

# ComGuard v. 3.1

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# 1 Software installation procedure

When you insert the installation CD into a CD drive, the ComGuard 3.1 installation menu will be run automatically. Follow the necessary steps in the displayed procedure.

## If the PC contains MS SQL server

If ComGuard software is being installed on a PC, where MS SQL is already running, the following step (MSDE installation) should be skipped.

## MSDE installation

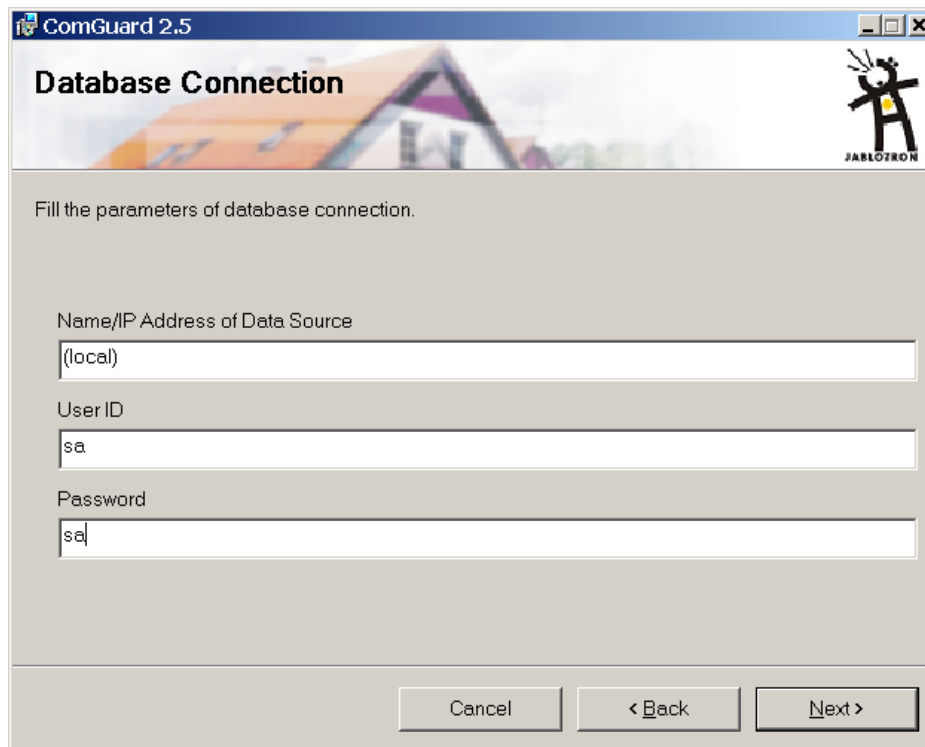
Installation of MSDE (Microsoft Data Engine) provides MS SQL support for a computer. Installation does not require any user settings as the installation is automatic. Restart the PC after the installation of MSDE.

## ComGuard SW installation

This step installs the ComGuard software.

During the installation you will be asked for editing certain parameters:

- checkbox for configuration of installed parts - ComGuard and Comtransporter; the Comguard should be checked everytime, the ComTransporter only if the MS-33 GSM module is installed.
- The setting of the main database connection (see the fig. 1); the displayed setting in the dialog window are recommended to be kept.
- The setting of the destination path of the installation, the displayed setting in the dialog window are recommended to be kept.



The screenshot shows a Windows-style dialog box titled "ComGuard 2.5". The main heading is "Database Connection" and there is a logo for "JABLOTRON" in the top right corner. Below the heading, it says "Fill the parameters of database connection." There are three text input fields: "Name/IP Address of Data Source" containing "(local)", "User ID" containing "sa", and "Password" containing "sa". At the bottom of the dialog, there are three buttons: "Cancel", "< Back", and "Next >".

Fig. 1 Database connection dialog

## The MS-41 PCI card installation

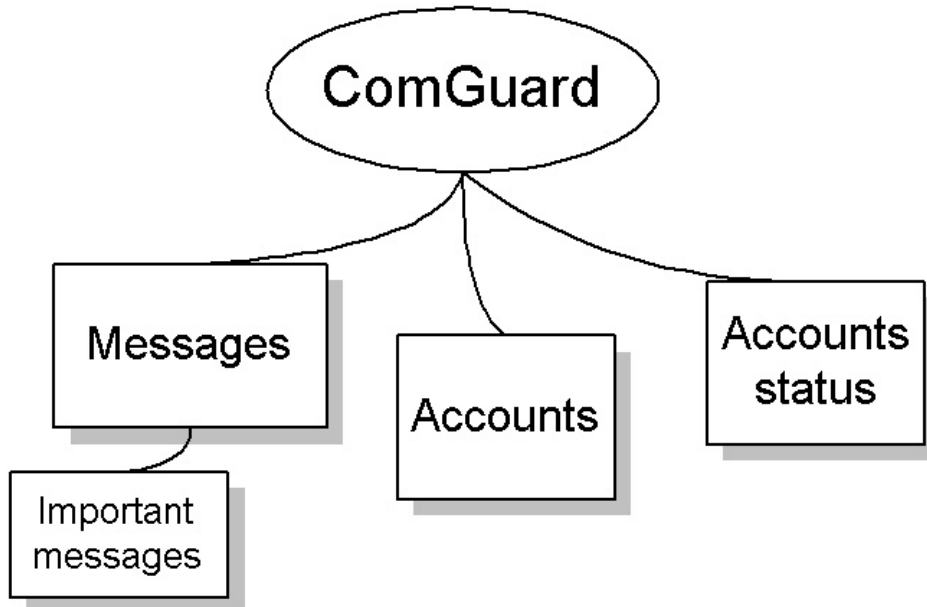
Please the manual of the MS-41 card for installation. The application for the MS-41 card management is installed by the step „BS Quatro Guard“ in the installation procedure.

## 2 A brief overview of ComGuard's structure

ComGuard software is an inseparable part of the MS-350 monitoring station. ComGuard manages received event messages, performs translation according to the translation tables and stores them in the database.

All the information about accounts and received event messages is arranged in four basic windows:

- **Messages**
- **Important messages**
- **Accounts**
- **Accounts status**



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## 3 Setting into operation

### 3.1 Software initialisation

When ComGuard is run for the first time after installation, the user is asked to set the appropriate COM port to which the MS-350 unit is connected. If the MS-350 unit is not currently connected, choose any COM port. The chosen port must not be occupied by another application.

Entering a user name and password finishes the initialisation. The default operator after initial software installation is „Supervisor“ with the password „123456“. Changing the password during the first run is recommended. The Supervisor operator cannot be erased from the list of operators, only changing the password is possible.

The order of operation during the first run should be as follows:

1. Change of Supervisor password – see chapter 4.2
2. Setting of MS-31 card regular checking – see chapter 8.
3. Setting of operators – chapter 4.2
4. Checking of preset formats and editing of formats – chapter 4.3
5. Setting and creating accounts – chap. 4.4

### 3.2 New operator, edit operator

Windows is used to administrate operators and their rights.

The complete operator list is on the left side of the window. Operator information is displayed on right side of the window. A left mouse button click chooses the operator you want to check through. Operators having supervisor rights are allowed to insert a new operator, to delete, and to copy or edit selected operators. Besides editing and reading operator information, the window enables a supervisor to change an operator's rights by clicking on the appropriate button on the right side of the window. This window

offers insertion of the *operator contract shortcut* to the Supervisor. Before opening the file, the path to the text editor must be defined (see chap. 6.5.5.).

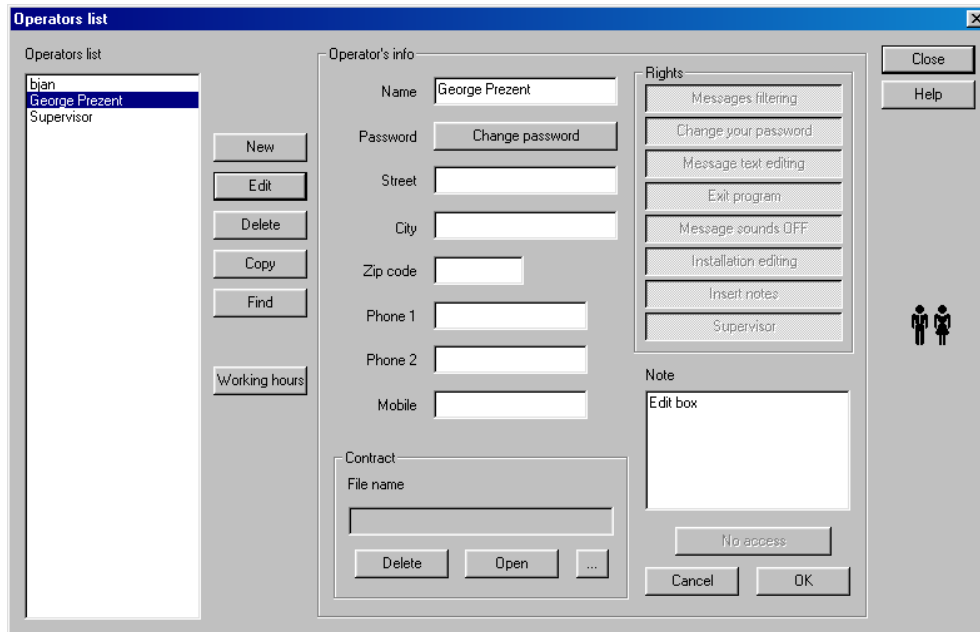


Fig. 1 Operators list

The default operator after installation is **Supervisor** with the password „123456“.

## Buttons

The meaning of the particular operator items and buttons is shown by their labels:

- **New** - creates access to ComGuard for a new operator.
- **Edit** - is used to edit operator details. Clicking the **Edit** button once activates the right part of the window to make changes. Only the operator with supervisory rights is allowed to change each of the details and rights. E.g. an operator with password change rights can change his own password, but others' details.
- **Delete** - deletes a selected operator from the database.
- **Copy** - creates a copy of a selected operator. A copied operator does not have the same password and it remains empty until it is changed. The name of the operator is set to *New operator*. Others items are kept like the original.
- **Find** - searches for an operator by name.
- **Working hours** - it displays a window showing the login and logout times of operators.
- **No access** - this button temporarily denies access to a selected operator .

