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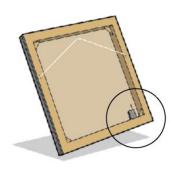
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Operating manual for

Piccolo®

Protection of objects and persons

System description / installation guide / programming guide





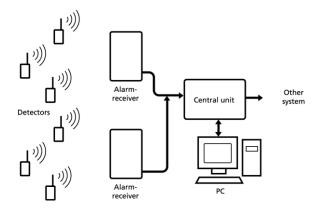
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1: Piccolo® - wireless protection

Piccolo® is a flexible alarm system ideal to survey objects and persons. The system is developed to operate wireless object protection in e.g. museums, galleries, hospitals and offices.

How the Piccolo® system works



System description

The entire alarm system is controlled through a central unit. The central unit is connected to a PC, which enables daily monitoring, setup and maintainance of the system by means of the included PC-software on CD-ROM delivered with Piccolo® system.

Piccolo® handles detectors (also called transmitters) of various types. If the object is touched or removed, or if the call button on a personal alarm is activated, the detector will transmit a wireless signal to an alarm receiver.

Detectors

The detector is wireless and easy to install. The detector is battery driven. The battery has a lifetime of up to 5 years.



A discrete placement behind the frame of a painting or in the corner of e.g. a showcase makes the detector invisible to the spectator. The wireless attribute and small dimension of the detector offer big options as regards its placement.

A personal alarm is a discrete transmitter which can be carried by the staff or placed under a desk.

Surveillance tasks can be performed effectively in places where it normally would be impossible or at least not without obstacles. Once the alarm receiver is mounted the detector can be moved freely to a convenient spot.

Alarm receivers

Several alarm receivers can be coupled together in a network, for example one receiver in each room (see "Assembling the alarm receiver", chap. 2). The network is monitored from a PC via a central unit.

Central unit & PC

The PC monitors, through the central unit, all active alarm receivers within the network. The central unit "picks up" alarm messages from each alarm receiver and forwards them to the intended recipients.

Forwarding alarms (interfaces)

Piccolo® can forward alarm messages to mobile phones, pagers, PC or a security service. The alarm will be displayed within a few seconds on the monitoring screen of the Piccolo® PC-program (see "User Interface", chap. 4) and e.g. as SMS message on mobile phones.

Possibilities of use

In case of an alarm Piccolo® can activate various outputs, for example:

- SMS messages to an unlimited number of mobile phones, PC or security service.
- Output to other alarm systems: Pagers, video cameras/CCTV).
- Output to sounder (e.g. a siren) or signal lamp.

Monitoring, set up, log

The system is administrated by means of the Piccolo® PC-program that provides the following opportunities:

- Supervision of alarms and maintainance of system parameters.
- Coding/setting up of indexes and functions.
- See the alarm- and user history items in log files.

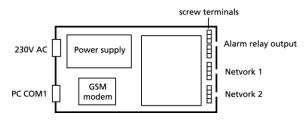
In chap. 2 follows a technical guidance to install and implement the Piccolo® system. Some specifying instructions are appended at annex.

2: Installation, Piccolo®

Do as follows:

Piccolo® is built around a central unit, which is connected to a PC.

The design of the central unit



Central unit, inside

- 2 plugs to each network. If only one plug is applied, line termination has to be done in the central unit (see exhibit 2, "Connect network & line termination").
- 1 **Alarm relay output** plug to external sounders, video cameras or an existing alarm system.
- 1 **Reset** output to PC.
- Output plug to PC COM1.
- 230V AC power supply.
- Place for built in GSM modem.
- Place for I/O Interface.

Connect the central unit

The central unit is connected partly to a PC and 230V AC, partly to the network:

- 1. Loosen the 4 screws and lift the front cover off the central unit.
- Connect all inputs and outputs to the unit. Use at least 24AWG twisted leads - or stronger if possible.

Notice: A 4-pol screw terminal is used to the network. If cables with conductors of different thickness are used, the strongest conductors are to be connected to ground and 24V DC, i.e. pins 1 and 4.

- 3. Screw the front cover back on the central unit.
- 4. Connect the central unit to COM1 or the USB plug on your PC. Use serial cable (RS 232) or RS 232/USB converter.
- 5. Connect the central unit to 230V AC and turn it on.

Install GSM modem

Piccolo® can be equipped with a GSM modem. In case of alarm or power failure the system can thereby send a SMS message to e.g. mobile phones:

- 6. Open the central unit by lifting off the front cover. Nb. The unit must be turned off!
- 7. Mount the GSM modem in the central unit. The modem has to be screwed in place and the antenna assembled at angle.

Install SIM card



Piccolo® must be fitted with its own SIM card in order to send alarm messages via the GSM net. All types of SIM cards can be used.

Prepare the SIM card in a GSM mobile phone:

- 8. Insert the SIM card in the mobile phone. The mobile phone must be turned off.
- 9. Check that the SIM card's PIN code is set to 1234 (default for most telephone companies). If not, set the PIN code to 1234.

Insert the SIM card into the GSM modem:

- 10. Take the SIM card out of the mobile phone.
- 11. Press the black button beside Eject to the left of the GSM unit. A drawer will open.
- 12. Place the SIM card with the little notch pointing to the left and press the drawer in.
- 13. Connect the central unit and check that the GSM unit has contact to the GSM net via the Piccolo® PC-program. (see "GSM signal strength", section 24).

Install I/O Interface

Piccolo® can be supplemented with an I/O Interface – a module with 8 relay output and 1 relay input. The module can be mounted in the central unit or e.g. in separate boxes on the network.

Insert the I/O Interface in the central unit:

- 14. Open the central unit (see point 1). Notice: The unit must be turned off!
- 15. Place the module with the print side upwards and on top of the 5 "sticks" in the central unit.

List of inputs and outputs

Outputs:

- 1 in the central unit (marked **Alarm**).
- 1 in each receiver unit (marked **CNCNO**).
- 8 in the I/O Interface (number **1-8**).

Inputs:

• 1 in the I/O Interface (number 21).

Outputs are potential free relay contacts, which opens or closes by instructions to Piccolo®. At set up all relay outputs are open. 8 screw terminals give access to the relays. The instructions to which relays must be activated by alarm, are set up in the Piccolo® PC-program (see chap. 19).

Input is protected by optocouplers. By shortcutting the screw terminals the input is activated. If the shortcutting is removed, the input is deactivated. In both cases an alarm will be send from the central unit.

Examples of outputs and inputs

- Outputs, I/O Interface: interface to other alarm system or division into locations (e.g. one location per output) (see chap. 19).
- Input, I/O Interface: a press button to turn off an alarm, i.e. as "Turn off alarm"-input (see chap. 19). Place the button on the 2 terminals.
- Output, central unit: activate a siren, a signal lamp (see chap. 18).
- Output, alarm receiver: activate a siren, a signal lamp (see chap. 18).

Assembling the alarm receiver

Dependent upon the size of the room and the way in which it is arranged one or more alarm receivers can be placed in each room.

Signals from a transmitter in one room can be registered by an alarm receiver located in another room. This probability increases if 2 adjoining rooms are separated by a thin wall, and the alarm receiver and the transmitter are installed on each side of the wall. This "double coverage" has no significance in the system – Piccolo® discard additional alarms.

The risk of reduced DC-voltage in extensive networks condition the placement of each alarm receiver. Many alarm receivers in the external area of the network may cause the voltage being too low. Therefore place the alarm receiver equally between the detectors, that are the farthest away from it:

- The alarm receiver is screwed to the wall.
 It should be assembled vertical, height (min. 2 m) and with the connecting cables upwards.
 The higher it is placed, the longer covering distance to the detector is obtained.
- Don't install the alarm receiver behind metal or reinforced concrete, massive stone or granite, as this substantially reduces the covering distance.
- Experience shows that a distance of only 30 cm between the alarm receiver and metal/concrete substantially increases the covering distance.

The voltage to each alarm receiver must be min. 7V DC. If the voltage drops below this level a power alarm will be sent to the PC.

For guidance to install alarm receivers, see exhibit 3 "Connect network & Line termination".

Disconnection/connection of the system

The system is disconnected from the Piccolo® PC-program. (see chap. 22).

Upgrading the software-licence

The basic version of Piccolo® can operate with a maximum of 10 detectors. The software licence has to



be upgraded if more detectors are to be applied.

Upgrades are conducted from the Piccolo® PC-program by typing in a product key.

The product key is delivered with the software upgrades on

CD-ROM (see exhibit 1, "Upgrading, Piccolo® PC-program").

Power controller

Piccolo® can be connected to a 230 VAC power controller (UPS). Thereby the system will function a number of minutes after a power failure.

Technical specifications

Range

Outside, between detector and alarm receiver:

Max. 1000 m.

Inside, between detector

Typically 50-100 m.

and alarm receiver

Distance from the central unit Max. 1.500 m. (if 24AWG

to the alarm receiver:

leads is used)

Distance between 2 alarm receivers:

Max. 3.000 m. if both networks are applied.

Number

Number of detectors per alarm receiver:

Max. 200 detectors.*

Number of alarm receivers and/or I/O Interfaces per system:

Max. 128 units.**

Minimum requirements, PC

- Windows 95, 32 Mbyte RAM
- Monitor, 800x600 screen
- COM-port or USB-port

* Notice: Only 10 detectors in the Piccolo® basic version.

Set up/programming of the alarm system is conducted from the Piccolo® PC-program. In the following can be found an operating manual for this purpose.

^{**} Notice: A maximum of 128 units in total can be coupled per network. Notice that the network can only support approx. 32 units. If more units are used, these must be supplied externally.

