RSM-Ex® 01 BT

Software Manual



Ex (E



Your automation, our passion.

With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause: "Expanded reservation of proprietor-ship"

Worldwide

Pepperl+Fuchs Group Lilienthalstr. 200 68307 Mannheim Germany Phone: +49 621 776 - 0 E-mail: info@de.pepperl-fuchs.com **North American Headquarters** Pepperl+Fuchs Inc. 1600 Enterprise Parkway Twinsburg, Ohio 44087 USA Phone: +1 330 425-3555 E-mail: sales@us.pepperl-fuchs.com **Asia Headquarters** Pepperl+Fuchs Pte. Ltd. P+F Building 18 Ayer Rajah Crescent Singapore 139942 Phone: +65 6779-9091 E-mail: sales@sg.pepperl-fuchs.com

https://www.pepperl-fuchs.com

| 1 | Overvi | ew | 5 |
|---|--------|--|---|
| 2 | Resett | ing to Default Settings | 6 |
| 3 | Blueto | oth® | 7 |
| | 3.1 | Bluetooth® Pairing | 7 |
| | 3.2 | Pairing with PC | 7 |
| | 3.3 | Pairing with Android® device | 8 |
| | 3.4 | Deleting a Connection | 8 |
| 4 | Firmwa | are Update | 9 |
| | 4.1 | Bootloader | 9 |
| | 4.2 | Launching the Bootloader on the RSM-Ex® 01 BT | 9 |
| | 4.3 | Installing New Firmware for the RSM-Ex® 01 BT (by Using a PC Without "eSETUP RSM-Ex") | 9 |
| | 4.3.1 | Installing New Firmware 1 | 1 |
| | 4.4 | Installing New Firmware on RSM-Ex® 01 BT (with PC and "eSETUP RSM-Ex")1 | 4 |
| | 4.5 | Installing New Firmware on RSM-Ex 01 BT (with Mobile Device) | |
| 5 | "eSET | UP RSM-Ex" Windows1 | 5 |
| | 5.1 | Generic1 | 5 |
| | 5.2 | Settings1 | 5 |
| | 5.3 | Load File1 | 5 |
| | 5.3.1 | | |
| | | Load Default Settings1 | |
| | 5.3.3 | Load Other Settings 1 | 5 |
| | 5.4 | Save File1 | 5 |
| | 5.5 | Bluetooth® Connection | |
| | 5.5.1 | | |
| | 5.5.2 | 5 | |
| | 5.6 | Transfer Data to RSM-Ex® 01 BT1 | |
| | 5.7 | Read Data from RSM-Ex® 01 BT1 | 9 |
| | 5.8 | Online Mode2 | 0 |
| | 5.9 | Installing New Firmware2 | 1 |
| | | | |
| | 5.10 | Device Info2 | 3 |

| 6 | "eSET | UP RSM-Ex" Android | .25 |
|---|-------|--------------------------------|-----|
| | 6.1 | Generic | .25 |
| | 6.2 | Connection | .25 |
| | 6.3 | Load File | .25 |
| | 6.3.1 | Generic | 25 |
| | 6.3.2 | Load Default Settings | 25 |
| | 6.3.3 | Load Other Settings | 26 |
| | 6.4 | Save File | .27 |
| | 6.5 | Bluetooth® Connection | .28 |
| | 6.6 | Transfer Data to RSM-Ex® 01 BT | .30 |
| | 6.7 | Read data from RSM-Ex® 01 BT | .32 |
| | 6.8 | Online Mode | .34 |
| | 6.9 | Installing New Firmware | .35 |
| | 6.10 | Device Info | .40 |
| | 6.11 | About | .41 |
| 7 | Annex | Α | .42 |
| | 7.1 | General RSM-Ex® 01 BT Settings | .42 |

1 Overview

This software manual shows all information's and handling of the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT and the "eSETUP RSM-Ex" software for Android $\mbox{\ensuremath{\mathbb R}}$ and Windows $\mbox{\ensuremath{\mathbb R}}$.

2 Resetting to Default Settings

The firmware of the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT can be used to reset the device to its factory settings. To enable this function, the PTT, SOS and Power Button must be pressed and held for approx. 2 seconds when the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT is starting up.

3 Bluetooth®

3.1 Bluetooth® Pairing

If the RSM-Ex® 01 BT has not yet been paired with a PC, a pairing process must be performed before a Bluetooth® connection can be established between the RSM-Ex 01 BT and PC. The RSM-Ex® 01 BT is using the SSP-Mode (Secure Simple Pairing), in this case no pairing-password is required to pair with a device (Smartphone/Tablet or PC).

Press and hold the Power Button for 5 seconds when the device is switched off. The "Discovering" function is indicated via an audio prompt and blue flashing LED.

3.2 Pairing with PC

Select the Bluetooth® name of the RSM-Ex® 01 BT via Start -> Control Panel -> Hardware and Sound -> Add a Bluetooth device. The PC is now paired with the RSM-Ex 01 BT and a Bluetooth® connection can be established. This is indicated by the illuminating Bluetooth® LED on the RSM-Ex® 01 BT.



Figure 3.1



3.3 Pairing with Android® device

Pairing without "eSETUP RSM-Ex" App:

"Settings" -> "Connected devices" -> "Pair new device" -> select BT_RSM_PTT -> RSM-Ex 01 BT and Smartphone/Tablet is paired

| 6:43 AM | нр 🗣 🖌 🚺 100% | 6:43 AM но 🕶 🖬 100% | 6:45 AM нр 🖤 🖌 🕯 99% |
|---------|--|--|--|
| ٩ | Search settings | ← Connected devices Q | ← Pair new device Q |
| 0 | Network & internet Wi-Fi, mobile, data usage, hotspot | + Pair new device | Device name Smart-Ex02 ROW |
| | | Log Previously connected devices | Available devices |
| | Connected devices Bluetooth, NFC | Connection preferences Bluetooth, NFC | □ 1808ASN022 |
| | Apps & notifications Permissions, default apps | Visible as "Smart-Ex02 ROW" to other devices | BT_RSM_PTT_E4:8D |
| 0 | Battery Not charging | | 义 Loc-Ex |
| | Display | | ⊁ Loc-Ex |
| 3 | Wallpaper, sleep, font size | | BlueBar Beacon D03972F91352 |
| | Sound Volume, vibration, Do Not Disturb | | O Phone's Bluetooth address: 84:FE:DC: 63:61:2B |
| | Storage 46% used - 17.36 GB free | | |
| | Security & location | | |
| Figure | | | |
| 6:45 AM | | 6:45 AM # ⁰ ▼⊿ 🕯 99% | 6:45 AM № * ▼⊿ 🕯 99% |
| ÷ | Pair new device Q | ← Pair new device Q | ← Connected devices Q |
| | Device name Smart-Ex02 ROW | Device name Smart-Ex02 ROW | Available media devices |
| | Available devices | Available devices | Active |
| | 1808ASN022 | 1808ASN022 | + Pair new device |
| | BT_RSM_PTT_E4:8D Pairing | Pair with BT_RSM_PTT_E4:8D? | Connection preferences Bluetooth, NFC |
| * | Loc-Ex | Allow access to your contacts and call history | Visible as "Smart-Ex02 ROW" to other devices |
| * | Loc-Ex | LUC-EX | |
| * | Loc-Ex | X Loc-Ex | |
| | | | |
| * | Loc-Ex | X Loc-Ex | |
| * | Loc-Ex Loc-Ex | * Loc-Ex * Loc-Ex | |

Figure 3.3

Pairing with the "eSETUP RSM-Ex" App:

See 6.5 Bluetooth® connection.