To confirm the operator item changes click on the **OK** button.

## 3.3 Preset formats

You can find a list of preset formats in the menu by selecting **Tools** then **Formats**. The default formats are:

- Ademco Contact ID
- 4/2
- SurGard
- Ademco Express
- Contact ID Jablotron
- Contact ID CA-12XX

Even though the protocols Ademco Contact ID, Contact ID Jablotron and Contact ID CA-12XX have the same structure, there is a significant little difference. The sources for Ademco Contact ID are empty and only the translation table for the general part contains texts. The formats Contact ID Jablotron and Contact ID CA-12XX are fully configured for the receiving and translation of messages from Jablotron control panels. The format Contact ID CA-12XX is pre-configured for messages from Jablotron car alarms of the CA-12XX series.

Formats 4/2, SurGard and Ademco Express are also preset for Jablotron control panels.– All the text in the translation table can be adapted to any compatible control panel. A translation table can be imported from an external \*.csv file. Several importable files are contained on the supplied installation CD. A detailed description of format setting is in chapter 8.1.

### **3.4 New account**

The number of preset accounts after software installation conforms to the preset formats. The names of accounts comply with the format, which is chosen for the particular account.

The overview and setting of accounts are accessible in the **Accounts** window – one of the four basic windows.

A new account in the database can be created by clicking the **New** or **Copy** button. When the **New** button is clicked, the new account contains no data. The software offers a new account ID to the operator.

If a new account is created by the **Copy** button, the new account inherits all the data and settings of the original account except the account ID and account name. The name is created from the original name with a “#“ sign on the end.

Every account has its own unique account ID, duplicate account IDs are not allowed in the database. If an operator tries to use an existing account ID for another account, ComGuard notices this and prevents it. However, account names can be shared by more than one account.

A new account only needs three parameters to be set for receiving messages: Account ID, Account name and the communication format.

A detailed description of these settings can be found in chapter 7.1.3.

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## **4 Message administration**

All the messages received by telephone card MS-31 or by GSM module MS-33 are arranged in the **Messages** window according to the time when the messages were received. Messages of type “Alarm” or “Fault” are displayed in the **Important Messages** window. The order in these two windows can not be changed.

### **4.1 Message filtering**

Received messages can be filtered according to the following criteria:

- the date of reception,
- the message type,
- the account name,
- the account ID
- the text or the text part of the message translation.

To activate filtering, press the right mouse button under the Message window, then choose **Message filtering**. The dialog window for filter settings will then be displayed (see fig. 2).

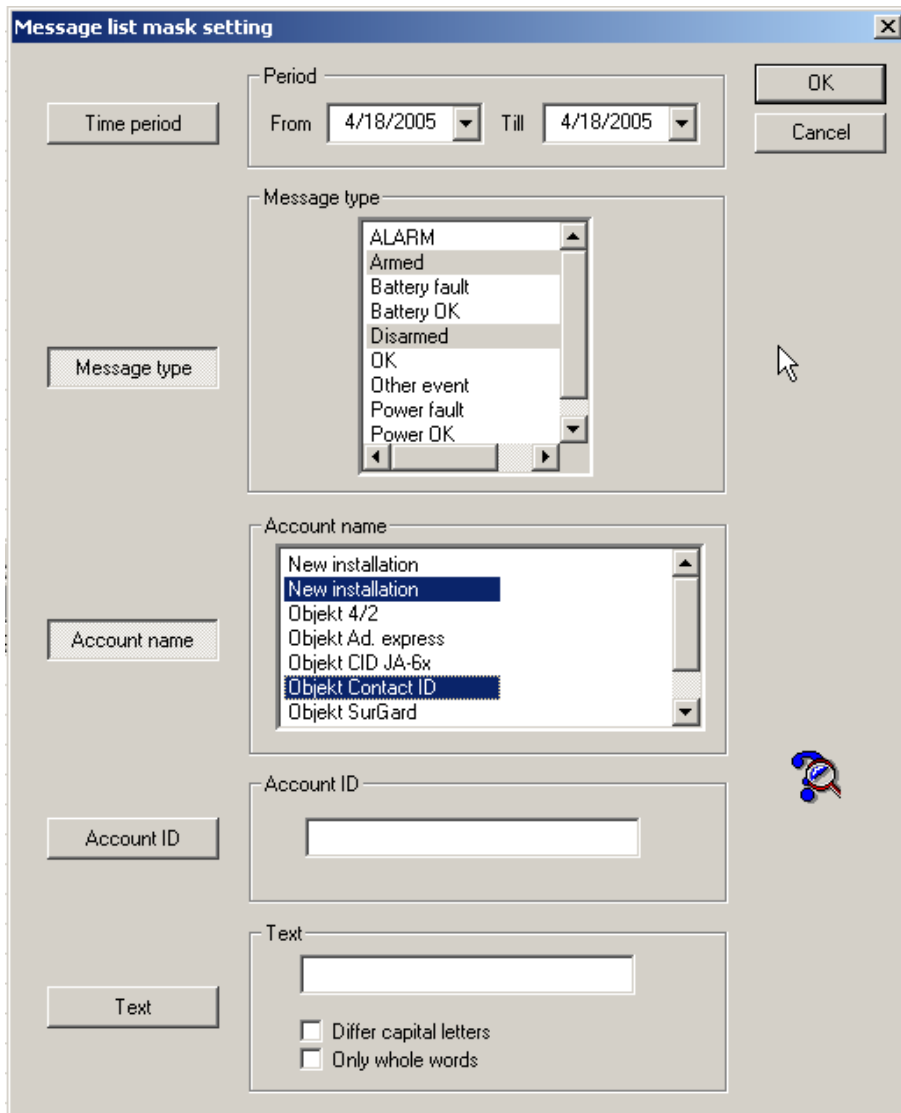


Fig. 2. Filter window

## 4.2 Additional notes

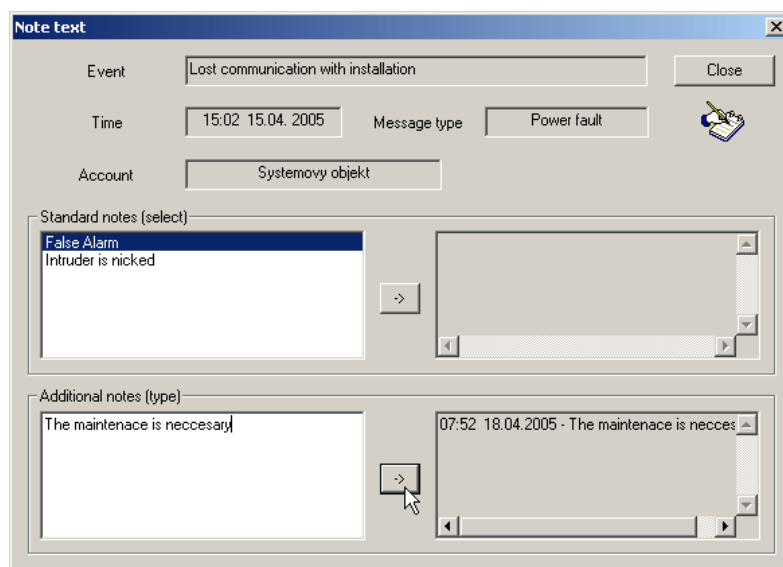



Fig. 3 Additional notes

The **Message** window contains two columns where extra information for each received message can be added. **Add notes** - This item invokes a dialog box with predefined **Standard notes** and customizable

**Optional notes.** To move a chosen note to the right window, click the  arrow down. Please note: none of the notes in the right window can be erased. The time of note creation is added automatically. After closing the dialog box the appropriate note will appear in the **Standard notes** or **Optional notes** columns. The existence of notes is shown by the word **Yes** in the **Note** column .

#### 4.2.1 Predefined notes

An operator can add some extra information to a chosen message. There are two kinds of additional notes: predefined (standard) and optional notes. In the case of predefined notes, an operator can choose suitable notes from a list. The list of predefined notes is intended to make working with notes easier and faster. Typical examples of standard situations that could be rated by predefined notes are false alarms, or the incorrect operation of equipment.

The list is created by selecting the **Tools** menu, then the **Predefined** item.

The following picture shows an example of creating predefined notes, that are offered afterwards as a list of standard notes in the **Messages** window.

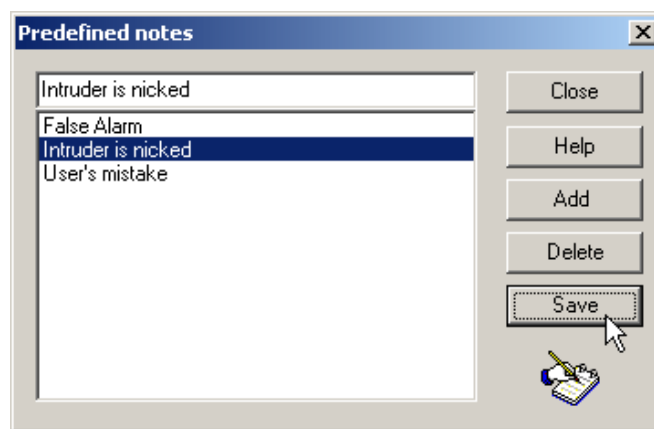


Fig. 4 Predefined notes

The upper editing field is used for editing a new standard note. To move the new notes to the list click the **Add** button.

Button functions :

**Close** – closes the **Predefined notes** window

**Help** – displays the help window

**Add** – adds a new note to the list from the upper editing field.

**Delete** – deletes highlighted notes from the list

**Save** – saves the contents of the window to the database.

#### 4.3 Unrecognized messages

When the **Message** window displays the event message “Telephone line error or wrong format”, ComGaurd has just received a message which can not be translated because of a non-existent Account ID in the database or a non-existent report code in the translation table. If a received message belongs to an account in suppressed mode, the message will not be translated either, so the text “Telephone line error or wrong format” will be displayed instead of the proper translation.

