100268223\_2000509144\_Rev B



### REMOTE CONNECT INSTALLATION & OPERATION INSTRUCTIONS



This manual must only be used by a qualified heating installer / service technician. Read all instructions, including this manual, the Installation and Operation Manuals, and the Service Manuals, before installing. Perform steps in the order given. Failure to comply could result in severe personal injury, or substantial property damage.



Save this manual for future reference.

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### **1** Introduction

The information contained in this manual provides general guidelines for the implementation of the CON·X·US remote communication device with Lochinvar boilers.

Now from virtually anywhere you can:

- Monitor boiler plant operating conditions at unlimited locations
- Re-program SMART SYSTEM control parameters
- Setup custom text or e-mail alerts for contractor and building owners/managers

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## **2** Wi-Fi Setup Instructions

### Wi-Fi Setup:

Requires Wi-Fi connection with internet access.

- 1. Press the three (3) dots in the upper right corner of the Display Screen.
- 2. Press Wi-Fi Setup.
- 3. Enable Wi-Fi by turning on the wireless access.
- 4. Select the desired network from the available networks.
- 5. Enter the network password as required.
- 6. Press Connect to connect to the network.
- 7. Observe network is connected before proceeding.
- 8. PresstheReturnArrowatthebottomofthescreentoreturn to the CON•X•US program.

NOTICE

The screens depicted in this manual are to be used for illustration purposes only.



	w	i-Fi	C	Off On	+	:
	Corporat Secured with	e Network				
	Building / Secured with	<b>ڳ</b> ۱ WPA2		3		
	Public Ac	ccess		U		
	Main Net Secured wit	t <b>work</b> h WPA/WPA2				
		$\stackrel{\frown}{\leftarrow}$	$\Box$	Ð		
ļ		Main Network Signal strength Security WPA/ Password	Excellent WPA2PSK		<mark>6</mark>	

Cancel

Wi-Fi	Off On	+
Corporate Network Secured with WPA/WPA2		
Building A Secured with WPA2		
Public Access Point Unsecured		
Main Network		
8		
RETURN KEY:		

Connect

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### **3** Internet Update Instructions

### **Internet Update:**

Requires Wi-Fi connection with internet access.

- 1. Press the three (3) dots in the upper right corner of the Display Screen.
- 2. Press System Update and wait for System Update box to appear.
- 3. Under Internet Update, press Check for Updates.
- 4. If no updates are available, press the Return Arrow at the bottom of the Display Screen.
- 5. If updates are available, press "Yes" to install.
- 6. The Display Screen will show progress bar while updating.
- 7. Once complete, the system will reboot and the CON•X•US program will open.





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## **4** USB Flash Drive System Update Instructions

### **USB Flash Drive Update:**

Requires removal of upper and lower front doors to insert the USB flash drive into the USB port located to the left of the display panel. The USB flash drive <u>must have</u> factory provided update files pre-loaded.

- 1. Press the three (3) dots in the upper right corner of the Display Screen.
- 2. Press System Update and wait for the System Update box to appear.
- 3. Under USB Flash Drive Update, press Check for Updates.
- 4. If no updates are available, press the Return Arrow at the bottom of the Display Screen.
- 5. If updates are available, press "Yes" to install.
- 6. The Display Screen will show progress bar while updating.
- 7. Once complete, the system will reboot and the CON•X•US program will open.

#### USB Flash Drive Update - Procedure





### **5** CON·X·US Registration

1. Download the Android App on Google Play or the Apple App from the App Store.

NOTICE

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To run the CON·X·US App on your device (Tablet/Phone) you must have a version of iOS 7.0 or above or Android 4.0 or above.

2. Once installation is complete, click on the CON·X·US App (logo) on your Tablet/Phone.

Figure 5-1\_Click on App



- 3. If you are a new user you will have to create a new account. If you have an existing account, move on to Step 6 on page 7.
- 4. To create a new account, open the CON·X·US App and click CREATE NEW ACCOUNT. You will receive an e-mail asking you to confirm your new account. **NOTE:** Be sure to check your Junk or Spam folders as your new account email may default to one of these folders. You will also be directed to a web page. This web page signifies you have completed the process. Exit the web page and move on to Step 5.

			Log in		
		User Name:	Enter User Name		
		Password:			
		Save	Information		
	Cre	ate New Acco	unt	Login	
		New Us	ser Account		
First Name:		New U	ser Account Phone:		Cell
First Name: Last Name:		New Us	ser Account Phone: E-Mail:		Cell
First Name: Last Name: Company:		New Us	ser Account Phone: E-Mail: Confirm E-Mail:		Cell
First Name: Last Name: Company: Address:		New Us	eer Account Phone: E-Mail: Confirm E-Mail: Password		Cell
First Name: Last Name: Company: Address: City:		New U	ser Account Phone: E-Mail: Confirm E-Mail: Password Confirm Password:		Coll
First Name: Last Name: Company: Address: City: State:	Peoulesi Peoulesi Zip:	New U	eer Account Phone: E-Mail: Confirm E-Mail: Password Confirm Password:		Cell

### 5 CON·X·US Registration (continued)

- 5. After creating your account, login to register a CON·X·US board.
- 6. Once you are logged in you will be directed to the Device Selection Screen. You can now register the unit by clicking on the REGISTER NEW DEVICE button.
- NOTE: The unit, at some point, must have been connected to the internet before registration can occur.

