

IFAM GmbH Erfurt

Ingenieurbüro für die Anwendung der
Mikroelektronik in der Sicherheitstechnik
Gustav-Weißkopf-Str. 9
D-99092 Erfurt

<http://www.ifam-erfurt.de>

UPC

Manual

Universal Protocol Converter

SMS-Box

ESPA 4.4.4

ESPA-X

CSDL

SOS-Access

Modem/Printer

Contents	Page
1 Introduction	4
2 Start-up Behaviour	5
2.1 LED Display	6
2.2 Jumper.....	6
3 Software Installation	7
4 A Simple Configuration.....	8
4.1 Program Start and a New Configuration	8
4.2 Input Protocol Selection	9
4.2.1 Maintenance Mode	9
4.3 Output Protocol Selection	10
4.4 Creating a New Receiver	11
4.5 Creating an Event Rule.....	12
4.6 Writing the Configuration Data into the Device	13
5 Advanced Configuration.....	14
5.1 Reading Out, Loading and Saving Of Configuration Data	14
5.2 Multiple Receivers and Receiver Groups.....	14
5.3 Multiple Event Rules and Exclusions	15
5.4 Logical Analysis of Rules and Exclusions	16
5.4.1 Event Rule Example	16
5.4.2 Exclusion Example	17
5.4.3 Using Text Filters.....	17
5.5 Message Preferences.....	18
5.5.1 Text Rules	19
5.5.2 Event Appearance and Disappearance Sign.....	20
5.5.3 Delay Time between Transmitted Messages.....	20
5.5.4 Wait until Customer Text from CIE is Available	20
5.5.5 Cyclically Repeat Messages.....	20
5.5.6 Refresh Messages after Reset	21
5.5.7 Object Text will be generated with Leading Zeros	21
5.6 Character Conversion.....	21
5.7 Edit Event Words.....	21

5.8	Edit Code Table	22
5.9	Element Texts	24
6	Diagnose	25
6.1	Error Codes	25
6.2	Debug Log	25
7	Error code table	27
8	Technical details	29

Figures	Page
Figure 1: UPC overview	4
Figure 2: Main window	8
Figure 3: Input Configuration	9
Figure 4: Configuration maintenance mode	10
Figure 4: Output Configuration	11
Figure 5: New Receiver	11
Figure 6: New Rule	12
Figure 7: Writing configuration data	13
Figure 8: Read configuration from device	14
Figure 9: New Receiver Group	15
Figure 10: New Exclusion	16
Figure 11: Message Preferences	18
Figure 12: Text Rule editing	19
Figure 13: Placeholder settings	20
Figure 14: Character encoding editor	22
Figure 15: Edit event words	22
Figure 16: Code Table Editor	23
Figure 17: Code table with ambiguous CIE codes	23
Figure 18: Replace element texts	24
Figure 19: Error code display window	25
Figure 20: The Debug Log window opened	26

1 Introduction

This document describes the “UPC-Config” software, which is used to configure the ADP-UPC (**U**niversal **P**rotocol **C**onverter). Picture 1 shows an overview of the application of the UPC.

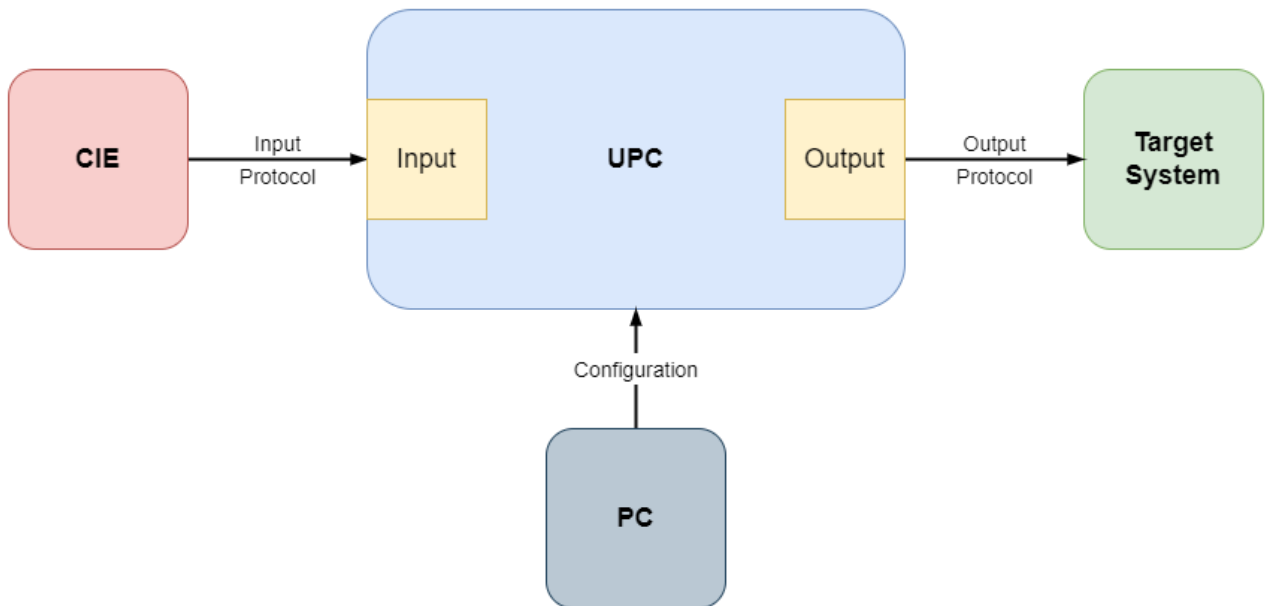


Figure 1: UPC overview

Events of the Fire Alarm Panel (CIE – Control and Indication Equipment) are processed in the UPC and translated into the configured output protocol. The configuration also specifies which events are considered and controls how the output will be built.



Note:

The ADP-UPC can be connected to the Fire Alarm Panel like any other peripheral device of the fire detection world.

2 Start-up Behaviour

After reset (Power-on or reset button), the device will immediately start the input protocol with the communication to the CIE. The output protocol will start 5 seconds later. Blink codes of the green LED show different operating conditions of the output protocol. In case of faults or errors, the LED 2 (yellow) or LED 1 (red) will show additional error states detected by the UPC, described below:

- LED 2 (yellow): Fault – The device is operating but there will be no messages sent to the output protocol. The error cause is reported by the flash code of the yellow LED. 4 Digits will be flashed out separated by a delay. Multiple codes can be active at the same time, which will be flashed out one after the other. There is a longer delay between two error codes.
- LED 1 (red): Error – **The device is not functional and will not operate at all!** The reason for this could be a hardware or software defect. The red LED will flash out the error code which shows a possible failure cause. LED 1 will always show only one error code at a time.

**Note:**

A table which shows the main error codes is listed in section 7 - Error code table

During a firmware update, the device will be switched into a bootloader mode. This mode can be recognized by the green LED 3 flashing 3 times every 2 seconds. In this mode no communication to the fire panel takes place. The CIE may show a communication fault for this interface.

2.1 LED Display

The following table shows the different LED modes:







LED	Display	Description
LED 3 ● (green)		<i>Flashing / Blinking</i> – shows the current operation state
		<i>Flash code 3 x short every 2 seconds</i> – Bootloader active (firmware update)
LED 2 ● (yellow)		<i>Off</i> – no fault
		<i>Flashing</i> – Fault: 4 digit error code shows specific fault
LED 1 ● (red)		<i>Off</i> – no critical error
		<i>Flashing</i> – critical error: 4-Digit error code shows specific critical fault

Table 1: LED diagnosis

2.2 Jumper

Jumper	Type	Description
J1 – Debug	Plug-in jumper	<i>Open</i> – reserved, don't close!
J2	Solder bridge	<i>Open</i> – reserved, don't close!

