

CTC firmware upgrade manual

Software installation and description for upgrading firmware on the CTC series circuit board.

James Campion 14-10-2016

Requirements.

- PC running Microsoft OS Windows XP, 7 (32&64bit), 8, 10 with USB port. USB communication cable to the CTC. •
- •

Software & driver installation.

This section explains the installation of the software and drivers required for the firmware update process.

Start installation.

Select the installation file to begin installation and click Next button. "CtcFirmwareUpgradeSetup 32bit.exe" (windows 32 bit OS)

OR "CtcFirmwareUpgradeSetup 64bit.exe" (windows 64 bit OS)

NOTE: Software requires .NET Framework to be installed on the host and installation may prompt for the downloading and installation of this software before proceeding. See section <u>.NET Framework 4.0 FULL</u>.

📸 CTCUpgradeSoftware 129637 00 - InstallShield Wizard 🛛 🗙				
25	Welcome to the InstallShield Wizard for CTCUpgradeSoftware 129637 00			
	The InstallShield(R) Wizard will install CTCUpgradeSoftware 129637 00 on your computer. To continue, click Next.			
	WARNING: This program is protected by copyright law and international treaties.			
	< Back Next > Cancel			

Select Next to continue installation...

븅 CTCUpgradeSoftware 129637 00 - In:	stallShield Wizard	l	×
Ready to Install the Program			4.
The wizard is ready to begin installation	1.		
Click Install to begin the installation.			
If you want to review or change any of exit the wizard.	f your installation s	ettings, click Back. C	lick Cancel to
InstallShield			
	< <u>B</u> ack	₽ Install	Cancel
<u> </u>			

Select the install button to continue....

After a few seconds the driver installation begins....

Driver installation.

Two drivers are now installed

- Ametek CTC. Used for communication with processor hosting CTC firmware.
- ATMEL. Used for initial communication with processor prior to any hosted firmware.

E Windows Sikkerhed	×
Vil du installere dette enhedsprogram?	
Navn: AMETEK, Inc. Porte (COM og LPT) Udgiver: Ametek Denmark A/S	
 Hav altid tillid til programmer fra "Ametek Denmark A/S". 	Installer Installer ikke
Du bør kun installere driverprogrammer fra udgivere, du ha <u>enhedsprogrammer der er sikre at installere?</u>	r tillid til. <u>Hvordan afgør jeg, hvilke</u>

Select the Installer button to continue with Ametek CTC series driver installation.

😵 V	Vindows Sikkerhed X
(\mathbf{X})	Windows kan ikke bekræfte udgiveren af denne driversoftware.
	[
	→ Installer ikke denne driversoftware.
	Du skal kontrollere producentens websted for opdateret driversoftware til din enhed.
	 Installer denne driversoftware alligevel.
	Installer kun driversoftware, der er hentet fra producentens websted eller disk. Usigneret software fra andre kilder kan skade computeren eller stjæle oplysninger.
\odot	<u>V</u> is detaljer

The ATMET driver is not digitally signed causing a prompt from the OS requiring confirmation that you wish it installed.

Both ATMEL and Ametek drivers are now installed.

B CTCUpgradeSoftware 129637 00 - InstallShield Wizard X			
3	InstallShield Wizard Completed The InstallShield Wizard has successfully installed CTCUpgradeSoftware 129637 00. Click Finish to exit the wizard.		
	Show the Windows Installer log		
	< Back Finish Cancel		

Please note.

The upgrade executable is found in the following location.

" C:\Ametek\CtcFirmwareUpgrade\CTC Firmware Update.exe".

For easy access a good practice is to create a shortcut on your computers Desktop.

.NET Framework 4.0 FULL.

The upgrade software requires .NET Framework 4.0 installed on the host PC: If not found the user must download and install the latest from Microsoft Web page.

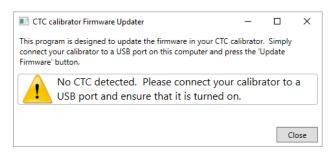
PROGRAM INTERFACE DESCRIPTION.

Startup.

On start-up the Upgrade software scans the PC's USB ports for the presence of any CTC.

The start-up interface depends on the presence of and condition of any connected CTC.

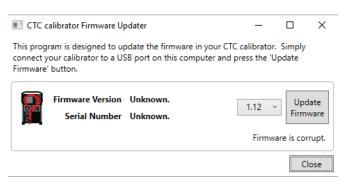
1. No CTC series calibrator currently connected.



2. CTC series detected with current firmware version displayed.

📧 CTC cal	librator Firmware Up	odater	_		×
This program is designed to update the firmware in your CTC calibrator. Simply connect your calibrator to a USB port on this computer and press the 'Update Firmware' button.					
	Firmware Version Serial Number		1.12 ~	Upda Firmv	
			Newer firmwa	re availa	ble.
				Clo	ose

3. CTC detected without firmware installed.



If an CTC is connect and latest available firmware version is displayed in the list box (1.12) and the Update

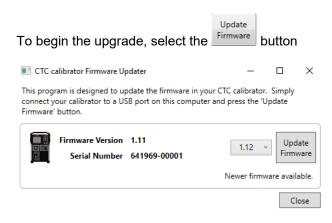
Firmware update button is activated ready for download.

