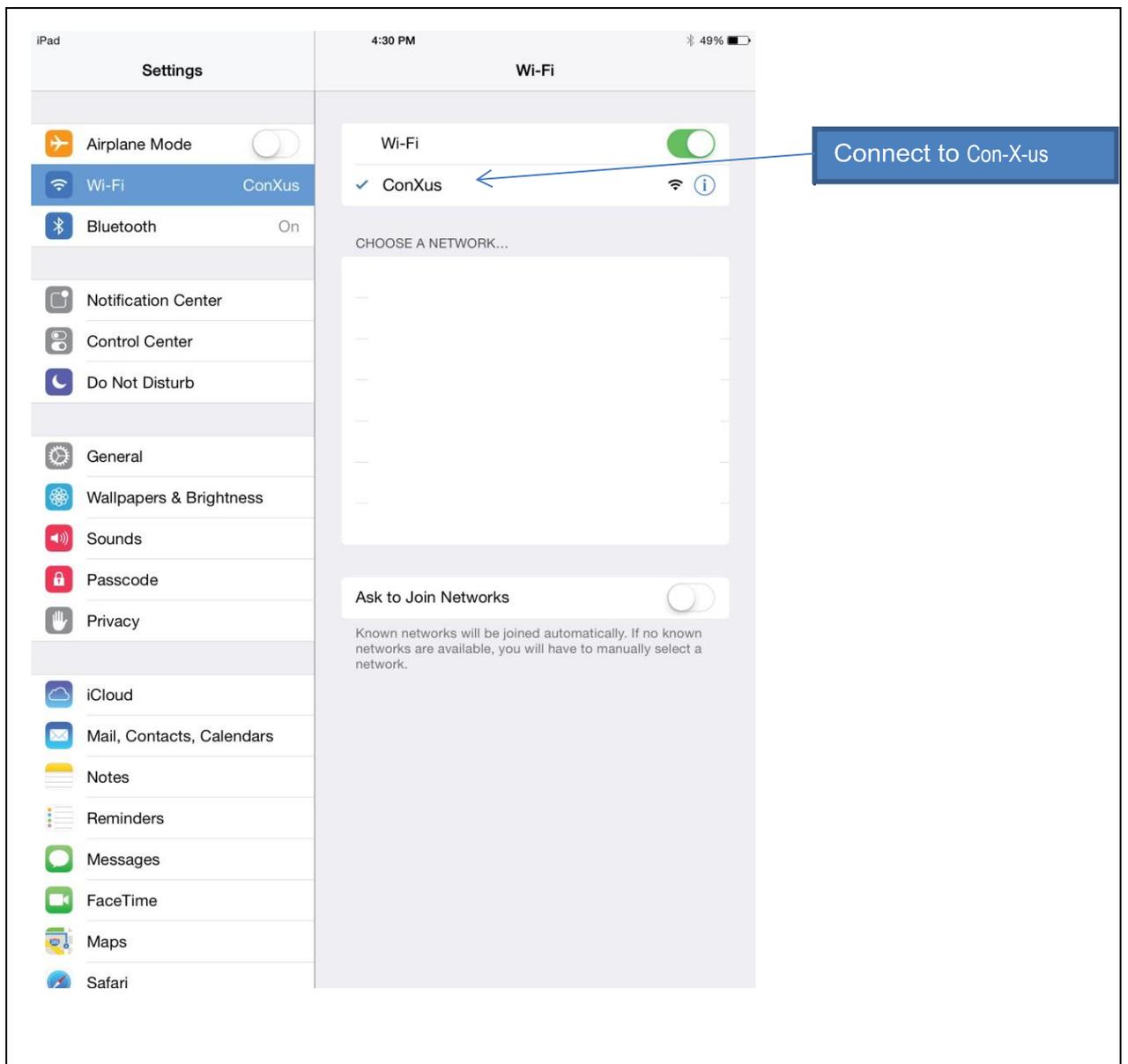
### 4.1 REGISTRATION



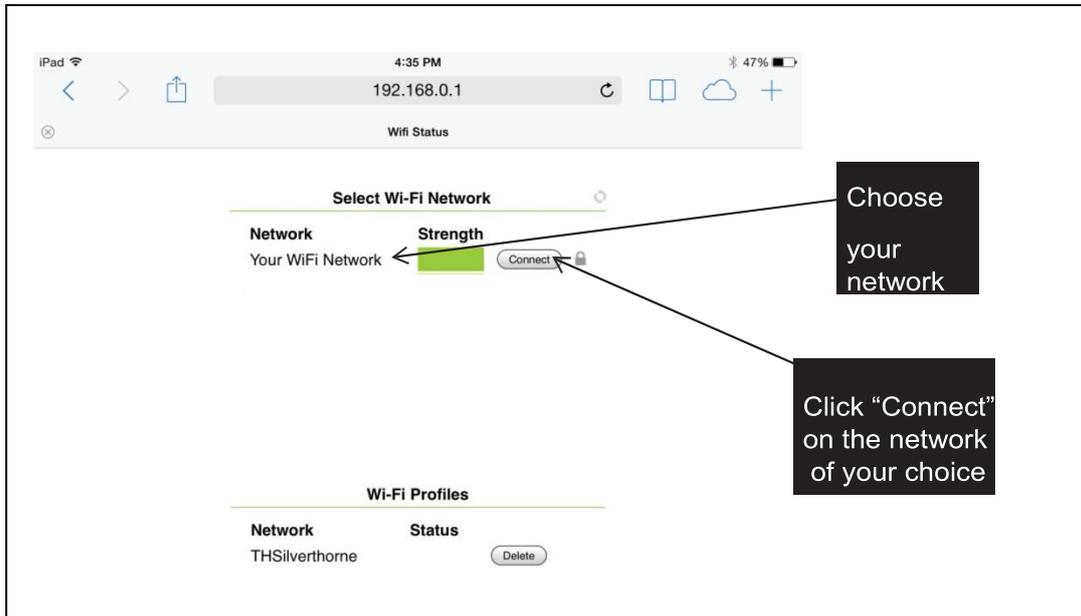
NOTE ALL SCREEN SHOTS USED IN THIS SECTION ARE FOR ILLUSTRATION PURPOSES ONLY.

#### 4.1.1 DEVICE SET UP

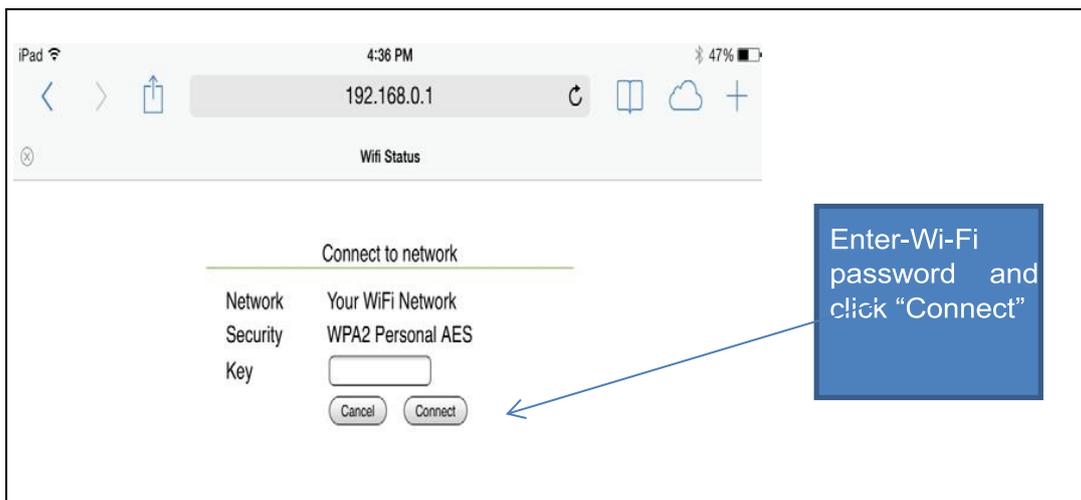
1. Switch on your WI-FI button on your smart device and search for the Con-X-us board as you would a WI-FI network. Ensure the green LED 5 light is on the Con-X-us board and that the WLAN light is off see **SECTION Error!** Reference source not found.
2. Connect to the device named Con-X-us as shown below



- Once connected to the Con-X-us board you should be directed to a login page. At this point you are choosing the network you would like CON-X-US to be linked with. If this is a secure network you will need to enter the network password.