All the messages received that have not been translated can be found in the **Unrecognized messages** window. This window is accessible via the **View** menu.

The window contains four columns:

- Date and time of message reception,
- Account ID, if recognized
- The code of the received message
- The account source (see chap.7.1.1)

Received at	Account code	Code	Source
15:23 27.02.2002	ABCD	Data packet:E2 4F 0A 0B 0C 0D 01 08 01 01 03 07 0A 01 07 0A 01 4D	Z2
15:23 27.02.2002	ABCD	Data packet:E2 4F 0A 0B 0C 0D 01 08 03 01 03 07 0A 01 07 0A 01 13	Z2
13:31 01.03.2002	ABCD	Data packet:E2 4F 0A 0B 0C 0D 01 08 01 01 03 07 0A 01 07 0A 01 4D	Z2
13:31 01.03.2002	ABCD	Data packet:E2 4F 0A 0B 0C 0D 01 08 03 01 03 07 0A 01 07 0A 01 13	Z2

Fig.5 The **Unrecognised messages** window

If the source is SMS, GPRS or TCP, the **Code** column contains a string of 15 characters that correspond to a Contact ID format code without a checksum.

When a message is received by the MS-31 telephone card, the code is displayed with the structure of COM port serial communication. The meaning of the message is as follows:

Received message e.g.: E1 06 05 01 0A 04 03 04 3A

- E1 – the message was received by the card with an address of 1,
- 06 – the message contains six figures,
- 05 01 0A 04 – Account ID - 51A4 in this case,
- 04 03 – report code of the received message –43 in this case,
- 3A – the check sum of this particular serial data communication

#### 4.4 Translation table editing

The installation of ComGuard2 creates the following list of formats (plus other items):

- Ademco Contact ID
- 4/2
- Ademco Express
- SurGard
- Contact ID Jablotron
- Contact ID CA-12XX




As regards the translation tables, all the preset formats are adjusted for Jablotron control panels, except for Ademco Contact ID format.

When any change of text or format is requested, select the **Tools** menu, then select **Format**. For detailed information about format editing see chapter 8.1.

## 5 The automatic functions of ComGuard software

### 5.1 Actions performed according to message type

ComGuard software performs certain actions according to the type of message received . The message type is set for every line in each translation table (see chap. 8.1) and the colour of the message in the **Message** window is chosen according to the message type . There are the following message types to choose from:

-  Other event – black
-  Disarmed – black
-  Armed – black

	Alarm – red
	OK – green
	Battery fault – blue
	Battery OK – blue
	Power fault – blue
	Power OK – blue
	Unspecified failure – violet

When a received message is of the type **Armed** or **Disarmed** the appropriate account is set to armed or disarmed status. The status of the account is displayed in the **Accounts** window (the Status sheet) and in the **Accounts status** window. Account status is evaluated according to whether the message type is arming or disarming ; see the chap. 6.2.

The alarm message type triggers an Alarm window when it is set to be displayed. During the time the alarm window is visible, the ComGuard software does not receive any other messages, until the alarm is confirmed by an operator.

The alarm, fault and unspecified failure message types are also displayed in the **Important messages** window.

ComGuard software has three modes for alarm message display, which can be set by selecting the **Tools** menu, then **Setting**, then the **Messages** sheet:

1. ComGuard displays an alarm window - an operator must confirm the alarm window.
  - the **Show alarm window** button is clicked, **Suppress confirmation** is not clicked.
2. ComGuard displays an alarm window- operator confirmation is not required
  - both buttons are clicked – the **Show alarm window** button and the **Suppress confirmation** button.
3. ComGuard does not display an alarm window, alarm messages are displayed directly in the **Important messages** window.
  - the **Show alarm window** button is not clicked. The status of **Suppress confirmation** makes no difference.

## 5.2 Account status checking (arm/disarm mode remote monitoring)

ComGuard software provides a function, which automatically monitors whether the alarm system associated with the account is armed or disarmed and compares this information with the expected typical state listed in the timetable..

The schedule for the arming timetable can be set in the **Account** window.

Choose the account in which you want to set the fields in the arming timetable by clicking the left mouse button on to the particular account in the account list , then click the **Edit** button and search through the **Arming time table** sheet.

The **Could be disarmed** table is used for information only, as arming has a much more important security impact. The account will be expected to be in disarmed mode during the set time period. The setting of this part of table has no effect on ComGuard functions.

The **Should be armed** table:

- This is the expected and typical arming time.
- In the case of an infringement of the arming time schedule, events are notified to the operator by a special dialog box, and in addition, events are recorded in the **Messages** window and in the **Important message** window.
- If it is temporarily required that the building be exited later than normal, the operator can set up a delay for the activation of the special dialog box. To set it up, find the **Tools** menu, then the **Setting** item marked **Arming time table tolerance**. It has a resolution of minutes and the programmed interval is added to the start of the normal arming time. Please note: this arming time offset effects all accounts.

## 5.3 Monitoring the time since the last message

ComGuard can monitor the time period since the last message for a particular account.

Select **Tools** menu, **Setting** item, **Messages** sheet. Look at the **No message warning after...** parameter. The default interval is set to 24 hours. If no message is received from a particular account during this time interval, ComGuard takes the following action:

The event is displayed in the **Messages** window and also the **Important message** window and the event has an alarm status.

The default time setting is 00:00 as set in the editing field when the **24 hours extension** button has not been clicked. It means that the monitoring interval is 24 hours. The setting in this window is valid for all accounts in the database. The monitoring interval can be set from 5 minutes to 47 hours 59 minutes. E.g. to set the monitoring interval to 26 hours, click the **24 hours extension** button and enter 02:00 into the editing field. If the **24 hours extension** button had not been clicked in this case, the checking interval would only be 2 hours.

The setting of the interval can be set individually for a particular account:

- Open the **Account** window,
- click on the account you want to edit by pressing the left button on the mouse.
- enter edit mode,
- choose the **Account status** sheet,
- release the **Use global setting** button,
- set the checking interval according to the above mentioned procedure.

5 minutes is the shortest recommended monitoring interval because ComGuard checks all the accounts once every 3 minutes. So there is no point in setting a shorter interval.

If a particular account should not be monitored for periodic messages, the function can be disabled:

- Open the **Account** window,
- click on the account you want to edit by pressing the left button on the mouse.
- enter edit mode,
- choose the **Account status** sheet,
- click the **Suppress** button.

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## 6 Windows overview

### 6.1 Main windows

#### 6.1.1 Messages

The window displays messages coming from particular ARCs (Alarm receiving centres). The messages are sorted by time of arrival to the ARC and in the case of an alarm, the message order is decided by the time of confirmation. An operator is not allowed to sort the messages, the last one is always at the end of the list.

The window is divided into the several columns with the following subjects:


- The first column is the reception time of the message (**Received at**). With the reception time, a specific icon appears according to the event. Various colours differentiate message types that could be set in the definition window of the Formats.
- **Event**. Message texts are generated according to the translation of the format used. The type of event is differentiated by text colour.
- **Account code** or **abbreviation**.

- **Account name.**
- The alarm message also contains the time of confirmation - **Confirmed by operator.**
- **Note** is a flag for a further specification, which is located in the **Standard notes** or **Additional notes** column .
- **Message Code.** It is used for checking a received message translation.
- **Source** - the direction, from which the received message came:
  - the letter **Z** followed by number 0-4 - the message was sent by telephone line to the MS-31 receiver card with address 0-4.
  - abbreviation **CG** - message generated by ComGuard itself,
  - **SMS** - The message was sent by a JA-60GSM via SMS. The MS-33 GSM module received the message,
  - **GPRS** - The message was sent by a JA-60GSM via GPRS. The MS-33 GSM module received the message,
  - **TCP** - The message was sent from a JA-60GSM via GPRS and was received as a UDP packet from the Internet.
- The last two columns contain **Standard** and **Additional notes**. Standard notes must be predefined using the **Tools** menu, then the **Predefined notes** item. When the source of the message is SMS, GPRS or TCP, the Additional notes contain the real time of the received event.

Received at	Event	Account code	Account name	Confirmed by operator	Note	Code	Source	Standard notes	Additional notes
08:29 28.02.2002	Installation [Domeček 65] edited	ABCD	Domeček 65			00	CG		
08:58 28.02.2002	Installation [Domeček 65] edited	ABCD	Domeček 65			00	CG		
08:58 28.02.2002	close by user System : 01	1238	Domeček 60			4A1A17A1	Z2		
08:58 28.02.2002	open by user System : 01	1238	Domeček 60			4A1A17A1	Z2		
08:58 28.02.2002	group close System : 01	1238	Domeček 60			4A2A17A1	Z2		
08:58 28.02.2002	close by user System : 01	1238	Domeček 60			4A1A17A1	Z2		
08:58 28.02.2002	group close System : 01	1238	Domeček 60			4A2A17A1	Z2		
08:58 28.02.2002	open by user System : 01	1238	Domeček 60			4A1A17A1	Z2		
08:58 28.02.2002	low system battery System : 01	ABCD	Domeček 65			3A2A17A1	Z2		
08:58 28.02.2002	low system battery-end System : 01	ABCD	Domeček 65			3A2A17A1	Z2		
08:58 28.02.2002	tamper System : 01	ABCD	Domeček 65	08:58 28.02.2002		137A17A1	Z2		
08:58 28.02.2002	tamper-end System : 01	ABCD	Domeček 65		Yes	137A17A1	Z2	13:20 01.03.2002 - alarm O.K.;	
09:00 28.02.2002	tamper System : 01	ABCD	Domeček 65	09:00 28.02.2002		137A17A1	Z2		
09:00 28.02.2002	tamper-end System : 01	ABCD	Domeček 65			137A17A1	Z2		
09:03 28.02.2002	Calling of extern process failed [Error code 2.	ABCD	Domeček 65			00	CG		
09:03 28.02.2002	tamper System : 01	ABCD	Domeček 65	09:03 28.02.2002		137A17A1	Z2		
09:03 28.02.2002	tamper-end System : 01	ABCD	Domeček 65			137A17A1	Z2		
09:05 28.02.2002	tamper System : 01	ABCD	Domeček 65		Yes	137A17A1	Z2	13:20 01.03.2002 - alarm O.K.;	
09:05 28.02.2002	tamper-end System : 01	ABCD	Domeček 65	09:05 28.02.2002		137A17A1	Z2		
09:05 28.02.2002	tamper System : 01	ABCD	Domeček 65			137A17A1	Z2		
09:05 28.02.2002	tamper-end System : 01	ABCD	Domeček 65			137A17A1	Z2		
09:06 28.02.2002	panic System : 01	ABCD	Domeček 65	09:06 28.02.2002		12AA15A1	Z2		
09:06 28.02.2002	panic-end System : 01	ABCD	Domeček 65			12AA15A1	Z2		