#### Figure 5-3\_Register New Device Button

D	Select Device Devices registered under your User Account		
Sort by:	Site Serial Nu	imber City	
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	
Site: University Building: Cafeteria	L2234567898	456 Washington Blvd Nashville, TN 37217	

7. There are required fields on the Device Registration Screen. Ensure ALL required fields are filled in.

#### Figure 5-4\_Fill in Required Fields

	Device R	egistration	
QR Code on Herald:	Required	Scan	
Barcode on Boiler:	Required	Scan	
Site Name:	Required	Address:	
Building/Location:		City:	Required
Boiler Name:		State:	Zip:
	Register	Cancel	

### **5** CON·X·US Registration

NOTE: You can use the SCAN buttons to fill in the QR code (reference FIG.'s 5-5 and 5-6 for QR Code Screen location) on the CON·X·US interface display and the serial number of the unit or you can enter them manually.



#### Figure 5-6\_QR Code About Screen

Boiler Firmware:	SIT FPFA-T150520V1.000B939CM	
Device Software:	2.28	
Last Cloud Update:	8/7/2014 12:00 AM	
Device Serial Number:	AC000W000441425	- T- S.
Ethernet MAC:	0c:84:11:80:a0:42	
Wi-Fi MAC:	44:33:4c:4e:15:be	

Figure 5-7\_Scan Buttons

	Device R	egistration	Scan buttons for QR code and serial number
QR Code on Herald:	Required	Scan	
Barcode on Boiler:	Required	Scan K	
Site Name:	Required	Address:	
Building/Location:		City:	Required
Boiler Name:		State:	Zip:
	Register	Cancel	

### 5 CON·X·US Registration (continued)

8. When you are finished filling in the fields, click the REGISTER button.

#### Figure 5-8\_Register Button

Device Registration						
QR Code on Herald:	Required	Scan				
Barcode on Boiler:	Required	Scan				
Site Name:	Required	Address:				
Building/Location:		City:	Required			
Boiler Name:		State:	Zip:			
	Register	Cancel				
Register button						

9. 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 at this time.

Figure 5-9\_Select Device

	Dev Sort by:	Select Device rices registered under your l Site Serial Nur	Jser Account
	Boiler Name	Serial Number	Address
	Site: University Building: Gym Boiler: 3	L1234567892	123 Main Street Nashville, TN 37216
Select the job	Site: University Building: Library Boiler: 4	L1234567893	500 Palm Street Nashville, TN 37212
u wish to	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
	Site: University Building: Cafeteria	L2234567898	456 Washington Blvd Nashville, TN 37217
_	Register New Device		Log Out

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### **6** Permissions

Whomever registers the CON-X-US will be assigned the role of Site Manager. As you register a CON-X-US your user information will be automatically populated in the site manager field. The Site Manager is responsible for assigning access to users for each site. As the Site Manager your contact information will be displayed in the "Site Manager" field on the "Service Notification" page of the setup tab (see FIG. 6-1).

#### Figure 6-1 Site Manager Contact Info

	Setup Tab			
	- ConXus Home	VIEW SETUP		ACCOUNT HELP
	Send Update			
Site Manager Contact Info	Revert Changes	Site Manager Contact Info john.smith@email.com John Smith555.555.1212 Cell	Unlink	Notification Type  Lockout Block Parameter Change
l. I	Cascade	Service Personnel Contact Info		Access Level
	BMS	rob.johnson@email.com Rob Johnson555,444.1212 🗹 Cell	Unlink	View Only View & Edit
	Ramp Delay	email	Link	
Service	SH Night Setback			
Notification	DHW Night Setback Service Notification	email	Link	

To add a user to a CON·X·US enabled boiler the user will need to create an account (reference the *Create Account* section on page 6 of this manual). Once the user that you wish to add has created an account, the Site Manager must enter the e-mail 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 (reference Select Devices Screen on page 9 of this manual).

NOTE: The UNLINK button can be used to remove a user. If the Site Manager unlinks themselves, the CON·X·US will need to be re-registered.

Figure 6-2 Enter Contact Information to Add User Access

	- 👯 ConXus номе	VIEW SETUP	ACCOUNT HELP
Enter contact information to add user access	Send Update Revert Changes Pump	Site Manager Contact Info john.smith@email.com John Smith 555.555.1212 Cell	Notification Type  Lockout Block Parameter Change
	Casc <del>ade</del> BMS	Service Personnel Contact Info rob.johnson@email.com Rob Johnson 555.444.1212 Cell	Access Level  View Only View & Edit
	Ramp Delay SH Night Setback	email	
	DHW Night Setback Service Notification	email	