Table 2: Jumper overview

3 Software Installation

The installation process is driven by a setup program, which is located on the CD delivered with the device.

The software needs the following components installed on your computer:

- Microsoft .NET Framework (Version 4.0 or higher)
- Microsoft Internet Explorer (Version 6.0 or higher)
- Microsoft Installer (Version 3.1 or higher)

If one of these components is missing, the setup program will install it on your system.

**Important:**

The setup process includes the installation of the USB drivers needed to connect the UPC with a USB cable to your PC.

The device must not be connected to the PC before or during the installation process.

With the auto start functionality activated, Windows should automatically start the setup program after inserting the setup CD into the computer. Otherwise, the installation process can be started manually through the program Setup.exe.

4 A Simple Configuration

This section describes a simple configuration that is sufficient to become more familiar with the UPC and its features and to start a first test.

4.1 Program Start and a New Configuration

After installing the software, there should be a link in your Windows start menu. The main window opens after starting UPC-Config.

When started, the main window opens (see Figure 2: Main window).

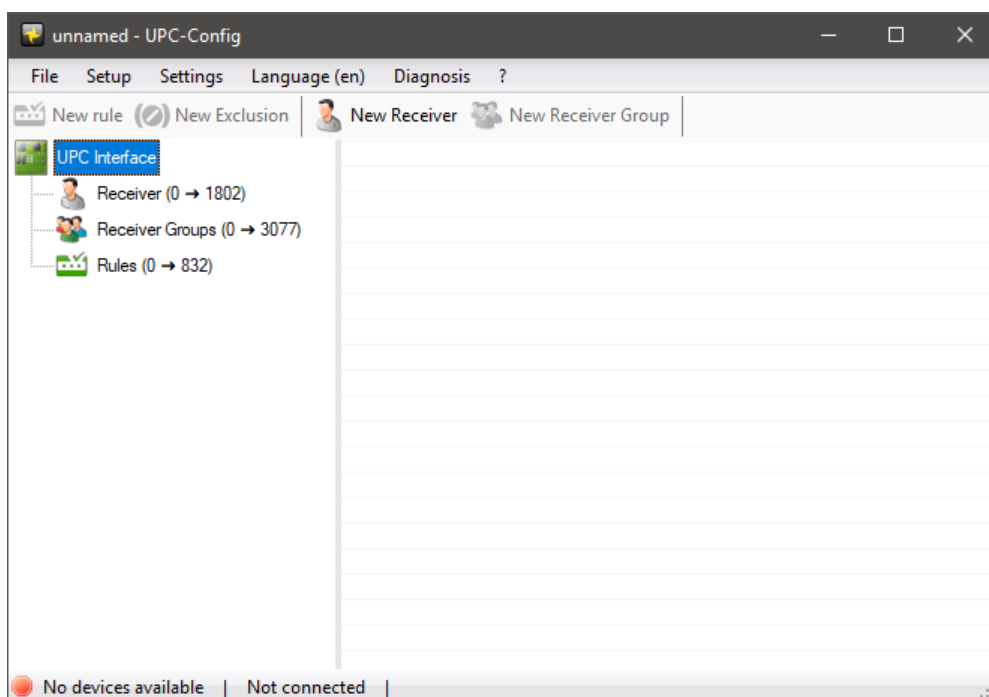


Figure 2: Main window

The main window shows an overview of the receivers, receiver groups, rules and exclusions involved in the project.

The status line at the bottom of the window shows information about UPC devices connected to the PC. One of them can be connected to UPC-Config at a time.

At the start a new configuration is already been opened and can be edited. It's always possible to start with a new clean base configuration via the menu item "File | New Configuration".



Note:

Because of the dynamic nature of the UPC configuration data, the number of available elements like rules or receivers is visible together with the number of used elements in the object tree on the left side. It is shown in parentheses behind the specific element type.

4.2 Input Protocol Selection

The UPC supports different input protocols. To change the input protocol, it is necessary to load the appropriate firmware into the device. The configuration must match this CIE type by selecting the right CIE protocol in the “Input Configuration” dialogue via menu “Setup | Input Configuration”. Depending on the selected protocol, there may be other parameters to set (see Figure 3: Input Configuration).

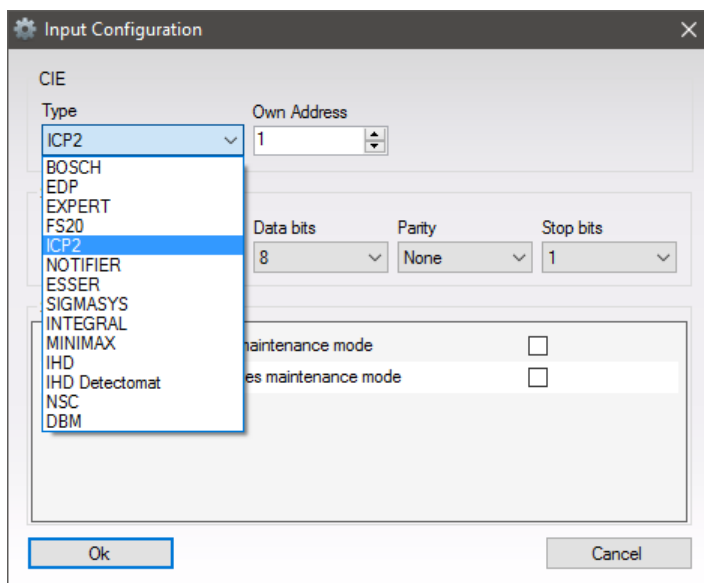


Figure 3: Input Configuration



Note:

In some UPC-Config setups, the CIE type is pre-configured and cannot be modified.

4.2.1 Maintenance Mode

Since version 3 a maintenance mode is available on all CIE which send unique messages for the fire controls off and for the acoustics off events. A UPC set into maintenance mode does not send any message to the output protocol. This operation is indicated using the blink code “1-1-1-1” on the yellow fault LED. Maintenance mode is left after 12 hours at the latest, to prevent an unintentionally permanent deactivation of the notification.

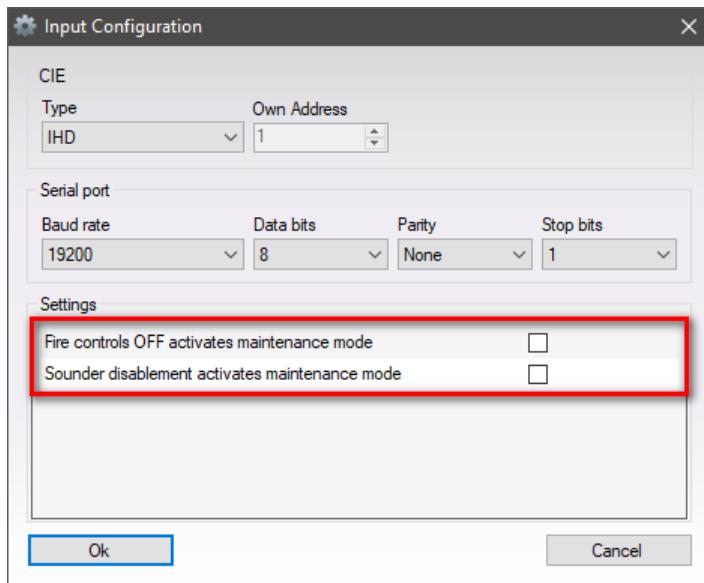


Figure 4: Configuration maintenance mode

If the checks for this functionality are set (see Figure 4: Configuration maintenance mode) the UPC watches for the CIE events “fire controls off” or “acoustics off” and activates or deactivates the maintenance mode correspondingly.