Fig.6. Messages window

**If the right mouse button is clicked on to any message, it rolls out the two items menu:**

- **Add notes** - This item invokes a dialogue box with predefined **Standard notes** and variables **Optional notes**. To move a chosen note to the right window push the  arrow down. Attention! No notes can be erased in the right window. The time of note creation is added automatically. After closing the dialogue box the appropriate note will appear in the **Standard notes** or **Optional notes** column. The existence of any note is signalled in the **Note** column by the word **Yes**.

**Message filtering** - The item invokes the dialogue box offering 4 types of filter. Filtered messages are displayed in an extra window. You need not only use one characteristic to filter messages; the operator can use combinations of several characteristics. Pushing the appropriate button down on the left part of the dialogue box activates the filters.

- **Time period** filter - choose the date **From - Till**.
- **Message type** filter - If you want to choose several message types at the same time, hold the **CTRL** key down and choose the desired message types by clicking the left mouse button on to them.

- **Installation name** filter - the choice is made in the same way as above.
  - **Account ID** filter – the operator can enter an account ID to perform filtering.
  - **Text filter** - the specified text is searched in the **Event** column. The Filter can be modified by capital differentiation or whole words separated by spaces as well as by other separators.
  - **Help** – Invokes the contextual help in the special window.
- After filter activation, an extra **Filtered messages** window appears containing the required messages.

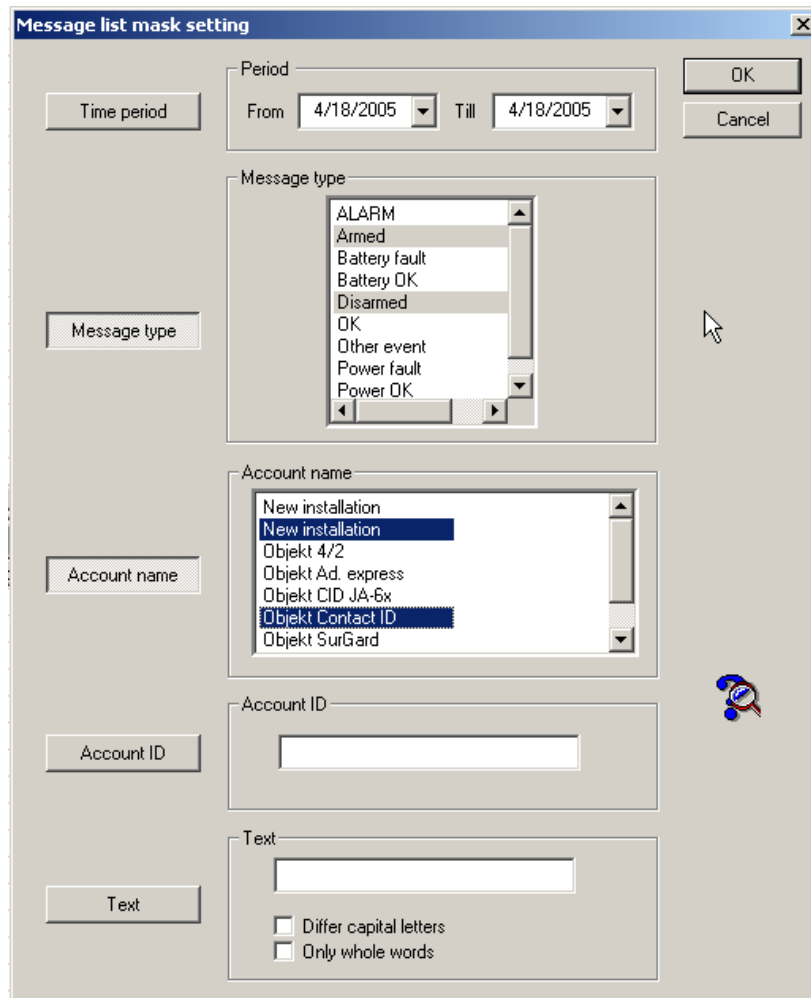


Fig.7. The **Filter** window

## 6.1.2 Important Messages

The **Important messages** window is used for the online filtering of alarm messages and various kinds of failure messages –battery faults, AC faults, and unspecified failures. The **Important messages** window simplifies managing the most important messages; the operator can see these messages for a longer time in comparison to the **Messages** window, where all the received messages are displayed –including arming, disarming, periodic testing, etc. These messages are overwritten by newly received messages. All the messages are arranged according to the time of reception, an operator cannot change the order.

## 6.1.3 Accounts

- The **Accounts** window contains a list of available accounts and their IDs.

Only clicking the left mouse button on the account name selects the account. If an account name in the list is only highlighted but not clicked on, it will not be selected. Choose the account carefully to avoid

mistakes, e.g. in the case of account erasure. After choosing an account, all the sheets on the right side of the window will be filled by the properties of the chosen account.

The account list can be sorted by name or ID. The sorting function can be done using the menu bar (*sort by...*) or by clicking on the header of the appropriate item (*Name* or *ID*). The sorting key is shown by a triangle in the header of the item.

If the right mouse button is clicked, the following menu appears:

- **New** - creates a new account on the list with the name "New installation". It is only possible to allocate a particular name to a particular account, i.e. account names cannot be duplicated. A new account is created with an ID of "0", but without a format.
- **Edit** - is used to change account settings and to insert detectors in to a map. Clicking the Cancel button exits edit mode without saving changes. Another way to exit the mode is by clicking the **OK** button which saves the desired changes to the database. The **Contact addresses** and **Messages** sheets and the **Source table** function are exceptions. In these cases the changes are saved to the database by directly clicking an appropriate **OK** button. If a copy of an account is created, all changes will be saved automatically without a confirmation question.
- **Copy** - creates a copy of an account. The name of a copied account is generated from an original name by adding a hash (#) to the end of it. The program allows the creation of up to 10 copies. This means an account name may contain 10 hashes. If an original account contains e.g. two hashes, copies may contain 12 hashes.
- **Delete** - account deletion. Note: only the current account can be deleted, i.e. the account chosen by the left mouse button.

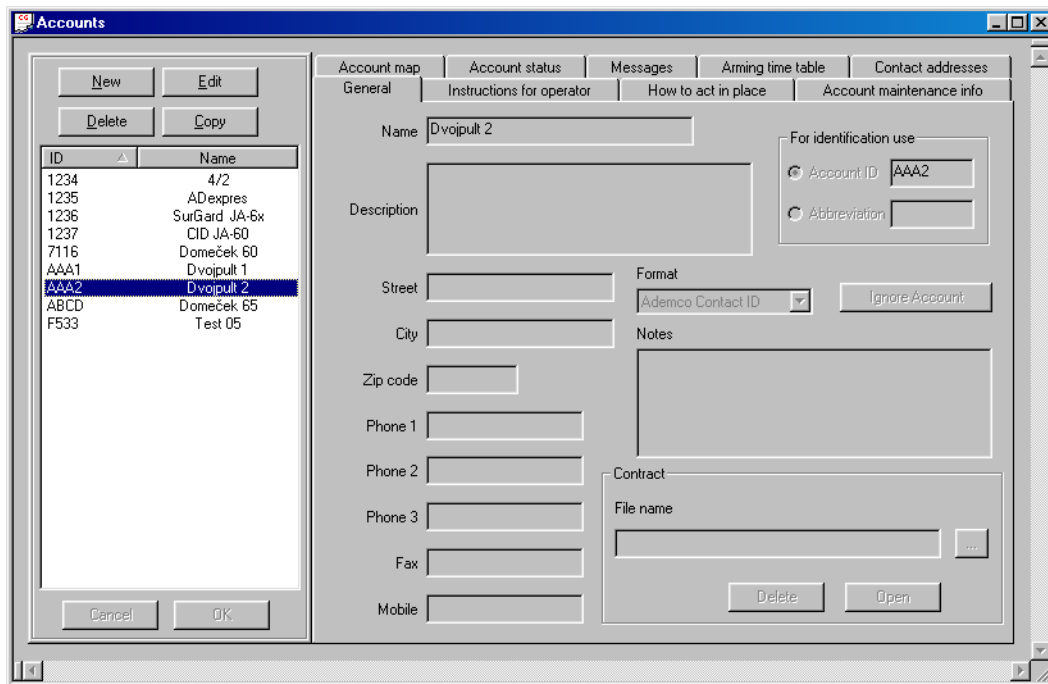


Fig.8. The **Account** window

- **Sort by name** – sorts the account list by name.
- **Sort by Account ID** – sorts the account list by ID.
- **Reverse order** -
- Sorting of accounts is done using menu items or by clicking the list heading. The course and sort key is assigned by a triangle. An up-turned triangle peak assigns ascending order and a down-turned triangle peak assigns descending order. The sort keys are an account name and an account ID.
- **Search** - The search keys are an account name and an account ID. The found account will appear in the list as current. Is it possible to search whatever string in the contact information attached to a particular account – search by “Contact”

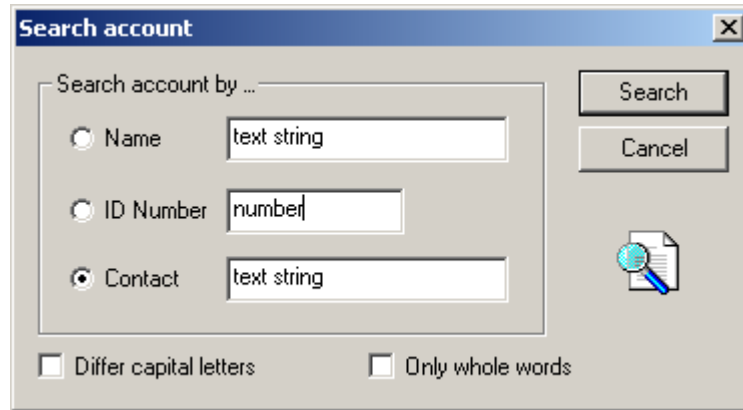


Fig.9. The **Search accounts** window



Fig.10. The menu for the **Accounts** window

## Buttons

The meaning of the buttons is the same as the menu items (see fig.6)

- **New** - new account creation.
- **Edit** - edit account items.
- **Delete** - account deletion.
- **Copy** - account copying.