- Enter the security password for your network and click CONNECT



- Your screen should tell you when the WI-FI connection is complete. You will also notice the WLAN LED light on the upper left hand side of the Con-X-us board is light once the board is connected to your WI-FI network. **See** Error! Reference source not found.



- Download the Android App on Goggle Play or the Apple App from the App Store



**TO RUN THE Con-X-us APP ON YOUR DEVICE YOU MUST HAVE A VERSION OF IOS 7.0 OR ABOVE OR ANDROID 4.0 OR ABOVE.**

- Once installation is complete, click on the Con-X-us App on your Tablet/Phone.



- If you are a new user you will have to create a new account, if you have an existing account move on the step 10.
- To create a new account, open the Con-X-us App and click CREATE NEW ACCOUNT. You will receive an email asking you to confirm your new account. You will also be directed to a webpage. This webpage signifies you have completed the process. Exit the web page and move to step 10.



**PLEASE CHECK YOUR JUNK OR SPAM FOLDERS AS YOUR NEW ACCOUNT EMAIL MAY DEFAULT TO ONE OF THESE FOLDERS.**

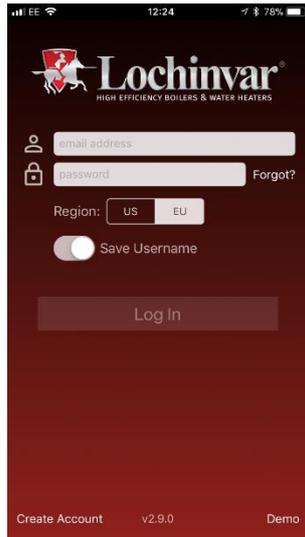


**THE NEW USER ACCOUNT HAS CELLS NOT NORMALLY USED IN THE UK – PLEASE COMPLETE ALL “REQUIRED FIELDS” AND COMPLETE THE FOLLOWING FIELDS AS DESCRIBED BELOW;**

- STATE – LEAVE BLANK
- ZIP – USE POSTCODE
- PHONE – IF MOBILE NUMBER CLICK CELL BUTTON, IF LANDLINE LEAVE CELL BUTTON UNCHECKED

**New User Account**

First Name: <small>Required</small>	Phone: <input type="text"/> <input type="radio"/> Cell
Last Name: <small>Required</small>	E-Mail: <input type="text"/> <small>Required</small>
Company: <input type="text"/>	Confirm E-Mail: <input type="text"/> <small>Required</small>
Address: <input type="text"/>	Password: <input type="text"/> <small>Required</small>
City: <input type="text"/>	Confirm Password: <input type="text"/> <small>Required</small>
State: <input type="text"/> Zip: <input type="text"/>	
Country: <input type="text"/> <small>Required</small>	<input type="button" value="Create"/> <input type="button" value="Cancel"/>



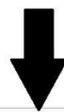
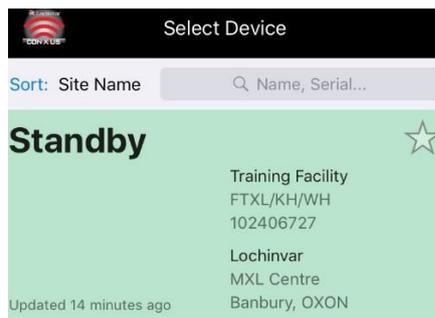
**Select EU as the region.**

10. After creating your account login to register a Con-X-us board
11. Once you are logged in you will be directed to the DEVICE SELECTION SCREEN. You can now register the boiler unit by clicking on the REGISTER NEW DEVICE button.