3.4 Deleting a Connection

If you press Channel Up, Channel Down and MFB, an existing Bluetooth $\ensuremath{\mathbb{B}}$ connection can be closed and the autoconnection is stopped.

2020-11



4 Firmware Update

4.1 Bootloader

New firmware can be installed for the RSM-Ex® 01 BT via the bootloader. New firmware can be transferred to the RSM-Ex® 01 BT from a PC or mobile device (e.g. smartphone or tablet) via Bluetooth®.

4.2 Launching the Bootloader on the RSM-Ex® 01 BT

To install new firmware on the RSM-Ex®01 BT, the RSM-Ex® 01 BT must be set to a certain state, namely the bootloader. The bootloader can be launched by pressing and holding the Volume Down, PTT and MFB button when switching on the RSM-Ex® 01 BT. It must be ensured that the RSM-Ex® 01 BT was previously switched off before launching the bootloader.



Figure 4.1

The bootloader starts to run on the RSM-Ex® 01 BT when the buttons are released (a light on the battery display changes from red to yellow to green).



Figure 4.2

4.3 Installing New Firmware for the RSM-Ex® 01 BT (by Using a PC Without "eSETUP RSM-Ex")

If the PC has been paired with the RSM-Ex® 01 BT, a Bluetooth® connection (SPP) can be established via the HyperTerminal program. For this purpose, we must know which COM port is being used for the Bluetooth® connection. This information can be viewed by selecting **Start** -> Control Panel -> Hardware and Sound -> Device Manager and then the Ports (COM & LPT) section.





Figure 4.3

We can now use this information to establish a Bluetooth® connection with the RSM-Ex® 01 BT via the HyperTerminal program. Open the HyperTerminal program on your PC. Start by assigning a name for the connection. This name can be freely selected (confirm by pressing "OK").

| New Connection - HyperTerminal | J |
|--|-------|
| File Edit View Call Transfer Help | a |
| D 🛎 🛪 💲 🛍 🗄 | |
| Connection Description New Connection Enter a name and choose an icon for the connection: Name: I Con: Con: Con: | |
| Disconnected Auto detect Auto detect SCROLL CAPS NUM Capture Print echo | - the |

Figure 4.4

In the next step, select the COM port that you want to use for the Bluetooth \mbox{B} connection (confirm by pressing "OK").



| RewConnectionIdentEx - Hy File Edit View Call Transf D 座 回 多 単 沿 団 | | | |
|--|---|---------|--|
| | Enter details for the phone number that you want to dial: Country/region: Area code: Phone number: Connect using: COM40 | | |
| Disconnected Auto o | OK Cancel | echo "i | |

Figure 4.5

If everything was successful, Bluetooth® LEDs on the RSM-Ex® 01 BT illuminates. These LEDs must illuminate, otherwise firmware cannot be installed on the RSM-Ex® 01 BT.



Figure 4.6

All necessary steps are now complete and new firmware can be installed on the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT.

4.3.1 Installing New Firmware

The new firmware to be installed must be available as a file. A Bluetooth® connection must have been established in the SPP mode before new firmware can be installed on the RSM-Ex® 01 BT (Bluetooth® LEDs must illuminate).

To install new firmware for the RSM-Ex® 01 BT, send the string "#IDSETTING" before firmware data is sent in the HyperTerminal program. To do this, enter the string "#IDSETTING" in the HyperTerminal program and press Enter by using the keyboard. The red LED on the RSM-Ex® 01 BT battery display starts flashing. This means the RSM-Ex® 01 BT is requesting data from the PC.





Figure 4.7

In the next step, we must send the file that contains the new firmware. To do this, we must select the file in the HyperTerminal program window that opens when we select **Transfer -> Send File...** Select the file by clicking **Browse... 1K XModem** must be selected as the transfer protocol.

| NewConnectionIdentEx File Edit View Call Tr D 座 @ 意 ■D 咨 留 | ansfer Help | | |
|--|--|---|--|
| | Send File Folder: C:\Users\de0216\Desktop Filename: C:\Users\de0216\Desktop\NewFilmware srec Protocot IKXmodem Send Close Cancel | | |
| Connected 00:27:40 Au | tto detect Auto detect SCROLL CAPS NUM Capture Print echo | * | |

Figure 4.8

The file is sent by pressing **Send**. The transfer process starts.

| 1K Xmodem file send for | NewConnectionIdentEx | | | - |
|-------------------------|-------------------------------|---------------------|---|--------|
| Sending: C:\Users\de0 | 0216\Desktop\NewFirmware.srec | | | |
| Packet 10 | Error checking: CRC | | | |
| Retries: 0 | Total retries: 0 | | | M |
| Last error. | | | | (|
| File: | | 4K of 71K | - | e R |
| Elapsed: 00:00:04 | Remaining: 00:01:06 | Throughput 1024 cps | | R |
| | | Cancel cps/bps | | 8 |
| | | | | R |

Figure 4.9

The yellow LED on the RSM-Ex® 01 BT battery display flashes when the transfer is in progress. The LED flashes until the transfer is complete or until an error occurs.



Figure 4.10

If the transfer was successful, the green LED on the RSM-Ex® 01 BT battery display illuminates briefly and then go out again.







If something went wrong during the data transfer process, the new firmware is not able to be started and we remain in the bootloader (the light on the battery display changes from red to yellow to green). If this occurs, the firmware has to be reinstalled and a new data transfer process must be started. If the Bluetooth® connection is lost when transferring firmware data (Bluetooth® LED is off), a new Bluetooth® connection must be established before a new transfer process can be started.

4.4 Installing New Firmware on RSM-Ex® 01 BT (with PC and "eSETUP RSM-Ex")

See 5.9 Installing New Firmware.

4.5 Installing New Firmware on RSM-Ex 01 BT (with Mobile Device)

See 6.9 Installing New Firmware.