4.3 Output Protocol Selection

The UPC supports multiple output protocols. The desired output protocol has to be configured through the menu item “Setup | Output Configuration”. There are additional parameters to be set to adapt the behaviour to the specific destination device (see Figure 5: Output Configuration).

For a detailed description of the specific output protocol settings, please refer to the separately packaged document.

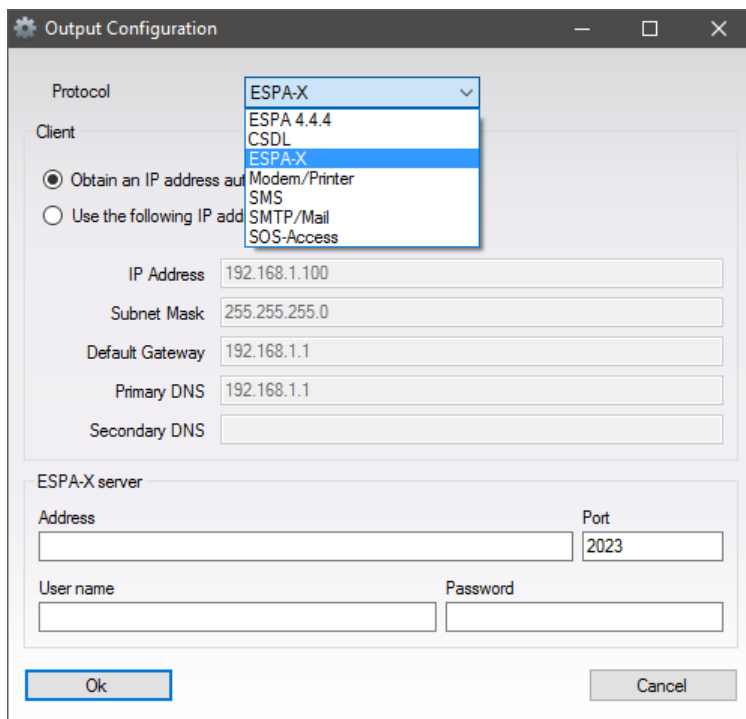


Figure 5: Output Configuration

4.4 Creating a New Receiver

With the button “New Receiver” below the menu bar, a new receiver of messages can be added to the project (see Figure 6: New Receiver).

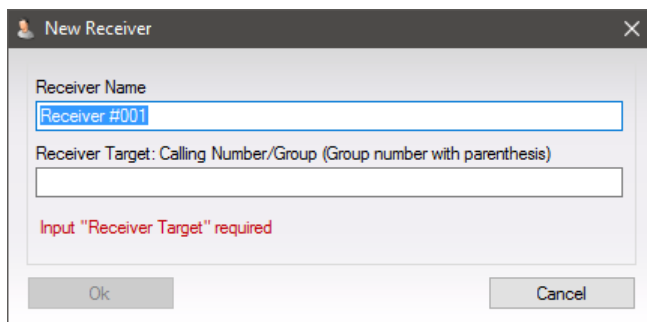


Figure 6: New Receiver

Depending on the selected output protocol, meaning or type of the receiver is different (see Table 3: Receiver Targets). If there is no output protocol selected, the input field for a receiver target is blocked. An output protocol must be configured first.

Output protocol	Destination	Example
CSDL	- not used -	- an empty receiver is created -
ESPA 4.4.4	Calling number at the telecommunications system	800
Modem/Printer	Calling number	0360 123456

Output protocol	Destination	Example
SMS	Calling number	0170 123456
SMTP/Mail	E-Mail address	user@mailserver.com
SOS Access	Receiver name	abc123
ESPA-X	Single call or group call number	42 or (123)

Table 3: Receiver Targets

4.5 Creating an Event Rule

An event rule describes the way how an input message is transferred to the output protocol. Thereby, a filtering of specific events as well as reformatting of the output is possible. A new event rule can be added to the project through the button “New Rule” below the menu bar (see Figure 7: New Rule).

Depending on the selected output protocol, individual output settings are available on the right side of this configuration dialogue. Receivers, which should be taken into account if this rule matches the incoming event must be chosen from the list of available receivers and be added to the “Used Receivers” list.

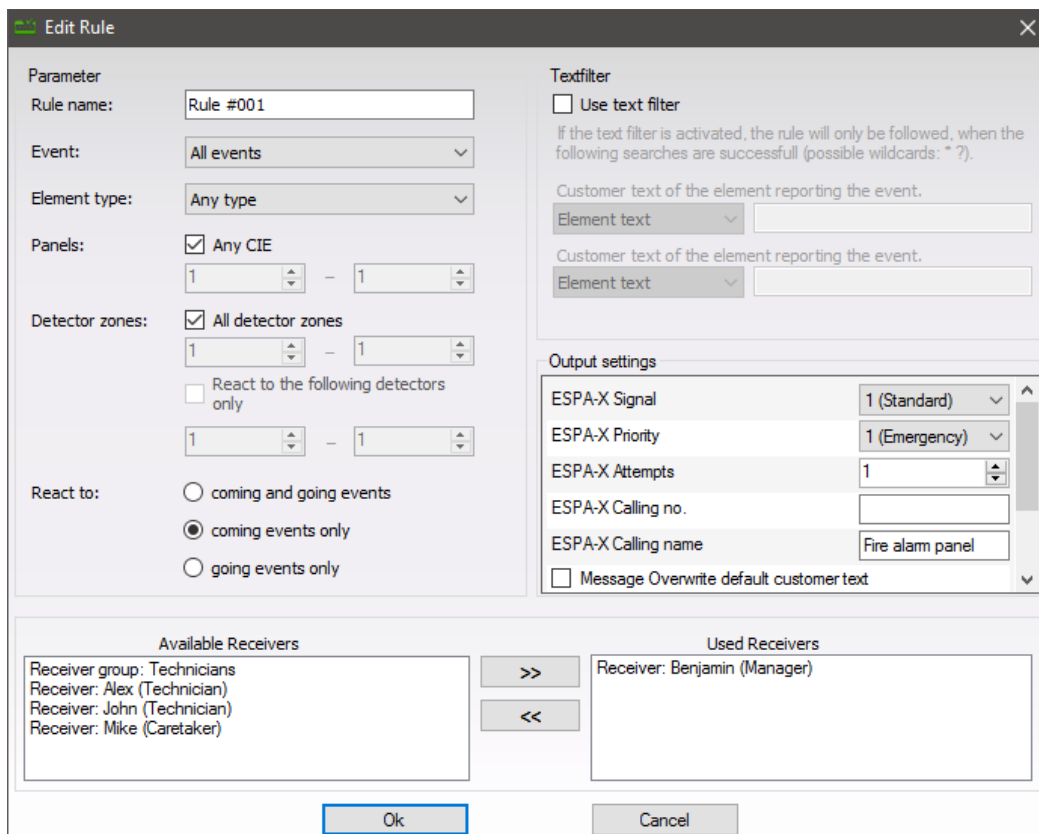


Figure 7: New Rule

4.6 Writing the Configuration Data into the Device

Before configuration data can be written into the UPC device, the UPC must be connected to the PC via a USB cable. The writing process can then be activated through the menu “File | Write configuration to device”.

