

—
GPG BUILDING AUTOMATION, 07/2020

Technical Bulletin

Update process - new firmware and application

DALI gateways new generation

DG/S 2.64.1.1



DG/S 1.64.1.1



<https://new.abb.com/products/2CDG110198R0011/dg-s1-64-1-1-dali-gateway-basic-1f>

<https://new.abb.com/products/2CDG110199R0011/dg-s2-64-1-1-dali-gateway-basic-2f>

- **Firmware update V 0.0.15**
- **Application update V 1.3**

Important notice:

It is mandatory to update the firmware of the Device Type "ECU12 G18" with version 0.0.15 before the actual application update!

Starting with application version Basic V1.3 we use so-called "ExtendedMemoryServices" in the ETS 5 application to speed up the download.

The firmware update app checks before an update whether the affected device already supports "ExtendedMemoryServices" and then selects either normal MemoryServices or ExtendedMemoryServices for the update.

With the bootloader of the xECU (versions smaller than 0.0.15), which is included in all previous DALI Basic devices, no "ExtendedMemoryServices" are currently supported.

The new ETS 5 applications from version V 1.3 on already use ExtendedMemoryServices, but the bootloader of the old xECU version does not support them yet. Therefore, the application/firmware update may be aborted. The device then remains in bootloader mode.

The USB interface USB/S 1.1 does not support Extended memory services and is perfectly suited for this purpose!

Remedy in this case -> use App "ABB KNX Bus Update V2".

With the new app "ABB KNX Bus Update V2" the problem with the update sequence is solved!

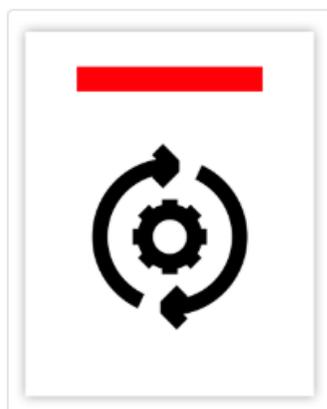
Availability September 2020 on KNX App Store.

The firmware update process

The update process requires the ABB „KNX Bus Update” ETS app. This app is free of charge and can be downloaded at www.knx.org.

Further information can be found in our „Engineering Guide Database” at www.abb.com/knx.

KNX Bus Update by ABB Stotz-Kontakt GmbH



The ETS app “KNX Bus Update” serves for the firmware update of various ABB KNX devices via the ETS (Engineering Tool Software). The current firmware files can be downloaded automatically from the Internet.

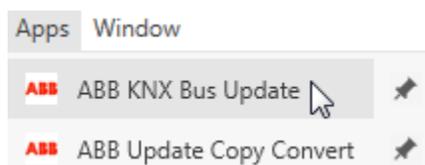
The app can be used with ETS4 or higher.

> [Developer website](#)

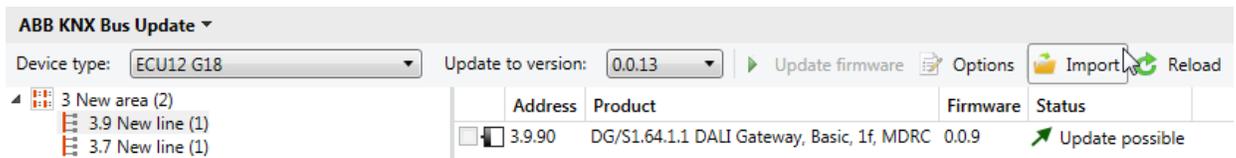
Version 1.0.37.0

Procedure:

1. Open the project that contains the DALI gateways.
Please do not update the application before!!!
Follow the procedure described above!!!
2. Start the „ABB KNX Bus Update” app via the menu bar „Apps”.