3: Installation, Piccolo® PC-program

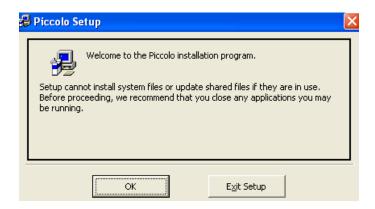
The Piccolo® PC-program gives access to monitoring, setting up and logging of the alarm system.

Notice:

• A help menu/guidance can be entered in the Piccolo® PC-program by pressing **F1**.

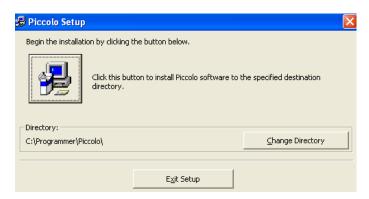
Installation:

- 1. Insert CD-ROM in PC.
- 2. Click OK.



Windows suggests to install the Piccolo® PC-program in C:\Programmes\Piccolo\ To change this location, press **Change Directory** and select the required folder.

3. Click the button in the upper left corner in order to start the installation.



The installation runs automatically and takes about 20 sec. When completed, the Piccolo® PC-program is operational.

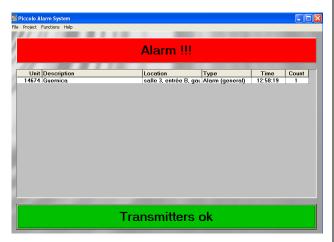
- 4. Start the Piccolo® PC-program on your PC.
- 5. Type in the product key in **File > Product Key**.

4: User Interface



The User Interface of the alarm system is a monitoring screen divided in 3 fields.

The top field **No alarm** is green when there is no alarm.



In case of alarm the field turns red with the text **Alarm !!!** A possible sound is activated and 1 to 5 extra alarm popup windows will be displayed on the screen if the function Alarm popup is activated in the menu Functions > Setup.

The middle field displays a list of registered alarms. The following information is shown:

Unit: The number of the unit.

Description: Which object or person the unit is attached

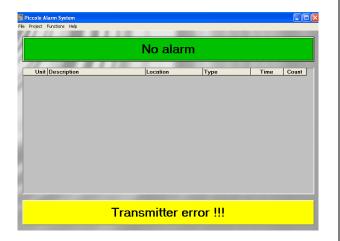
to.

Location: The position of the object or person.

Type: Indicates the type of alarm.

Alarm/Count: Date, time and number of alarms.

The alarms can be removed from the monitoring screen by clicking the field Alarm !!! Any sounders will turn off.



Every 4th minute the system registers "ok-signals" from transmitters (see "Watched", chap. 13).

If no ok-signal has been registered within a predefined number of minutes, the lower field **Transmitters ok** turns yellow **Transmitter error !!!** The number of minutes which passes before the yellow Transmitter error !!! appears by lack of an ok-signal is predefined in a setup menu (see 'Transmitter error (min)' chap. 7).

See list with transmitter error by clicking the yellow field.

5: Access to the system

Access to the system requires a username and a password.



On delivery the system has the following default username and password: **ADMIN** Admin must be entered at the first access to the system:

- 1. Select **File > Login**.
- 2. In Login enter **ADMIN** in both Username and Password.
- 3. Click login.

Notice:

- ADMIN (administrator) signifies system administrator. He has access to *all* indexes and functions. Only the system administrator can set up new users and has access to product keys.
- At every login the system administrator enters the username ADMIN. Thereby Piccolo® can recognize the system administrator from other users of the system. The default password should be replaced by a new self chosen password (see "Set up users", chap. 20).

6: Product Key

The Piccolo® system is delivered with a product key on CD-ROM. The product key has a number which has to be entered only one time before the alarm system can be taken in use:

- 1. Select **File > Product Key**.
- 2. Type the number of the product key (indicated on the CD-ROM cover):



3. Click **OK** to close the menu.

Licence upgrades

Piccolo® can be upgraded with up to 4 product keys, which enables the system to handle more transmitters than the max. 10 pieces in the Piccolo basic version.

Product keys are purchased at your distributor. During upgrading the Piccolo® PC-program has to be reinstalled but this can be done without loosing the original set up (see exhibit 1, "Upgrading, Piccolo® PC-program").

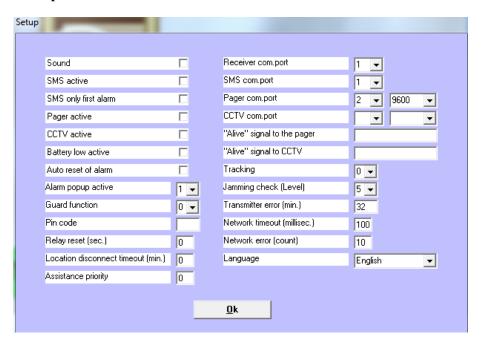
Product keys to Piccolo®

Keys/amount	Max capacity
1 key	Max. 10 transmitters (Piccolo® basis version)
2 keys	Max. 50 transmitters
3 keys	Max 500 transmitters
4 keys	Unlimited amount

7: Setup

The menu Setup is central in the installation of the Piccolo system. Before alarm receivers, any GSM-modem, pagers and/or video camera can be connected to the central unit a **comport** has to be selected for each of these systems:

Select Functions > Setup



- 1. In order to activate the sound signal in the unit and the PC in case of alarm, activate **Sound**.
- 2. In order to connect GSM-modem: Activate $\lceil \sqrt{\rceil}$ SMS active.
- If only the first alarm is to be sent, activate SMS only first alarm. If blank all alarms will be sent.
- 4. In order to connect pager system (see chap.
 16): Activate [√] Pager active.
- 5. In order to connect video camera (see chap. 17):
 Activate [√] CCTV active.
- In order to receive battery low warning before the battery expires:
 Activate [√] Battery low active.
- 7. For automatic turn off alarm after 5 sec.: Activate $\lceil \sqrt{\rceil}$ Auto reset alarm.
- In order to display a photo of the object and the ground floor: Activate Alarm popup active. Select from the menu list the number

- popup windows to be displayed simultaneously (1-5). 0 signifies that no popup window will be displayed.
- 9. In order to reset the alarm on the monitoring screen only when a quard has pressed the alarm button locally, activate [√] Guard function. Define for how long the siren must stop, when the guard presses the alarm button: 0= The guard function is not in use.
 1-8: The siren stops for 1-8 minutes and starts again after the selected amount of minutes.
 9: The siren stops permanently.
- 10. For indicating the pin code of the SIM-card to the SMS-transmitter/modem, type it in **Pin** code.
- 11. **Relay reset (sec.)**: Define the number of seconds that passes before relays in receivers, PC- and I/O interfaces close. 0 (zero) = relays are reset only by user interference.
- 12. **Location disconnect timeout (min):** Define the number that passes from disconnection of

- locations till they will automatically reconnect. 0 (zero) = no automatic connection.
- 13. Assistance Priority: The priority specified in the transmitter file is associated with attack. Enter the priority (from -9 to 9) for the alarm type "Assistance" in relation to "Attack".
 0 indicates that assistance and assault have the same priority.
 -5 defines that the priority for assistance is 5 steps lower than attack.
 If -9 is indicated, Assistance in the popup window is shown with yellow colour.
- 14. Indicate a number of which **Receiver comport** to be used for PC-interface [**note 1**].
- 15. Indicate a pin code to SMS transmitter unit. Indicate with a number 1-4 **SMS comport [1]**.
- 16. Indicate with a number 1-4 **Pager comport** Select baud-speed from menu list.
- 17. Indicate with a number 1-4 **CCTV comport** Select baud-speed from menu list.
- 18. 'Alive' signal to the pager: If a text is entered, the alarm system sends the text to the pager comport every 30 seconds.
- 19. 'Alive' signal to CCTV: If a text is entered, the alarm system sends the text to the CCTV comport every 30 seconds.
- 20. Define the level of **tracking**: 1 = tracking via alarm receivers. 2 = tracking via position transmitters. 3 = tracking via alarm receivers and position transmitters. 0 = no tracking.

- 21. **Jamming check (Level)**: Define the level of jamming surveillance of all alarm receivers. An alarm will be generated by jamming in a period of: 5: 8 sec., 4: 30 sec., 3: 1 min., 2: 2 min., 1: 4 min., and 0: no alarm.
- 22. **Transmitter error (min):** Define the number of minutes that passes before the yellow bar Transmitter error !!! appears by lack of oksignals from detectors.
- 23. **Network timeout (millisec):** Define the number of milisec. Where the system, by request, waits for reply from the network. Can be adjusted from 50-999 millisec. Default is 100.
- 24. Network error (count): Define the number of minutes from locations are disconnected until they will automatically be connected.
 0=locations will not be connected automatically.
- 25. Language: Select language.
- 26. Click **OK** to close the menu.

The settings in Setup will be explained in the following chapters. An explanation list can be found via the help menu in the Piccolo® PC-program:

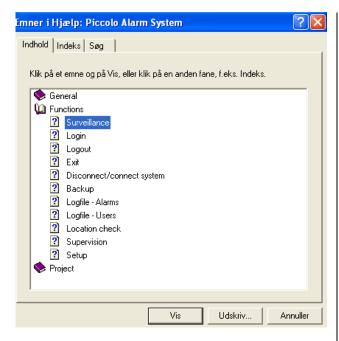
- 1. Press **F1**.
- 2. Search in Index > Setup.

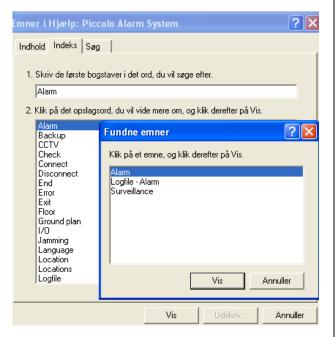
[Note 1] If the GSM modem is built in the central unit, the SMS comport and Receiver comport have to be the same number.

8: Help menu

The Piccolo® PC-program is equipped with a help menu.