5 "eSETUP RSM-Ex" Windows

5.1 Generic

An XML file is used to transfer data to the RSM-Ex® 01 BT. This file will be created by the "eSETUP RSM-Ex" software and transferred to the RSM-Ex® 01 BT.

First start

After the first start of the software, an "BT_RSM01" folder will be created in the "document" directory and several config files will be added to this folder. These XML files are default settings for the RSM-Ex® 01 BT.

5.2 Settings

The "**SETTINGS**" tab is used to read and write XML files, transfer data to the RSM-Ex@ 01 BT and manage the Bluetooth@ connection.

5.3 Load File

5.3.1 Generic

The default settings will be loaded after the first start of the "eSETUP RSM-Ex" software. After loading another file through the button "LOAD OTHER", this file path will be stored and loaded automatically at the next start. The last saved or opened file will be loaded at the next start.

5.3.2 Load Default Settings

Press the button "LOAD DEFAULT" to load the default settings of the RSM-Ex® 01 BT. This setting file is stored in the installation folder "data/RSMEx01Config.xml".

5.3.3 Load Other Settings

Press the button "LOAD OTHER" to load any settings XML file. After pressing the button, you can select the file in the opened file dialog and after confirming with "OPEN" the file will be loaded into the "eSETUP RSM-Ex" software. The status bar shows the successful loading of the file.



Figure 5.1

If the reading of the file was interrupted, the syntax of the file was not complied.

It is possible to load one of the last 3 saved or loaded files. These files were stored in the dropdown list. To open one of these files, select one and press the button "**LOAD**".

5.4 Save File

The settings can be saved with the button "SAVE" and "SAVE AS". The status bar shows the progress and faults.



2020-11



5.5 Bluetooth® Connection

The "Connect to RSM-Ex 01 via SPP profile" part is managing the Bluetooth® connection to the RSM-Ex® 01 BT. It is possible to use the integrated Bluetooth® module or a USB to Bluetooth® converter to connect your PC with your RSM-Ex® 01 BT.

5.5.1 Bluetooth® Connection of RSM-Ex® 01 BT and PC

If the PC is paired with the RSM-Ex® 01 BT, the connection will be available over COM-PORT (Bluetooth® pairing see **3.1 Bluetooth® pairing**). This COM-PORT can now be selected from the drop-down list to connect in SPP profile.

| esetup RSM-Ex BT – 🗆 X |
|---|
| SETTINGS GENERAL BUTTONS DEVICE FIRMWARE ABOUT |
| Settings |
| Load file |
| LOAD LOAD OTHER |
| Connect to RSM-Ex 01 BT via SPP profile |
| CONNECT COM17 - BT_RSM_PTT_E4:C7 COM3 - Intel(R) Active Management Technology - SOL (COM3) |
| Send data to conr COM7 - Ident-Ex 01 19:ce COM8 - Standard Serial over Bluetooth link (COM8) |
| COM17 - BT_RSM_PTT_E4:C7 |
| After successful writ COM18 - Standard Serial over Bluetooth link (COM18) COM28 - Standard Serial over Bluetooth link (COM28) |
| COM29 - Standard Serial over Bluetooth link (COM29) COM49 - USB Serial Port (COM49) |
| COM60 - Standard Serial over Bluetooth link (COM60) COM64 - Ident-Ex 01 |
| Load default data |
| LOAD DEFAULT |
| Read data from connected RSM-Ex 01 BT |
| E READ |
| After successful reading of the data, the online mode is automatically activated. (Please save settings bevor reading data from RSM-Ex 01 BT, otherwise all settings will be overridden) |
| TEST GET/SET XML Store Always Online |
| offline 📕 not connected |

Figure 5.3

If the required COM-Port is not shown in the drop-down list, refresh the list with the button "**R**". If the required COM-Port is still not available, check the "**show all COM-PORTs**" checkbox and all available COM-PORTs are shown.

5.5.2 Connecting

After selecting the right COM-PORT for the Bluetooth® connection, press the button "**CON-NECT**". If everything was successful, the status bar shows "connected" and the visual indicator switches from red to green.

| offline 📕 connected |
|---------------------|

Figure 5.4

Also the Bluetooth® LED on the RSM-Ex® 01 BT illuminates. These LEDs must illuminate, otherwise the connection was not made correctly.





Figure 5.5

5.6 Transfer Data to RSM-Ex® 01 BT

Before sending data to the RSM-Ex® 01 BT, the Bluetooth® connection must be compounded (Bluetooth® LED illuminating). Now you can send the data to the RSM-Ex® 01 BT.

The "eSETUP RSM-Ex" software save all settings before sending the data to the RSM-Ex® 01 BT. Select a file at "**Save data to XML file**" where the settings are saved. After choosing the right file, press the button "**SAFE AND SEND**". The settings are saved in the chosen file and send to the RSM-Ex® 01 BT. If the data transfer has started, a progress bar shows the progress in the status bar.

| esetup RSM-Ex BT – 🗆 X |
|---|
| SETTINGS GENERAL BUTTONS DEVICE FIRMWARE ABOUT |
| Settings |
| Load file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| LOAD LOAD OTHER |
| Connect to RSM-Ex 01 BT via SPP profile |
| Isconnect COM15 - BT_RSM_PTT_E4:A5 R show all COM-PORTs |
| Send data to connected RSM-Ex 01 BT |
| SAVE AND ZIND |
| After successful writing of the data, the online mode is automatically activated. |
| Save data to xml file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| SAVE SAVE AS |
| Load default data |
| LOAD DEFAULT |
| Read data from connected RSM-Ex 01 BT |
| T READ |
| After successful reading of the data, the online mode is automatically activated. (Please save settings bevor reading data from RSM-Ex 01 BT, otherwise all settings will be overridden) |
| |
| |
| 0 of 5 sending file offline connected |

Figure 5.6

The successful or terminated transfer of the data will be shown in the status bar.



2020-11

RSM-Ex® 01 BT "eSETUP RSM-Ex" Windows

| esetup RSM-Ex BT – 🗆 🗙 |
|---|
| SETTINGS GENERAL BUTTONS DEVICE FIRMWARE ABOUT |
| Settings |
| Load file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| LOAD I LOAD OTHER |
| Connect to RSM-Ex 01 BT via SPP profile |
| DISCONNECT COM15 - BT_RSM_PTT_E4:A5 R show all COM-PORTs |
| Send data to connected RSM-Ex 01 BT |
| SAVE AND SEND |
| After successful writing of the data, the online mode is automatically activated. |
| Save data to xml file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| SAVE SAVE AS |
| Load default data |
| I LOAD DEFAULT |
| Read data from connected RSM-Ex 01 BT |
| I READ |
| After successful reading of the data, the online mode is automatically activated. (Please save settings bevor reading data from RSM-Ex 01 BT, otherwise all settings will be overridden) |
| |
| 5 of 5 File successfull transfered online 🔳 connected |

Figure 5.7

If the data transfer was interrupted, check the Bluetooth® connection (Bluetooth® LED illuminating) and start a new download.