3. Import the latest firmware version 0.0.15 (see mouse pointer).

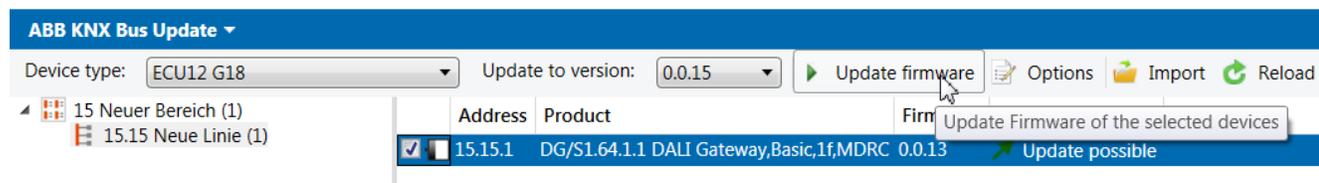


The current firmware can be found under the links that are shown on the top of this document. The firmware also can be updated automatically via the online update function of the ETS app.

4. The app shows automatically all possible devices that are used in the currently open project.



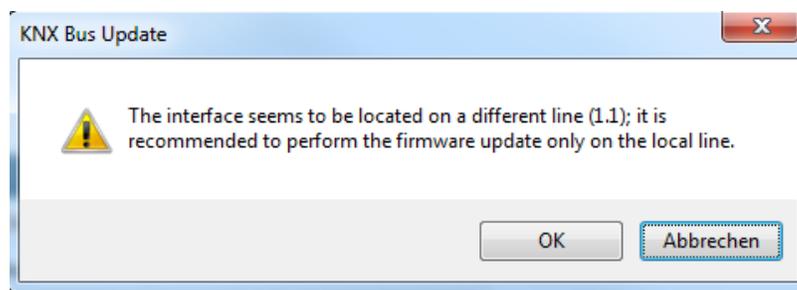
Select the corresponding devices and press the button „Update firmware”.



5. During the update process there is a high amount of telegrams.

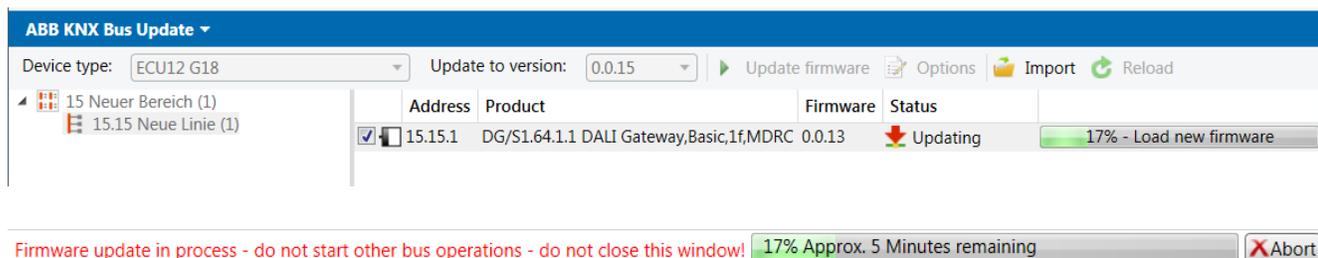
Suggestion:

The KNX interface should be physically in the same KNX line as the updated device. We don't recommend to update across lines (e.g. via line coupler).



The process can last several minutes.

6. During the update process.

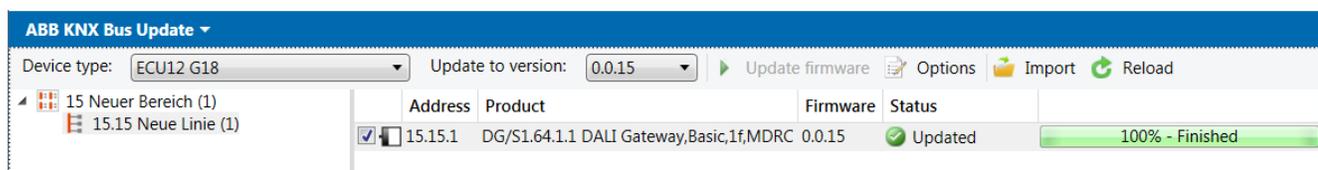


The screenshot shows the 'ABB KNX Bus Update' interface. The 'Device type' is set to 'ECU12 G18' and the 'Update to version' is '0.0.15'. The 'Update firmware' button is active. A table lists the device being updated:

Address	Product	Firmware	Status
15.15.1	DG/S1.64.1.1 DALI Gateway,Basic,1f,MDRC	0.0.13	Updating

A progress bar below the table shows '17% - Load new firmware'. A red warning message at the bottom states: 'Firmware update in process - do not start other bus operations - do not close this window! 17% Approx. 5 Minutes remaining' with an 'Abort' button.