## 6 Permissions (continued)

For each service provider, the Site Manager can grant either "View Only" access or "View & Edit" access by clicking one of the boxes to the right of the service provider's name. "View Only" access will allow that user to view all information without the ability to make any changes. If the Site Manager would like to have a user have "View Only" privileges, but receive alerts, the Site Manager must provide the user with "View & Edit" privileges to allow the user to set up the alerts. Once the setup is complete, the Site Manager can then change that user's access level back to "View Only". "View & Edit" access will allow that user to view all information and make programming changes.

onXus Home	VIEW SETUP		ACCOUNT HELP
Send Update Revert Changes Pump	Site Manager Contact Info john.smith@email.com John Smith555.555.1212		Notification Type  Lockout Block Parameter Change
ascade MS	Service Personnel Contact Info rob.johnson@email.com Rob Johnson 555.444.1212	_ Cell Unlink	Access Level  View Only View & Edit
amp Delay H Night Setback	email	Link	
HW Night Setback	email	Link	
	φ û		

#### Figure 6-3 Access Levels

The Site Manager and any user with View & Edit privileges can select which alerts they receive. One, all, or none of these notification types can be selected. By selecting "Lockout" the Site Manager or user will receive a text or e-mail about a lockout condition. Selecting "Block" will result in an e-mail or text message any time the boiler enters a blocking condition. Blocking conditions are not lockouts, but are conditions such as high outlet temperature, high flue temperature, or high Delta T's, that result in the boiler limiting itself. Blocking conditions can occur often depending on the operation conditions, but could also indicate a problem. Anti-cycling Blockings are not relayed. Selecting "Parameter Change" will result in an e-mail or text message every time a parameter is changed remotely from CON·X·US or locally through the user interface on the boiler.

When a boiler with CON-X-US goes into a fault condition an alert will be sent out via e-mail or text message. A text message will be sent if a cell phone number is entered and the cell box is checked (see FIG. 6-4 on page 12). Otherwise, the user will receive an e-mail.

NOTE: Only the Site Manager is able to see all linked personnel. All other personnel will only see the Site Manager.

## **6** Permissions

Figure 6-4 Enter Cell Phone Info

		🗢 🗓 16:45
- 🎇 ConXus номе	VIEW SETUP	ACCOUNT HELP
Send Update		]
	Site Manager Contact Info	Notification Type
Revert Changes	john.smith@email.com	Lockout
	John Smith 555 555 1212 Cell	Unlink Block
Pump		Parameter Change
0	Service Personnel Contact Info	Access Level Select
Cascade	rob.johnson@email.com	View Only     Notification
BMS	Rob Johnson 555.444.1212 Cell	Unlink View & Edit Type
Ramp Delay	email	
SH Night Setback		LINK
DHW Night Setback	email	Enter cell phone number and select cel
Service Notification		box to receive a text message with lockout
		info

#### Figure 6-5 Link/Unlink Buttons

- <u>5 5 5 5 6 5 5 5</u>		🔝 🗓 16:45	
- 🎇 ConXus номе	VIEW SETUP	ACCOUNT HELP	
Send Update			
	Site Manager Contact Info	Notification Type	
Revert Changes	iohn smith@email.com	Lockout	
		Unlink 🔲 Block	
Pump		Parameter Change	
	Service Personnel Contact Info	Access Level	
Cascade	rob.iohnson@email.com	View Only	
BMS	Rob Johnson555.444.1212 Cell	Unlink O View & Edit Press these buttons to	e link/
Ramp Delay	email	unlink *Site Managers/	e Users
SH Night Setback		Link	
DHW Night Setback	email	151	
Service Notification		LINK	

\*Site Manager can unlink all if unlinked.

## 6 Permissions (continued)

By accessing the Setup tab, the Site Manager and any user 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 to the boiler simply click the SEND UPDATE button. The REVERT CHANGES button will retrieve the last saved parameters and re-populate all the screens with those parameters.



	• \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	😴 🔒 16:45	
Press this	-🎇 ConXus номе	VIEW SETUP	ACCOUNT HELP
button to send new parameters to the boiler	Send Update Revert Changes	Site Manager Contact Info john.smith@email.com John Smith555.555.1212 Cell Unlin	Notification Type           Lockout           Block           Parameter Change
Press this button to retrieve the last	Cascade BMS	Service Personnel Contact Info rob.johnson@email.com Rob Johnson 555.444.1212 Cell	Access Level  View Only View & Edit
saved parameters and re-populate all the screens with those parameters	Ramp Delay SH Night Setback	email	ĸ
	DHW Night Setback Service Notification	email	ĸ

## 6 Permissions

#### How to use the sort function

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 desired boiler. The sort function can be used to sort the list of boilers by serial number, city, or site name.

If a boiler is gray, this means it is not communicating with the internet. This could mean that the boiler is powered OFF or that the CON-X-US module is not connected to the internet.



	- 👯 ConXus			
		Select Device		
		Devices Registered Under Your User Account		
		Sort by: Serial Num	ber 🖌 🗧	viewing availabl
	Boiler Name	Serial Number	Address	boilers
Select Desired	Site: University Building: Gym Boiler: 3	L1234567892	123 Main Street Nashville, TN 37216	
Dollor	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	
	Lo	g Out	Register New Device	

# Notes

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



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Revision B (PCP# 3000004033 / CN# 500004083) reflects the removal of all model references.