**THE UNIT AT SOME POINT MUST HAVE BEEN CONNECTED TO THE INTERNET BEFORE REGISTRATION CAN OCCUR.**

#### 4.1.2 DEVICE REGISTRATION



12. There are fields that are **REQUIRED** on the device registration screen, ensure all these fields are completed.

13. The SCAN buttons can be used to fill in the QR code on the Con-X-us board and the serial number on the Herald™ boiler, or they can be entered manually.

- QR Code on Herald – QR code for Con-X-us Board
- Barcode on Boiler – QR Code for Boiler Serial Number

14. The boiler serial number is located on the left hand side of the outer casing, the Con-X-us QR code should have been fitted just below the serial number during step 6 in section **Error! Reference source not found.** or as shown below.





**THE QR CODE IS LOCATED ON THE WI-FI CARD SEE Error! Reference source not found., THERE IS ALSO A DUPLICATE LOCATED WITHIN THE PACKAGING.**

15. Once you have finished filling in the fields click on the REGISTER button.

Site Name Required

Building

Address

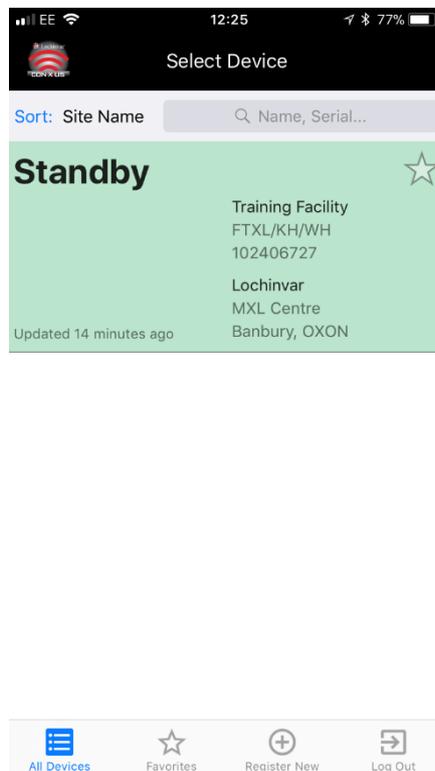
City Required

State/Region Required

ZIP/Postal

Cancel Register

16. Once registration has been completed, you will be re-directed to the device selection screen. You are now able to select the unit to monitor and change parameters with the App.



## 4.2 PERMISSIONS

Whoever first registers the Con-X-us device will be assigned the role of SITE MANAGER. As you register a Con-X-us device your user information will be automatically populated into the SITE MANAGER field. The SITE MANAGER is responsible for assigning access to other users for each site. As the SITE MANAGER your contact information will be displayed in the SITE MANAGER field in the service notification page of the setup tab.



**We would recommend setting up Lochinvar Limited as a user (view only access would be sufficient – with NO NOTIFICATIONS). If Lochinvar has access to the boiler via the Con-X-us app it may assist with any future fault diagnosis on the boiler.**

**If setting up Lochinvar as a view only user then please use the email address – [conxus@lochinvar.ltd.uk](mailto:conxus@lochinvar.ltd.uk)**