5.7 Read Data from RSM-Ex® 01 BT

To read all settings from the RSM-Ex® 01 BT, press the button "**READ**". All settings saved in the RSM-Ex® 01 BT are transmitted to the "eSETUP RSM-Ex" software.

Save all settings before reading data from the RSM-Ex® 01 BT, otherwise these settings are overridden ("SAVE" or "SAVE AS" button).

After pressing the button "**READ**", the RSM-Ex® 01 BT is sending all settings to the "eSETUP RSM-Ex" software. The progress of the data transfer is shown in a progress bar in the status bar.

| 🖬 esetup RSM-Ex 8T – 🗆 🗙 |
|---|
| SETTINGS GENERAL BUTTONS DEVICE FIRMWARE ABOUT |
| Settings |
| Load file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml * |
| LOAD LOAD OTHER |
| Connect to RSM-Ex 01 BT via SPP profile |
| BISCONNECT COM15 - BT_RSM_PTT_E4:A5 R show all COM-PORTs |
| Send data to connected RSM-Ex 01 BT |
| SAVE AND SEND |
| After successful writing of the data, the online mode is automatically activated. |
| Save data to xml file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| 🖹 SAVE 🛛 📋 SAVE AS |
| Load default data |
| LOAD DEFAULT |
| Read data from connected RSM-Ex 01 BT |
| Re D |
| After successful reading of the data, the online mode is automatically activated. (Please save settings bevor reading data from RSM-Ex 01 BT, otherwise all settings will be overridden) |
| |
| |
| 5 of 50 loading data offline 📕 connected |

Figure 5.8

The status bar shows the successful or failed transfer of the data. If the data were received successfully, the settings are shown in the associated tab.

RSM-Ex® 01 BT "eSETUP RSM-Ex" Windows

| esetup RSM-Ex BT – 🗆 X |
|---|
| SETTINGS GENERAL BUTTONS DEVICE FIRMWARE ABOUT |
| Settings |
| Load file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| LOAD LOAD OTHER |
| Connect to RSM-Ex 01 BT via SPP profile |
| Show all COM-PORTs COM15 - BT_RSM_PTT_E4:A5 |
| Send data to connected RSM-Ex 01 BT |
| SAVE AND SEND |
| After successful writing of the data, the online mode is automatically activated. |
| Save data to xml file |
| C:\Users\jostertag\Documents\BT_RSM01\BT_RSM01Config.xml ~ |
| 🖹 SAVE 📄 SAVE AS |
| Load default data |
| LOAD DEFAULT |
| Read data from connected RSM-Ex 01 BT |
| T REND |
| After successful reading of the data, the online mode is automatically activated. (Please save settings bevor reading data from RSM-Ex 01 BT, otherwise all settings will be overridden) |
| |
| 50 of 50 Data successfull loaded online 🔳 connected |

Figure 5.9

5.8 Online Mode

With the online mode it is possible to send data directly after modification to the RSM-Ex® 01 BT. There are two capabilities to activate the online mode. For each of these capabilities the RSM-Ex® 01 BT must be connected via Bluetooth® (Bluetooth® LED illuminating).

- 1. After successful transfer a file to the RSM-Ex® 01 BT ("SAFE AND SEND")
- 2. After reading the data from the RSM-Ex® 01 BT ("READ")

the online mode is activated.

The actual state of the online mode is shown in the status bar (green -> online, red -> offline).



Figure 5.10

After activating the online mode, every change made in the tab GENERAL or BUTTONS, will be sent directly to the RSM-Ex® 01 BT.

The status bar shows the successful transfer of the data. If the data transfer was interrupted or terminated, the last set value is set and the online mode is deactivated.



5.9 Installing New Firmware

All settings for the firmware update were made in the tab "**FIRMWARE UPDATE**". First of all the new firmware file must be selected by pressing the button "...". An open file dialog pops up and the requested file can be selected. The newest firmware version can be downloaded by pressing the button "**DOWNLOAD**". The download of the new firmware starts automatically if the PC is connected to the internet.

| esetup RSM-ex BT | | | | | - 🗆 | × |
|--------------------------------------|---------------------------------------|---|--------------------------------------|---|-----------------------------|-----|
| SETTINGS | GENERAL | BUTTONS | DEVICE INFO | FIRMWARE UPDATE | ABOUT | |
| Firmware u | ıpdate | | | | | |
| Download firmw | /are | | | | | |
| DOWNLOAD | | | | | | |
| Select update fil | e | | | | | |
| L | | | | | | |
| Update | | | | | | |
| | | | | | | |
| Bootloader mode, RSM-Ex 01 BT for | turn RSM-Ex 01 B about 3 seconds a | T, ensure that RSM-E: IT off. Then press and and release them. The ted by a light chaser | hold PTT, Volume RSM-Ex 01 BT nee | Down, MFB and Pow d a few seconds to s | er Button of tl tart the | ne |
| | | | | 1 | offline 📕 connec | ted |

Figure 5.11

Only "**bin**" or "**srec**" files can be selected as firmware update files. Other files are not allowed. The RSM-Ex® 01 BT must be in bootloader mode (see **4.2 Launching the Bootloader on the RSM-Ex 01 BT**) before updating the firmware. After choosing the right file and the RSM-Ex® 01 BT is in bootloader mode and connected, press the button "**UPDATE**" to send the file to the RSM-Ex® 01 BT.

If the data transfer has started, a progress bar shows the progress in the status bar.

| | 0 of 505 sending file | offline 📕 connected 🔳 |
|-------------|------------------------|-----------------------|
| Figure 5.12 | | |
| | | |
| | 82 of 505 sending file | offine 📕 connected |

Figure 5.13

The yellow LED on the RSM-Ex® 01 BT battery display flashes when the transfer is in progress. The LED flashes until the transfer is complete or until an error occurs.



Figure 5.14

If the transfer was successful, the green LED on the RSM-Ex® 01 BT battery display illuminates shortly and then switch off again.



Figure 5.15

After the file was transferred, the status bar will show the status of the data transfer.



Figure 5.16

After successful firmware update, the "eSETUP RSM-Ex" software set the connection state to "**not connected**", because the RSM-Ex® 01 BT restarts and the Bluetooth® connection was terminated.

