GIRA

Push button sensor 3 Plus - Brief instructions for loading additional display languages

Order-No. 5142 00, 5145 00, 2042 xx, 2043 xx, 2046 xx

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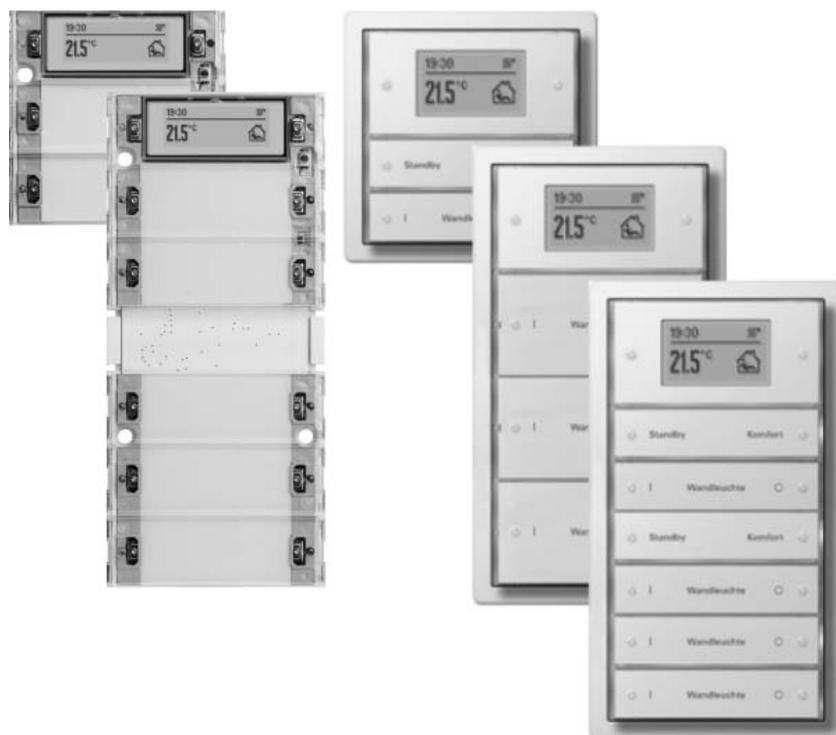
Contents

1 Product definition

1.1 Product catalogue

Description: Push button sensor 3 Plus - Brief instructions for loading additional display languages

Use: Sensor

Design: UP (concealed)

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1.2 Function

The push-button sensors 3 Plus have a graphic display that can also display texts as display information in addition to the temperature, value or symbol information. Display texts of the menu level or information messages are hard-coded into the devices by the manufacturer. The display language of the text displays specified by the manufacturer can be defined by means of ETS parameters. The selectable display languages in the ETS are German, English, Dutch, Norwegian, Russian and Polish.
If one of these languages was selected in the configuration, the addressed device switches automatically to the required display language after an ETS programming operation.

The ETS plug-in used for the configuration of the push-button sensors 3 Plus allows an additional display language to be programmed in the devices. This makes it possible to supplement the standard language range of the texts predefined by the manufacturer by exactly one additional language and thus customise the text display to the user by the reloaded language of the country.
Reloadable languages must be available in a particular file format and are therefore provided by the manufacturer. This documentation describes how additional languages for display texts are programmed into the devices with the help of the ETS plugins.

2 Instructions for service download

The ETS plug-in of the push-button sensors 3 Plus allows display texts to be programmed in the devices via Service-Download. In this way, additional display languages can be implemented. A service download must first be prepared before it can be carried out. The following chapters describe the procedure that must be followed in order to carry out a service download for supplementing an additional display language.

2.1 Preparing service-download

File format

Display texts must exist as a file in a manufacturer-specific format so that they can be programmed in the devices via service download. Apart from the actual display texts, character set information - depending on the language - is also required. The manufacturer always provides all the necessary files for the service download of a particular language or a language set. The ETS plug-in decides whether the display texts alone have to be programmed in the target devices or the character set information as well.
Display texts have the file format *.systemtext*. Character set information is described by the file format *.charset*.

A reloadable language for display texts consists of at least an system text file (e. g. "*TS3+ _Griechisch_greek.systemtext*") and optionally of character set information (e. g. "*ZeichensatzGiraCP1253.charset*"). In the ETS plug-in only the system text file is selected for a service download.

  i⃞   The character sets (codepages) used for the various languages are listed in the appendix of this documentation (see page 11).