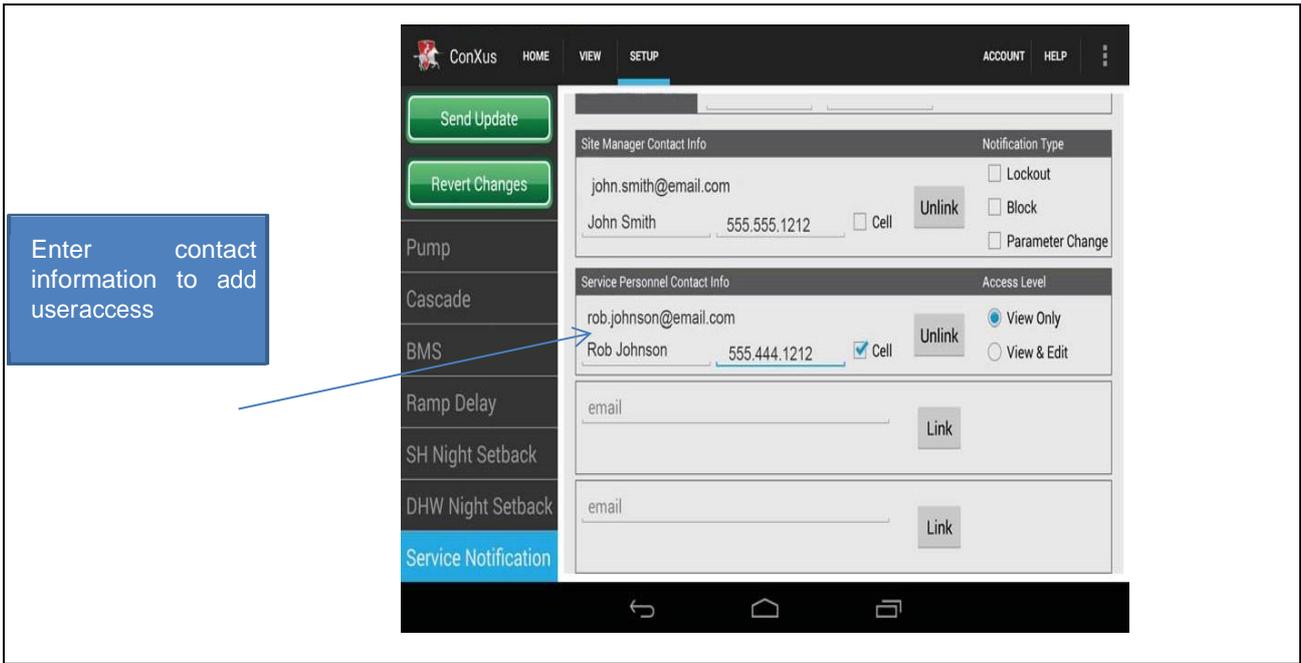


### 4.2.1 NEW USER

To add a new user to a Con-X-us enabled boiler the user will first need to create an account **see Section 9**. The SITE MANAGER must enter the email address into the SERVICE PERSONNEL CONTACT INFO section of the service notification menu and click the LINK BUTTON. This will grant access to the Con-X-us enabled boiler and will be populated on the user's available devices list.



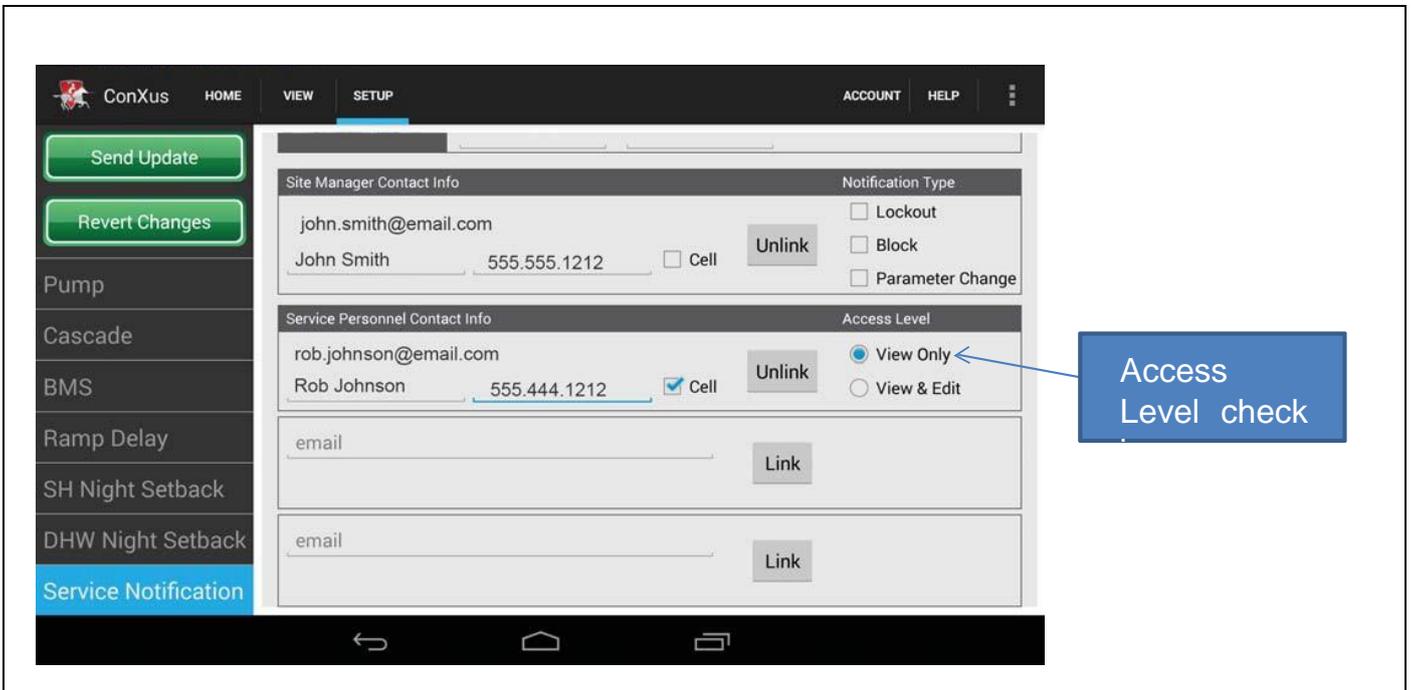
**THE UNLINK BUTTON CAN BE USED TO REMOVE A USER. IF THE SITE MANAGER UNLINKS THEM SELF THE CON-X-US WILL NEED TO BE RE-REGISTERED BY ANOTHER USER.**