7. The update process is finished.



The screenshot shows the 'ABB KNX Bus Update' interface after the update is complete. The 'Update firmware' button is now disabled. The table shows the device status:

Address	Product	Firmware	Status
15.15.1	DG/S1.64.1.1 DALI Gateway,Basic,1f,MDRC	0.0.15	Updated

The progress bar now shows '100% - Finished'.

The application update process

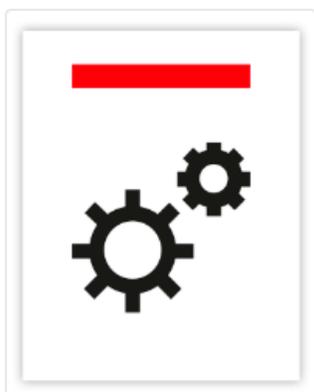
The update process requires the ABB „Update Copy Convert” ETS app. This app is free of charge and can be downloaded at www.knx.org.

Further information can be found in our „Engineering Guide Database” at www.abb.com/knx.

Note:

Firmware update first, then application update!!

ABB Update Copy Convert by ABB Stotz-Kontakt GmbH



This app provides a series of useful functions for device configuration (parameters and Group Addresses) in an ETS project.

The functions are:

Update: Changes the application program to a later or earlier version while retaining current configurations.

Convert: Transfers/adopts a configuration from an identical or compatible source device.

Channel Copy: Copies a channel configuration to other channels on a multichannel device.

Channel Exchange: Exchanges configurations between two channels on a multichannel device.

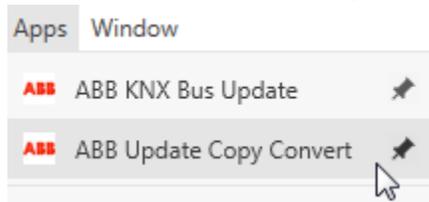
[Show more](#)

[> Developer website](#)

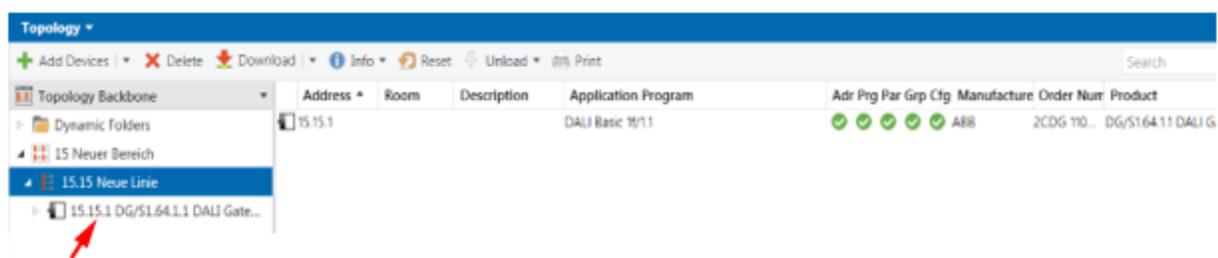
Version 1.0.81.0

- 1. Open the project that contains the DALI gateways.
Import the new application in the product catalog.
The current application can be found under the links that are shown on the top of this document.**
- 2. Insert a new DALI gateway with the new application as a reference product into the project. Based on this new product the app is able to reference all gateways within the project.**

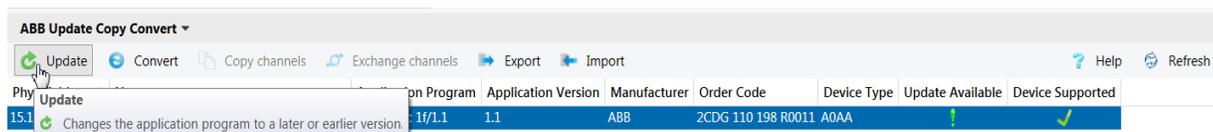
3. Start the „ABB Update Copy Convert” app via the menu bar „Apps”.