Installation of the language files

The manufacturer-specific files for reloadable display languages must be at a specific location on the local hard disk C: of the commissioning PC. To ensure that the necessary files (system texts and character set information) are complete and are also copied to the correct location, the manufacturer provides an installation file. Executing the installation file ensures that all necessary components are installed properly so that the ETS plug-in can access it later during a service download.

  i⃞   Before a service download is carried out with the help of the ETS plug-in (see page 6), the language files must be installed properly.

  i⃞   The manufacturer can either provide installations that set up entire language sets or just individual languages. In the ETS plug-in you can select which of the installed languages is later programmed into a device.

ETS-Configuration

The text display language of the device display is configurable in the ETS. The display languages that can be selected in the "Language" parameter of the standard language range are: German English, Dutch, Norwegian, Russian and Polish.
If one of these languages is selected in the configuration, the activated device switches automatically to the set display language after an ETS programming operation without further intervention of the user.

It is possible to program another display language in a device with the aid of the ETS plug-in. This makes it possible to supplement the standard language range of the texts predefined by the manufacturer by exactly one additional language and thus customise the text display to the user by the reloaded language of the country. If a language not covered by the standard language range must be displayed, the "Language" parameter must be configured to the setting "downloaded language" (Figure 1). Afterwards, it is necessary to carry out a service download (see chapter 2.2. Carrying out service download).
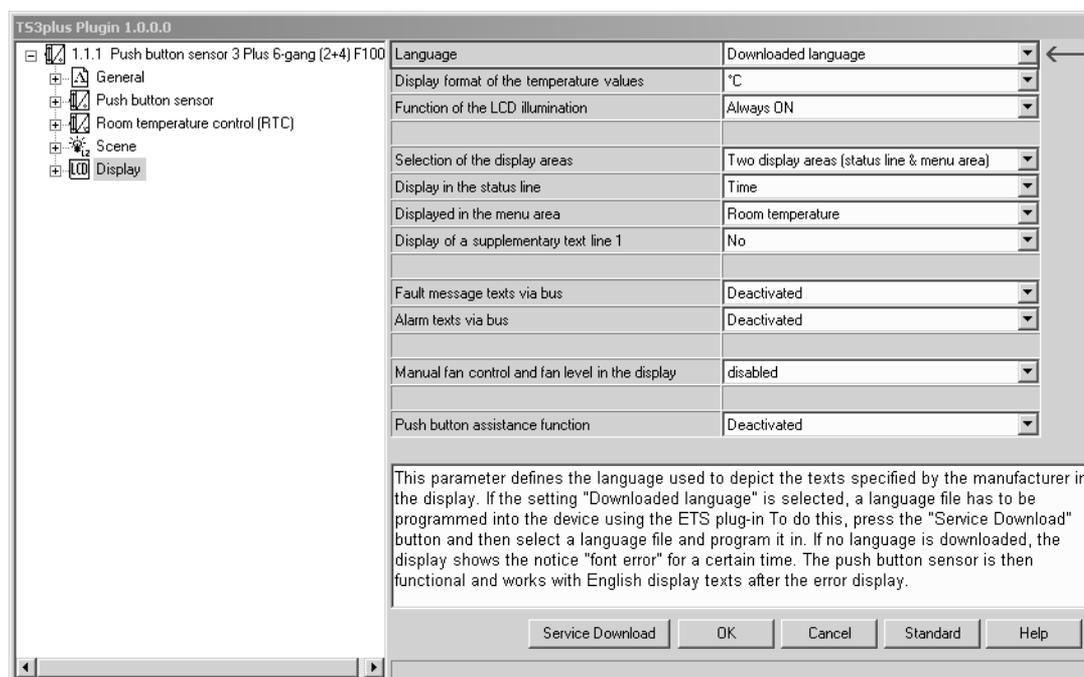
Figure 1: ETS parameters for the display language

[i] The parameter setting "Downloaded language" causes the pushbutton to display texts of the reloaded language in the device display and not to access the texts anymore that were programmed in the devices by the manufacturer at the factory. For this reason it is imperative with this configuration that a language is also reloaded into the device concerned with the help of the ETS plug-ins!
If a language is not reloaded, the device display displays the message "**font error**" for some time after an ETS programming operation. The push button sensor is then functional and works with English display texts after the error display.

[i] A service download can already be carried out by the ETS as part of the parameter configuration before a programming operation of the application program. Before a service download is possible, the device concerned must first be installed and programmed with the appropriate physical address.
it is advisable to carry out a service download before programming the application program and parameters to ensure that valid display texts are displayed in the necessary language of the country immediately after an ETS startup procedure.