1. Select **Help > Contents**





Piccolo® gives 3 search options:

- A subject search from **Content**.
- A headword search from **Index**.
- An advanced search on single words and expressions by means of the function Search.

The illustration shows subject search:

- 1. Click a book icon and **Open**.
- 2. Click on a subject and **Display**.

The required search subject will be displayed in a separate window.

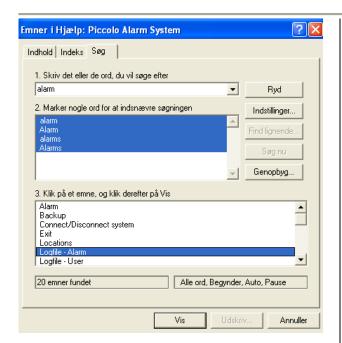
Close the window by clicking the red icon in top of the window.

The illustration shows headword search:

- 1. Type the first letters of the headword beneath [1] or select from the list beneath [2].
- 2. Click the headword in the box **Found issues** and Display.

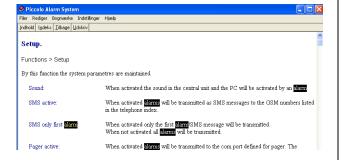
Notice:

The help menu can also be entered by pressing **F1**.



The illustration shows advanced search:

- 1. Type in the search word beneath [1].
- 2. Narrow down the search word in the list beneath [2].
 - Nb. More search words can be selected simultaneously by holding down the Ctrl key as you select with the mouse.
- 3. Click a subject beneath [3] and Display.

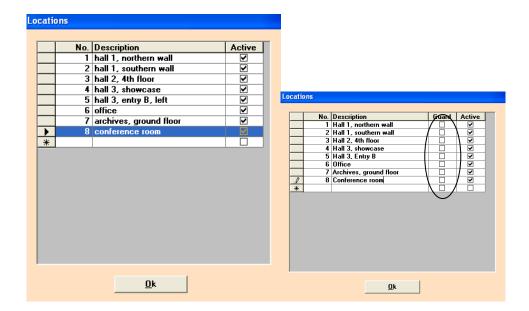


The search word will be displayed in the chosen context.

Close the window by clicking the red icon in top of the window.

9: Set up locations

In the location index is registered which halls, rooms, floors, etc. to be surveyed. Use the tabulator key in order to jump to the next field.



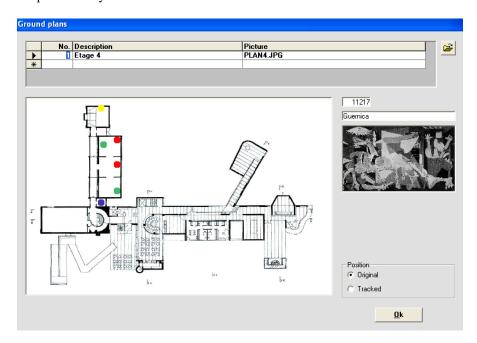
- 1. Select **Project > Locations**.
- 2. Give the location an unequivocal **Number** (1-9999). The number can be used in order to disconnect a location with a remote control.
- 3. Give a **Description** of the location (max. 25 characters).
- 4. Guard will only be displayed if the guard function is activated in the menu Setup. Select the individual location [√] if alarms must be acknowlegded locally, before it will be possible to reset the alarm on the monitoring screen.
- 5. Activate the location $[\sqrt{\ }]$ if it is to be watched by the system. If the location is deactivated alarms from transmitters within this location will not be transmitted.
- 6. Click **OK** to close the menu.

Delete a location:

- 1. Click in the grey field to the left. The line turns blue.
- 2. Press Delete.

10. Set up ground plans

In the index Ground plans can be set up one or more ground plans which graphically display the location of all transmitters/objects, receivers and guards. A ground plan can be e.g. a floor. All positions will be updated every 15 sec.



Add ground plan:

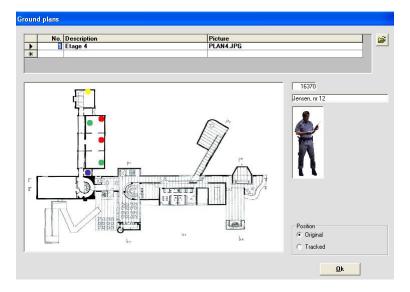
- 1. Select Project > Ground plans.
- 2. Enter the number of the ground floor in No.
- 3. Give a **Description** of the alarm receiver (max. 50 characters) that indicates which part of the building belongs to the ground plan.
- 4. Insert a graphic display of the ground plan: Press the folder icon to download the required file (see exhibit 2).

Notice:

The index Ground plan gives a <u>general view</u> of the placement of *all* transmitters, receivers and guards in case of alarm. The location of transmitters is indicated by **red dots**, the location of receivers is indicated by **blue dots**, the location of guards is indicated by **green dots** the location of positions transmitters is indicated by **yellow dots**. By pointing with the mouse at a dot the description of the transmitter, receiver, position transmitter or guard will be displayed.

Display the location of guards

To see which guards and their position in the specific ground plan the function Guard in the index Transmitters must be activated (see "Set up transmitters", chap. 13). The receiver which gets the strongest signal from a transmitter gives an idea of the position of the nearest guard in case of alarm. By pointing at the green dot you will see the description of the guard, e.g. his call number.



Original and tracked position

The index Ground plans has an extra option 'Position' if the option 'Tracking' in the index Setup is set to more than 0 (see chap. 7).



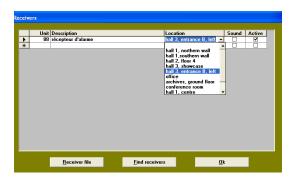
The position 'Original' means that the transmitter or the guard is displayed by its original location in the ground plan. The position 'Tracking' means that the transmitter or the guard is displayed by its latest tracking location.

Notice:

It is only possible to remove the original location of a transmitter, a guard, a receiver or a position transmitter. The tracked position can't bee removed.

11: Set up alarm receivers

The receiver index is set up by typing in the information about the placement of every alarm receiver. Every alarm receiver has its own serial number (indicated on the alarm receiver).



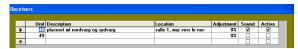
- 1. Select **Project > Receivers**.
- 2. Type the serial number of the alarm receiver in **Unit** or click Find receivers (see point 7).
- 3. Give a **Description** of the alarm receiver (max. 50 characters). For example exactly *where in the room* the alarm receiver is placed. If the field is filled in an electrician can easily locate the alarm receiver in case of reparation.
- 4. Indicate the **Location** of the alarm receiver (select from menu list).
- 5. Mark $[\sqrt{\]}$ **Sound** if internal sounder in the alarm receiver must be activated by an alarm. Often only applied during installation.
- Mark [√] Active. Should only be deactivated in the event of service check, reparation or removal of the alarm receiver.
 Notice: If deactivated alarms from transmitters will not be received.
- 7. Click **Find receivers**. All active alarm receivers on the network will be registered. The function takes about 2 min. Notice: Experience shows that a slow PC may cause problems here.
- 8. Click **OK** to close the menu.

Adjustment of signal strength

If a receiver has ideal receiver conditions it is more likely that this one "takes" the signal than a receiver with less good receiver conditions. Only if the <u>tracking level is set to more than 0</u> it is possible to adjust this relation between receivers by forcing one receiver to be the favourite:

1. Select **Project** > **Receivers**.

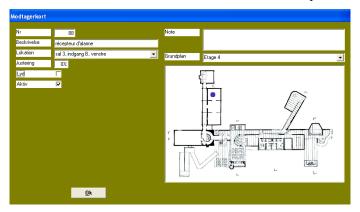
The receiver index will be provided with a new column title Adjustment



2. Enter in Adjustment the required adjustment (reduction or increasement) of the signal on the receiver. 0% doesn't say that there is 'no signal' but only that there has been no adjustment.

Receiver file

Each receiver can be specified with further information and the information can be updated.



- 1. Select **Project > Receivers**.
- 2. Select receiver **No** in the receiver index.
- 3. Press Receiver File.

Enter the following:

- 4. In **Description:** describe the receiver (max. 50 characters).
- 5. In **Location:** indicate the location of the transmitter (select from menu list).
- 6. **Adjustment:** This option is only possible when the option tracking is activated. Adjust the signal strength (in percent), e.g. 12% or 6%).
- Sound: indicate by [√] if the internal sounder in the receiver should activate in case of alarm
- 8. **Active:** indicate by $[\sqrt{\ }]$ if the receiver should be activated in the system.

Information

In the field Information can be written a free text (max. 1000 characters), e.g. a message to the staff saying what to do in case of alarm.

Select Ground plan

In the field Ground plan it is possible to insert an image illustrating where the receiver is installed. The image is taken from the menu Project > Ground plans (see "Set up ground plans", chap. 10).

1. Click the arrow to the right to select ground plan.

Draw the blue dot into Ground plan

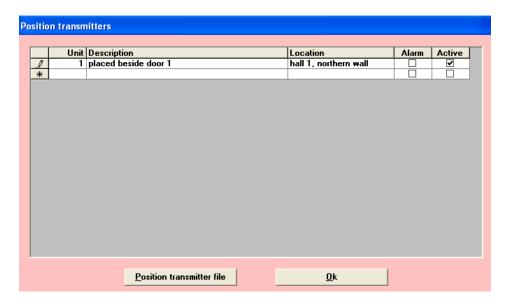
2. By using the mouse draw the dot to the required position on the ground plan. Alarm from the receiver will be displayed in a popup window in case of alarm (blue dot).

Notice:

The dot is placed where the receiver is mounted. It can be removed by drawing it outside the field Ground plan.