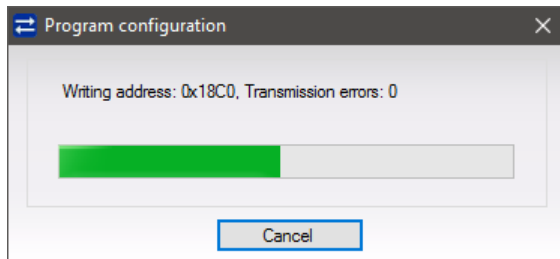


Figure 8: Writing configuration data

5 Advanced Configuration

Many projects require a more extensive configuration which goes beyond the creation of one receiver and one event rule.

5.1 Reading Out, Loading and Saving Of Configuration Data

If a device configuration has to be changed, the existing configuration can be read out from the UPC. Therefore the UPC must be connected to the PC and the process must be started through the menu "File | Read configuration from device" (Figure 9: Read configuration from device).

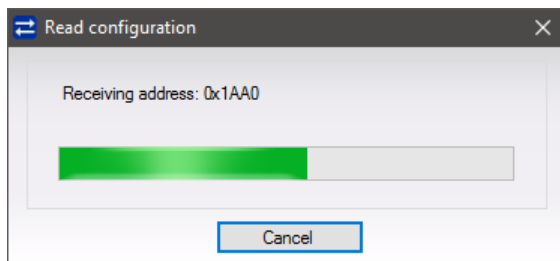


Figure 9: Read configuration from device

Furthermore, configurations can be saved to disc (menu "File | Save configuration") and opened from disc (menu "File | Open configuration").

5.2 Multiple Receivers and Receiver Groups

The UPC supports the notification of multiple receivers per rule. Receivers can also be organized in groups.

In a first step, all possible individuals or institutions should be added to the project, which shall eventually be notified by the UPC (Button "New Receiver" below the menu bar).

To summarize some of them in useful groups, a new receiver group can be added through the button "New Receiver Group" (see Figure 10: New Receiver Group).

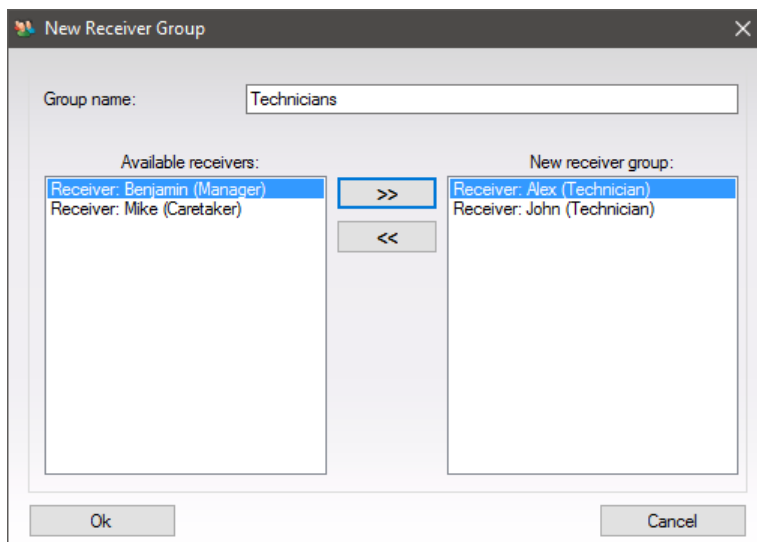


Figure 10: New Receiver Group

5.3 Multiple Event Rules and Exclusions

One Project can have multiple event rules which can be added through the button “New Rule” below the menu bar. One rule can have one or more exclusions which can be added through the button “New Exclusion”. Therefore the desired rule must be selected.

Exclusions are special cases of their superior event rule. They specify how to handle a specific subset of the messages covered by the parent rule. Here, the output message can be modified, can be sent to other receivers or can even be completely suppressed (see Figure 11: New Exclusion).

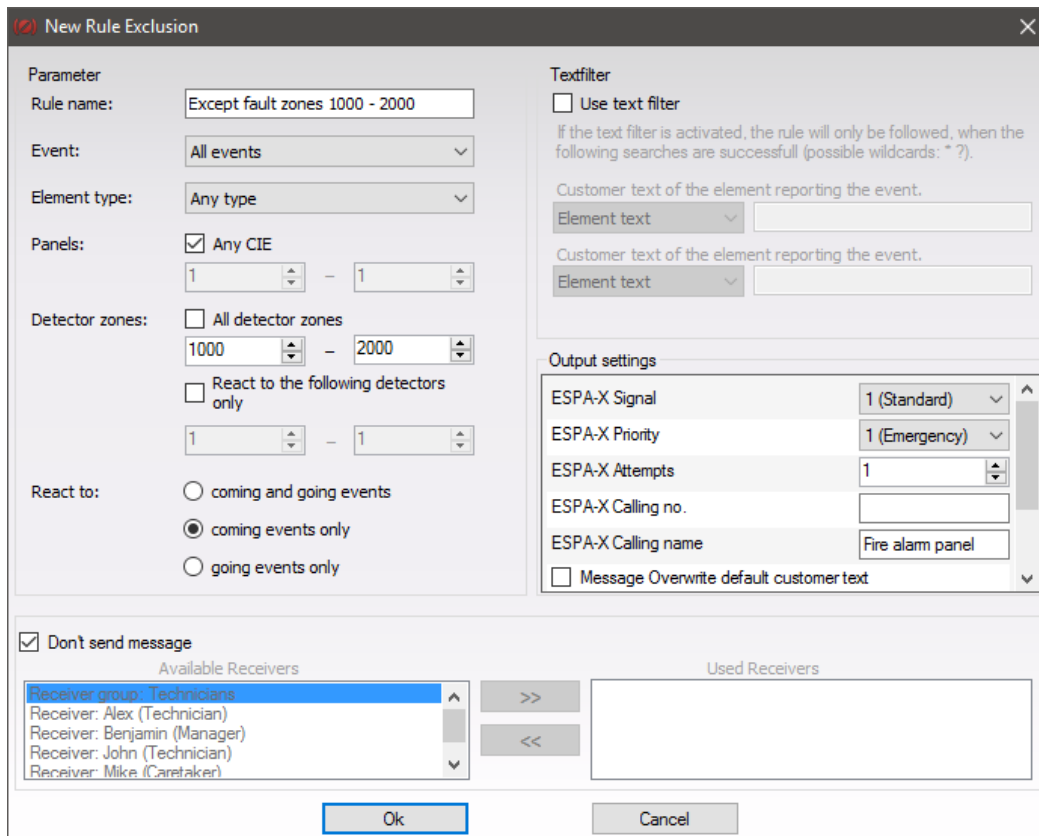


Figure 11: New Exclusion

5.4 Logical Analysis of Rules and Exclusions

- Every rule is considered separately and produces an output message while taking its exclusions into account.
- Every time an event occurs, each rule will be looked at and if several rules fit to the event, each of these rules will cause an output message.
- Exclusions can be assigned to a rule, which can change the output format of the message compared to the rule or even block the message output for the matching event.
- If there is more than a single exclusion for a rule, only the most conditioned exclusion of this rule, which still matches the event, will be executed.
- The exclusion of a rule will not be executed before its rule applies to the event.

5.4.1 Event Rule Example

Imagine there are 3 event rules:

1. All event codes, all zones, coming and going events will be sent to Receiver 1.
2. Alarms, all zones, coming and going events will be sent to Receiver 2.
3. Alarms, zone 1 to zone 10, coming events only, will be sent to Receiver 3.

If there is an incoming alarm of zone 1 appearing on the CIE, 3 messages will be sent to the output protocol. One message is sent to Receiver 1, because rule 1 matches this event. A message is sent to Receiver 2, because rule 2 also matches this event. Even rule 3 matches this event so Receiver 3 gets a message too.