## Sheets

### General

- Name – the name of an account is displayed in the **Message** window and in the **Account mode** window.
- Description – text box\*.
- Account address (street, city, ZIP/postal code).
- Contact phone number (phone 1, 2 & 3, fax, mobile).
- Notes for the chosen account - text box\*.
- Contract – shortcut to a document “Guarded installation Contract” (generally an MS Word document).
- For identification purposes - ID or an abbreviation (it depends on the account item you want to use as identification in the messages window).

- Format - this item is used to choose an actual format for communication with exchanges.
- **Ignore Account** button - If the button is pressed down, the account does not receive any messages, it does not communicate, but all of the properties are kept. ComGuard does not recognise an account that is in “*Ignore Account*” mode, that is why the messages from the account appear in the **Unrecognised message** window.

## Instructions for operators

- The editable sheet with information for an operator – text box\*.

## How to act in place

- The table contains information in the case of an alarm occurrence in an account. The text, which is written in the edit window, appears in the special alarm window. The special alarm window is always displayed on top, even if the program is minimised to an icon.
- The table contains a contact address in the case of an alarm occurrence.
- At the bottom of the sheet is a line for adding a shortcut to an executable file (\*.exe), which is activated in the case of alarm message. If the path of the shortcut is wrong, the fault is notified in the “Message” window – *Calling of external process failed – Error code 2*.

## Account maintenance info

- The table contains technical information about account maintenance. The text box\* is reserved for records of an Intruder alarm system account and the service organization.

## Account map

- Contains three shortcuts to graphics files (format \*.BMP) that represent account maps.
- In common viewing mode it is possible to view a map with detector locations. This mode is invoked by clicking the **View** button.
- The **Edit** button opens edit mode, where an operator is allowed to insert detectors into the map using the items library. The selection of a detector or an object, and inserting it in to a map is performed by left mouse button clicking. If the right mouse button is pressed, it opens the three item map menu:
  - Add item - inserts the selected object in to the map.
  - Delete item - deletes an object on the map.
  - Edit item – allows the operator to enter a short description of the item (up to 8 characters). To edit an account map a more advanced operator can edit a map using graphics software and only insert a shortcut to this externally created account map.
- When a map file is open in edit mode or view mode, the operator can print this map by clicking the appropriate button on the toolbar. If the map has been edited in edit mode, the changes will be saved for printing after closing edit mode.
- The changes that are done in Comguard (the addition of schematic symbols) have no effect on the original map.

## Account status

- Displays the current account status (Disarmed, Armed, No data and Unknown).



Fig.11. The window **Account**, **Account status** sheet

The time is displayed for the statuses **Disarmed**, **Armed** and **No data**. The time corresponds to the moment of the message arriving in the system. It applies to both **Disarmed** and **Armed** status. The time in the case of **No data** status represents the moment of the last message arriving from the account.

In the case of battery failure or mains power supply failure the battery and mains power indicators will indicate red. To deactivate this state, switch the account to edit mode and click the **Override** button. The indicators return to the normal state after event confirmation. The normal state is indicated by the grey colour of these indicators.

The **Arm** and **Disarm** buttons are operated in the same way as the **Override** buttons.

Until a new message arrives, the system is not aware of the status of accounts when the program starts, so the **Unknown** indicator is lit. This state of the indicator continues while no status message has arrived.

Every account can have its own setting of the supervision time– checking the time of receipt of the last event. After the set time interval without any event having been received, ComGuard releases the notification “Lost communication with installation”. This event is written to the “Message” window.

The supervision time for all the accounts is set in the **Setting** window (see chapter 6.5.5.). To set the supervision time for a selected account, release the “**Use global setting**” button, then the supervision time set here is valid. For a particular account you can also suppress the 24 hour preset interval by pressing the “**Suppress 24 hours extension**” button.

## Messages

- To display account events click the **Refresh** button.
- The displayed messages are filtered by account ID, i.e. it might display messages belonging to a non-existent account having the same ID as a present account.

## Arming time table

### *Can be disarmed*

- Expected working hours at the premises of the account - serves as information only.

### *Should be armed*

- Assumed arming time.
- In the case of an infringement of the arming time, events are notified to the operator by a special dialog box and in addition, events are recorded in the **Messages** window.

If there is a requirement for exiting the building later, the operator can set up a delay for the activation of the special dialog box. To set it up find the **Tools** menu, **Setting** item, then **Arming time table tolerance**. It has a resolution of minutes and the set up interval is added to the start of the arming time. This setting of the *Arming time* is observed by all accounts!

The 'Arming time table' window is divided into two sections: 'Can be disarmed' and 'Should be armed'. Each section contains a table with columns for 'from' and 'till' times for each day of the week. The 'Can be disarmed' section shows times from 06:00 to 18:00 for Monday-Friday, 06:00 to 12:00 for Saturday, and 00:00 to 00:00 for Sunday. The 'Should be armed' section shows times from 05:00 to 19:00 for Monday-Friday, 05:00 to 13:00 for Saturday, and 23:59 to 00:01 for Sunday.

Fig.12. The **Accounts** window, **Arming time table** sheet

## Contact address

- Contact details (address, phone number) of the person responsible for a monitored account.
- In the case of account printing, only the first address will be printed alphabetically. To sort the person list in order of importance, write a number as the first character of their names.

*Rem.: text box\* - rules and tools for editing this field are the same as in the "Windows text fields". E.g.: to reach the next line press the CTRL-Enter keys.*

The 'Contact addresses' window features a list of contacts on the left and a form for editing details on the right. The list includes 'Paul Frighten' and 'Peter Deford'. The form fields are: Name (Paul Frighten), Position (Fireman), Street (Rolling street 56), City (Glasgow), Zip code, Phone 1 (0258/147 369), Phone 2, Phone 3, Fax, and Mobile. Buttons for 'New', 'Edit', 'Delete', 'Cancel', and 'OK' are also present.

Fig.13. The **Accounts** window, **Contact address** sheet

### 6.1.4 Account status

This window displays the status of all accounts (Disarmed, Armed, No data, Unknown, Battery fault and Power fault). The current status is shown by a cross (X).

To sort accounts, click the heading in the wanted column, no matter which one is chosen as a sorting key. The order and a sort key are assigned by a triangle. An up-turned triangle peak assigns ascending order

and a down-turned triangle peak assigns descending order. This window cannot be closed. It can be only minimized to an icon.

Until a new message arrives, the system is not aware of the status of accounts when the program starts, so all accounts have an **Unknown** status. This state of the indicator continues while no status message has arrived.

Account code	Disarmed	Armed	No data	Unknown	Battery fault	Power fault
4/2				X		
ADexpres				X		
CID JA-60				X		
Domeček 60	X					
Domeček 65	X					
SurGard JA-6x				X		

Fig.14. Account status window

## 6.2 Other windows

### 6.2.1 Unrecognised messages

This window displays messages, that have not been identified or messages without a corresponding translation. This window is also very important for the proper setting of communication of the ARC and accounts.

It is divided in to four columns:

- **Received at** - the time of message reception.
- **Account code** - account ID, if the number has been identified.
- **Code** - the received messages in hexadecimal code.
- **Source** – the source of the message.

If Z10 is displayed in the **Source** column, then the corresponding ARC with implicit hexadecimal address 0A sent the message.

Received at	Account code	Code	Source
15:23 27.02.2002	ABCD	Data packet:E2 4F QA 0B 0C 0D 01 08 01 01 03 07 QA 01 07 QA 01 4D	Z2
15:23 27.02.2002	ABCD	Data packet:E2 4F QA 0B 0C 0D 01 08 03 01 03 07 QA 01 07 QA 01 13	Z2
13:31 01.03.2002	ABCD	Data packet:E2 4F QA 0B 0C 0D 01 08 01 01 03 07 QA 01 07 QA 01 4D	Z2
13:31 01.03.2002	ABCD	Data packet:E2 4F QA 0B 0C 0D 01 08 03 01 03 07 QA 01 07 QA 01 13	Z2

Fig.15. The Unrecognised messages window

The messages in the window cannot be sorted and the context menu is not available. The **Unrecognised messages** window is made for viewing only and the operator can close the window.

---

## 7 Software setting – the Tools menu

The setting of functions and features are accessible via the **Tools** menu. Most items in this menu are only available to an operator with Supervisor rights.

- **Hex/Dec conversion table** - displays a table for number conversion between the decimal system and the hexadecimal system.
- **Sound OFF** - enables an operator with proper rights to suppress the generating of message sound effects.
- **Settings** – the software administration
  - **General parameters** - enables an operator to perform some program setting up.
  - **Format**- enables format creation, editing, deleting or the import/export of communication formats.
  - **Standard notes** - enables predefined note creation, editing, and deleting.
- **Back up database as ...**- creates actual backup of the main database.