#### 4.2.2 ACCESS RIGHTS

For each service provider the SITE MANAGER can grant either VIEW ONLY access or full VIEW and EDIT access by clicking one of the buttons to the right of the service provider's name. VIEW ONLY access will allow the user to view all information without the ability to make changes. If the SITE MANAGER would like the user to be able to receive TEXT and email alerts then the SITE MANAGER must provide the user with full VIEW and EDIT access so they can set up the alerts. Once these are set up the SITE MANAGER can then change the user's access level back to VIEW ONLY.

VIEW and EDIT access allows the user to view all information and make programming changes.



The SITE MANAGER and any user with VIEW and Edit privileges can select the type of alerts they wish to receive. One, all or none can be selected see highlighted below in green. By selecting LOCKOUT the SITE MANAGER or user will receive a text alert or email about the lockout condition. Likewise selecting BLOCK will result in a text or email being received about the blocking condition. Blocking conditions are not lockouts, but are conditions such as high outlet temperature, high flue temperature, or high delta T that result in the boiler limiting itself. Blocking conditions can occur because of operating conditions but can also provide early indications of problems. Anti-cycling blocking conditions are not relayed. Selecting PARAMETER CHANGE will result in a notification whenever a parameter is changed either via Con-X-us or through the user interface on the boiler.