After carrying out the installation of the language to be reloaded or the language pack in the required file format and after setting the "Language" parameter in the ETS as described, all necessary preparations for reloading an additional display language are now completed. Afterwards, the service download can be carried out (see chapter 2.2. Carrying out service download).

2.2 Carrying out service download

Function

After all preparation for reloading an additional display language have been completed (see chapter 2.1. Preparing service-download), a service download can be carried out. A service download is carried out with the aid of the ETS plug-in of the push-button sensor 3 Plus. The plug-in establishes a direct programming connection to the device. The product entry with the application program in the ETS defines which device is programmed. A necessary precondition is that the device concerned has already been programmed validly with the physical address in the ETS! The physical address must therefore be programmed with the aid of the ETS before carrying out a service download. If the physical address has not yet been programmed, the plug-in reports an error when a service download should be carried out (see page 8-9).

Procedure

The procedure described below must be followed step by step in order to carry out a service download. It is necessary to ensure that the ETS has bus access and the pushbutton that is to be programmed is installed properly.

1. Program the physical address with the help of the ETS into the push button.

2. Open parameter view in the ETS of the push-button concerned. The plug-in starts. Set the parameter "Language" on the parameter page "Display" to the "Downloaded language", if this was not already done as part of the parameter configuration (see page 4-5).

3. Open the commissioning dialogue for the service download. For this purpose, click on the "Service-Download" button (A.) (Figure 2) in the plug-in at the bottom of the screen. A file browser first opens.
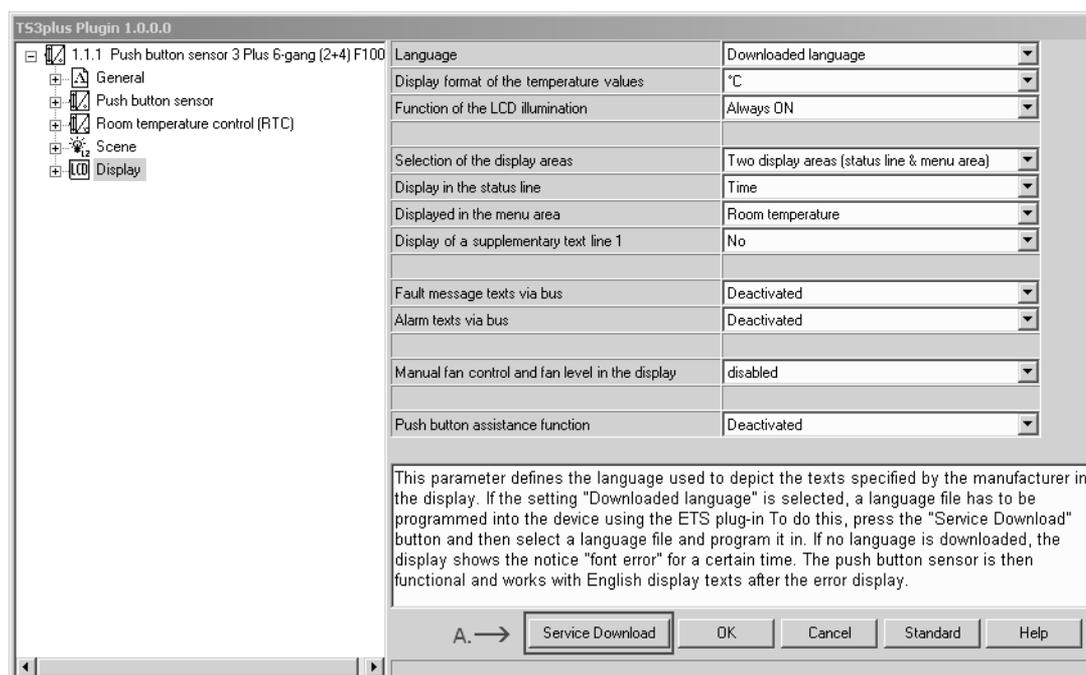
Figure 2: "Service-Download" button for opening the commissioning dialogue

4. In the file browser (Figure 3) select the language file you require with the format *.systemtext* (B.). click on "Open" (C.). The commissioning dialogue "Service download" opens.

ℹ️ The selected language file immediately determines the language to be reloaded The language is indicated in the filename. No further selection is to be made. Optionally required character set information is selected automatically and programmed into the device later.
The location of the language files on the local hard disk C*:* was already determined by the installation of the language or language pack and must not be changed.
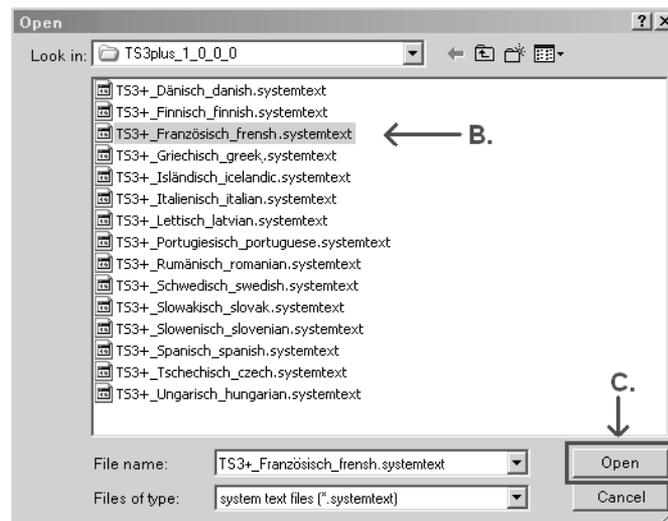
Figure 3: File browser for selecting the system text file

5. In the commissioning dialogue "Service-Download" (Figure 4) click on the "Download" button (D.). The service download starts. The programming progress is symbolised by a bar diagram (E.) (Figure 5).
The display of the device concerned displays the text "**Prog**" during the download. In this state the device is without function. The programming operation cannot be cancelled manually.
After a successful programming operation, the ETS plug-in displays the commissioning dialogue once again.

ℹ️ Programming operations vary in length depending on whether character set information was also programmed into the device.
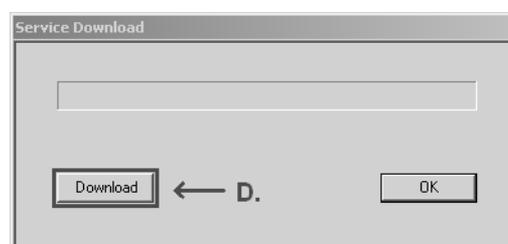
Figure 4: Commissioning dialogue - Start the programming operation
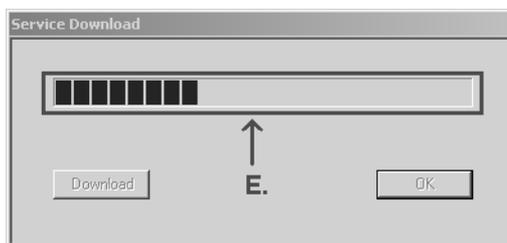
Figure 5: Commissioning dialogue - Display the programming progress

6. Click the "OK" (F.) button (Figure 6). The commissioning dialogue for the service download is concluded. The service download was carried out properly.

Figure 6: Commissioning dialogue - Close the programming environment

7. Program the application program (parameters and objects) into the device with the aid of the ETS After this, the device is ready for operation. Display texts are displayed in the reloaded language.

ℹ️   Only one language can be reloaded at a time. A new service download replaces the language that was programmed into the device by a previous service download.

ℹ️   The parameter setting "Downloaded language" causes the pushbutton to display texts of the reloaded language in the device display after the commissioning procedure and not to access the texts anymore that were programmed in the devices by the manufacturer at the factory. For this reason it is imperative with this configuration that a language is also reloaded into the device concerned with the help of the ETS plug-ins!
If a language was not reloaded (only an ETS programming operation of the physical address and the application data was carried out), the device display displays the message "**font error**" for some time after an ETS programming operation. The push button sensor is then functional and works with English display texts from the standard language range after the error display.

ℹ️   After a service download, the device display displays the message "**language error**" if a reloaded language is incorrect. In this case it is necessary to repeat the programming operation of the language. If this error display appears repeatedly, then it is possible that the downloaded language file is faulty. We then recommend that you contact the manufacturer.

ℹ️   During a service download, no further programming connection may be established to the device concerned (e.g. by the ETS).

Possible error messages during a service download

The plug-in carries out a service download via the program connection of the ETS. Consequently, a functioning bus connection (via RS-232 or IP) must be configured in the ETS and be available. During the data exchange between the plug-in and the target device, communication errors might occur due to various circumstances.

In the case of general communication errors, the plug-in displays the error message "**Error occurred! - Exception from...**" in a separate window. This message can be confirmed by pressing "OK". The service download has already been cancelled in this case and must then be carried out again.

The following causes can lead to the error message described...

- Device not plugged onto the bus coupling.
- Device not programmed with the necessary physical address.
- Two devices found with the same physical address in the installation.
- No programming connection available in the ETS.
- A programming connection to the device already exists.

