

# BACnet Enabler User Manual

Stirling Ultracold 6000 Poston Road Athens Ohio 45701 USA t: 740.274.7900 f: 740.274.7901 e: info@stirlingultracold.com Global Cooling technology is manufactured under U.S. and International patents. Stirling Ultracold is a trademark of Global Cooling, Inc.

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## 1. Introduction

Thank you for using the BACnet Enabler software. The BACnet Enabler will allow you to update existing Stirling Ultracold XLE freezer to provide BACnet/IP connectivity.

To complete the installation and configuration, basic computer knowledge is necessary. If you are an unexperienced user, please refer to a professional. Read this manual thoroughly and carefully! The following instructions are essential for the installation and configuration of your BACnet Enabler software and XLE freezer:



It is strongly recommended to pay attention to all instructions marked with this symbol, because these are necessary for an error-free functioning of your BACnet Enabler software.

This symbol indicates background information.

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## 2. System requirements

#### Hardware:

- Pentium<sup>®</sup> or AMD<sup>®</sup> processor above 1 GHz or compatible
- At least 2 GB RAM
- 4 GB free hard disk space
- Graphics card capable of 1024\*768 resolution

#### Software:

- Microsoft Windows
- Java Runtime Environment (included in installation package)

#### Network:

- Standard TCP/IP network
- DHCP server
- Both XLE freezer as well as computer running the BACnet Enabler connected to the same network

# 3. Connecting the network

Before running the BACnet Enabler, please make sure to connect both the XLE freezer as well as your computer to a network with DHCP server:



XLE

Computer with BACnet Enabler

## 4. Downloading the BACnet Enabler software

Please use this link to download the latest revision of the BACnet Enabler.

#### BACnetEnabler\_Setup.exe

If this link does not work, please copy it into the address bar of your internet browser: This will start the download.

## 5. Installing the BACnet Enabler software

After the download is finished, you will find the Installer file in your Download directory:



To start the installation, please double-click on the file.

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Depending on the Windows version you might get some warning message upon installation:

Please click on "More info"

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Windows protected your PC	×
Microsoft Defender SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk. <u>More info</u>	
Don't rur	



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If you're running a 64 Bit operating system, the installer will ask whether you would like to install the 64 Bit version of the BACnet Enabler:



It is suggested to use the 64 Bit version of BACnet Enabler with a 64 Bit operating system, so please click on "Yes".

This will start the BACnet Enabler Setup Wizard:



To continue the installation process, please click on "Next"



Next please select the Destination folder and click "Install":



This concludes the installation. Please click on "Finish":



## 6. Updating XLE freezers

### 6.1 Starting the BACnet Enabler software

To start the BACnet Enabler software please double-click on the icon on the desktop and confirm the warning message with "Yes"



User Account Control	×
Do you want to allow this app from an unknown publisher to make changes to you device?	r
BACnet Enabler.exe	
Publisher: Unknown File origin: Hard drive on this computer	
Show more details	
Yes No	

This will start the BACnet Enabler:

🌺 Stirling Ultracold BACnet Enabler	-		×
IP Address: $192{\vee}$ $168{\vee}$ $0{\vee}$ $1{\vee}$			
IP Address Host Name	Resp	onse Time	
find Intel(R) 82574L Gigabit Network Connection	•	uploa	d

#### 6.2 Selecting the freezer(s) to update

To upgrade an XLE freezer, the BACnet enabler software needs to know the IP address of the freezer. There are two ways to introduce a freezer to the BACnet enabler:

#### 6.2.1 Manual IP entry

If you already know the IP address of the XLE to be updated and you only want to update a single freezer, you manually enter the IP address:



#### 6.2.2 Finding freezers on the network

In case you do not know the IP address of the XLE or if you would like to update multiple freezers at once, you can search for available freezers on the network.

First, please select the network adapter that is being used to connect to the network from the drop-down menu:



Depending on your computer system used, there might only be one network adapter available.

To start the network search, please click on "Find":



This will start the network search:

Stirling Ultracold BACnet En	abler	– 🗆 X
<i>IP Address:</i>		scanning
IP Address	Host Name	Response Time



Once the process is finished. vou will get a list of all the found XLEs on the network:

Stirling Ultracold BACnet En	abler		×
IP Address:			
192 - 168 -		finished!	
IP Address	U _ 1	Response Time	
	U _ 1		

Please select all freezers to be updated:

IP Address	Host Name	Response Time
192.168.0.117		110
192.168.0.108		110

#### 6.3 Starting the upload process

To start the upload process, please make sure all the freezers to updated are marked and then click the upload button:



#### 6.3.1 License

In order to run the BACnet firmware on the XLE freezer you are required to have a valid license per freezer. You can either use single activation licenses – which are good for one activation, or multi activation licenses. Multi activations licenses can be activated for multiple freezers – this will allow you to bulk update and activate XLEs. The license will be activated on your computer system and then transferred to the freezer. During this process, your computer will need Internet access, however the freezer does not.

You can also upload the BACnet firmware without a license. The firmware will not be active until activated. It is possible to activate the license at a later point of time, but this will require an internet connection to the freezer!

			_	Ente	er valid lice	nse
Stirli	ing Li	cense	×	/ k	ey	
4		Please enter license ZLN3P-KA3GX+H3933344444				
		OK Cancel				
Click o	n "O	K" to use the license				
				•	bload the activating it	

#### 6.3.2 Upload started

Once the upload is started, the BACnet enabler will go through a few steps to transfer, activate and enable the new firmware. This will take a while.

Stirling Ultracold BACnet End	abler	- 🗆 X	1
$\begin{array}{c c} IP \ Address: \\ \hline 192 {} \\ \hline 168 {} \\ \hline \end{array}$		finished!	Process status
IP Address 192.168.0.108 192.168.0.117	Host Name	Response Time 31 31	
STRUNG ANACOS	Updating Sending files		
find Intel(R) 825	74L Gigabit Network Connection	▼ upload	

#### 6.3.3 Upload finished

💑 Stirling Ultracold BACnet Enabler  $\times$ IP Address: 192 🔒 168 \_ 0 -1 + finished! GREEN = upload OK IP Address Host Name Response Time 192.168.0.108 192.168.0.117 31 31 RED = upload failed Finished  $\times$ 192.168.0.108 - BACnet firmware uploaded! - OK (i) 192.168.0.117 - BACnet firmware uploaded! - OK Status report OK Intel(R) 82574L Gigabit Network Connection find upload

When the upload is finished, you will get a status report:

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## 7. Support

To get support for the BACnet Enabler, please contact:

# Stirling Ultracold 6000 Poston Road Athens, OH 45701

Business Hours: Monday through Friday 8:00 AM – 7:00 PM, Eastern Time USA <u>Phone:</u> Toll-Free: 855.274.7900 Phone: 740.274.7900 Fax: 740.274.7901 <u>Email:</u> customerservice@stirlingultracold.com