# 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: <u>https://www.bosch-industrial.com/us/en/commercial/service/technical-</u> <u>documentation/software/</u> 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



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

1. Installer will launch.

暑 install4	lj Wizard	1. <u>-</u> 1		$\times$
	AppLoader is prepar guide you through t	ring the install4j Wi he rest of the setu	zard which p process	n will
			Can	cel

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 - AppLoader 6.5	- 0
Select Destination Directory	
Where should AppLoader be installed?	4
Select the folder where you would like AppLoader to be installe	ed, then dick Next.
Destination directory	
C:\AppLoader6.5	Browse
Required disk space: 554 MB	
Hee lisk space: 297 Gb	

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

😹 Setup - AppLoader 6.5	- X
Colord Start Manu Folder	
Select Start Menu Folder	
Where should Setup place the program's shortcuts?	
Select the Start Menu folder in which you would like Setup to create th	e program's shortcuts, then click Next.
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).

File Edit View Tools Help	Scotch Devices and Printers	
Add a device Add a printer	<b></b>	0
Windows can display enhanced device icons and information from the Internet. Click to change		×
Fig.Pi0/184 on it-omsol (UIREC1) • Unspecified (1)		
Silicon Labs CP210x USB to UART Bridge (COM4)		
3 items		

#### 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.

	pproduer -	. 0.0.003.20130	1910-55505			
<u>F</u> ile	Options	Connection	Access Port	Baud Rate	IP Config	
	☑ <u>P</u> rese	rve Paramete	rs Ctrl-P			
	Enable	e Alarms Deliv	ery Ctrl-A			

Figure 10

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

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

app Ap	proacer -	0.0.003.20130	1910-22202			
<u>F</u> ile	Options	Connection	Access Port	Baud Rate	IP Config	
		Rnet				
		O IP				

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.

PP AppLoader - 6.0.003.20130910-55565						
<u>F</u> ile	Options	Connection	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	0101005120150	510 55505			
File	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:

Elle Opti Den	Contraction of the local division of the loc		×
Look In:	Desktop		0-
📑 BST			
SAP ORDE	RS		
CONTROL	S - Shortcut		
Controls-j	- Shortcut		
bosch 7.0	5.03 WA 6-12-15.clipping		
Clippin-tes	st3.clipping		
File <u>N</u> ame:	bosch 7.05.03 WA 6-12-15.clippin	19	
Files of <u>Type</u> :	Clipping Files		-
		Open Cance	el

#### 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 Opt	tions <u>Connection</u>	Access Port	Baud Rate	IP Config		
		uild Dow	vnload Memo	ny Modstat	Clear	

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

Elle Options Connection Access Port Baud Rate IP Config   Creating internal catabase Applying data Rnet set to use port COM4 Starting communications   Build complete. Choose next action Image: Choose next action Image: Choose next action	202 AppLoader - 6.0.003.20130910-5	5565		
Creating internal database Applying data Rnet setto use port COM4 Starting communications Build complete. Choose next action.	File Options Connection Acc	ess Port Baud Rate IP Confi	g	
	Creating internal database Applying data Rnet set to use port COM4 Starting communications Build complete. Choose next actio	n		
			<b>↓</b>	



#### 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.



#### 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 autors	to-assign device ID (528000)	
O Use current au	to-assign device ID (2400)	
O Use assigned o	device ID "2402"	
0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Set device ID to	2402	

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.

<u>File Options Connection Access Port Baud Rate</u> IP Config	
(MPL S ) Developiding control program value sate _ 56%	
(MP - S -) Downloading control program value sets - 50%	
(MP - 6) Downloading control program value acts - 57/	
(mP-s-) Downloading control program varies sets - 5%	
(MP - S-) Downloading control program value sets - 59%	
(mP-s-) Downloading control program varie sets - 60%	
(MP-S-) Downloading control program value sets - 51%	
(MP-S-) Downloading control program source content - 61%	
(MP-S-) Downloading control program source content - 66%	
(MP-S-) Downloading control program source content - 72%	
(MP-S-) Downloading source file index - 72%	
(MPS-) Downloading source file index - 77%	
(MP+S-) Restarting controller - 77%	
(MP-S-) Restarting controller - 83%	
(MPS-) Timesynching controller - 83%	
(MP—S-) Timesynching controller - 88%	
(S-) Timesynching controller - 88%	
(S-) Downloading schedules - 88%	
(S-) Downloading schedules - 94%	
() Downloading schedules - 94%	=
() Download complete - 94%	
() Download complete - 100%	
**** Download Successful****	
	-
Pulld Download Morrory Bladistat Class	

#### 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

File Options Connection Access Port Baud Rate IP Config	
**** Download Successful****	-
Retrieving module status	
06/16/2015 15:44:57 CM: 2	
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	

NOTES:

**United States and Canada** 

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