12: Set up position transmitters

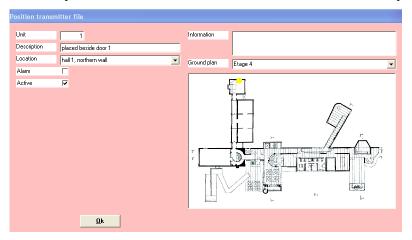
The index 'Position transmitters' is set up by typing in the information about the placement of each position transmitter. The position transmitter gives an accurate location of a transmitter when the transmitter comes nearby the position transmitter.



- 1. Select **Project > Position transmitters**.
- 2. Type the serial number of the position transmitter in **Unit**.
- 3. Give a **Description** of the position transmitter (max. 50 characters). For example exactly *where in the room* the position transmitter is placed.
- 4. Indicate the **Location** of the position transmitter (select from menu list).
- 5. Activate $\lceil \sqrt{\rceil}$ Alarm if an alarm is to be sent when the transmitter passes the position transmitter. If Alarm is not activated by a $\lceil \sqrt{\rceil}$ the location of the transmitter will only be updated (no alarm will be sent).
- Active: indicate by a [√] in order to activate the position transmitter in the system. The option should only be deactivated in the event of service check, reparation or removal of the position transmitter.
 Notice: If deactivated alarms from transmitters will not be registered.
- 10. Click **Ok** to close the menu.

Position transmitter file

Each position transmitter can be specified with further information and the information can be updated.



- 1. Select **Project > Position transmitters**.
- 2. Select **No** in the position transmitter index.
- 3. Press **Position transmitter file**.

Enter the following:

- 4. In **Description:** describe the position transmitter (max. 50 characters), e.g. its placement. Adjustments to the description is automatically updated in the index position transmitters.
- 5. In **Location:** indicate the location of the position transmitter (select from menu list). Change of location is automatically updated in the index position transmitters.
- 6. Activate [√] Alarm if an alarm is to be sent when the transmitter passes the position transmitter. If Alarm is not activated by a [√] the location of the transmitter will only be updated (no alarm will be sent).
- 7. **Active:** indicate by a $\lceil \sqrt{\rceil}$ in order to the receiver should be activated in the system.

Information

In the field Information can be written a free text (max. 1000 characters), e.g. a message to the staff saying what to do in case of alarm.

Select Ground plan

In the field Ground plan it is possible to insert an image illustrating where the position transmitter is installed. The image is taken from the menu Project > Ground plans (see "Set up ground plans", chap. 10).

3. Click the arrow to the right to select ground plan.

Draw the yellow dot into Ground plan

4. By using the mouse draw the dot to the required position on the ground plan. Alarm from the position transmitter will be displayed in a popup window in case of alarm (yellow dot).

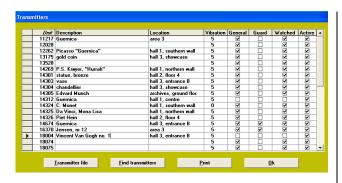
Notice:

The dot is placed where the receiver is mounted. It can be removed by drawing it outside the field Ground plan.

13: Set up transmitters

The transmitter index can be set up by inserting information about the object or the person the transmitter is attached to and/or in which room the object or person is placed. Every transmitter has a unequivocal number (indicated on the transmitter). Another procedure to set up transmitters is to press **Find transmitters** (see next page). Caution !!! By using Find transmitters all active transmitters in the neighbourhood will be registered.

The transmitter index can be sorted in unit- or location order by clicking one of the these column titles.



Set up a new transmitter

- 1. Select **Project > Transmitters**.
- 2. Type the serial number of the transmitter in **Unit**.
- 3. Give a **Description** of the transmitter or person (max. 50 characters) that indicates which object the transmitter is attached to. For instance a name or a title
- 4. Indicate the **Location** of the transmitter (select from menu list).
- 5. **Vibration:** select from the menu list the level of sensitivity of the seismic sensor on a scale from 0-5. 5 = most sensitive / 1 = less sensitive / 0 = not activated.
- 6. Activate [√] General:
 if the magnet in combiSpot is applied: set a [√]
 if only the seismic sensor in combiSpot is applied:
 do not set a [√]
 Set a [√] if any other transmitter is applied.
- 7. **Guard:** If not activated by a [√] the location of the guards will not be displayed. The option 'Guard' is applied for personal alarm. Activate Guard [√] in order to display all guards from the same ground plan as the object/person in case of alarm (See "Display the location of guards", chap. 10 and "Display guards", chap. 14).
- 8. Set a [√] in **Watched** (see "Watched" below) if the transmitter is supposed to be watched by the system.
- 9. Set a $\lceil \sqrt{\rceil}$ in **Active** in order to activate the transmitter in the system.



Notice: If a transmitter is deactivated no alarm messages will be transmitted.

10. Click **OK** to close the menu.

Find transmitters

If it is certain which transmitters are attached to which objects, where they are etc., it is not necessary to type in the serial number:

 Click Find transmitters. All transmitters from which a signal is received will automatically be registered. The function takes about 4 min. Caution !!! All active transmitters in the neighbourhood will be registered.

Print

By clicking Print a list with the transmitters in the system will be printed. It is possible to define which transmitters and in which order they should be printed.

Deactivate a transmitter

A transmitter that is not in use during some time can be set on stand by without the necessity to be set up in the index once again it is attached to another object:

Double-click in Unit. The information in Description, Location and the [√] in Active will be erased. Notice: "Regret".

Notice:

The serial number of the transmitter still figures in the index for later use. It is recommended to take out the battery if the transmitter is removed from the object.

Watched

If Watched is marked $[\sqrt]$ an "ok-signal" from the transmitter will be registered every 4th minute. If no signal has been registered within ½ hour this will be considered as a transmitter error. (see "Transmitter error!!!", chap. 23).

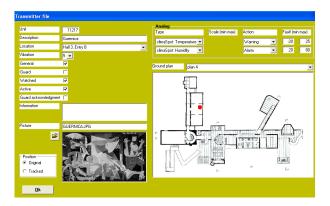
Delete a transmitter

A transmitter that is no longer in use can be deleted from the index.

- 1. Click in the grey field to the left. The line turns blue.
- 2. Press Delete. Notice: No "Regret".

Transmitter file

Each transmitter/object or guard can be specified with further information and the information can be updated.



- 1. Select **Project > Transmitters**.
- 2. Select transmitter No in the transmitter index.
- 3. Press **Transmitter File**.

Enter the following:

- In **Description**: give a description of the transmitter (max. 50 characters) that indicates which object or person the transmitter is attached to. For instance a name or a title.
- 5. Indicate the **Location** of the transmitter (select from menu list).
- 6. In **Vibration:** Indicate (select from menu list) the level of the seismic sensor on a scale from

5 = most sensitive / 1 = less sensitive / 0 = notactivated.

7. Activate $\lceil \sqrt{\rceil}$ General:

if the magnet in combiSpot is applied: set a $\lceil \sqrt{\rceil}$ if only the seismic sensor in combiSpot is applied: do not set a $\lceil \sqrt{\rceil}$

Set a $[\sqrt{\ }]$ if any other transmitter is applied.

- 8. **Guard:** If not activated by a $\lceil \sqrt{\rceil}$ the location of the guards will not be displayed. The option 'Guard' is applied for personal alarm. Activate Guard $\lceil \sqrt{\rceil}$ in order to display all guards from the same ground plan as the object/person in case of alarm (See "Display the location of guards", chap. 10 and "Display guards", chap. 14).
- 9. Set a $[\Box]$, if necessary, in Watched, if the transmitter is to be watched by the system (see "Watched" above).

- 10. Set a $\lceil \sqrt{\rceil}$ in **Active** in order to activate the transmitter in the system. Notice: If a transmitter is deactivated no alarm messages will be transmitted.
- 11. Choose **Priority** of alarm from the transmitter. Scale 0-9, where 0 is the lowest priority, 5 is default and 9 is highest. There is also a difference in the colour of the popup screen where the highest priority is a slightly darker red than the lower. In the list of alarms, the highest priority will occur at the top.
- 12. Set a $\lceil \sqrt{\rceil}$ in **Guard acknowledgement** if the transmitter must be used for alarm acknowledgement.

Insert an image

In the field Picture it is possible to insert an image of the object or person:

1. Press the folder icon next to the field Picture (see exhibit 2).

Tracking

In some situations it can be necessary to track an object/transmitter, a guard or a personal alarm, e.g.

- In order to retrieve an object that has been removed to a new unknown location.
- In order to trace which way the object has been brought through the museum.
- In order to trace an alarm from a press button.

Original and tracked position

The index Transmitters has an extra option 'Position' if the option 'Tracked' in the index Setup is set to more than 0 (see chap. 7).

The position 'Original' means that the transmitter or the guard is displayed by its original location in the ground plan. The position 'Tracking' means that the transmitter or the guard is displayed by its latest tracking location.

The field 'Position' is also displayed in case of alarm. If the object or the guard is placed in the ground plan (red dot = transmitter / green dot = guard) the position 'Original' will be displayed in case of alarm (default setting). If the object or the guard is not placed in the ground plan the position 'Tracked' will be displayed.

Notice: it is only possible to remove only the original position of a transmitter or a guard. The tracked position can't be removed.

'Location', 'Ground plan' and the placement of objects/guards follow the selected position.

Note

In the note field it is possible to enter a note (max. 1000 characters.

Select Ground plan

In the field Ground plan it is possible to insert an image illustrating where then transmitter is located. The image is taken from the menu Projects > Ground plans.

1. Click the arrow to the left to select ground plan.

Analog

In the field 'Analog' it is possible to define values for 2 analog inputs. The first input is for temperature probes. The other input is for other measuring equipment, e.g. air humidity probes.

Example: Measuring of temperature

- 1. In the field 'Type': Select TEMP.
- 2. In the field 'Action':
 Select 'Only log' if the value is to be logged
 and no alarm or warning is to be sent. The log
 is updated every minute and from both analog
 inputs.

