# AppLoader 6.5

Download Enabling Software for Bosch WSHP DDC Controllers



Installation Manual

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# 1 Key to Symbols and Safety Instructions

# 1.1 Key to Symbols

# Warnings



Warnings in this document are identified by a warning triangle printed against a grey background. Keywords at the start of a warning indicate the type and seriousness of the ensuing risk if measures to prevent the risk are not taken.

The following keywords are defined and can be used in this document:

- **DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- ► WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.
- NOTICE is used to address practices not related to personal injury.

# Important information

1

This symbol indicates important information where

there is no risk to people or property.

# 2 Introduction

# 2.1 What is AppLoader?

AppLoader is a free software that enables approved field technicians and individuals to download programs to a controller using a laptop. It is a One-to-One downloading application, meaning a .clipping file can be downloaded to one controller at one time.

AppLoader can connect to any Bosch DDC controller over a Serial (RS-485) to USB connection and requires a USB-L cross-over cable (see Figure 1).



Figure 1 USB-Link Cable – 8733 927 403



# WARNING:

This product can expose you to chemicals including Lead and Lead components, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# 3 Installing AppLoader

Insert mini CD into CD/DVD drive and install the driver for the USB-L cable or go to: https://www.bosch-climate.us/support-center/download-center/downloads-for-fhpproducts/controls-fhp-products.html and download the .zip file that contains the application.

Create a folder on your local disk drive to save the AppLoader installation files and extract the AppLoader installation files into the folder you created.

- ► Double-click the setup.exe file
- ► Follow the Setup Wizard

# 3.1 Setup Wizard

i

Please note, images may correspond to different version of the Apploader software. This should not affect the installation process.

#### 1. Installer will launch.

暑 install4j	Wizard	_		×
	AppLoader is prepa guide you through t			đ
		_ [	Cancel	

Figure 2

2. When the Introduction Screen pops up, Select Next or Cancel if you do not want to continue.



Figure 3

3. Accept the terms of the EULA by clicking in the selector next to I Accept. Then select Next.

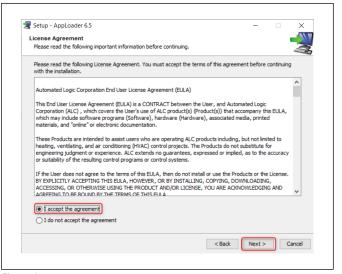


Figure 4

4. Select destination directory or accept default and click Next.

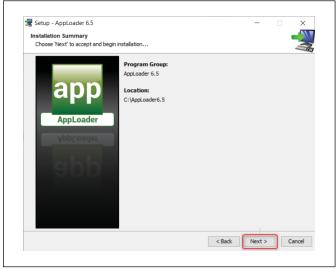
😽 Setup - AppLoad	er 6.5				_	
Select Destination	Directory					
Where should Appl	Loader be installed?					
Select the folder w	here you would like Ap	opLoader to be i	installed, then d	ick Next.		
Destination direct	tory					
C:\AppLoader6.	.5				Bro	wse
Required disk space	e: 554 MB					
Free disk space:	297 GB					

5. Edit the Select Start Menu folder if you want to create a shortcut and click Next.

Setup - AppLoader 6.5 —	×
Select Start Menu Folder	
Where should Setup place the program's shortcuts?	
	- H
Select the Start Menu folder in which you would like Setup to create the program's shortcuts, then click Next	t.
Create a Start Menu folder	
AppLoader 6.5	
7-Zip	^
Accessibility	
Accessories	
Administrative Tools	
AppLoader 6.5	
AutoCAD	
AutoCAD Electrical 2017 - English	
Autodesk	
BitLocker - MBAM Client	
BOSCH	
Bosch Output-Management-System	
Bosch Remote Support Tool	
Bosch Virtual Classroom	
CI-DAP52.5	
Cisco	~
Create shortcuts for all users	
< Back Next >	Cancel

Figure 6

6. Click Next to complete installation.





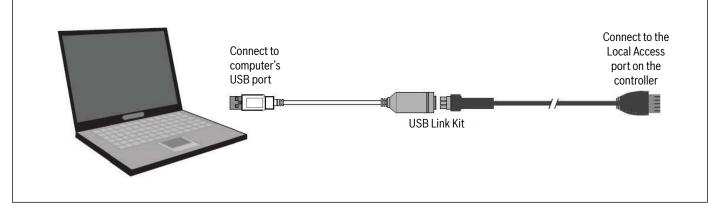
# 3.2 .Clipping File

AppLoader uses a .clipping file to download memory to your controller. The secure clipping file is obtained from Bosch Thermotechnology and makes up the software configuration for the controller. The provided file must be saved to an accessible location on the computer/laptop to be used for the download.