### 7.1 Hex/Dec conversion table

The table is an useful tool in the course of codes conversion for the format communication checking. The window is always brought to front.

(hex-hexadecimal system, dec-decimal system).

	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
0x	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1x	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2x	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3x	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4x	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5x	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6x	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7x	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8x	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9x	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Ax	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Bx	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Cx	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Dx	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Ex	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Fx	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

Fig.17. The **Hex/Dec converting table** window

#### Example of a conversion hexadecimal number **B8 (HEX)** to decimal number **(DEC)**:

To make a regular representation of the hexadecimal number find the according line to the first figure (**B**) in the table. Afterwards find the according column to the second letter (**8**) in the line. The converted decimal number is the intersection of the found line and column. So the result is 184.

#### Example of a conversion decimal number **203 (DEC)** to hexadecimal number **(HEX)**:

Find the decimal number 203 in the table. The first figure of the searched hexadecimal number is in the same line as the decimal number 203 lies, i.e. **C**. The second figure is in the same column, i.e. **B**. The searched hexadecimal number is **CB**.

## 7.2 General parameters

The **Setting** item is for changing the features and functions of the ComGuard software. The displayed window has five sheets:

### General

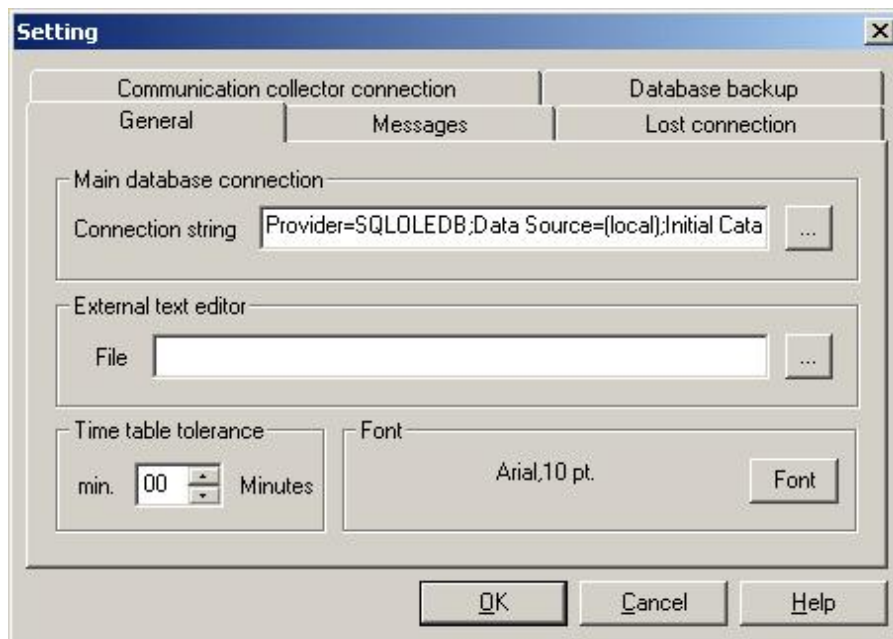


Fig. 23

- **Connection string** - the setting for the database connection, performing changes is not recommended.
- **External text editor** - the operator can choose an editor for viewing **Contracts**. Contract viewing is possible on the **General** sheet of the **Account** window or in the **Operator list** window.
- **Time table tolerance** - the set time represents a delay for generating special messages during the arming time. The special messages are generated in the case of a disarmed installation in the arming time
- **Font** – the setting of the text font is valid only for the **Messages** and **Important Messages**.

### Messages

- **Message display and filter** - the parameter determines how long history of received message is displayed in the **message** window. The numeric data in the gap is the number of days.
- **Display alarm window** button – If the button is clicked, then every alarm message opens a special alarm window. There are two kinds of alarm window - the position of **Suppress alarm message confirmation** determines which kind of alarm window will be shown.
- **Suppress Alarm message window** button - If the button is not clicked, an operator has to confirm message reception by pressing an extra button in the alarm window. If the button is clicked, more received messages appear in the **Message** window without operator confirmation in the case of the alarm window.
- **Suppress display of periodic test** button - When the button is pressed down, the periodic test events are not displayed in the **Messages** window. The checking of the last received message from particular accounts is on in any case.

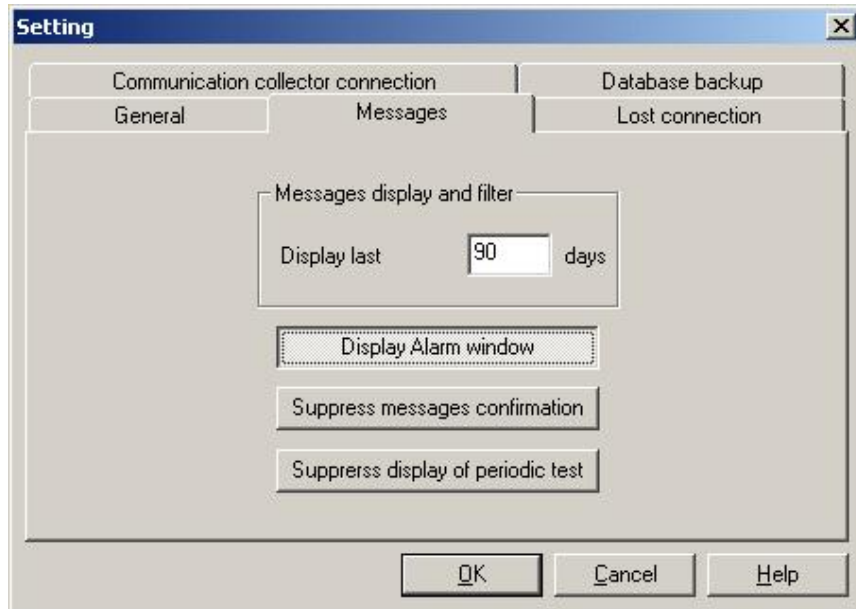


Fig. 24

### Lost connection

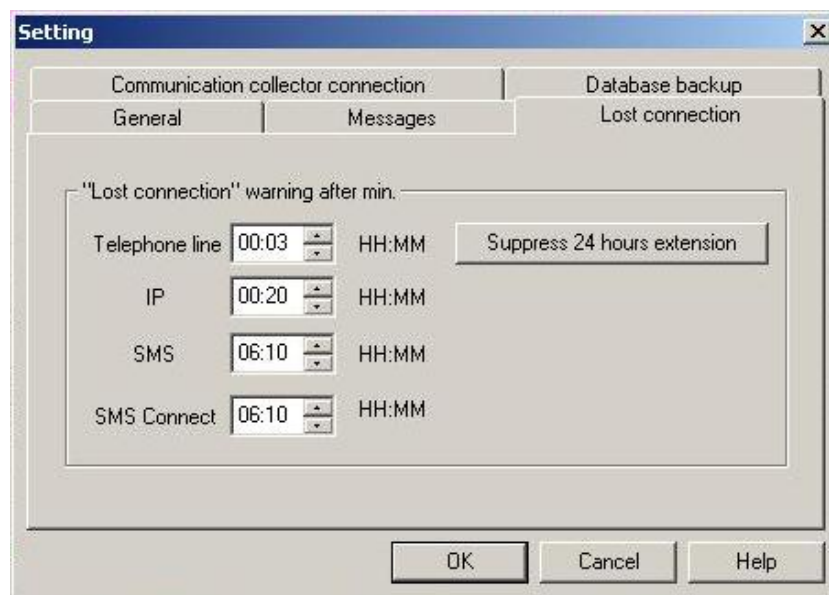


Fig. 25

1) The "Suppress 24 hours extension" button is off:

- The fix time interval for account supervision is 24 hrs. A user can prolong this interval by setting of this parameter up to 24 hrs + set time. The maximum is 47 hrs and 59 minutes. E.g. if you set 02:30 the warning message is released after 26 hrs and 30 minutes when the last event from the account was received.

2) The "Suppress 24 hours extension" button is on:

- The warning message will be released just after the set time interval, i.e. maximally after 23 hrs 59 minutes.
- **Telephone line** - the setting of supervision interval for accounts communicating via telephone line formats.
- **IP** - the setting of supervision interval for IP channel communication

- **SMS** - the setting of supervision interval for SMS channel communication - backup path
- **SMS Connect** - the setting of supervision interval for SMS Connect channel communication - backup path when installed
- With regard to the inner structure of the ComGuard software the warning message may be delayed of about three minutes comparing with the set interval. The 3minute interval is the time of regular checking of account status .
- When the time edit box is set to 00:00, the function of the last message checking is off for the chosen channel.
  - The supervision of the last message time interval can be set off for a particular account - see "Accounts" window" , sheet "Account status", press the **Suppress** button.