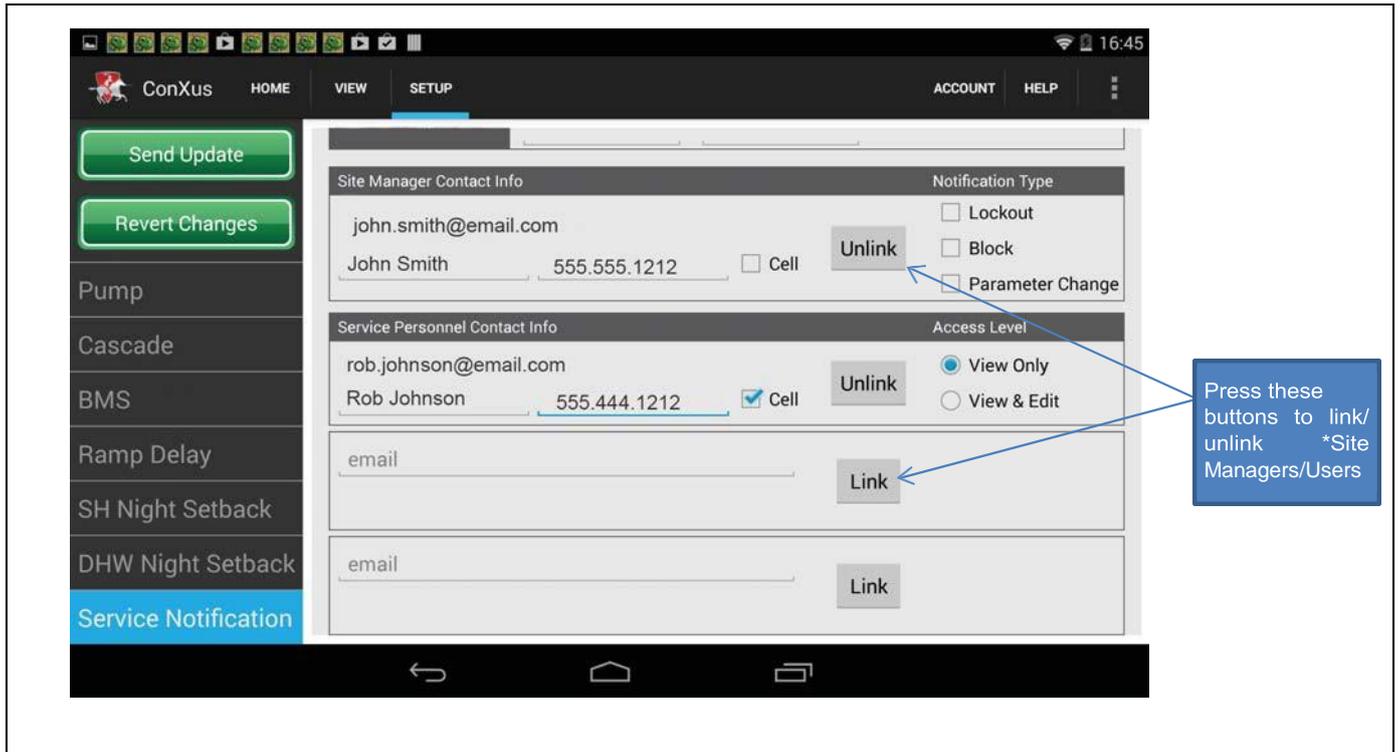
When a boiler with Con-X-us goes into a fault condition an alert will be sent via email or text message. A text message will be sent if a mobile phone number has been entered and the CELL box checked see highlighted below in red. Otherwise the user will receive an email.



**ONLY THE SITE MANAGER CAN SEE ALL LINKED USERS. ALL USERS WILL JUST SEE THE SITE MANAGER.**

**Select Notification Type**

**Enter phone number and select cell box to receive a text message with lockout info**



By accessing the SETUP tab the SITE MANAGER and any USERS with VIEW and Edit privileges will be able to make changes to all accessible parameters and send the parameters to the boiler. To send parameters simply click on the SEND UPDATE button. The REVERT CHANGES will retrieve the last saved parameters and re-populate all screens with these parameters.



By clicking on the ACCOUNT button you will be taken to a list of all the boilers registered to the account manager or user. You can access any boiler on the list by selecting the boiler required. The sort function can be used to sort the list of boilers by

- Site name
- Serial number
- City location

If a boiler is shown as grey this means it is not communicating with the internet. This could be because the boiler is powered off or the Con-X-us module is not connected to the internet.