Select 'Warning' if the yellow field "Transmitter error!!!" is to be displayed on the screen in case that the defined value interval is exceeded. Alarm will not be sent.

- Select 'Alarm' if the red field "Alarm!!!" is to be displayed on the screen in case that the defined value interval is exceeded. Alarm will be sent
- 3. In the field 'Fault (min max)': define the accepted interval, e.g. -20°C to +25°C. If the temperature exceeds the interval the value will be logged or a warning or alarm will be sent depending on the selected action.

Example: Measuring of air humidity

- 1. In the field 'Type': Select 0-10 V (The other options are 0-20 mA, PT1000 or PTC).
- 2. In the field 'Scale (min max)' define the values for the selected probe, e.g. that -20 corresponds to 0 V and 60 corresponds to 10 V. No use of decimals. The values which are entered in advance are default values and can be changed.
- 3. In the field 'Action': Select 'Only Log', 'Warning' or 'Alarm'. See step 2 above.
- 4. In the field 'Fault (min max) the accepted interval is defined, e.g. set min. to 0°C and max. to 30°C. If the value exceeds the interval the value will be logged or a warning or alarm will be sent depending on the selected action.

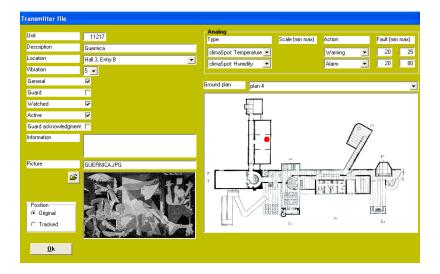
If none of the analog inputs is to be applied select 'Not used'.

Draw the red dot into Ground plan

 By using the mouse draw the dot to the required position on the ground plan. Alarm from the transmitter will be displayed in a popup window in case of alarm. The dot can be removed by drawing it outside the field Ground plan.

Graphic interface

If a ground plan has been inserted the ground plan (chap. 10) can be transferred to the transmitter index. An image of the object or the guard can then be drawn into the ground plan, and it's position will be marked by a red spot.



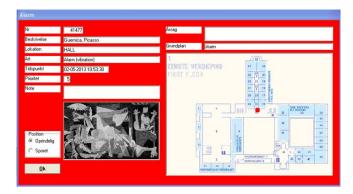
Insert Image:

- 1. Select **Project > Transmitters**.
- 2. Press **Transmitter file**.
- 3. Click the folder to search the file (see exhibit 2).

Insert ground plan:

- 1. Select **Project > Transmitters**.
- 2. Select transmitter No.
- 3. Press **Transmitter file**.
- 4. In the field **Ground plan** insert an image of the ground plan (select from menu list). The image is taken from Project > Ground plans (see "set up ground plans, chap. 10).
- 5. In the field **Picture** click with the mouse and draw the image into the ground plan to the required position.
- 6. Click **Ok** to close the menu.
- Select Functions > Setup and activate [1-5]
 Alarm popup active. The number of active windows.

14: Alarm !!!







If Alarm popup is set to display 1 popup window in Functions > Setup the window in figure 25 will be displayed. The number of popup windows (1-5) can be defined in **Functions** > **Setup**.

If Alarm popup active is set to 0 in the index Setup only the red field Alarm !!! will be displayed (figure 26).

In the popup window, the same note field of the transmitter file can be found. There is also a field called Cause. Here you can write the reason why the alarm went off.

Turn off alarm

If popup windows is applied:

- 1. Every popup window can be closed *individually* by clicking OK.
- 2. Click the red field Alarm !!! to close *all* popup windows at the same time.

If popup windows is not applied:

- 3. Click Alarm !!!
- 4. Click **Yes** in order to turn off the alarm.

"Yes" erases the alarms from the monitoring screen and any sounders turn off. The incident has already been registered in the log file.

Auto alarm reset

If the field Auto reset of alarm is activated $\lceil \sqrt{\rceil}$ in **Functions** > **Setup** the alarms will automatically be removed after 5 sec.

Notice:

In order to activate the sounder in PC [1] and the central unit by an alarm:

- 1. Select **Functions > Setup**.
- 2. Activate $[\sqrt{\]}$ Sound.

Before the alarm turns off the PC-program gives the possibility to enter a note (see below):

 Activate [√] Popup active in Functions > Setup. Select the number of popup windows.

[1] Only if the PC has a sound card and a



Write a comment

Before closing the popup window it is possible to enter a note concerning the alarm, e.g. what has caused the alarm or who resets the alarm.

If the popup window doesn't appear automatically double-click the serial number in the column Unit.

Piccolo keeps the note for up to one year (see "Log file", section 25).

Display the guards

In case of alarm from an object or a personal alarm (red dot) the alarm popup display the guards nearby the alarm situation (green dot) if the guards are set up in the same ground plan as the object (see "Set up ground plans, chap. 10).

By pointing with the mouse at the green dot the description of the guard, as it is written in the index Transmitters, will be displayed, e.g. his call number.

Notice: Only the guards within the specific ground plan will be displayed, not guards in other ground plans.

Original and tracked position

By selecting the position 'Original' the transmitter or the guard is displayed by its original location in the ground plan. By selecting the position 'Tracked' the transmitter or the guard is displayed by its latest tracking location.

loudspeaker.

Guard function

If the function "guard acknowlegdement" is activated in the system this appears on the monitoring screen by a G for "guard".

With this guard function alarms can only be reset centrally on the monitoring screen when the guard has acknowledged the alarm locally. This means that the red bar Alarm!! can be removed only when the guard has acknowledged the alarm in the zone.

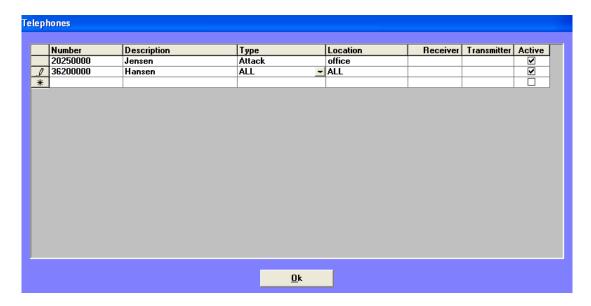
When the alarm has been acknowlegded by the guard the siren stops but only for the selected number of minuts whereafter it starts again. The siren will be reset permanently by clicking the red alarm bar.

The indication $\lceil \sqrt{\rceil}$ means that the guard has reset the alarm locally. If the alarm hasn't been acknowledged the red alarm bar can't be removeed.

Two alarms from the same location that use the guard function must be acknowledged twice. This means that it is necessary to acknowledge each alarm locally before the red alarm bar can be removed.

15: Telephones

In the telephone index all mobile phones which are due to receive a SMS message in case of alarm are set up. Piccolo® transmit the alarm to the telephone company's service centre. The service centre forwards the message to all numbers on the list. The telephone chain can't be stopped. The text displayed is the one which is typed in the transmitter index.



- 1. Select **Project > Telephones**.
- 2. Type the GSM-number in **Number**.
- 3. In **Description** (max. 50 characters) write e.g. a name or a call number.

Fill in only one of the following 3 fields:

- Fill in **Type** if only one specific alarm is to be sent to the selected telephone number (select from menu list). By selecting **ALL** all types of alarms will be sent to the selected telephone number.
- Fill in Location if a SMS is to be sent in case of alarm only from this location (select from menu list). If the option ALL is selected a SMS is sent in case of alarm from all locations.
- Fill in **Receiver** if a SMS is to be sent in case of alarm only from this receiver (select from menu list).
- 4. Fill in **Transmitter** if a SMS is to be sent in case of alarm only from this transmitter (select from menu list).
- 5. Activate $[\sqrt{\ }]$ the mobile phone in the system.
- 6. Click **OK** to close the menu.

7. Select **Functions** > **Setup**.

Here either SMS active [note 1] or SMS only first alarm [note 2] is selected.

Notes

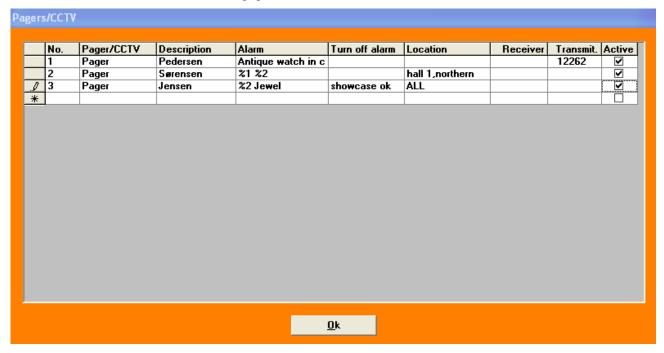
- [1] An alarm message will be sent from *each* transmitter. That means one alarm pr. transmitter.
- [2] Only *one* alarm message will be sent from the *first* transmitter. That means alarms from other transmitters will not be displayed.
 - 8. Make sure that Pin code, SMS comport and Receiver comport are filled in (see "Setup", chap. 7).

Notice:

- If there is only *one* number on the list Piccolo® tries to transmit the message every minute until the message has been delivered at the service centre.
- If there are several numbers on the list Piccolo® tries to deliver the message 3 times in total.

16: Pagers

Piccolo® Object protection can activate a pager system, for example **Ascom Nira Line**. In case of alarm a text message will be displayed on a pager. Since the interface to the pager system is simply ASCII values sent to the comport this interface can also be used for other alarm equipment.



- 1. Select **Project > Pagers/CCTV**.
- 2. In **No.** give the pager a number (1-99999).
- 3. Select **Pager** in the field Pager/CCTV.
- 4. In **Description** (max. 50 characters) write e.g. a person name.
- 5. In **Alarm** write the text (max. 100 characters) to be displayed in case of alarm. By using codes the text displayed will be the one which is written in the transmitter index (see examples next page).
- 6. In **Turn off alarm** write e.g. the text to be displayed when the alarm is turned off.