If something goes wrong during the data transfer process, the new firmware will not be able to be started on the RSM-Ex® 01 BT and we remain in the bootloader (the light on the RSM-Ex® 01 BT battery display changes from red to yellow to green). If this occurs, the firmware must be reinstalled and a new data transfer process must be started. If the Bluetooth® connection is lost when transferring firmware data (the Bluetooth® LEDs on the RSM-Ex® 01 BT is off), a new Bluetooth® connection must be established between the RSM-Ex® 01 BT and the PC before a new transfer process can be started.



5.10 Device Info

The "Device Info" tab shows some information's of the connected RSM-Ex® 01 BT. To receive information from the RSM-Ex® 01 BT, it must be connected via Bluetooth® (Bluetooth® LED illuminating). These data is shown:

- Battery Level
 Battery level of the RSM-Ex® 01 BT in %
- Firmware Version Firmware version of the RSM-Ex® 01 BT
- Firmware Version Bootloader Firmware version of the bootloaders
- Firmware Version Bluetooth-Module Firmware version of the Bluetooth® module
- Bluetooth Address
 Bluetooth® address of the RSM-Ex® 01 BT
- Paired Devices 1-5 Bluetooth® address of the last five connected devices



Figure 5.17



5.11 About

Information about manufacturer and download link to the newest "eSETUP RSM-Ex" software version.

| esetup RSM-Ex BT | | | | - 0 | × |
|-------------------------------|--|---|--------------------|-------------------|-------|
| SETTINGS GENERAL | BUTTONS | DEVICE INFO | FIRMWARE UPDATE | ABOUT | |
| About | | | | | |
| | Version | 1.0.0.13486 | | | |
| | A PEPPERL+I ecom instru Industri 97959 A Ger | FUCHS BRAND Juments GmbH iestrasse 2 ssamstadt rmany 94 4224 0 | | | |
| | support@e | ecom-ex.com om-ex.com | | | |
| Update the RSM-Ex 01 BT Setup | | | | | |
| UPDATE | | | | | |
| Admin Mode | | | | | |
| Enter Password: | | | | | |
| License | | | | | |
| ecom EULA | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | offline 📕 connect | ted 🔳 |

Figure 5.18

6 "eSETUP RSM-Ex" Android

The "eSETUP RSM-Ex" App can be downloaded under https://www.ecom-ex.com/apps/ from the ecom instruments GmbH homepage and in the Google Play Store.

6.1 Generic

An XML file is used to transfer data to the RSM-Ex® 01 BT. This file is created by the "eSETUP RSM-Ex" software and transferred to the RSM-Ex® 01 BT.

First start

After the first start of the software, an "RSM-Ex01" folder will be created in the "device storage" directory and several config files will be added to this folder. These XML files are default settings for the RSM-Ex® 01 BT.

6.2 Connection

The "**CONNECTION**" tab is used to read and write XML files, transfer data to the RSM-Ex® 01 BT and manage the Bluetooth® connection.

6.3 Load File

6.3.1 Generic

The default settings will be loaded after the first start of the "eSETUP RSM-Ex" software. After loading another file through the button "LOAD OTHER", this file path will be stored and loaded automatically at the next start. The last saved or opened file will be loaded at the next start.

6.3.2 Load Default Settings

Press the button "LOAD DEFAULT" to load the default settings of the RSM-Ex® 01 BT.



6.3.3 Load Other Settings

Press the button "**LOAD OTHER**" to load any settings XML file. After pressing the button, you can select the file in the opened file dialog. After confirming with "**open**", the file is loaded into the "eSETUP RSM-Ex" app. A pop-up message shows the successful loading of the file.

| 06:50 P | | 4G 🖌 | 97 % |
|------------------|--------------------|----------|--------|
| eSETUP_RS | M-Ex_BT | * | 8 |
| CONNECTION | GENERAL | BUTTO | ONS |
| CONNECTIO | N | | |
| Load file | | | |
| /BT_RSM01Co | nfig.xml 👻 | | |
| LOAD | | | |
| Connect to | BT-RSM via SF | PP pro | ofile |
| * | CONNECT | | |
| Send data to | o connected B | T-RSN | M |
| SAV | /E AND SEND | | |
| After successful | uccessfully loaded | online m | ode is |
| | | | |

Figure 6.1

If the reading of the file was interrupted, the syntax of the file was not complied.

It is possible to load one of the last three saved or loaded files. These files were stored in the drop-down list. To open one of these files, select one and press the button "**LOAD**".



6.4 Save File

The settings can be saved with the button "SAVE" and "SAVE AS". A pop-up message shows the successful or faulty saving progress.

| 06:51 P | 4G 🔺 月 97 % |
|--|----------------|
| eSETUP_RSM-Ex_BT | 8 😣 |
| CONNECTION GENERAL | BUTTONS |
| LOAD LOAD OTHER | R |
| Connect to BT-RSM via SF | PP profile |
| * соллест | |
| Send data to connected E | BT-RSM |
| SAVE AND SEND | |
| After successful writing of the data, the automatically activated. | online mode is |
| Save data to xml file | |
| /BT_RSM01Config.xml | |
| SAVE data written | |
| | |

Figure 6.2

6.5 Bluetooth® Connection

A Bluetooth $\ensuremath{\mathbb{B}}$ connection can be established under the "CONNECTION" tab by pressing "connect".

| 06:52 P 46 ⊿ 8 97 % |
|---|
| eSETUP_RSM-Ex_BT 🚯 😢 |
| CONNECTION GENERAL BUTTONS |
| CONNECTION |
| Load file |
| /BT_RSM01Config.xml |
| LOAD LOAD OTHER |
| Connect to BT-RSM via SPP profile |
| * CONNECT |
| Send data to connected BT-RSM |
| SAVE AND SEND |
| After successful writing of the data, the online mode is automatically activated. |

Figure 6.3

A window opens which contains one or more names of one or more Bluetooth® devices that can be connected. The default Bluetooth® name of the RSM-Ex® 01 BT is "**BT_RSM_PTT**". If a different Bluetooth® name has been set for RSM-Ex® 01 BT (see **BT name**), this name must be selected.



Figure 6.4

If the mobile device has not yet been paired with the RSM-Ex® 01 BT, a window will appear after selecting the Bluetooth® name of the RSM-Ex® 01 BT to query whether a connection should be established with the RSM-Ex® 01 BT. After confirming the query, a Bluetooth® connection is established between the RSM-Ex® 01 BT and the mobile device. If the corresponding Bluetooth® name of the RSM-Ex® 01 BT does not appear in the list of Bluetooth® devices, you can perform a search for the RSM-Ex® 01 BT by selecting "Scan for devices".

If a Bluetooth® connection has been established successfully between the RSM-Ex® 01 BT and the mobile device, the Bluetooth® LEDs on the RSM-Ex® 01 BT illuminates. These LEDs must illuminate, otherwise firmware cannot be installed on the RSM-Ex® 01 BT.