Select Device

Devices Registered Under Your User Account

Sort by: Serial Number

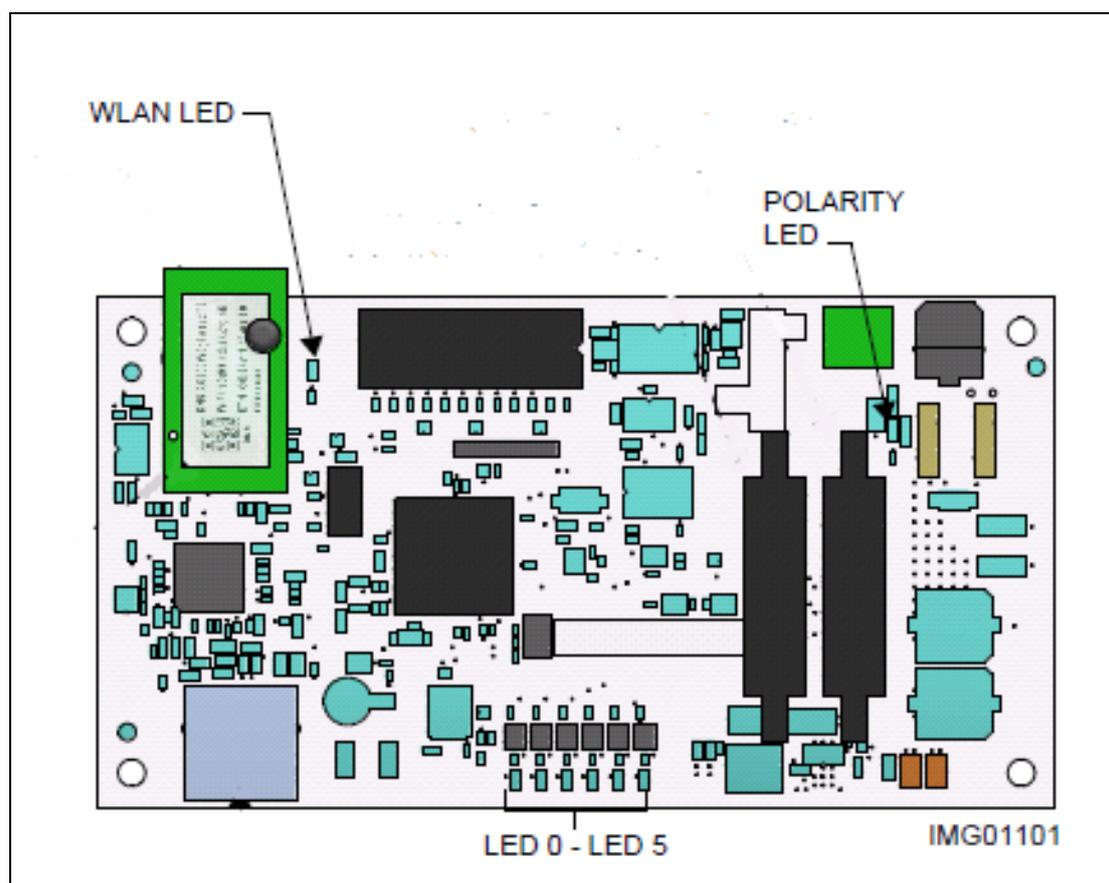
Boiler Name	Serial Number	Address
Site: University Building: Gym Boiler: 3	L1234567892	123 Main Street Nashville, TN 37216
Site: University Building: Library Boiler: 4	L1234567893	500 Palm Street Nashville, TN 37212
Site: University Building: Dorm Boiler: 7	L2234567895	2345 Burkle Road Nashville, TN 37201
Site: University Building: Hospital Boiler: 17	L4234567897	34 White Street Nashville, TN 37228

Log Out Register New Device

Select Desired Boiler

Use sort function for ease of viewing available boilers

## 5.0 FAULT FINDING



LED	DESCRIPTION	ERROR	CORRECTIVE ACTION
LED 0	N/A		-----
LED 1	Control to display communication error	RED	Check ribbon cable connection and display
LED 2	Con-X-us Communication	BLANK	If blank during known transfer through Con-X-us review install and registration
LED 3	N/A		-----
LED 4	Control to display communication	BLANK	No display signal received, check ribbon cable connections
LED 5	Power Confirmation	BLANK	Confirm power on 24v AC supply from transformer
WLAN	Internet Connectivity Confirmation	BLANK	If after registration, repeat section of set-up
POLARITY	Inverse Polarity Alert	RED	Swap 24v AC and ground







## IMPORTANT INFORMATION

These instructions must be read and understood before installing, commissioning, operating or maintaining the equipment.