# 4 Downloading Memory (.clipping file) to a DDC Controller

## 1. Establishing Communication.

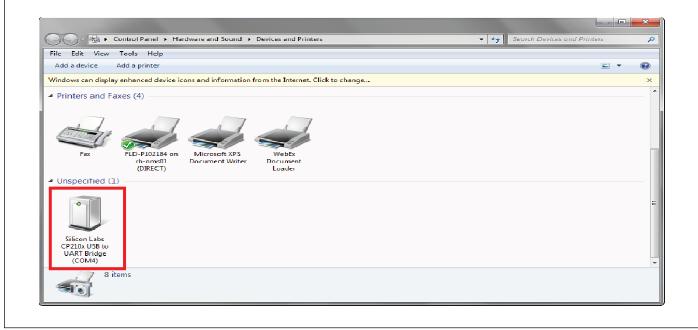
 Plug USB-L (Bosch Thermotechnology part number 8733-927-403) cable to the computer and controller before launching AppLoader. The DDC controller must be connected to a 24Vac source and powered on.





# 2. Verifying port settings.

 Navigate to the computer's Devices and Printers page (in Windows) and note the COM port used for the cable (labeled Silicon Labs CP210x USB to UART Bridge).



#### 3. Launching AppLoader and checking settings.

- Start AppLoader program: Click Start > All Programs > AppLoader orbrowse to your program location.
- ► Verify Enable Alarms Delivery is checked under Options > Preserve Parameters. This should be enabled by default.

app A	ppLoader -	- 6.0.003.2013				
File	Options	Connection	Access Port	Baud Rate	IP Config	
		erve Paramete	and control			
	Enable	e Alarms Deliv	very Ctrl-A			

Figure 10

## 4. Selecting the Connection protocol to the controller – Rnet.

• **Rnet** should be selected by default.

app AppLoade					
File Options	<u>Connection</u>	Access Port	Baud Rate	IP Config	
	Rnet				
	OIP				

Figure 11

#### 5. Selecting the Access Port used for the USB Link cable.

Select the COM port value that matches the port selected for the USB-L cable under Devices and Printers or on the Device Manager for Windows. This step is crucial in establishing communication with the controller.

app A	ppLoader -					
File	Options	<b>Connection</b>	Access Port	Baud Rate	IP Config	
			COM3			
			● COM4			

Figure 12

# 6. Verifying Baud Rate is 115200 (default setting).

▶ Default speed is set to 115200.

	pproduct	- 6.0.003.20130	1910-33303			
<u>F</u> ile	Options	Connection	Access Port	Baud Rate	IP Config	
				115200		
				○ 38400		

## 7. Opening the saved .clipping file

 Select File/Open and browse to the location of the saved .clipping file that was supplied, as shown in the example below:

<u>File</u> Opti Open	- I HARD DE LA COLUMN DE	×
Look in:	🗂 Desktop	
BST		
	Special Orders - Shortcut OLS - Shortcut	
	s-jr - Shortcut	
	7.05.03 WA 6-12-15.clipping	
Clippin-	test3.clipping	
File <u>N</u> ame:	bosch 7.05.03 WA 6-12-15.clippir	ng
Files of <u>Typ</u>	e: Clipping Files	-
		Open Cancel

Figure 14



In the above example the file named "bosch 7.05.03 WA 6-12-15. clipping" file was saved to the Desktop.

# 8. Building the .Clipping file

Select the Build button (build process lasts approximately 1 minute).

Eile	Options	Connection	Access Port	Baud Rate	IP Config	
	_		uild Dow	nload Memo	ry Modstat Clear	

9. Performing a Modstat to further verify communication with the controller (Optional)

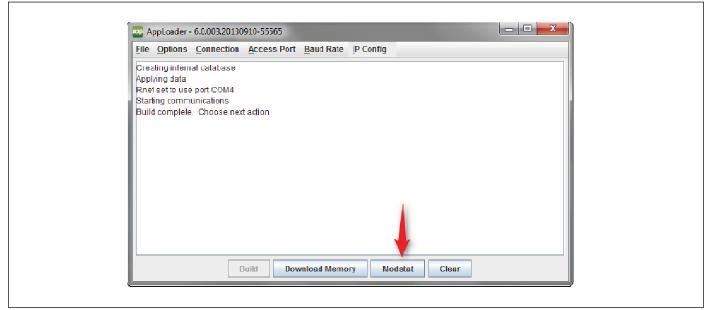


Figure 16

## 10. Downloading Memory to Controller

The below screen information ending with "Build Complete. Choose next action" is displayed after a successful build of the clipping file. At this point select the "Download Memory" button to initiate the download process.