It may not always be desired that all 3 receivers will be notified in this case. To have only one of the receivers notified, rule 2 and rule 3 must be created as exclusions of rule 1.

5.4.2 Exclusion Example

Imagine there is one common event rule. There are 4 exclusions defined for this rule:

1. Exclusion: All event codes, all zones, coming and going events.
2. Exclusion: Alarms, all zones, coming and going events.
This exclusion is more restricted than exclusion 1 through restricting the event code to alarms only.
3. Exclusion: Alarms, zone 1, coming and going events.
This exclusion is more restricted than exclusion 2 through additionally restricting the range of zones to zone 1.
4. Exclusion: Alarms, zone 1, going events only.
This exclusion is more restricted than exclusion 3 through additionally restricting the appearing type to going events only.

In case a new alarm of zone 1 appears on the CIE, only exclusion 3 will be used to send a message to the specified receiver. Exclusion 3 is the one with the most restrictions which still matches the event. Exclusion 4 is more restricted than 3, but has the appearing type set to going events only and therefore does not match the event.

5.4.3 Using Text Filters

Event rules or Exclusions can additionally restrict their range through specifying text filters. These filters allow searching for text parts within the currently processed event and thereby restricting the Rule or Exclusion to events which contain these text parts. Text filters can be formulated similar to file searches in the Windows OS. With the help of wildcards variable text parts can be accepted. A text filter with the text e.g.

"*storage room*" accepts events which contain the words "storage room". The "*" at the beginning and at the end of the filter are wildcards, for which arbitrary text is accepted at this position. If a text filter does not contain any wildcards, the event text must consist exactly of this character string. Even spaces will not be tolerated. This means the following examples would be rated for the text filter "storage room" as not accepted:

- ".storage.room" → not accepted, because a space at the beginning
- "storage.room." → not accepted, because a space at the end
- "Storage.Room" → not accepted, because text filters are case-sensitive

The meaning of the wildcard characters is as follows:

- "*" – any number of arbitrary characters (even no character at all) is accepted.
- "?" – exactly one arbitrary character is accepted and is expected.

Thus, the text filter from the first example “*storage room*” accepts any number of arbitrary characters before the specified words, then the words “storage room” and after that any number of arbitrary characters (even zero) again. Text filters are always case-sensitive, though.

A text filter with the text “storage · room · ?” accepts all events whose text starts with the words “storage room”. However, after the last space one arbitrary character is expected. This character in fact must exist for the event to be accepted. So this text filter would accept / not accept the following texts:

- “storage room 1” – accepted, “1” as arbitrary character
- “storage room #” – accepted, “#” as arbitrary character
- “storage room” – not accepted, because there is one arbitrary character expected

For each of the two available text filters of a Rule/Exclusion, it can be defined to which text of an event this text filter belongs. If all two text filters are set, both filters must match for the rule to accept the corresponding event.

5.5 Message Preferences

With the menu “Setup | Message Preferences” the common behaviour for output message generation can be adapted (see Figure 12: Message Preferences).

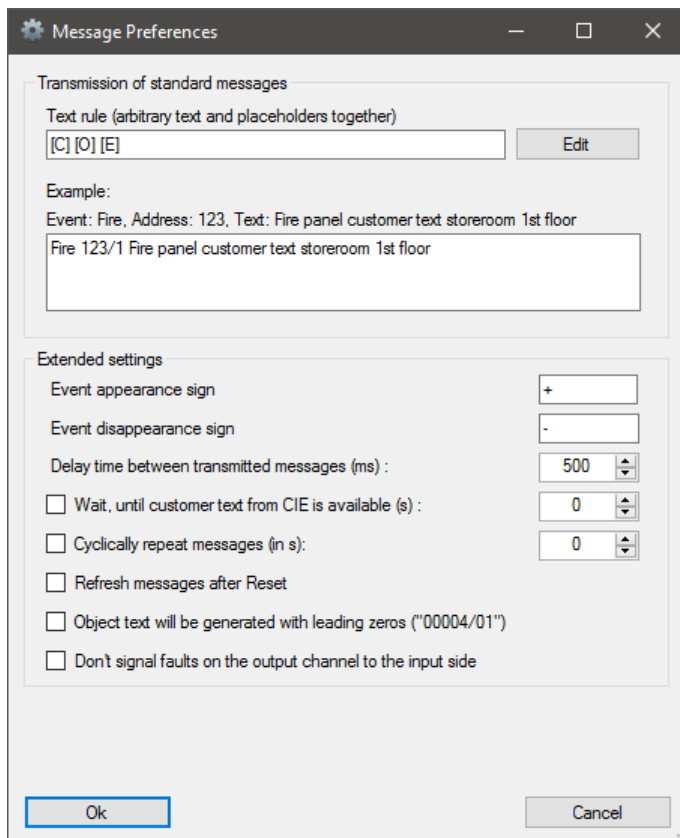


Figure 12: Message Preferences

Options available here may vary with the selected input protocol.

5.5.1 Text Rules

The box “Transmission of standard messages” defines a text rule to be used normally for composing the output message. A text rule defines content and formatting for the output consisting of placeholders mixed with arbitrary text. This setting can be overridden by event rules or exclusions.

**Note:**

The standard text rule is limited to 40 characters. Text rules defined by event rules / exclusions are not limited in this kind. The size is then limited only by the available space for configuration data in the UPC.

The text rule can be directly modified in the text field or with the help of an assistant dialogue through the “Edit” button (Figure 13: Text Rule editing).

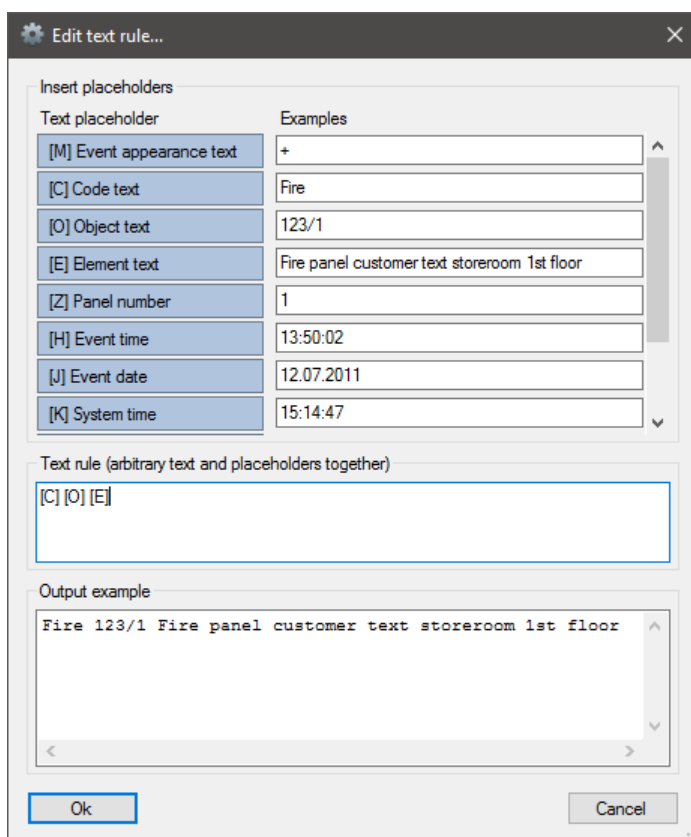


Figure 13: Text Rule editing

The dialogue contains text samples used to fill the placeholders exemplarily for generating the output example at the bottom. These text samples can be modified to test placeholder settings with texts from the real world. During a normal operation UPC will then fill these placeholders with data from the currently processed event from the CIE.

Clicking one of the blue placeholder fields opens a dialogue for the placeholder settings (see Figure 14: Placeholder settings).