4. Firmware is current, no update required.

If the latest available firmware matches the version on the CTC, the above text it shown and no action is necessary.

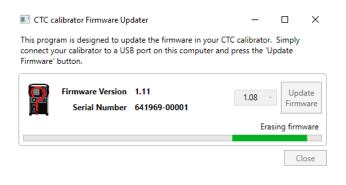
	Firmware Version Serial Number		1.12 Vpdate Firmware
_		\subset	Firmware is up to date.
			Close

Upgrade firmware.



After a while, the software begins updating the current firmware.

Erasing the firmware....



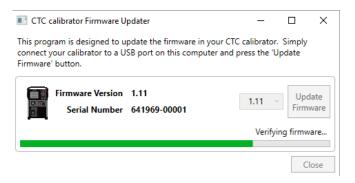
Updating firmware....

CTC calibrator Firmware Updater

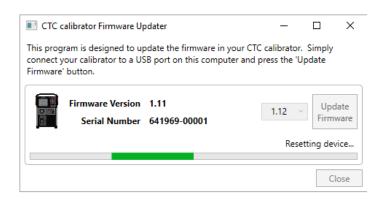
This program is designed to update the firmware in your CTC calibrator. Simply connect your calibrator to a USB port on this computer and press the 'Update Firmware' button.



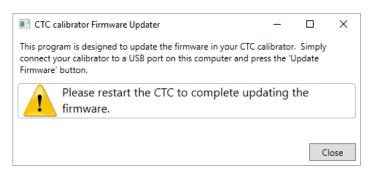
Verifying firmware...



Resetting device...



To complete the firmware update, restart the CTC.



To ensure the firmware in upgraded correctly the program will request to you to restart the CTC.

Connect AC-adaptor and/or batteries again.



The CTC firmware is now updated and verified.

Running upgrade tool on Windows xp and 7.

The firmware upgrade process requires both loading of both the Atmel processor driver and the CTC calibrator driver, of which are both installed during installation of the CTC upgrade software. During the update process the CTC is rebooted and announces itself to the host computer that it is now an Atmel device and the Atmel driver needs to be loaded by windows.

If this is the first time such a device is used by the computer, the user is requested to find and load the appropriate driver as is done with all new devices in windows.



The upgrade program will display a message for the user to manually install the driver before selecting the OK button to proceed with the upgrade.

Guiden Ny hardware fundet				
Vælg den enhedsdriver, du vil installere til hardwaren.				
Marker producent og model for din hardwareenhed, og klik derefter på Næste. Klik på Har diskette/cd, hvis der fulgte en installationsdisk med hardwaren.				
✓ Vis kompatibel hardware				
Model				
AT31 USB to Serial Converter AT31 USB to Serial Converter				
Driveren er ikke signeret digitalt! <u>Fortæl mig, hvorfor driversignering er vigtigt</u>				
<u> </u>	nnuller			

Installation af hardware				
<u>.</u>	Softwaren, du installerer til følgende hardware: AT91 USB to Serial Converter har ikke bestået testen til kontrol af kompatibiliteten med Windows XP, der kræves, for at produktet kan bære Windows-logoet. Fortæl mig, hvorfor denne test er vigtigi Hvis du fortsætter installationen af softwaren, kan systemet blive eller ustabilt og vil muligvis ikke fungere korrekt lige efter installationen eller senere. Microsoft anbefaler kraftigt, at du afbryder installationen nu og kontakter hardwareleverandøren for at få software, der har bestået testen, der kræves, for at produktet kan bære Windows-logoet.			
	Eortsæt alligevel Afbryd installationen			

After completion of the Atmel driver select the OK button and continue with the firmware upgrade.

_	Circ camprator rinnware opuater	
	This program is designed to update the firmware in your CTC c calibrator to a USB port on this computer and press the 'Update	
	Firmware Version 1.12 Serial Number 641969-00001	1.13 Vpk Firm
	Ensure installation is complete then select OK 🗙	
	Awaiting installation of Atmel Device/driver.	C
	OK	

NOTE!

The location of the Atmel driver is located in the following folder should you need to install the driver manually.

 $C:\ \ CtcFirmwareUpgrade\ \ Atmel$

Trouble shooting upgrade of existing firmware.

Occasionally an upgrade of an existing firmware version can freeze after erasing the firmware resulting in the CTC displaying a blank screen after reboot.

Should this occur do the follow the instructions below.

- 1. Simply shutdown down the program and restart it.
- 2. The program will see the CTC as if no firmware was installed.
- 3. Select the Upgrade button and repeat the process.