P AppLoader - 6.0.003.20130910-55				_ <b>D</b> X
File Options Connection Acce	s Port <u>B</u> aud Rate <u>I</u> P	Config		
Creating internal database Applying data Rnet set to use port COM4 Starting communications Build complete. Choose next action				
	<b>_</b>			
Build	Download Memory	Modstat	Clear	



#### 11. Confirming BACnet Device Instance number

The device instance is typically read from the device; Select Use factory autoassign device ID (528000) and click OK to begin downloading.

Use factory au	to-assign device ID (528000)	
🔾 Use current au	ito-assign device ID (2400)	
Use assigned (	device ID "2402"	
Set device ID to		

Figure 18

#### 12. Completing the Download Process.

- ► The download process lasts anywhere between 3 and 5 minutes depending on the files size. The message "**Download Successful**" is displayed once the process is completed successfully. Allow approx 30 seconds after the message is displayed for program to be archived to flash memory (green and red LEDs for RUN and ERROR respectively on the controller flash alternately during this process).
- Run another Modstat to verify program status.

Eile Options Connection Access Port Baud Rate IP Config	
(III) O 1 Develop dire programmatice coto cono	
(MPS-) Downloading control program value sets - 56% (MPS-) Downloading control program value sets - 57%	
(MPS-) Downloading control program value sets - 58%	
(MPS-) Downloading control program value sets - 59%	
(MPS-) Downloading control program value sets - 60%	
(MPS-) Downloading control program value sets - 61%	
(MPS-) Downloading control program source content - 61%	
(MP-S-) Downloading control program source content - 66%	
(MPS-) Downloading control program source content - 72%	
(MP-S-) Downloading source file index - 72%	
(MPS-) Downloading source file index - 77%	
(MPS-) Restarting controller - 77%	
(MPS-) Restarting controller - 83%	
(MP-S-) Timesynching controller - 83%	
(MPS-) Timesynching controller - 88%	
(S-) Timesynching controller - 88%	
(S-) Downloading schedules - 88%	
(S-) Downloading schedules - 94% () Downloading schedules - 94%	_
() Downloading scriedules - 94% () Download complete - 94%	=
() Download complete - 94%	
**** Download Successful****	
Download Succession	-
Build Download Memory Modstat Clear	

# 5 Troubleshooting

- 1. If AppLoader application fails to start verify that no other program that uses the USB-L cable is running. Such applications include Virtual BACview and WebCtrl.
- 2. The first crucial step in downloading software to a controller is establishing a connection. If the connection is not established the "Build" portion of the process will not be completed successfully. If build is not successful (Build Complete not displayed) check the following:
  - a. Verify COM port for device matches port selected on AppLoader (page 7).
  - b. Verify USB-Link cable connection between controller and laptop is secure.
  - c. Verify controller is powered on by a 24Vac source, and power LED indicator for controller is on (green light).
- 3. It is possible for the download process to be interrupted and not complete successfully (100%) if communications is lost. If this happens just click the "Download Memory" button to restart the download process. If download keeps failing contact Tech Support as the clipping file may be damaged.
- 4. It is good practice to run a Modstat after building a clipping file to verify existing software on the controller (if any) as well as communication. A Modstat provides a status check on the health of the existing program currently running on the subject controller. Information includes:
  - a. A date and time stamp for the download
  - b. Software application version
  - c. Status of flash archive
  - d. Number of programs loaded and running (these should match)
  - e. Controller serial number

PP AppLoader - 6.0.003.20130910-55565	
File Options Connection Access Port Baud Rate IP Config	
**** Download Complete 19079	-
Retrieving module status	
Device Instance: 0528002	
Downloaded by: AppLoader 06/16/15 15:39 FLD86AD06	
Application Software Version: PRG:heat_pump_water_to_air_standard_7_05_03	=
Flash Archive Status: Valid on 06/16/15 15:43:56	
1 PRGs initialized. 1 PRGs running.	
Module status:	
Firmware sections validated in flash memory	
Boot16-H_IAR - v2.10:001 Apr 18 2013 LO ZONE - v6.00a:054 Jan 16 2015	-
Build Download Memory Modstat Clear	

NOTES:

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