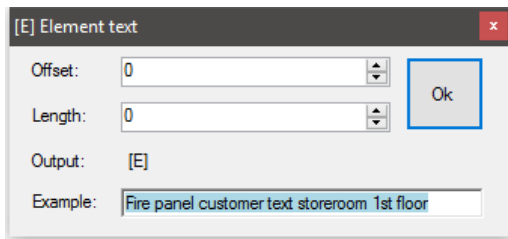


Figure 14: Placeholder settings

For each placeholder, it can be specified by the parameters “Offset” and “Length”, which part of the text will be used in the output message. This helps hiding unnecessary text on small destination displays for example. Accepting the settings with OK inserts the placeholder into the text rule.



Note:

By clicking on a placeholder with the right mouse button, the placeholder is inserted directly into the text rule, without opening the settings dialogue.

5.5.2 Event Appearance and Disappearance Sign

The input fields labelled “Event appearance sign” and “Event disappearance sign” specify character strings used to fill the [M] placeholder. Dependent on the type of event, the appearance or the disappearance sign is used. Of course the placeholder [M] must exist in the text rule for sign to appear in the output message.

5.5.3 Delay Time between Transmitted Messages

To not overrunning the destination system with output messages, a delay can be specified which is respected before the next message is sent. This delay is added to other delay times which come about the specific output protocol timings.

5.5.4 Wait until Customer Text from CIE is Available

In some CIE protocols the customer text of an event is supplied only on request and is given later by the CIE. In such cases the UPC must wait for the text before the output is generated if customer text should appear in the output. This option specifies, if this waiting shall be performed and the maximum time the device will wait until the message is sent anyway, without the text. If the text from the CIE arrives earlier the output message is generated immediately. The delay which comes about in this way can be avoided through inserting the customer texts directly into the UPC with menu “Setup | Replace element texts”. Here you can also import customer texts from sources like manufacturer defined file formats or CSV files.

5.5.5 Cyclically Repeat Messages

In cases where the UPC is connected to a higher control / guidance system, a periodic comparison of the actively present events may be wanted. This can be achieved through

this parameter. The time value in seconds tells the UPC how often this should happen. The device will then send all its known events to the output interface again.

5.5.6 Refresh Messages after Reset

The output of all known events to the output interface can also be triggered through a reset of the device. To activate this behaviour, this option must be activated. The ADP-UPC will then retransmit all known events to the output interface after a soft reset.

5.5.7 Object Text will be generated with Leading Zeros

This option activates the generation of the object information (placeholder [O] e.g. zone / detector) with leading zeros. For example an event of detector 1 of zone 5 will fill the [O] placeholder (object information) with the value "00005/01" instead of "5/1". This setting also affects other object types like outputs. The leading zeros generated are the same as used for zones.

5.6 Character Conversion

The menu "Setup | Character Encoding Editor" defines a conversion table for special characters and umlauts, that are supported by the output protocol, but have a different character code as specified in the Unicode standard. The CIE may send texts encoded in Unicode characters. The output protocol may only support 7 bit characters or uses a specific character code page. This dialog allows you to specify the conversion between incoming characters and characters sent to the output interface.

The button "Load" copies a selected standard code table as a starting point into the character encoding table that will be used for the conversion. These character codes must be adapted to the specific output protocol or destination system (see Figure 15: Character encoding editor).

5.7 Edit Event Words

With the menu "Setup | Edit event words" the words used for specific event codes can be customized (see Figure 16: Edit event words). Here, all the event codes the selected CIE can produce are available for modification. Depending on the event code of the currently processed event, the placeholder [C] ("Code") is filled with one of these texts and this text will appear in the output message in place of the placeholder.

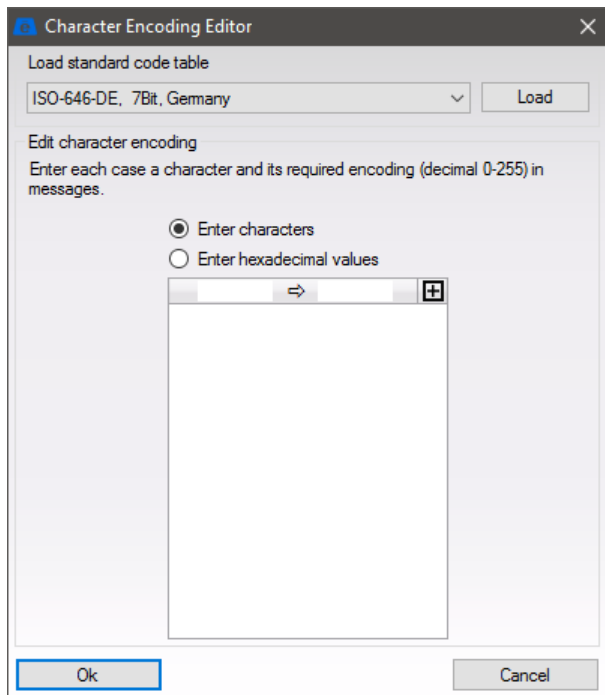


Figure 15: Character encoding editor

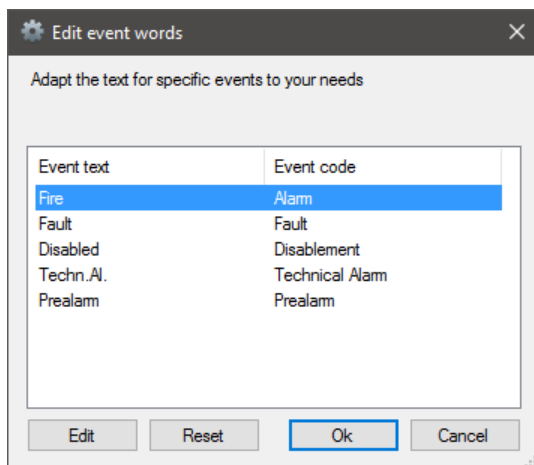


Figure 16: Edit event words

5.8 Edit Code Table

Depending on the selected input protocol and CIE there may be the code table editor instead of the event words dialogue. With the code table editor, it is possible to modify the internal mapping from CIE event code to the UPC event code as well as the code text used to be printed in the output message (see Figure 17: Code Table Editor). The customizable text is mapped to the internal UPC code. Changing the text of one entry will affect all entries with the same internal UPC event code in this table. Event codes with the immutable text “*not visible*” do not produce output messages directly with this code. For example in the screenshot below, the code Reset will not appear in the output. Instead, this code generates the going event for an existing event with its specific event code. Depending on the currently processed event code, the placeholder [C] will be filled with the appropriate event text.