### Communication collector connection

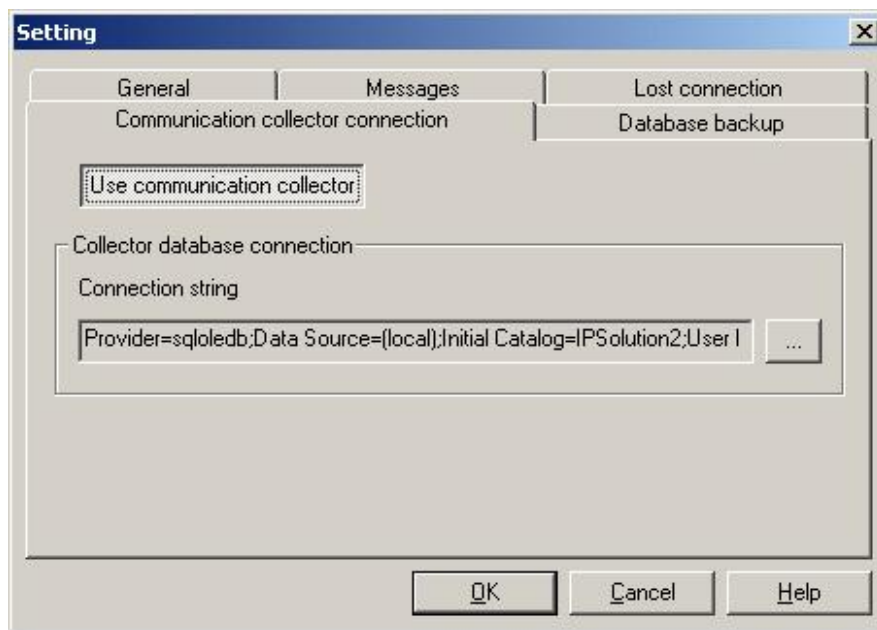


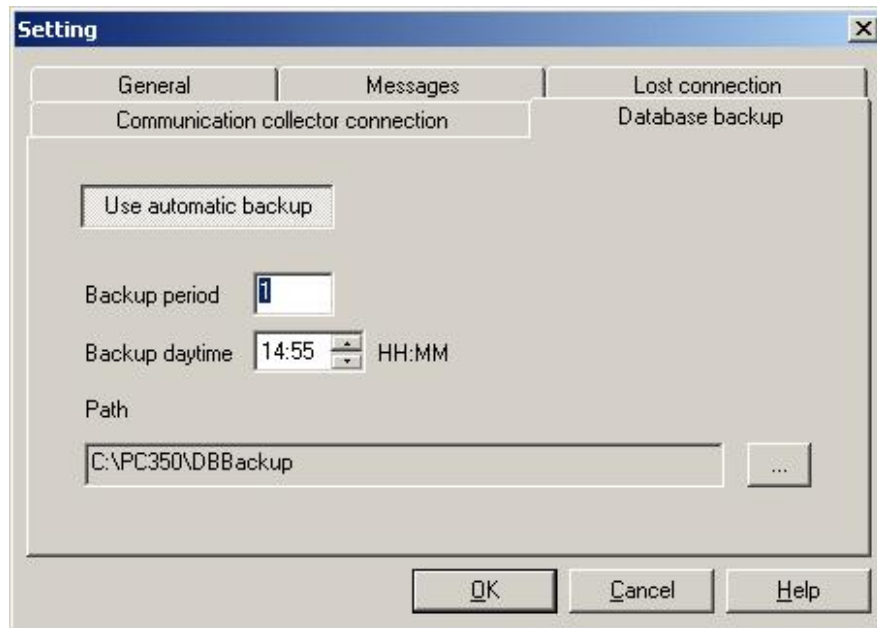
Fig. 26

- The setting for the database connection where rough data event are stored. The data are stored just after receiving into the collector database without any translation, then they are processed by ComGuard.
- **Use communication collector** button- turns on the reading of the collector database by the ComGuard.
- **Connection string** - the setting for collector database connection, any change is not recommended..

### Database backup

- **Use automatic backup** button - button activates the automatic saving of the ComGuardMain database, which keeps all the data for Con`mGuard software (Received messages, Account , Formats setting, etc).
- **Backup period** field - the database back up period in days.
- **Backup daytime** field - the setting of the daytime for database back up.

- **Path** field - the setting of the path, where the backed up database should be stored. **Do not set the path, where any folder has space in its name, e.g. "folder 1"**! The backed up file has the name "ComGuardMain\_080905.bak", where the number means data of back up - DDMMYY.



### 7.3 Formats

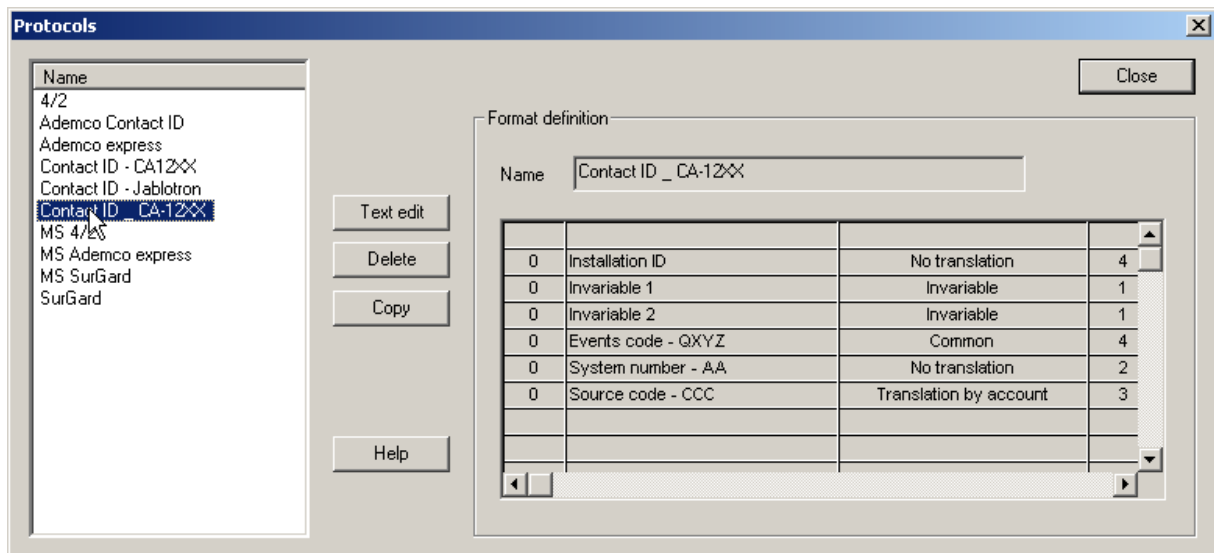


Fig.17 The **Formats** window

After software installation, several formats are preset: Ademco Contact ID, Ademco Express, Sur-Gard and the 4/2 format. These formats can be edited and copied. An operator may change the text of particular translation tables and other features of the report codes via this window.

To edit text and the features of report codes in the translation tables, choose the format you want to edit and click the **Edit text** button. The window for editing is then displayed.

The edit window differs in its appearance according to the chosen format:

## 4/2 Format

The left side of the window shows the list of report codes and their text translations. Theoretically, the 4/2 format has 256 report codes (FF in hexadecimal), we must omit all the report codes which have "0" (zero) in it. The "0" is replaced by an "A" in a report code.

The translation table of 4/2 format can be used for various types of formats, e.g. Ademco Slow, Ademco Fast, Franklin, Radionics, SESCOA.

The important thing for appropriate translation is the structure of a format, no matter what the way of communication is (tone or DTMF format).

The meaning of the functional elements:

- **Message text** – the translation text of the chosen report code,
- **Message type** – the setting of the message type (see the chap. 6.1),
- **Sound** – each report code may be followed by a chosen sound. (only sound file format \*.wav)

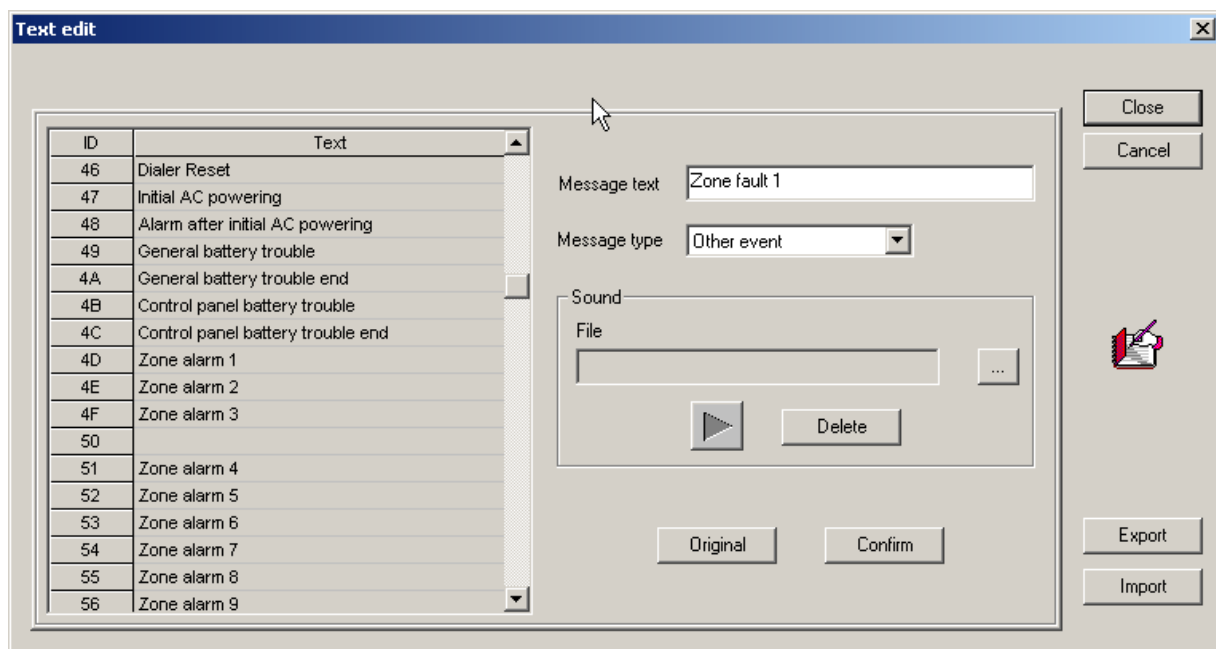


Fig.18 The **Text edit** window

- **Confirm** – saves the performed changes,
- **Original** – does not save the performed changes and renews the original features of the report code,
- **Close** – saves all the confirmed changes and closes the text edit window,
- **Cancel** – closes the text edit window without saving any changes,
- **Export/Import** – exports/imports translation tables from/to a \*.csv or \*.cgp file. The \*.csv file can be opened by a simple text editor outside ComGuard to make any editing changes. The ";" semicolon sign is not recommended to be used in the text, it is used as a separator of particular information in an exported file.