When during a service download the error "**Error occurred! - Invalid Load-State of the application**" is displayed, a programming connection to the device concerned already exists (e. g. application download of the ETS). In this case, all program connections must be cancelled or carried out to the end. The service download must then be restarted.

With program connections carried out in parallel, it can generally happen that the data programmed into the devices is not valid. In such cases, the device display of a device concerned displays the message "**No Prog**". These devices are then functionless after cancelling the programming connections. It is then necessary in such cases to reprogram the application program (parameters and objects) into the devices with the aid of the ETS.

The error "**Error occurred! - Invalid mask version**" or "**Error occurred! - Invalid Hardware-Type**" is displayed if no pushbutton 3 could be addressed under the physical address configured in the ETS project or a wrong device type was addressed. There is then a design error of the system. In such cases, the physical addresses set up in the ETS project must be checked and compared with the programmed addresses of the installation. It is necessary to ensure that the pushbutton sensor concerned has been plugged onto a bus coupling 3 before the service download.

Replacing or cancelling reloaded language

The language programmed into the devices by a service download as well as the optional character set remain stored in a non-volatile state. A simple programming operation by the ETS (physical address, application program or parameter and group address) does not affect the reloaded language. A previously programmed language can only be overwritten through a new service download by an ETS plug-in, by replacing it by another language, for example. Only one language can be reloaded at a time.

The reloaded language will only be considered by the device if the "Language" parameter on the parameter page "Display" is configured to "Downloaded language". Consequently, the reloaded language is irrelevant and therefore has no effect if the parameter is set to a defined language of the standard language range. Such a parameter setting causes the pushbutton to display texts in the device display once again that the manufacturer programmed into the devices at the factory. The displaying of a reloaded language can therefore be cancelled in this way.

3 Text input in the ETS

Besides the unalterable menu and information texts for the display predefined by the manufacturer, freely definable user texts can also be displayed at various places in the device display. These freely definable texts include, for instance, the texts of the push-button help or additional texts of display values.

To display these freely definable user texts, the device refers to the predefined character set. The character set is preset by the parameterized or reloaded language. You can refer to the character set table in the appendix of this document to find out which language references which character set (see page 11).

An example:

"Downloaded language" is configured in the ETS in the "Language" parameter. "Czech" is reloaded as system language. Czech is referenced by the device on the Central European character set (code page 1250). Thus, the freely definable user texts in the ETS plug-in can only contain characters that exist in the Central European character set as well.

ⓘ   The character set used when entering texts into parameter fields of the plug-in is dependent on the ETS generation.
ETS3: The ETS3 uses the Windows-Codepage for application programs that do not support any Unicode in the operating system of the commissioning PC. When entering freely definable user texts, it must be ensured that the Windows operating system is configured to the language of the country used and the character set used is also supported by the device (see appendix) and is active in the device.
ETS4: The ETS4 is an application program that supports Unicode encoded texts. Any texts with characters from the Unicode character set can be entered directly into the text parameter fields. In a programming operation of parameter texts entered freely into devices, the characters are converted to an 8-bit codepage. The behaviour depends here on the ETS4-version used. Up to and including version 4.0.3, characters are always converted to the ISO-Codepage iso-8859-1. This means that only characters from Western European languages are displayable in the device display for texts entered freely by the user. In the ETS4 from version 4.0.4 - as in the ETS3 - the Windows codepage configured in the operating system is used for the character conversion.

ⓘ   If the user enters texts into the ETS parameter fields containing characters not available in the active character set of the operating system and are thereby not displayable, the device display displays a "?" at the corresponding character position in the text after a programming operation. The text display in the display is implausible if the active character set of the operating system is not identical with the character set of the device (e.g. the device works with Cyrillic characters and the commissioning PC with Western European characters).

4 Appendix

4.1 Character set table

Language	character set used (Windows-Codepage)
German	CP 1252
English	CP 1252
Dutch	CP 1252
Norwegian	CP 1252
Russian	CP 1251
Polish	CP 1250

Table 1: Standard languages (available as supplied from the factory)

Language	character set used (Windows-Codepage)
French	CP 1252
Italian	CP 1252
Swedish	CP 1252
Spanish	CP 1252
Icelandic	CP 1252
Portuguese	CP 1252
Finnish	CP 1252
Danish	CP 1252
Slovenian	CP 1250
Hungarian	CP 1250
Czech	CP 1250
Slovakian	CP 1250
Romanian	CP 1250
Greek	CP 1253
Latvian	CP 1257

Table 2: Reloadable languages (Date June 2011)