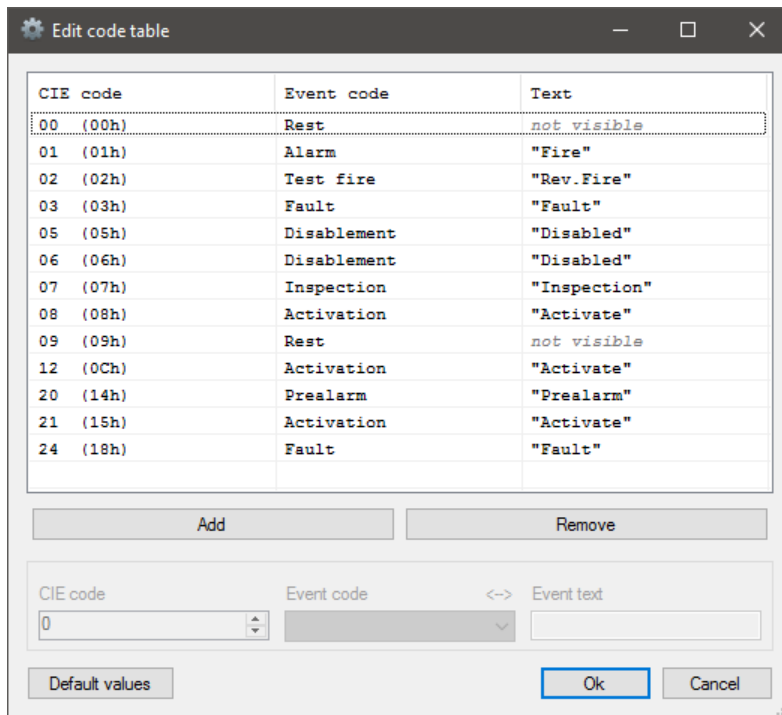


Figure 17: Code Table Editor

CIE codes must be unique. Multiple occurrences of the same code will be marked with a red background and will be cleared when OK is pressed (see Figure 18: Code table with ambiguous CIE codes). By pressing the button "Default values", the original mapping of codes and texts is restored.

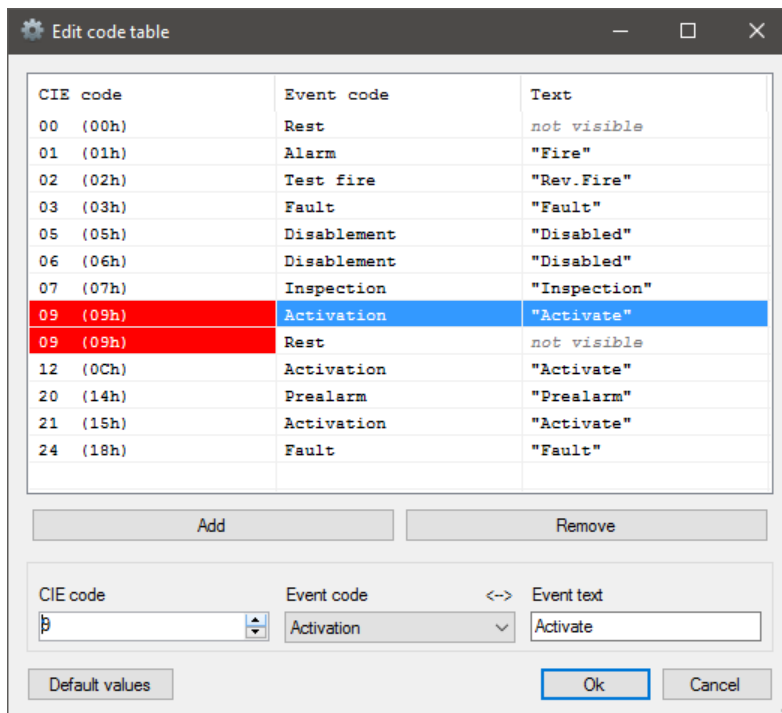
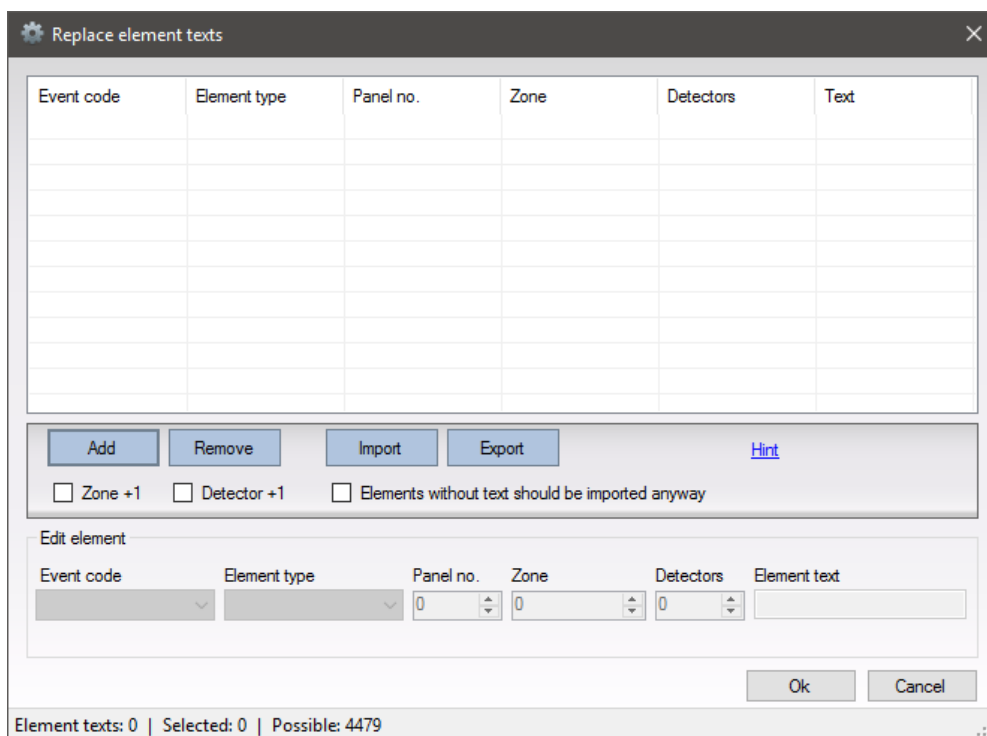


Figure 18: Code table with ambiguous CIE codes

5.9 Element Texts

Customer text sent from the panel for a specific event is stored as “element text” in the UPC. The text is available as placeholder [E] in the text rule to appear in the output message. The “Replace element texts” dialogue allows overwriting the element text with another text for example to provide a shortened text for small pager displays (see Figure 19: Replace element texts). Depending on the CIE type, this configuration is also necessary when there is no customer text delivered from the panel at all.

In addition to entering all text entries manually, an import function is available, which supports different text file formats. There are CIE specific formats as well as a common CSV file format (e.g. MS Excel table with specific column names) which is CIE type independent.



Event code	Element type	Panel no.	Zone	Detectors	Text

[Hint](#)

Zone +1
 Detector +1
 Elements without text should be imported anyway

Edit element

Event code	Element type	Panel no.	Zone	Detectors	Element text
		0	0	0	

Element texts: 0 | Selected: 0 | Possible: 4479

Figure 19: Replace element texts

6 Diagnose

6.1 Error Codes

The ADP-UPC distinguishes various sources of trouble, which are signalled to the user by the yellow fault LED. To help identifying currently active error codes, the error code display window was introduced (see Figure 20: Error code display window). Here you can quickly receive all active errors from a connected device. The errors are listed in the table at the top of this window with their meaning. A more detailed description and possible reasons for a selected error is shown at the bottom.