Fill in only one of the following 3 fields:

- Fill in **Location** if a message is to be sent in case of alarm only from this location (select from menu list). If the option **ALL** is selected a message is sent in case of alarm from all locations.
- 8. Fill in **Receiver** if a message is to be sent in case of alarm only from this receiver (select from menu list).

- 9. Fill in **Transmitter** if a message is to be sent in case of alarm only from this transmitter (select from menu list).
- 10. Activate $[\sqrt{\ }]$ the pager in the system.
- 11. Click OK to close the menu.
- 12. Mark $[\sqrt]$ Pager active in Functions > Setup.

The signal which is sent to the comport concerned is in **ASCII** format.

Code	Definition
%1	Assure that the serial number of the transmitter will be displayed.
%2	Assure that the field Description defined in the transmitter index will be displayed.
%3	Assure that the transmitter's Location defined in the transmitter index will be displayed.
%4	Assure that information Attack/assistance from the personal alarm will be displayed.

The text which is to be sent to the COM-port in case of alarm can be fetched from the transmitter index or a free text defined in the pager index.

Example 1: Write free text in the pager index

- In the field **Description** write the name of the person who is due to receive an alarm message. For example Pedersen.
- In the field Alarm write e.g. which object has generated an alarm and where the object is placed.
 For example "Antique watch in conference room".
- In the field **Transmitter** indicate the serial number of the transmitter. For example 12262.

On the pager (or on the comport as ASCII values) the text "Antique watch in conference room" will be displayed in case of alarm from transmitter unit12262.

The serial number of the transmitter will not be displayed. If the serial number is due to be displayed the code % 1 must be added as free text in the field Alarm.

Example 2: Use text from the transmitter index

• **Description**: Sørensen.

• Alarm: %1 %2.

• Location: hall 1, northern wall.

Sørensen will receive alarm messages from all the transmitters which are placed in the location: hall 1, northern wall.

Because of the codes %1 %2 the transmitter unit 14325 will be displayed followed by the text from the field Description in the transmitter index.

Example 3: Combine code and free text

Description: Jensen.

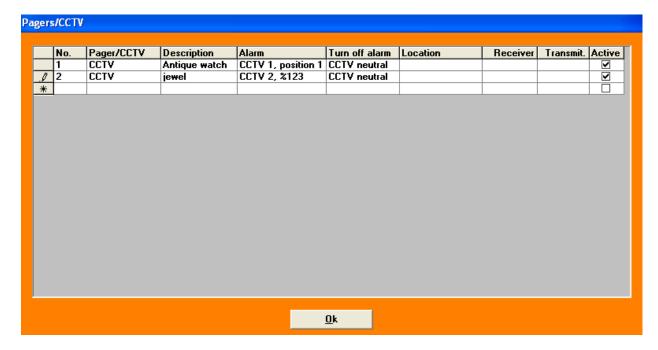
Alarm: %3 Jewel.

Location: All.

In the field Alarm is added a code (%3) which fetches the text from the field Location in the transmitter index: Hall 3, showcase. This text will be displayed on the pager followed by the free text "Jewel".

17: Video camera/CCTV

The Piccolo® system can be coupled with extra monitoring equipment like video cameras (CCTV). In the CCTV index the records/codes to activate the camera system are set up. The record may be defined by means of numerals or letters. The set up of CCTV is similar to the set up of pagers. The only difference is the possibility to apply an extra interface.



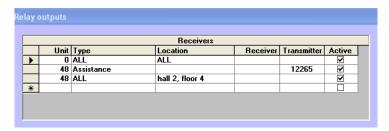
- 1. Select **Project > Pagers/CCTV**.
- 2. In **No.** give the CCTV a number (1-99999).
- 3. Select **CCTV** in the field Pager/CCTV.
- 4. In **Description** (max. 50 characters) write e.g. a translation of the record defined in the fields Alarm and Turn off alarm. For example which object the camera monitors.
- 5. In **Alarm** write a record/code for adjusting the camera angle in case of alarm. For example write a record for the command: Camera 1, position 1.
- 6. In **Turn off alarm** write a record/code for the camera to turn back to neutral angle.

Fill in only one of the following 3 fields:

- 7. Fill in **Location** if CCTV is to be activated in case of alarm only from this location.
- 8. Fill in **Receiver** if CCTV is to be activated in case of alarm only from this receiver.
- 9. Fill in transmitter if CCTV is to be activated in case of alarm only from this transmitter.
- 13. Activate $\lceil \sqrt{\rceil}$ CCTV in the system.
- 10. Click **Ok** to close the menu.
- 14. Mark $[\sqrt]$ CCTV active in Functions > Setup.

18: Signal lamp, siren

In every alarm receiver is an output-relay. The relay can be used for local signalling, for example a signal lamp or a siren that warns if a person approaches or touches a piece of art.



The alarm can come from a location, a receiver or a transmitter. Figure 28 illustrates 4 examples to be regarded separately.

1. Select **Project > Relay outputs**.

Situation 1:

- 2. In **Unit** type the serial number of the central unit (always 0).
- 3. In **Type** select ALL (menu list), all types of alarms can activate the output.
- 4. In **Location** select **ALL** (menu list) [**Note 1**]. That means relay-output 0 will be activated by alarm from all transmitters and receivers.
- 5. Activate $\lceil \sqrt{\rceil}$ the output on the network.

Situation 2:

- 1. In **Unit** type the serial number of the alarm receiver/relay-output, e.g. 48.
- 2. In **Type** select e.g. 'Assistance' or 'Attack'.
- 3. In **Transmitter** indicate the serial number of the transmitter (select from menu list). That means relay-output on receiver no. 48 will be activated by alarm only from transmitter 12265, in this case a personal alarm. Other transmitters will be discarded. Don't fill in the field Receiver.
- 4. Activate $[\sqrt{\ }]$ the output on the network.
- 5. Click **Ok** to close the menu.

Situation 3:

Alarms only from location "hall 2, 4th floor" generates an alarm on the relay-output of receiver 48.

Notes

- [1] An operational way to manage an extensive surveillance area may be, in the transmitter index, to set up a whole group of transmitters in one single location and give the location a name. (see "Locations", chap. 19).
- [2] A call button is literally pressing a button. A guide during a conducted tour can e.g. call the attendant.

19: Other alarm system, locations, press button

The central unit has two relays:

RESET: closes for 100 msecs. after the communication to the PC has been interrupted for more than 30 secs. Also the internal siren gives an acoustic alarm for 2 secs.

ALARM: (NC) opens for 2 secs. by all alarms and is constantly open by power failure. (Relay Outputs: Unit=0, Type=ALL, Location=ALL, Active=yes)

The central unit is equipped with one relay-output. In the central unit or in a relay box an I/O Interface can be placed with 8 extra outputs (no. 1-8) and 1 input (no. 21) which can serve as "Turn of alarm" or "Input".



Other alarm system

The 8 outputs can be used in order to activate another alarm system, e.g. call for the security service.

Locations

The 8 outputs can be applied individually in order to use locations. To each location belongs a group of transmitters. One location is called e.g. location 3, which has all been set up in the transmitter index.

Press button

Input 21 can be applied in order to turn off an alarm manually in cases where there is no access to a PC.

Situation 1: Press button

- 1. Select **Project > Relay outputs**.
- 2. In **No**. type the serial number of the I/O Interface (indicated on the print) or apply **Find outputs**.
- 3. In I/O type input number 21.
- 4. In Function select **Turn off alarm** (menu list).
- 5. In Type select **ALL**.
- 6. Click **Ok** to close the menu.

Situation 2: Interface to other alarm system

By interface to another alarm system all 8 outputs will typically be applied and connected to the 8 inputs on the existent alarm system.

Input

Input 21 can be applied as alarm input from other equipment. From the menu 'Function' select 'Input'.

- 1. In **I/0** type the number of the applied output to another alarm system, e.g. all relay-output 1-8.
- 2. In **Function** select Output (menu list).
- 3. In **Type** select ALL, all types of alarms breaks the selected relay output.
- 4. In **Location** select All (menu list). That means relay-outputs 1-8 will be activated by alarm from all transmitters and receivers.
- 5. Activate $[\sqrt{\ }]$ output 3 in the system.

Situation 3: Location with several transmitters

- 1. In **I/O** type the applied output to a specific location, e.g. output 4.
- 2. In **Function** select Output (menu list).
- 3. In **Type** select **Alarm** (**motion**). Only this alarm type activates relay output 4.
- 4. I **Location** select location 3. That means relay 4 will be activated by alarm from all transmitters which are connected to location 3.
- 5. Activate $[\sqrt{\ }]$ output 4 in the system.

Situation 4: Location with only one transmitter

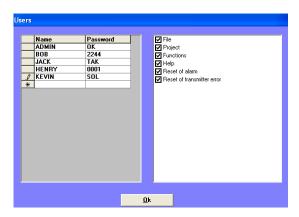
- 1. In **I/O** type the applied output to a specific piece of art, e.g. output 2.
- 2. In **Function** select output (menu list).
- 3. In **Type** select Attack. Only this alarm type activates relay output 2.
- 4. In **Transmitter** indicate the serial number of the transmitter. That means relay 2 will be activated by alarm only from this transmitter/personal alarm.

Find outputs:

• All outputs on the network will be registered. Experience shows that a slow PC can give problems.

20: Set up users

In the user index the users of the system and their rights to access the system is registered.



- Select Project > Users.
- 2. In **Name** enter username (max. 10 characters).
- 3. Provide the user with a **Password** (max. 10 characters) or leave the field empty. In this case the user has the opportunity to enter a password in File > Login.
- 4. In the list File, Project, Functions etc. it is possible to indicate by a $\lceil \sqrt{\rceil}$ which parts of the system the user is allowed to access. Only the areas which ha a $\lceil \sqrt{\rceil}$ will be accessible when the user logs in with his password. By removing the $\lceil \sqrt{\rceil}$ the access will be blocked.