Figure 6.5



2020-11

6.6 Transfer Data to RSM-Ex® 01 BT

Before sending data to the RSM-Ex@ 01 BT, the Bluetooth@ connection must be compounded (Bluetooth@ LED illuminating). Is the connection made, you can send the data to the RSM-Ex@ 01 BT.

The "eSETUP RSM-Ex" app saves all settings before sending the data to the RSM-Ex® 01 BT. Select a file under "**Save data to XML file**" where the settings will be saved. After choosing the right file, press the button "**SAFE AND SEND**". The settings are saved in the chosen file and send to the RSM-Ex® 01 BT. If the data transfer has started, a progress bar shows the progress.



Figure 6.6

The successful or terminated transfer of the data will be shown in a pop-up message.



| 06:54 P | 4G 🔺 🛿 98 % |
|---|-------------------------|
| eSETUP_RSM-Ex_BT | 8 📀 |
| CONNECTION GENERAL | BUTTONS |
| CONNECTION | |
| Load file | |
| /BT_RSM01Config.xml | - |
| 🗈 LOAD 🚺 LOAD OTH | ER |
| Connect to BT-RSM via S | SPP profile |
| * DISCONNECT | |
| Send data to connected | BT-RSM |
| SAVE AND SEND | |
| After successful File successful transfer | e online mode is red |
| | |

Figure 6.7

If the data transfer was interrupted, check the Bluetooth® connection (Bluetooth® LED illuminating) and start a new download.



6.7 Read data from RSM-Ex® 01 BT

To read all settings from the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT, press the button "**READ**". All settings saved in the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT will be transmitted to the "eSETUP RSM-Ex" software.

Save all settings before reading data from the RSM-Ex® 01 BT, otherwise these settings are overridden ("SAVE" or "SAVE AS" button).

| 06:54 P | | 4G 🖌 | 98 % |
|---|--|------------|---------|
| eSETUP_RS | SM-Ex_BT | * | 8 |
| CONNECTION | GENERAL | BUTT | ONS |
| After successful v automatically act | writing of the data, the ivated. | e online m | node is |
| Save data t | o xml file | | |
| /BT_RSM01Co | onfig.xml 👻 | | |
| SAVE | SAVE AS | | |
| Load defau | It data | | |
| Ŀ L | OAD DEFAULT | | |
| Read data | from connecte | ed BT- | RSM |
| Ŀ | READ | | |
| is automatically a (Please save sett | reading of the data, th ictivated. ings bevor reading da e all settings will be o | ta from | |

Figure 6.8

After pressing the button "**READ**", the RSM-Ex® 01 BT is sending all settings to the "eSETUP RSM-Ex" software. This opens a window which displays the progress of the transfer.

| 06:55 P | 4G 🛋 월 98 % | 06:55 P | | 4G 🛋 🛿 98 % |
|--|----------------|---|---------------------------|--------------|
| eSETUP_RSM-Ex_BT | 8 😣 | eSETUP_RSM-Ex | x_BT | 8 😣 |
| CONNECTION GENERAL | BUTTONS | CONNECTION G | ENERAL | BUTTONS |
| After successful writing of the data, the automatically activated. | online mode is | After successful writing automatically activated. | of the data, the on | line mode is |
| Save data to xml file | | Save data to xm | nl file | |
| /BT_RSM01Config.xml - | | /BT_RSM01Config.x | ml - | |
| reading data | - 1 | reading data | | - 1 |
| | _ 1 | | | - 1 |
| 4% | 2/50 | 76 % | | 38/50 |
| LOAD DEFAULT | 1000 | LOAD DE | | |
| Read data from connecte | ed BT-RSM | Read data from | connected | BT-RSM |
| E READ | 1933 | E REA | | |
| After successful reading of the data, the is automatically activated. (Please save settings bevor reading dat BT-RSM, otherwise all settings will be or | a from | After successful reading is automatically activate (Please save settings be BT-RSM, otherwise all se | d. evor reading data f | rom |

Figure 6.9

A message is displayed on the mobile device to indicate the successful or failed transfer of the data. If the data were received successfully, the settings will be shown in the associated tab.

| 06:55 P | | 4G 🔺 🛿 98 % |
|---|---|----------------|
| eSETUP_RS | M-Ex_BT | 8 |
| CONNECTION | GENERAL | BUTTONS |
| After successful w automatically activ | riting of the data, the o vated. | online mode is |
| Save data to | o xml file | |
| /BT_RSM01Co | nfig.xml 👻 | |
| SAVE | SAVE AS | |
| Load defau | t data | |
| L. LC |)AD DEFAULT | |
| Read data f | rom connecte | d BT-RSM |
| | READ | |
| is automatically re (Please save set) | ading of the data, the ad data successful all settings will be ov | irom |





6.8 Online Mode

With the online mode it is possible to send data directly after modification to the RSM-Ex® 01 BT. There are two capabilities to activate the online mode. For each of these capabilities the RSM-Ex® 01 BT must be connected via Bluetooth® (Bluetooth® LED illuminating).

- 1. After successful transfer a file to the RSM-Ex® 01 BT ("SAFE AND SEND")
- 2. After reading the data from the RSM-Ex® 01 BT ("READ")

the online mode is activated.

The actual state of the online mode is shown in the status bar (green -> online, red -> offline).

| 06:54 P | | 4G 🖌 💈 98 % |
|--|---|-------------------|
| eSETUP_RS | M-Ex_BT | 8 |
| CONNECTION | GENERAL | BUTTONS |
| After successful v automatically acti | vriting of the data, t vated. | he online mode is |
| Save data t | o xml file | |
| /BT_RSM01Cc | onfig.xml | • |
| SAVE | SAVE A | AS |
| Load defau | lt data | |
| i u | OAD DEFAULT | |
| Read data f | rom connec | ted BT-RSM |
| | READ | |
| is automatically a (Please save setti | eading of the data, ctivated. ngs bevor reading c e all settings will be | lata from |

After activating the online mode, every change made in the tab GENERAL and BUTTONS is sent directly to the RSM-Ex $\mbox{\ensuremath{\mathbb R}}$ 01 BT.

2020-11

Figure 6.11

The status bar shows the successful transfer of the data. If the data transfer was interrupted or terminated, the last set value is set and the online mode is deactivated.

6.9 Installing New Firmware

Navigate to the "**FIRMWARE UPDATE**" tab and press "..." to select the file that contains the new firmware for the RSM-Ex® 01 BT.