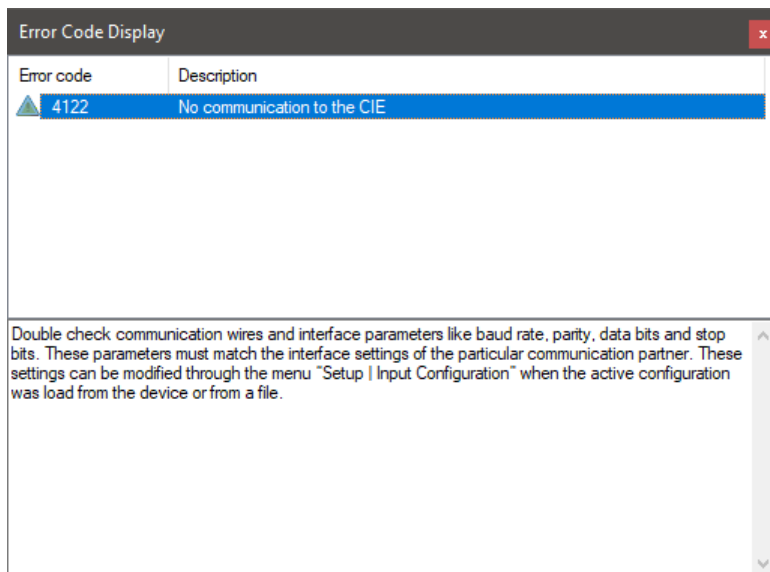


Figure 20: Error code display window

6.2 Debug Log

In cases of communication problems on the input or the output protocol side, it often helps when a technician on-site can have a look at what was sent and received directly on the wires. The debug log window at the bottom of the main window (see Figure 21: The Debug Log window opened) shows bytes sent and received from the perspective of the ADP-UPC. Together with our service team, problems can be better analysed with the help of this data. Logging options define which channel will be logged. The logged data can be saved to a log file through the save icon or can be discarded through the trash can icon.



Important:

Please note that activating multiple logging options (Input | Output | Error) changes the timing of the UPC device and can have negative effects on the communication to the input protocol (CIE). Panels with hard timing requirements for the communication partner might detect communication errors due to bad response times.

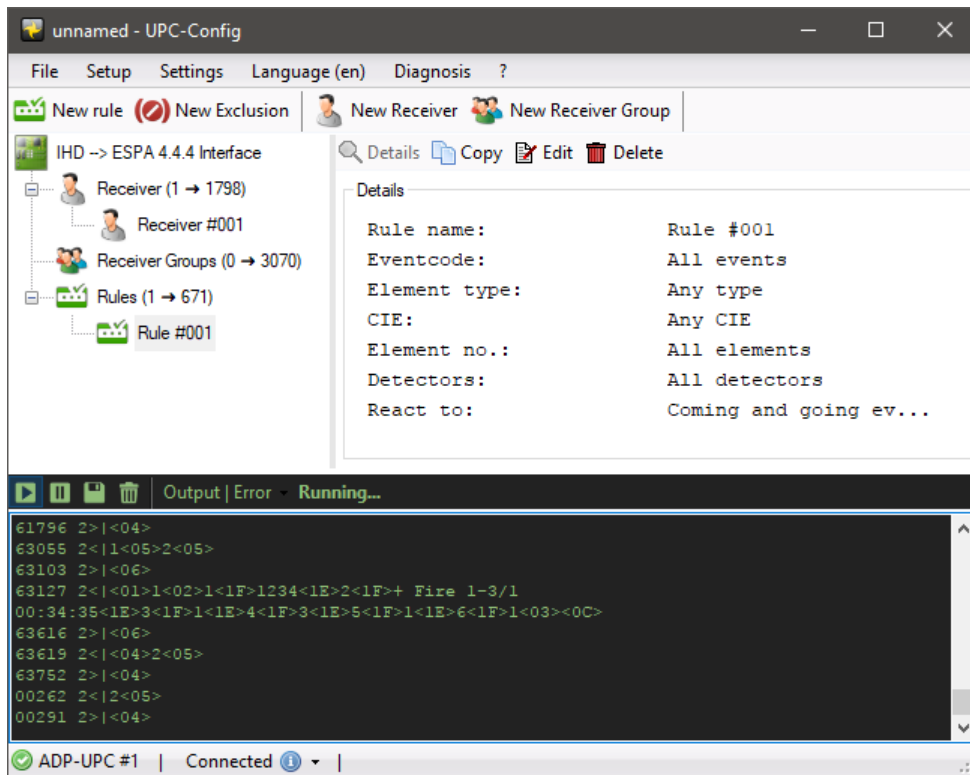


Figure 21: The Debug Log window opened

The window shows a milliseconds timestamp, followed by the channel number (**1**: input protocol, **2**: output protocol), followed by the channel direction (>: RxD, <: TxD), followed by a separator (|) and the raw data bytes.

7 Error code table

Flash Code (red)	Description (System specific critical faults)
2-1-2-2 ... 2-1-2-9	Task Fault! <ul style="list-style-type: none"> Internal program execution error. Please inquire the manufacturer about available firmware updates.
2-1-4-1	Wrong Hardware ID! <ul style="list-style-type: none"> The hardware used is not supported by the current firmware. Possibly there was a firmware update with a wrong firmware file.
2-1-4-3	ROM check failed! <ul style="list-style-type: none"> Application program memory (Flash) was changed unexpectedly! The device must be exchanged.
2-1-4-4	BIOS check failed! <ul style="list-style-type: none"> BIOS program memory (Flash) has been changed unexpectedly! The device must be exchanged.
2-1-4-5	Stack overflow error! <ul style="list-style-type: none"> Please inquire the manufacturer about available firmware updates.
2-1-4-6	Configuration data check failed! <ul style="list-style-type: none"> Configuration data memory (Flash) has been changed without user interaction! It's possible that a retransfer of the configuration helps here. If this failure appears again, the device must be exchanged. Possibly there are extreme electromagnetic interferences near the device which lead to changes in the flash memory. Place the device at a better shielded location.
2-1-4-7	AMEM check failed! <ul style="list-style-type: none"> Event data memory (RAM) has invalid entries! Switch the device off and on again. If this failure appears again, the device must be exchanged.

Flash Code (yellow)	Description (common, not critical faults)
2-1-4-2	Configuration data is invalid <ul style="list-style-type: none"> UPC tool and device firmware may not match. Please consider the CIE type setting under "Setup -> Input Configuration". This type must match the device firmware. Retransfer the configuration into the device. If this failure persists even after repeated retransfers, the cause possibly is a defective flash memory. The device must be exchanged.
2-1-4-8	Invalid output protocol <ul style="list-style-type: none"> The output protocol selected in the configuration is not supported by the hardware in use. Please order a hardware (ADP-UPC) which supports the desired output protocol.
2-3-2-2	No event rule available <ul style="list-style-type: none"> At minimum one event rule must be configured in the device, else no output message can be created.
2-3-2-3	No receiver available <ul style="list-style-type: none"> At minimum one receiver must be configured in the device, else no output message can be created.
4-1-2-2	No communication to the CIE <ul style="list-style-type: none"> Double check communication wires and interface parameters like baud rate, parity, data bits and stop bits. These parameters must match the interface settings of the particular communication partner. These settings can be modified through the menu "Setup Input Configuration" when the active configuration was load from the device or from a file.


Note:

Additional error codes are possible. These codes are different, depending on the selected output protocol. The specific codes are described in the associated documentation.

8 Technical details

Rated operating voltage	12V DC or 24V DC
Operating voltage range	9V DC to 30V DC
Power consumption	Approx. 50mA @ 12V DC Approx. 30mA @ 24V DC
Ambient temperature	0°C to 50°C
Storage temperature	-10°C to +60°C
Humidity	≤ 95% rel.
Dimensions	115mm x 90mm x 24mm (width x length x height)
Wire cross section	0.08mm ² ... 2.5mm ²
Interfaces (depending on the hardware board) :	
CIE	RS485 isolated or interface module – CIE specific
Interface	RS232 isolated or interface module – output protocol specific
USB	USB 2.0 standard (USB 1.1 compatible) used for configuration and firmware update
Other	
Keys	Reset button
LEDs	Green, Yellow, Red (status / debug)
Weight	140 g (DIN rail mounting) 340 g (separate plastic housing)

IFAM GmbH Erfurt

Ingenieurbüro für die Anwendung der
Mikroelektronik in der Sicherheitstechnik
Parsevalstraße 2
D-99092 Erfurt

<http://www.ifam-erfurt.de>