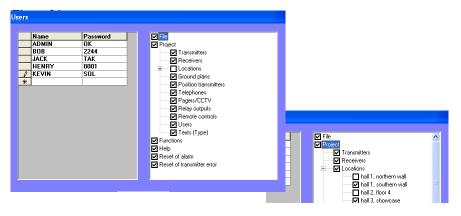
Example 1:

The access to the menu Project is blocked ($\lceil \sqrt{\rceil}$ is removed). The menu Project will not be accessible when the user logs in.



Example 2:

The access to the menu Locations is blocked by login. It is also possible to block only a few locations.



Example 3:

The access to reset alarms (click the red field Alarm !!!) and to reset Transmitter error !!! (click the yellow field) is blocked.



Notice: The system administrator (ADMIN) has unlimited access to all menus. The username ADMIN can not be replaced by another name or deleted.

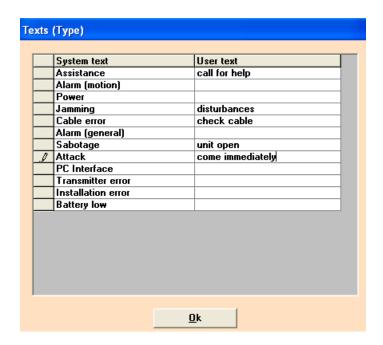
Password

If the field Password is empty the user can set up a self chosen password. There are 2 possibilities to set up passwords:

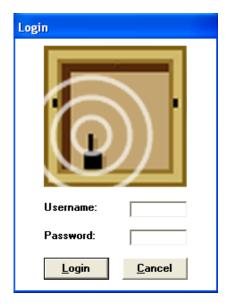
- In Project > Users.
- In File > Login.

21: Set up texts (type)

In the index 'Texts (type)' it is possible to change the system's default texts to user texts. The user texts will be displayed in case of alarm instead of the default texts.



22: Login, Logout, Exit, Connect/Disconnect system, Remote controls



Logout

In order to avoid unauthorized use of the system the user should log out every time he leaves the monitoring screen.

1. Select **File > Logout**.

The monitoring screen is displayed but no access to Project and Functions.

Notice:

- The function Logout doesn't exit the Piccolo® PC-program.
- Alarms will be registered even if no user is logged in.

Disconnect of the complete system

• Select Functions > Disconnect system

When disconnecting the system the monitoring screen disappears and all communication to alarm receivers and other equipment stops.

When connecting the system all communications starts and the monitoring screen will be displayed.

It is possible to disconnect locations separately (see "Location check", chap. 26).

Login

- 1. Select **File > Login**.
- 2. Enter username and password.
- 3. Click **Login**.

Here a user can set up a password at his first login. However this does not apply if a password has already been set up by ADMIN in the user index.

Notice:

- When logging in any other user will automatically be logged out.
- If a user forgets or wants to change his password the system administrator can either inform or delete the (old) password.
- If ADMIN forgets his password the Piccolo® PC software must be reinstalled.

Exit

This command closes the Piccolo® PC-program and ends the communication with alarm receivers.

1. Select **File > Exit**.

Notice:

 Users with level 0 can't close the Piccolo® PCprogram.

Alarms will not be registered during the time when the PC-program is closed.

Remote controls

With a remote control, locations, transmitters and alarm receivers can be disconnected/connected.

This can be done in 2 ways:

- Select Project > Remote controls.
 In Unit give the remote control a number.
- 2. In **Description** (max. 25 characters) write e.g. a person name.
- 3. Activate $[\sqrt{\ }]$ the remote control.

Or click Find remote controls.

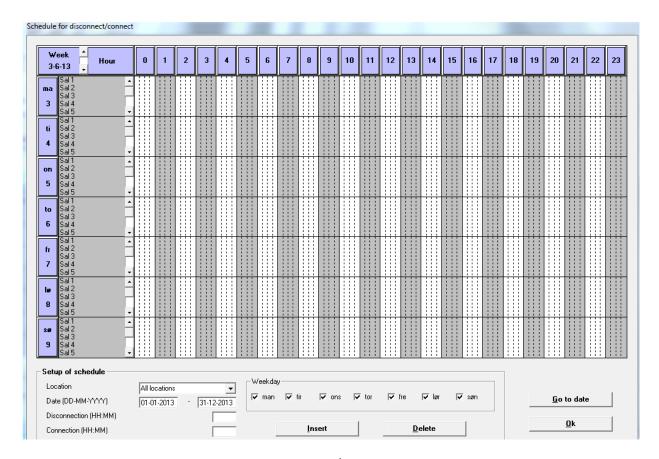
All remote controls on the network will be registered. Thereafter the pager must be activated manually.

23. Schedule for disconnect/connect

In the index 'Schedule for disconnect/connect', times for automatic disconnection/connection of locations can be added.

The horizontal line indicates hours per day. The vertical one indicates a week. By use of scrollbars in the top left corner it is possible to scroll up and down to later or earlier weeks.

The locations/halls/rooms that have been created in the locations index can be seen on every weekday. Are there more locations than there is room for, you can use the scrollbars next to them.



Add a time

Choose the desired time for disconnecting the desired location.

To connect you hover the mouse over the time and drag it by the end to the desired time for connection.

This is how you repeat a time regularly

- 1. Go down to 'Setup of schedule'.
- 2. Choose a location, if not all of them.
- 3. Type in the dates for the time period. It is also possible to extend it over more years.
- 4. Write the time for disconnection.
- 5. Write the time for connection.

- Under 'weekday' you can choose specific days for disconnection/connection, if not all of them.
- 7. Press 'Insert'.
- 8. Do you wish to delete the times, press delete.

Delete time individually

If you wish to delete a time, right-click on the mouse. Then comes up 'Delete time?', and to that you answer yes.

Go to date

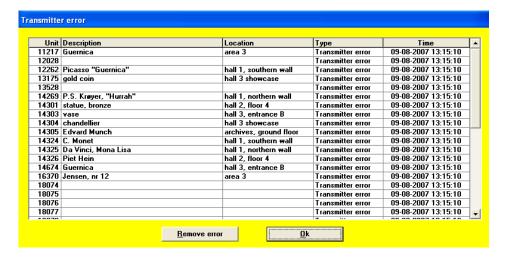
If you need to find a time many weeks away, press 'Go to date', type in the date in the field and press ok.

24. Transmitter error !!!

If the system hasn't received ok-signals from a transmitter in ½ hour the lower field **Transmitter error** !!! turns yellow. This can be caused by e.g. a defective battery in the transmitter or the fact that the transmitter is out of coverage.

Notice:

Only if **Battery low** is active in Functions > Setup the system gives a warning some weeks before the battery has expired.



1. Press **Transmitter error !!!** in order to see which transmitters has caused the fault message.

A list displays the serial number of the transmitter, location and date/time of the error. There can be 3 types of errors: transmitter error, battery error or installation error.

- 2. Press **Remove error** in order to remove the list from the screen.
- 3. Press **Ok** to close the menu.

Surveillance of the transmitter- and receiver quality can be conducted continuously by means of the function **Supervision** (see chap. 24). Also transmitter error will be logged.

25. Supervision

Supervision is a monitoring facility to be conducted continuously and in case of detecting sudden system errors. The function is also useful in the event of installation as well as the half yearly service check of the Piccolo® system (see "Service and maintenance", chap. 27).



Every 4th minute all transmitters transfer an "oksignal" that Piccolo® logs and uses for statistics.

- Select Functions > Supervision.
 The list in figure 34 will be displayed on the screen.
- 2. Click Ok to close the menu.

Piccolo® updates the list every second. It displays the transmitters from the statistics where the amount of received ok-signals are less than 60 %. If the system administrator is logged in, figures from all transmitters will be displayed.

Furthermore only the alarm receivers with a performance less than 100% are displayed. The reason why the amount is below this value is that the cable connection is not optimal. If the performance of the alarm receiver reaches a 100%, nothing will be displayed.

Amount

Indicates how many ok-signals are transferred every 4th minute. When starting up the amount will slowly rise to 100%. The amount should be between 85%-110%.

Strength

Indicates how strong is the latest signal from the transmitter. The strength should be higher than 25%.

GSM signal strength

Indicates, if GSM modem is installed, how good is the connection to the GSM net. The signal strength should be more than 25 percent. If this is not the case an external GSM-antenna should be applied.

Possible causes of dysfunction

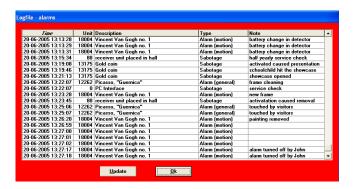
Transmission- and receiving conditions

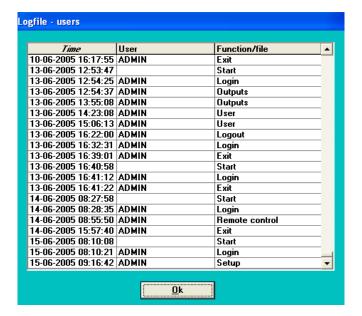
- Defective battery or transmitter.
- Too much distance between transmitter and receiver.
- Placement: alarm receiver near to e.g. reinforced concrete, metal, massive granite- or stone wall, and transmitters near to a ventilating plant significantly reduce the conditions.
- Defective cable connection.

26. Log file

Piccolo® automatically keeps a log file with alarm- and user history. The information in it goes back a year and can neither be modified nor deleted.







- 1. Select Functions > Log file
 - > Alarms.
 - > Users.
- 2. Click **Update** in order to display the latest registered alarms.
- 3. Click **Ok** in order to close the menu.

