WOODWARD

EASYGEN-3000XT FLASH INSTRUCTION   #37630

Flashing a Woodward easYgen-3000XT device for full or partial update

⚠ CAUTION	**For trained personnel only!** **Updating the device software needs expert level. Otherwise, the device can become unusable or even cause error function that can lead into dangerous situation with genset.**
⚠ CAUTION	**DO NOT switch off the device** **until the flash procedure is explicitly mentioned as completely finished as described below**
⚠ WARNING	**If the device to be updated is installed into a running genset system, it is mandatory that a genset control expert guarantees trouble free system setup during update process.**

IMPORTANT	**If firmware update process is however interrupted before it has finished, due to lost or switched off power supply, your device may be no longer able to operate.** **Note that you perform firmware update at your own risk.**

What to do?

The updating process comes with conditions, which need certain preparations, ask for step-by-step procedure, and will be closed with some final preparations.

First, read this instruction manual completely and carefully, before you start updating your device.

PRECONDITIONS

The following conditions are mandatory BEFORE updating a device:

→ PC or laptop computer with the latest version of Woodward software ToolKit installed
→ Get the latest version <u>here</u>

→ Appropriate configuration files installed/copied on your computer

→ Powered up easYgen-3000XT (12/24 V) but
    → without any(!) genset control operation
    → without communicating to other devices

→ PC or laptop computer connected to the device via the preferred interface type and cable

→ Current version of update file *.scp, according to the actual device and the preferred interface.
→ Get the latest version <u>here</u>

There are two possible ways to update the easYgen-3000XT:
→ via USB interface
→ via Ethernet interface

We recommend using the Ethernet variant for the update procedure.

Depending on the way, you want to conduct the update you may receive an appropriate file:
→ File for USB: "…usb.scp".
→ File for Ethernet: "…eth.scp".

For each interface, it is mandatory to use the appropriate file!
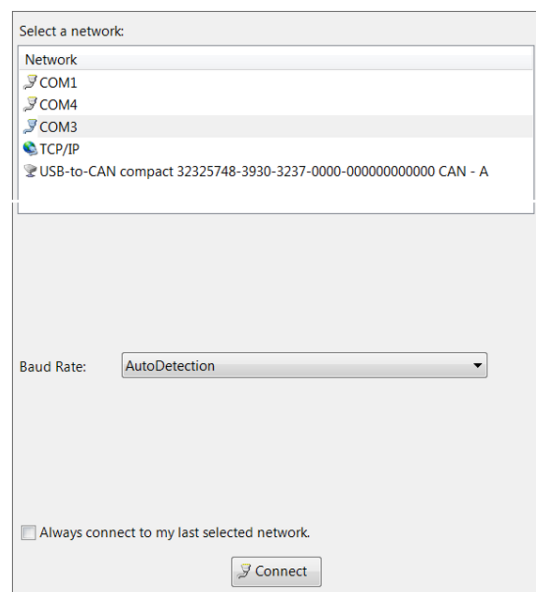
PREPARATIONS

EASYGEN-3000XT
→ Select operation mode "STOP"
→ Ensure that "running gensets" are controlled by other genset control(s)
→ Remove all interface connections, except the connection for updating the device

TOOLKIT
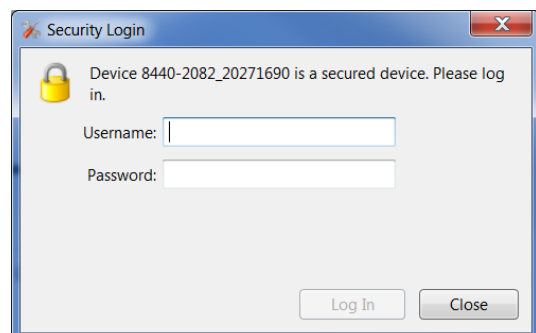→ Save your current settings as *.wset file on your computer to ensure re-storing it later

1 Start ToolKit software

2 Open the appropriate configuration file (*.wtool) which fits to your device

3 Click the "Connect" icon
- Connection selection sub window opens

4 Select the appropriate interface for the device which is supposed to be flashed for (partial) update
- Login screen appears

5 **To login with user name and password for Code Level 5 is required!**

- After Log-In, HOME PAGE now displays data and actual status from the connected device

UPDATE PROCEDURE
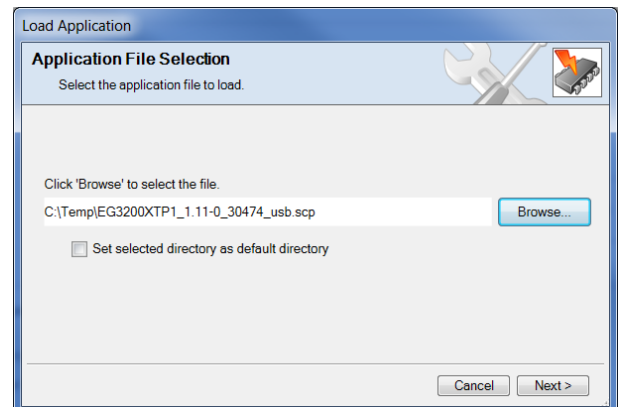
1   Select "File" --> "Load Application" and follow the instructions
    - Load Application sub window opens

2   Continue with "Next"
    - Application File Selection window opens

3   Click "Browse" and select the provided *.scp file. If available, select _eth.scp or _usb.scp with respect to the appropriate interface to which you are connected now

    Continue with "Next"
    - Restore Settings windows opens

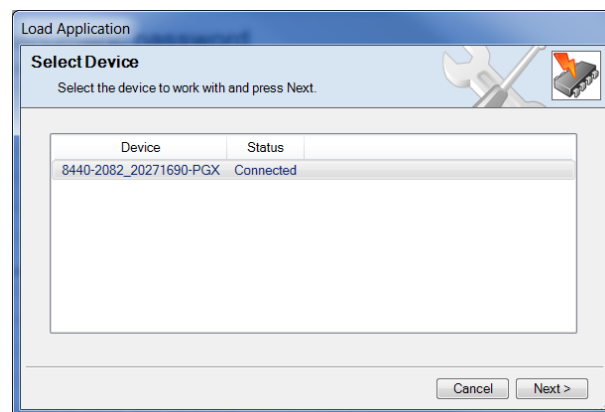4   Please ensure that your settings are saved e.g., by checking the "Restore …" box

    Continue with "Next"

5	Update via USB:	Continue at Step 6
	Update via Ethernet:	"Select Device" window
	appears.

	Notes!
	Ensure that the device will
	NOT BE SWITCHED OFF during update process
	before you click "Next"!

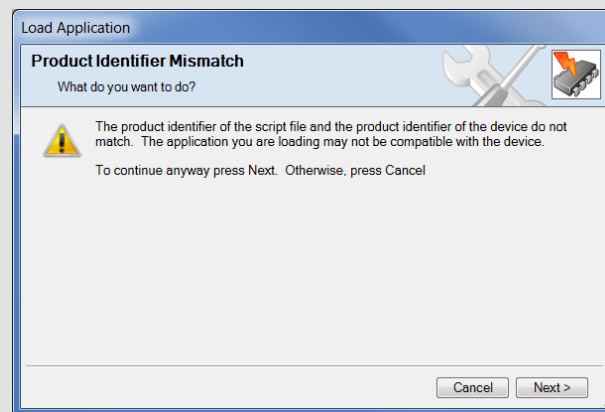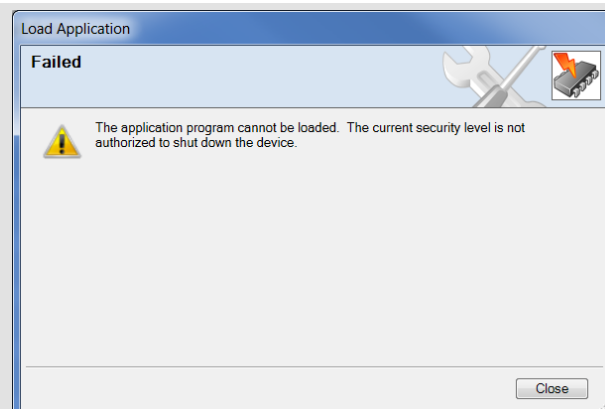	Select you device if not already selected and
	click "Next"

	Notes!
	If next window says "Failed":

	In this case the actually entered code is below
	Code Level 5.
	Click "Close" then "Disconnect" in ToolKit window.
	Go back to Chapter "Preparations" step 4 and
	login with code for Code Level 5

	If "Production Identifier Mismatch" window
	appears:

	The .scp file you have selected does not fit to the
	hardware of that device.
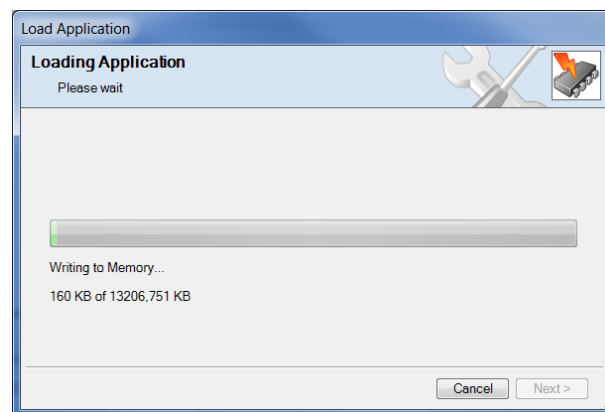	Click "Cancel" and
	check the selected file in step **3**.

6	The update process has now started, and ToolKit transfers the file to the memory of the device.
	easYgen-3000XT with display:
	The device switches off the display. Furthermore, "Ready for operation" relay de-energizes.
	The buttons TEST, STOP, AUTO, MAN and the yellow alarm LED are illuminated

	easYgen-3000XT with LEDs (metal housing):
	LEDs "Communication" and "Operation" turn red. Furthermore, "Ready for operation" relay de-energizes.

Via Ethernet, the transfer takes about 6 - 9 minutes.
Via USB, the transfer takes about 15 – 18 minutes.

Still valid: **DO NOT SWITCH OFF THE DEVICE**!

Wait until the bar graph is completed.

Load Application
Loading Application
Please wait

Writing to Memory...
160 KB of 13206,751 KB

Cancel   Next >

NOTE

With some ToolKit versions (e.g.: ToolKit 5.1) loading application window seems to stuck up at the end when the bar graph is full. In this case …

a) **HMI Variant: O**bserve the HMI.
   When you observe the boot-up is complete and the display is showing home screen. Check the firmware version (how to check the firmware version is described below)

b) **Back panel variant: O**bserve the LEDs.
   When you observe the LEDs have become stable (approx. 10 mins after the bar is full). Press Cancel on loading application window. A message appears "The flash update may not be complete…". Ignore the message and check the firmware version via Toolkit. Firmware should be upgraded. If not, try again and let the process run a little longer.
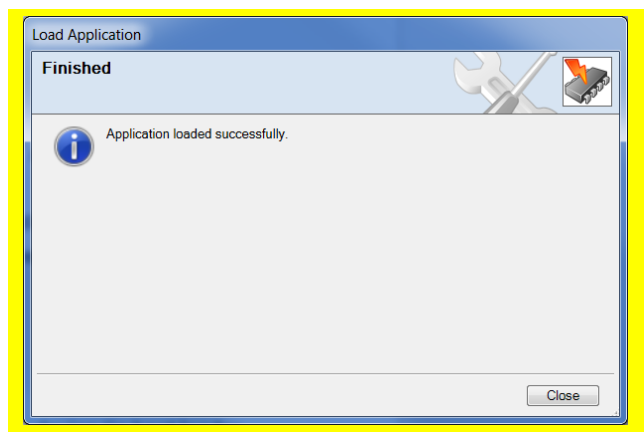
… otherwise:

Afterwards "Application loaded successfully" will appear

DO NOT click "Close"!
Leave that window as it is for now!

DO NOT switch off the device!

Load Application
Finished
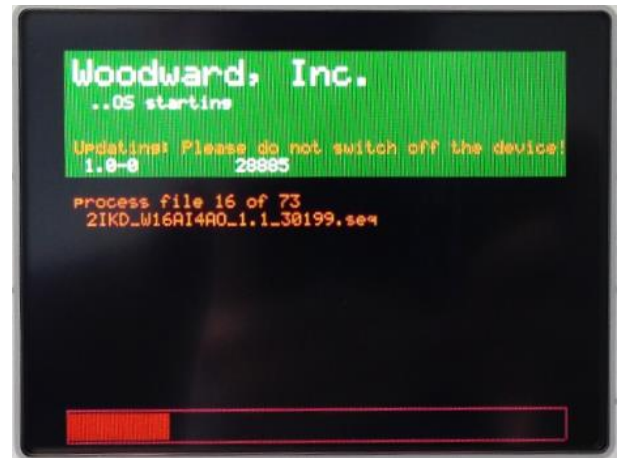
Application loaded successfully.

Close

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7   Now the device will reboot **automatically** and continues the update process.
easYgen-3000XT with display:

During the reboot, the display of the device will
show in RED:
"Updating: Please do not switch off the device!"
The bar graph shows the progress of the update
action

DO NOT SWITCH OFF THE DEVICE!

This process will finish after about 4-5 minutes

easYgen-3000XT with LEDs (metal housing):
LEDs "Communication" and "Operation" stay still red.
DO NOT switch off the device!
After about 30 seconds, the LEDs will start blinking in turn for about 2:30 minutes.
Afterwards both LEDs again turn red for a moment.
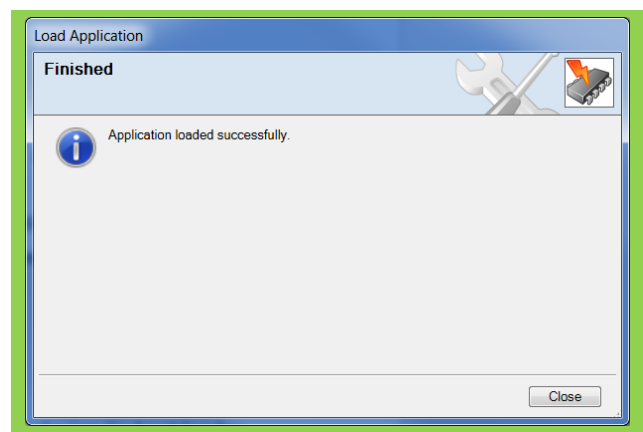DO NOT switch off the device!

8   After the device has finished the previous step, it will perform automatically again a reboot.
Now the device starts with the new software version.

Update has finished completely after the device has started the application, and the easYgen-3000XT with
display shows the Home Screen on the HMI as usual.
In easYgen-3000XT with LEDs (metal housing), the "Operation" LED turns to green, as usual. If there is an
alarm active, LED toggles green/red, as usual.

Now the window "Application loaded successfully"
can be closed

Click "Close"

Check the version

In ToolKit: Navigate to "STATUS MENU" → "Diagnostic" – "Version"

Via HMI: "Next Page" → "Diagnostic" → "Version"

The "Application", "HMI", "Bitmap" and "Language" must have the same version.

If there is any discrepancy, there will show an exclamation mark besides the respective version

HMI Screen:

ToolKit screen   HMI screen

In this case, please contact your sales support partner to fix the problem:

For further Product Support Options, Product Service Options, Returning Equipment for Repair, and/or Engineering Services please download application note #37573.

Close update

Ensure latest (saved) setting

- Check whether your latest specific settings are still/again loaded. If not:

- Re-load your latest saved settings or execute "factory settings"

Undo temporary safety preparations

- Re-connect all interface connections that have not been necessary for the flash update process

Device is updated and ready for use!

- Start your application

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