Press the "**DOWNLOAD**" Button to download the newest firmware from the ECOM Instruments GmbH server.

| 06:56 🗳 P | 4G 🔺 💈 98 % |
|--|-------------|
| eSETUP_RSM-Ex_BT | 8 |
| DEVICE FIRMWARE INFO UPDATE | ABOUT |
| FIRMWARE UPDATE | |
| Download firmware vers | sion |
| DOWNLOAD | |
| Select update file | |
| I | |
| Update | |
| Send selected file to RSM-Ex | 01 BT |
| | |
| (Before sending file to RSM-Ex 01 BT, ensure that RSM-Ex 01 BT is in Bootloader mode. To bring | |
| RSM-Ex 01 BT into Bootloader mode, turn RSM-Ex 01 BT off. Then press and hold Volume Down, MFB, PTT and Power Button of the RSM-Ex 01 BT for about 2 | |



Pressing "..." opens a window in which the file with the new firmware can be selected.





Figure 6.13

After selecting the corresponding file that contains the new firmware, we are transferred back to the software update menu. The RSM-Ex® 01 BT must be in bootloader mode (see 4.2 Launching the Bootloader on the RSM-Ex® 01 BT) and connected with SPP profile before updating the firmware.

The new firmware for the RSM-Ex® 01 BT can now be installed by pressing "UPDATE".



| 07:00 Р | 🔆 4G ⊿ 🛿 98 % |
|---|---------------|
| eSETUP_RSM-Ex_BT | 8 😣 |
| DEVICE FIRMWARE INFO UPDATE | ABOUT |
| FIRMWARE UPDATE | |
| Download firmware vers | sion |
| | |
| Select update file | |
| /storage/emulated/0/ RSM-Ex01_BT/1833914B_B T_RSM_1_0_0.srec | |
| Update | |
| Send selected file to RSM-Ex 01 BT | |
| | |
| (Before sending file to RSM-Ex 01 BT, ensure that RSM-Ex 01 BT is in Bootloader mode. To bring RSM-Ex 01 BT into Bootloader mode, turn RSM-Ex 01 BT off. Then press and hold Volume Down, MFB, PTT and Power Button of the RSM-Ex 01 BT for about 2 | |

Figure 6.14

This opens a window which displays the progress of the transfer.

| 07:01 P | 🕸 4G ◢ 🛿 98 % | 07:54 P | 4G 세 🛿 100 % | 07:55 P | 4G 📶 🚨 100 % |
|---|--|---|--|--|--|
| eSETUP_RSM-Ex_BT | 8 😣 | eSETUP_RSM-Ex_BT | 8 😣 | eSETUP_RSM-Ex_BT | 8 😣 |
| DEVICE FIRMWARE INFO UPDATE | ABOUT | DEVICE FIRMWARE INFO UPDATE | ABOUT | DEVICE FIRMWA INFO UPDATE | |
| FIRMWARE UPDATE | | FIRMWARE UPDATE | | FIRMWARE UPDAT | E |
| Download firmware vers | sion | Download firmware ver | sion | Download firmware | version |
| Waiting for response | | Transmitting data | | Transmitting data | |
| 0 % | 0/488 | 50 % | 244/488 | 97 % | 475/488 |
| Update | 0.Siec | Update | _U.SIEC | Update | /_1_U_0.srec |
| Send selected file to RSM-Ex | 01 BT | Send selected file to RSM-Ex | 01 BT | Send selected file to RS | M-Ex 01 BT |
| | | UPDATE | | UPDATE | |
| (Before sending file to RSM-Ex 01 BT, RSM-Ex 01 BT is in Bootloader mode, RSM-Ex 01 BT into Bootloader mode, BT off. Then press and hold Volume D and Power Button of the DSM-Ex 01 B | To bring turn RSM-Ex 01 Down, MFB, PTT | (Before sending file to RSM-Ex 01 B' RSM-Ex 01 BT is in Bootloader mode RSM-Ex 01 BT into Bootloader mode BT off. Then press and hold Volume and Power Britton of the PSM-Ex 01 | e. To bring b, turn RSM-Ex 01 Down, MFB, PTT | (Before sending file to RSM-Ex RSM-Ex 01 BT is in Bootloader RSM-Ex 01 BT into Bootloader BT off. Then press and hold Vc and Power Button of the PSM-I | mode. To bring mode, turn RSM-Ex 01 blume Down, MFB, PTT |

Figure 6.15

The yellow LED on the RSM-Ex@ 01 BT battery display flashes when the firmware data is being transferred. The LED flashes until the transfer is complete or until an error occurs.





Figure 6.16

If the transfer was successful, the green LED on the RSM-Ex® 01 BT battery display illuminates shortly.



Figure 6.17

A message is displayed on the mobile device to indicate that the transfer was successful.



| 07:55 P | 4G 🖌 🖪 100 |
|--|--------------|
| eSETUP_RSM-Ex_BT | 🖇 🔇 |
| DEVICE FIRMWARE INFO UPDATE | ABOUT |
| FIRMWARE UPDATE | |
| Download firmware vers | ion |
| DOWNLOAD | |
| Select update file | |
| /storage/emu RSM-Ex01_BT T_RSM_1_0_0 | 7/1833914B_B |
| Update | |
| Send selected file to RSM-Ex (| 01 BT |
| | |
| (Before sending file to RSM-Ex 01 BT, 0 RSM-Ex 01 RSM-Ex 0 File successfull transfere BT off. Then press and hold volume D and Power Button of the RSM-Ex 01 B | ed SM-Ex 01 |

Figure 6.18

The new firmware is launched on the RSM-Ex® 01 BT and the bootloader is closed.

If something went wrong during the data transfer process, the new firmware is not able to be started on the RSM-Ex® 01 BT and we remain in the bootloader (the light on the RSM-Ex® 01 BT battery display changes from red to yellow to green). If this occurs, the firmware has to be reinstalled and a new data transfer process must be started. If the Bluetooth® connection is lost when transferring firmware data (the Bluetooth® LEDs on the RSM-Ex® 01 BT is off), a new Bluetooth® connection must be established between the RSM-Ex® 01 BT and the mobile device before a new transfer process can be started.