Log file - Alarms

In this history information about a specific alarm can be found. **Date**, **time** and **number** of the unit which has caused the alarm appears.

In addition to a **Description** of the unit it appears which **Type** of alarm has been generated. Also the **Note** (comment), if any has been entered before turning off the alarm, will be displayed.

Click **Print** to print the log file. To sort the list by time click the column title **Time**. To sort the list by unit click the column title **Unit**.

A list with types of alarms can be found in Log file – Alarms in the Piccolo® PC-program.

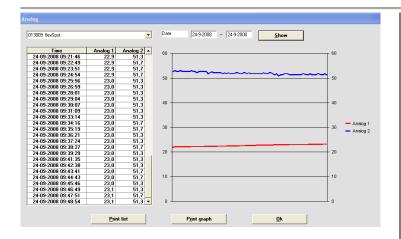
Log file - Users

In this history information about all functions carried out by users as well as changes in indexes during the last year can be found.

Date and **time** as well as which **User** has performed the act will be displayed.

Notice:

 In the log file it is possible to change the way in which the information is sorted by clicking one of the grey column titles.



Log file - Analog

In this history information about analogue measuring can be found. It requires that the applied detectors with analogue inputs don't use the option 'Not applied' (See 'Analog' in the transmitter index).

The information is in a list and shows the time for when an analog value has been registered.

With the option 'Date' it is possible to see the information in a specific time interval. Press 'Show' in order to see a graphical illustration and a table of the values.

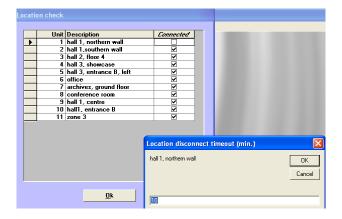
'**Print list**': The log information is printed as a list to a printer.

'**Print graph**': The log information is printed as a graph to a printer.

'Ok': Closes the window.

27: Location check

Location check provides a list with actual connected locations. It serves the purpose of a monitoring function. Furthermore it is possible to disconnect a location by deleting the $\lceil \sqrt{\rceil}$ in the field Connected. If this function is applied the screen should always be present in the Piccolo® PC program.



- 1. Select Functions > Location check.
- Click one of the 3 column titles Unit, Description or Connected in order to change the way in which the list is sorted.
- 3. Click **Ok** to close the menu.

Notice:

Location check provides a "snapshot" of which locations are actually connected.

Location check is not to be confused with the location index, in which locations are set up.

Disconnect a location

1. In Function > Location check: remove the $[\sqrt{\ }]$ with the mouse.

Automatic connection of locations

A disconnected location can be connected automatically by Piccolo. This happens after a certain number of minutes specified in **Functions** > **Setup**.

- In Location disconnect timeout (min):
 The number 10 indicates the number of minutes to pass before Piccolo automatically connect the locations again.
- 2. In Location disconnect timeout (min): if required change the number of minutes to

pass before Piccolo automatically connect the locations again.

Notice:

The location can be connected manually at any time by setting a $[\sqrt{\ }]$.

28: Service and maintenance

Half yearly check

Every six months it must be checked whether all detectors can be activated.

- Print a list with all detectors from the transmitter index.
 Click for instance the column titles **Location** or **Unit** in order to sort by these columns.
- 2. Go from detector to detector and activate each one of them.
- Check in Log file alarms if there has been registered an alarm from the activated detectors.

If there are detectors which didn't send an alarm the battery must be changed. If this doesn't help the detector must be replaced by another.

Change battery in detector

After max. 5 years the battery in the detector should be changed. This is done by loosening the screws. Gently press the battery out.

Test of GSM modem

In the event of the half yearly service check it must be tested whether the GSM modem, if any, works.

This is done from e.g. the telephone index by setting up a GSM telephone number. Then a detector is activated and eventually it is checked whether the alarm message has been delivered as required.

If no alarm has been transmitted it should be checked in Supervision (see chap. 24) whether the GSM covery is sufficient. Notice: It should be higher than 25%.

Backup

Backup should be conducted frequently or at least when significant changes in data files have been made.

This function makes a copy of all file data to a disc or to a drive. If using a disc, this is inserted in disc drive

A.: The disc must be empty and with no write protection.

Notice:

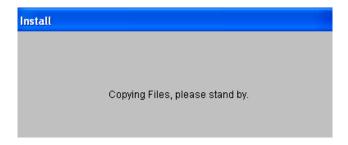
The alarm system must be disconnected during backup and alarms, if any, will not be received. Alarms will be displayed after the backup is finished.

New installation, Piccolo® PC-program

A new installation of the PC software has to be done, if:

- 1. You want a newer version of the PC software with the latest updates.
- 2. You want to increase the number of transmitters/to upgrade your licence.

Notice that the installation procedure is not quite the same for updating as for upgrading (see pkt. 8 below). Only if the new installation is done in order to upgrade your licence, and thereby increase the number of transmitters, a new product key has to be entered. If the new installation is due to a new version number of the PC software, and thereby updates of the facilities of the program, it is not necessary to enter a product key.



Exit Piccolo® and close any other active programmes on your PC during the installation process.

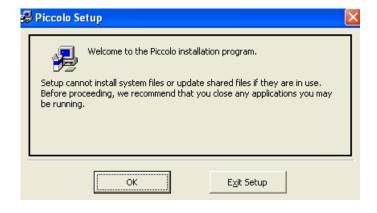
1. Insert CD-ROM in PC.

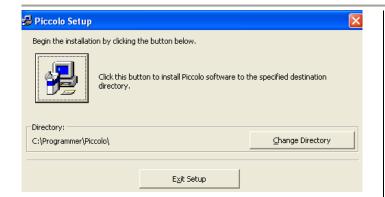
The installation program automatically makes a backup of the following data files from the previous Piccolo® PC program:

- log-data files.
- alarm-data files.
- language-data files.

The previous data files will automatically get the following file names in the folder 'old piccolo': 'old log', 'old alarm' and 'old language'.

2. Press OK.





Setup will add items to the group shown in the Program Group box.
You can enter a new group name or select one from the Existing Groups list.

Program Group:
Piccolo

Existing Groups:
Microsoft Help Workshop
Piccolo
Start
Tilbehør

Continue

Cancel



The Piccolo® PC-program is in the folder **C:\Programmes\Piccolo** The software must now be installed in the same folder:

Windows suggests installing in C:\Programmes\Piccolo\
Press **Change Directory** in order to select another folder (not recommended).

3. Press the upper left button in order to start the installation.

4. Press Continue.

If the dll-files on your PC are of a **more recent date** than the ones on the CD-ROM the installation program will ask whether you want to keep the most recent dll-files:

5. Press **Yes** until the Version Conflict dialogue box disappear.

If the dll-files on your PC are of a **older date** than the ones on the CD-ROM the installation runs without interruption and the old dll-files on your PC will be replaced by the new ones.

- 6. Start the Piccolo® PC-program on your computer from the selected folder.
- 7. CLICK YES TO "CONVERT DATA" if you want to preserve the previous settings. Otherwise you will loose the previous settings.
- Only if licence upgrades: enter the product key in File > Product key.

The folder Pictures

All pictures of ground plans, persons and objects can be kept in a specific folder in the Piccolo program, the folder 'Pictures'. 'Pictures' is at the same place as where the Piccolo software is installed, e.g. on c:\
The folder 'Picture' must be applied if Piccolo remote is applied.



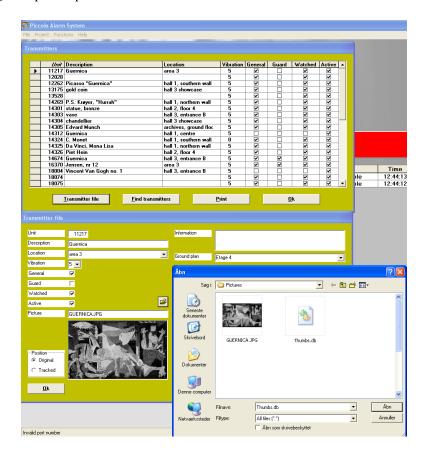
How to put images into the folder 'Pictures':

- 1. Find and copy the image (click the right mouse button > copy).
- 2. Find the directory where Piccolo is installed (e.g. c:\).
- 3. Find Programmes > Piccolo > Pictures.
- 4. Double clik with the left mouse button the folder 'Pictures'.
- 5. With the right mouse button select 'Insert'.

Afterwards it is only necessary to search for an image one place, when an image is to be inserted in an index, e.g. the Transmitter index. Piccolo automatically suggest to take the image from the folder 'Pictures'.

Insert Picture:

- 1. Open Transmitters > Transmitter file.
- 2. Press the folder.
- 3. Select image and press Open.



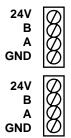
Connect network & line termination

Cable requirements:

Network cable from the PC to line adaptor has to be, as a minimum, twisted pairs of 2x2 conductor, minimum 0,25 \emptyset . One pair for A + B and a pair for 24V, GND or maybe Cat5 PDS-cable.

Cabling with PDS Cat5 (4x2 twisted):

Central unit:

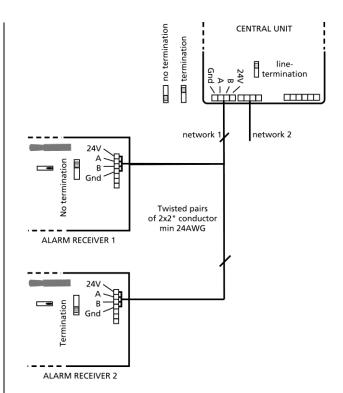


Alarm receiver:



Line termination:

A line termination must be done in the central unit if only one of the networks is applied. If both networks are used the line termination must be done in the unit farthest away on the network.



How to use line termination:

