Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

Transport X² *

Cumulative Firmware History

This document shows the main changes to the Transport X² firmware, release by release sorted with the latest release first. The <u>upgrade procedure</u> is described at the end of this document.

Version 2.12.0.0 - Dec 2021

New features

- Improved user messaging on "oil too hot" warning messages
- Improved user messaging on atmospheric contamination warning messages
- Addition of user-friendly passwords

Notable bug fixes

• Rollup of various small bugs (intermittently freezing), fixes, and interface clean ups

Version 2.10.0.1 – Jul 2020

New features

- Display of recommended oil injection temperature, fan status and heating status on top right corner of the device
- Ambient Contamination detection and user messaging has been improved. The unit is now able to detect certain patterns such as
 - o increased Hydrogen (H₂) levels, which can be found nearby battery banks
 - $\circ~$ increased Carbon-Dioxide levels (CO_2), which may occur if too many people are within one room or the car exhaust may be too close
 - usage of cleansing agents such as Isopropanol, which should never be used when cleaning the Transport X² equipment as this interferes with the sensitivity of the device.
- New languages available from 2.10 onwards based on 3x regional packages. Upgrading from a previous version will enable by default the European package. The Japanese and Chinese packages can only be loaded by GE factory or GE field services. Please contact your local representative to get further details.





Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

- European Package:
 - English (Default)
 - Spanish
 - Portuguese
 - French
 - German
 - Polish
 - Russian
- Japanese Package:
 - English
 - Japanese
- Chinese Package
 - English
 - Chinese
- CSV export settings available to set list separator and decimal symbol.
- Improvement to user instructions wording.
- Log files now available as a ZIP without containing EXE files for easier file transfer via email.
- Improvement of the sorting functionality when reviewing existing measurements.

Notable bug fixes

- Oil-Too-Hot error appearance has been greatly reduced by changes made of the internal warmup control. The user messaging has been improved and creates now more clarity if the oil is too warm or if unit requires further time to warmup. Any user waiting time will now be estimated by the device.
- Fixed screen freeze issue after user data entry step 9 or 10, on "view results" page and "PC-Sync" screen
- Fixed counter error for reminder of lid-assembly-filter replacement
- Fixed fan operation bug during system flush process to allow better venting.
- No more user data loss when downgrading the firmware from 2.10. or higher down to previous versions no lower than 2.2.0.0. Downgrading to version 2.1.* will still lose user data. Unit will perform a backup prior downgrading which could be restored.
- Automatically save measurement directly after cycle.
- Fixed H₂0 measurement bug on ester oils.

Version 2.6.3 - Nov 2019

New features



Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

- Improved performance and diagnostics during system gas test and leak tests.
- User instructions and messages have been updated and provide better clarification.
- System Gas Check will produce a warning if executed outside recommended unit temperature limits of 15°C to 40°C
- GE font implementation

Notable bug fixes

- Fixed inconsistent data rounding in Perception vs. Transport X²
- Fixed missing pixels on screen
- Fixed PC Sync crashing
- Fixed aborting a measurement
- Fixed usage of 24h time format instead of 12h

Version 2.2 - Dec 2018

New features

- More efficient search functionality including filters
- Functionality to restore backups
- Define oil types in setup menu

Notable bug fixes

- Pressing "Home" button during operation will now always trigger user confirmation
- Removal of irrelevant items on the printout and broken printouts fix
- Display of missing elements during "New Measurement" procedure
- Time zone display and Set Date/Set Time fix

Version 2.1.6.106 – July 2020

Notable bug fixes

• Fixed pressure differential in gas lines (DE6806)

Version 2.1.6.104 – Sep 2018



Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

Notable bug fixes

• Fixed false-positive error code #24 showing on some devices (DE6786)

Version 2.1.6.101 – July 2018

Notable bug fixes

• Fixed false-positive errors showing on some devices before and after the measurement

Version 2.1.6.10 – May 2018

Baseline software release.



Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

Upgrade procedure

- (a) Please contact GE M&D Services to ask them for a quote to come and perform this software upgrade.
- (b) If you want to perform the upgrade yourself, please follow the steps below:
 - Prepare a USB Memory stick, no larger than 32 GB, with the FAT 32 file system (e.g. right click and select format)

> 🕳 USB Drive (D:)	
> 🌳 Network	Format USB Drive (D:)
	Capacity:
	3.75 GB ~
	File system
	FAT32 (Default) ~
	Allocation unit size
	4096 bytes \vee
	Restore device defaults
	Volume label
	Format options
	Quick Format
0 items	
	Start Close

• Create the folder "TransportX2" in the root folder of the USB stick and the subfolder "Upgrade" within the folder "TransportX2".



- Copy the following files into the just created folder "\TransportX2\Upgrade\":
 - upgrade_2.X.Y.Z.zip
 - upgrade_2.X.Y.Z.md5



Technical Bulletin

Date: December 2021

Distribution: Public

Please note: it is important to keep the folder-name and file-names as is.
 Otherwise the upgrade cannot be performed. The letters "X.Y.Z" would be replaced with the relevant firmware version number.



- Start the Transport X² and select "PC Sync"
- Plug the USB Memory stick into the USB port
- Transport X² should now recognize, that a newer firmware version is available, and will ask the user to proceed with the upgrade:

PC S	улс
U	ISB sync in progress
	A new firmware was found. Do you want to upgrade TRANSPORT X firmware?
	Yes No
	Back

• If no is selected, the current firmware version will remain.



Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

• If yes is selected, then the device will perform a full backup and store this onto the USB memory stick. Then it will upgrade the firmware to the latest version available in the folder.

 >>> Create encrypted Service File >>> Save Service File to USB Memory Stick >>> Folder: \Hard Disk\TransportX2\Customer R >>> File name: 803661_2.9.5.0_2020-07-24T16 >>> File size: 204,364 bytes >> Your Full System Backup was successful >> Install Folder: 'Bin' >>> Install Folder: 'Bin' >>> Install Folder: 'Data' >>> Install Folder: 'Startup' The Installation completed successfully. Please provided the second second	esults 5-13-46Z.service ess below button to start.
upgrade version 1.4.1.0	Home

- Please keep the unit powered during this process as otherwise the firmware may be corrupted. The screen will inform you about the current status of the process.
- Press **Home** button to restart the product and use the new firmware.
- **Please note:** in order to load new languages when you are upgrading from a firmware version lower than 2.10, it may be required that you re-run the installation process of this firmware. Therefore please follow below steps:
- From the Main Menu, click on "System" and then select "Upgrade/Backup".

Configuration

GE)

Then click on "Select Transport X² firmware version to load"

Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4



• Select from the list the latest version available and click on "Install this firmware version".

upgrade_2.9.5.0	
Install this firmware version	
Currently installed version: 2.9.5.0	
Currently installed version: 2.9.5.0	
Currently installed version: 2.9.5.0 Back	

• This will perform a full backup and load the firmware now with all languages supported.





Technical Bulletin

Date: December 2021

Distribution: Public

Bulletin No.: 283v4

- Please keep the unit powered during this process as otherwise the firmware may be corrupted. The screen will inform you about the current status of the process.
- Please review the release notes for further information on the supported languages.
- Press **Home** button to restart the product and use the new firmware.
- Now go to "Systems" and the button "Set Language" will be available and no longer greyed out.



• Click "Set Language", then select your language from the list and click "Back" once done.