2020-11

6.10 Device Info

The "**Device Info**" tab shows some information's of the connected RSM-Ex® 01 BT. To receive information from the RSM-Ex® 01 BT, it must be connected via Bluetooth® (Bluetooth® LED illuminating). These data is shown:

- Battery Level Battery level of the RSM-Ex® 01 BT in %
- Firmware Version Firmware version of the RSM-Ex® 01 BT
- Firmware Version Bootloader Firmware version of the bootloaders
- Firmware Version Bluetooth-Module Firmware version of the Bluetooth® module
- Bluetooth Address
 Bluetooth® address of the RSM-Ex® 01 BT
- Paired devices 1-5 Bluetooth® address of the last 5 connected devices

| 06:57 P | | 4G 🖌 🛿 98 % |
|--|----------------|--|
| eSETUP_RS | M-Ex_BT | 8 |
| BUTTONS | DEVICE INFO | FIRMWARE UPDATE |
| DEVICE INF | ORMATION | |
| | | |
| Firmware Version Bluetooth-Modul: V7.3 | 1505 | |
| Bluetooth address: 20:FA:BB:0A:E4:8D | | |
| Paired device 1: | RSM-EX 01 | Battery level: 79% |
| Paired device 2: Paired device 3: | | |
| Paired device 3. | | Firmware Version: 1.0.1 |
| Paired device 5: | | Firmware Version Bootloader: 0.3.0.0 |
| | | 0.3.0.0 |
| | | |
| | | |
| | | |
| | | |
| | | |

Figure 6.19



6.11 About

Information about manufacturer and download link to the newest "eSETUP RSM-Ex" app.



Figure 6.20



7 Annex A

7.1 General RSM-Ex® 01 BT Settings

| Settings | Options | Default value | Description |
|------------------------------|---------------------------------|---------------|--|
| General | | | |
| Switch off time (in minutes) | 0-10 | 5 | Specification of a time after which the RSM- Ex 01 BT switches off automatically if a Blue- tooth® connection is not available and the RSM-Ex 01 BT is not located in the docking station/being charged. Specification in min- utes. Interval in 1-min- ute increments. |
| BT | | | |
| BT name | 0-140 characters | BT_RSM_PTT | Setting for the Blue- tooth® name of the RSM-Ex 01 BT. |
| Add BT ID to name | 0 1 2 3 4 5 6 | 2 | How many words of the Bluetooth® ID should be written at the end of the BT Name. e.g. Value = 2 ID = 00:11:22:33:44:55 BT Name = BT- RSM_PTT_44:55 |
| Autoconnect | 0 1 | 1 | Setting if the RSM-Ex 01 BT should auto- matically connect to the last connected device after start. |
| Enable CVC | 0 -> disabled 1 -> enabled | 1 | Enable / disable clear Voice capture |
| Enable Wide-Band- Speech | 0 -> disabled 1 -> enabled | 1 | Enable / disable Wide Band Speech |
| Enable Inband Ring | 0 -> disabled 1 -> enabled | 1 | Enable / disable in- band ringing for incoming calls |
| Enable NREC | 0 -> disabled 1 -> enabled | 0 | Set / unset NREC flag to tell AG to no use/use internal Noise Reduction/Echo Can- celer algorithm 0 -> AG should use inter- nal Noise Reduc- tion/Echo Canceler algorithm. 1 -> AG should not use internal Noise Reduction/Echo Canceler algorithm. |
| Audio | | | |

| Settings | Options | Default value | Description | |
|-----------------------------|--|---------------|--|--|
| Voice Prompt Function | 0 -> Off 1 -> On | 1 | Setting if Voice- Prompts should be enabled or not. | |
| Side Tone Volume | 0-15 | 4 | Volume setting of the side tone volume. | |
| Accelerometer | | · | | |
| Accelerometer func- tion | 0 -> Off 1 -> On | 1 | Setting if the acceler- ometer should be enabled or not. | |
| Preamble | 0-32 characters | | Specification of char- acters that are appended to the front of data from the accel- erometer. | |
| Postamble | 0-32 characters | | Specification of char- acters that are appended to the end of data from the accel- erometer. | |
| Delimiter | 0-4 characters | | Specification of the delimiter between the X, Y and Z value of the accelerometer. | |
| SOS Button | | · | | |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 2 | Specification which function the button has. | |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. | |
| Released AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is released. | |
| Pressed SPP Com- mand | 0-32 characters | SOS=P | Specification which SPP command should be sent when the but- ton is pressed. | |
| Released SPP Com- mand | 0-32 characters | SOS=R | Specification which SPP command should be sent when the but- ton is released. | |
| PTT Button | | | | |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 2 | Specification which function the button will have. | |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. | |

| Settings | Options | Default value | Description |
|---------------------------|--|---------------|--|
| Released AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is released. |
| Pressed SPP Com- mand | 0-32 characters | +PTT=P | Specification which SPP command should be sent when the but- ton is pressed. |
| Released SPP Com- mand | 0-32 characters | +PTT=R | Specification which SPP command should be sent when the but- ton is released. |
| MFB Button | | | |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 3 | Specification which function the button has. |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. |
| Released AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is released. |
| Pressed SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is pressed. |
| Released SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is released. |
| Channel Up Button | 1 | I | 1 |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 2 | Specification which function the button has. |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. |
| Released AT Com- mand | 0-32 characters | CH_UP=P | Specification which AT command should be sent when the button is released. |
| Pressed SPP Com- mand | 0-32 characters | CH_UP=R | Specification which SPP command should be sent when the but- ton is pressed. |
| Released SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is released. |
| Channel Down Butto | on | | |

2020-11

| Settings | Options | Default value | Description | |
|---------------------------|--|---------------|--|--|
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 2 | Specification which function the button has. | |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. | |
| Released AT Com- mand | 0-32 characters | CH_DOWN=P | Specification which AT command should be sent when the button is released. | |
| Pressed SPP Com- mand | 0-32 characters | CH_DOWN=R | Specification which SPP command should be sent when the but- ton is pressed. | |
| Released SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is released. | |
| Volume Up Button | | · | | |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | 3 | Specification which function the button has. | |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. | |
| Released AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is released. | |
| Pressed SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is pressed. | |
| Released SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is released. | |
| Volume Down Button | | | | |
| Button function | 0 -> Disabled 1 -> AT Command 2 -> SPP Command 3 -> Default | | Specification which function the button has. | |
| Pressed AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is pressed. | |
| Released AT Com- mand | 0-32 characters | | Specification which AT command should be sent when the button is released. | |



| Settings | Options | Default value | Description |
|---------------------------|-----------------|---------------|--|
| Pressed SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is pressed. |
| Released SPP Com- mand | 0-32 characters | | Specification which SPP command should be sent when the but- ton is released. |



Your automation, our passion.

Explosion Protection

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex[®] Fieldbus
- Remote I/O Systems
- Electrical Ex Equipment
- Purge and Pressurization
- Industrial HMI
- Mobile Computing and Communications
- HART Interface Solutions
- Surge Protection
- Wireless Solutions
- Level Measurement

Industrial Sensors

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- Fieldbus Modules
- AS-Interface
- Identification Systems
- Displays and Signal Processing
- Connectivity

Pepperl+Fuchs Quality Download our latest policy here:



www.pepperl-fuchs.com/quality



www.pepperl-fuchs.com © Pepperl+Fuchs · Subject to modifications Printed in Germany / DOCT-7035