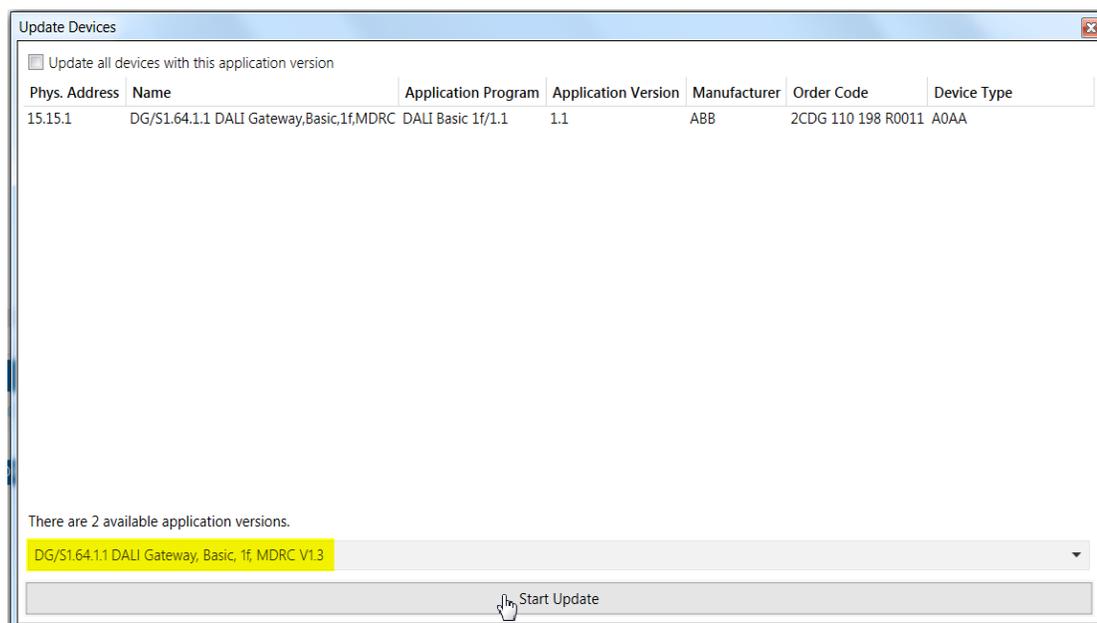
4. Select the DALI gateway that should be updated.



The selected DALI gateway will be displayed in the app view.



5. Activate the update process.



By setting the checkbox „Update all devices with this application version” all existing devices within the project will be displayed. The lower part of the window is showing the available versions of the application.

The process starts with the „Start Update” button and can last several minutes and depends on the project size and the computer performance.

6. The change of the application or full download to the corresponding device can last several minutes.

Therefore, the download of the new application should be done within the same line. If interfaces are used which supports „long-frames” (e.g. IPS/S 3.1.1) the process can be shortened.

7. Important Note!!

After a successful download of V 1.3, it is absolutely necessary to reset the 230 V supply. The reason for this is that during a change of application and update of the DALI interface the Dali output itself is short-circuited and thus the lighting system cannot be influenced.

"green ON LED flashes"

By resetting the 230 V supply, this short circuit is cancelled again. If this reset is not performed, the DALI output stage may be destroyed. The DALI output stage is thermally destroyed after a certain time.

Overview DALI Basic portfolio

Product type	Product ID	Additional information (serial number)
DG/S 1.64.1.1	2CDG110198R0011	
DG/S 2.64.1.1	2CDG110199R0011	
6197/45	2CKA006197A0043	
6197/46	2CKA006198A0043	