### Ademco Contact ID format:

The meaning of the **Contact ID events editor** functional elements:

- **Event code** - the code of the general part of a received message.
- **Event name** – the translation text for the chosen report code.

**Source table** – the setting of the direction for a type of source table – the definition of the source table according to the character of the received message; available sub-tables are Zone, User and Other information. The definition of the sub-tables should be followed in the translation table for event sources (CCC).

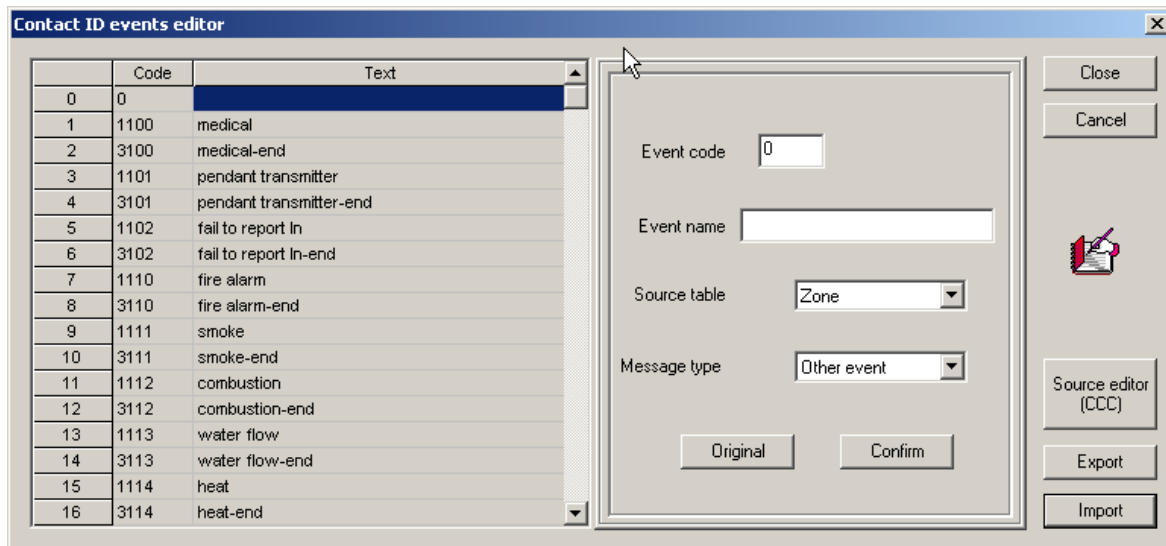


Fig.19 The edit window for Contact ID text editing

- **Source editor (CCC)** – opens a dialog window for event source editing.

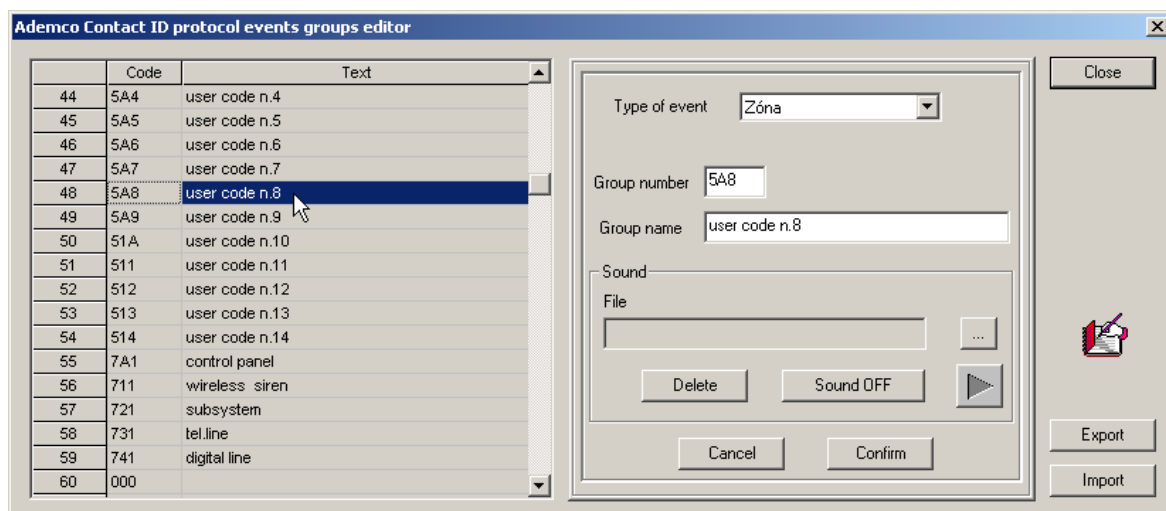



Fig.20 The dialog window for editing of event sources

- **Type of event** – corresponds to the setting in the **Contact ID events editor** window – the character of the event source
- **Group number** - the code of the event source (CCC),
- **Group name** – the translation text of the source,
- **Sound** – the setting is the same as the 4/2 format sound setting
- **Cancel, Confirm, Export/Import** – the same function as the previous edit windows.

### SurGard format

Control elements and their functions are similar to the edit windows of the previous formats. The SurGard format has a structure of 4/1/2, i.e. 4 digits for Account ID, 1 digit for the general part of the message (arming, disarming, etc.) and 2 last digits for the description of the event source. The **Group** menu is for shifting among the general part of message. The “three dots” button  opens a translation table for text editing the general part of message.

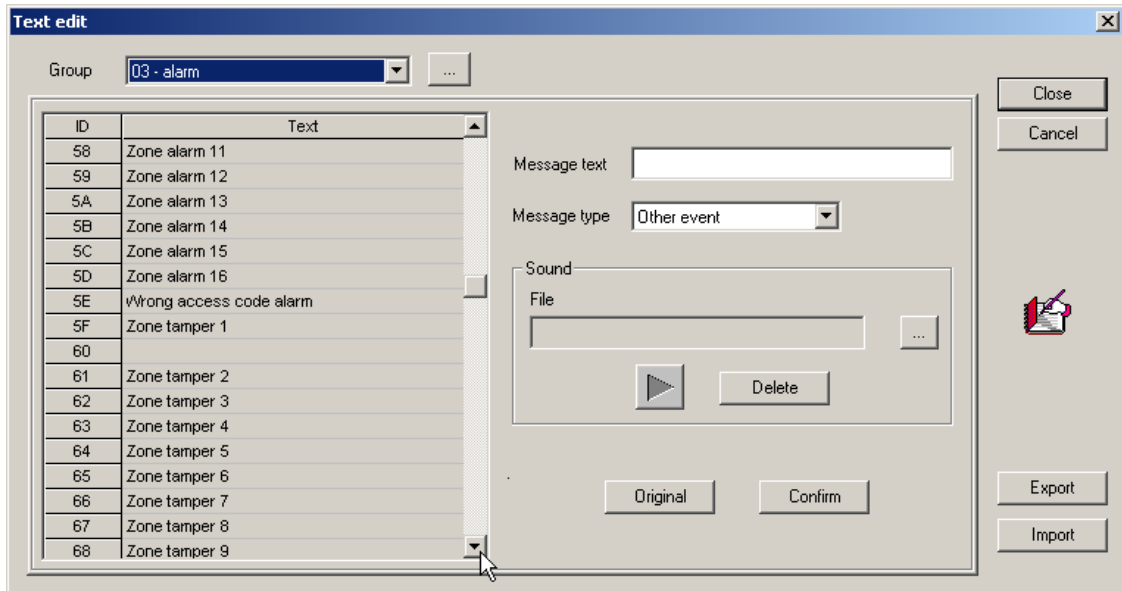


Fig.21 The text edit window for the SurGuard format

## 7.4 Standard notes

- Invokes a window for creating, editing, deleting particular items.
- Predefined notes are added to messages by clicking on the **Add notes** item in the context menu. It is also possible on the **Messages** sheet of the **Installation** window by double clicking on a message.
- The notes from this window are displayed in the **Standard notes** column of the **Messages** window and **Filtered messages** window.

### The window contains three buttons:

- **Add** - adds the text in the edit field to the list below.
- **Delete** - deletes a marked item from the list.
- **Save** - replaces the text of the current item with the text in the edit field.

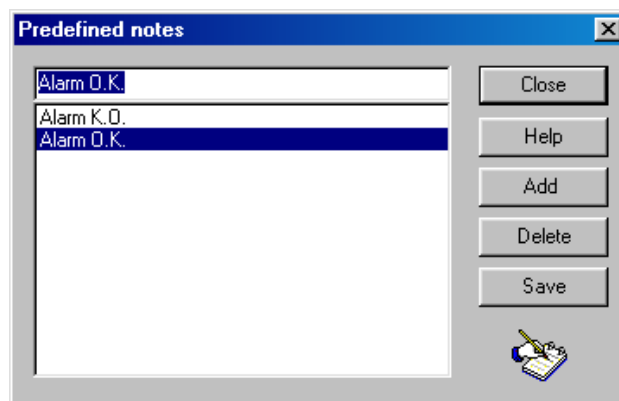


Fig.22 The **Predefined notes** window

## 8 Trouble shooting

Problem	Causes and solutions
The program terminates after operator initiation with the error report: „ <i>abnormal program termination</i> “	The program has already been started and is running in the background. Check programs running by pushing <i>Ctrl+Alt+Del</i> (Win 95 and 98) or open <i>the task manager</i> (Win NT a 2000). Then close the copy of Comguard running.
Incoming message is translated as „ <i>Telephone line error or wrong format</i> “	<ul style="list-style-type: none"><li>• the message contains unknown data</li><li>• the account with the appropriate ID has a different format to that which the message contains</li><li>• the account with this ID is being ignored</li></ul>
The special alarm window is not followed by a sound	<ul style="list-style-type: none"><li>• the volume of the <i>wave</i> output is turned down</li><li>• the sound “<i>Default beep</i>” is not set in the Windows system. To set it, open the <i>Control panel</i>, then <i>Sounds and multimedia</i>.</li></ul>

## 9 Information

- **For assistance please contact us:**

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