### **DOCUMENTACION TECNICA**



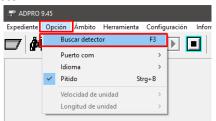
# XTRALIS – Configuracion Detectores ADPROE

La gama de detectores ADPROE son configurables únicamente desde el software ADPRO 9.47

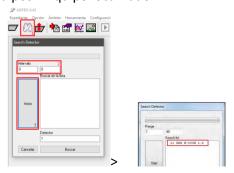
Definir puerto COMOpción > Puerto COM > Seleccionar Puerto COM



Buscar detectorOpción > Buscar detector



Ventana de búsqueda de equipos > Equipo localizado



- Configurar detector
  - 1 Entrar en la configuracion del detector
  - 2 Enviar / Recibir informacion del detector



Parámetros de configuracion:

ADRESS: Direccion del detector, asignado mediante el rotoswitch

**ATD:** eliminación de ruido , este parámetro será necesario tenerlo desactivado en las pruebas de puesta en marcha del detector , después se deberá activar para así poder filtrar las señales y eliminar el ruido con el fin de obtener las menos faltas alarmas posibles.

VANDAL PROTECTION: Tamper del detector

**COMPASS FUNTION:** Brújula , activar para generar una alarma en el caso de que el detector rote

Address	12
ATD	ON •
Vandal protection	ON 🔻
Compass function	ON •

Habilitar o deshabilitar salidas de Rele , ALARMA / TAMPER / FALLO / CONFIG

Out 1 Alarm	ON •
Out 2 Tamper	ON •
Out 3 Fault	ON •
Out 4 Config1	ON •
Out 5 Config2	ON •

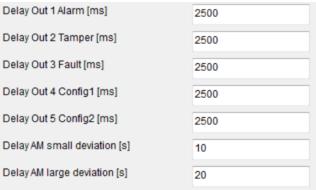
### Retardos de activación de Reles , ALARMA/TAMPER/FALLO

Tiempo que estarán activos los Reles una vez activado el evento desencadenante \*En milisegundos 2500 : 2,5 segundos

**Retardo de activación de AM** , tiempo que necesita encontrarse enmascarado parte o el total del sensor para generar la activación del Fallo

**SMALL**: En el detector

LARGE: En el detector o en grandes partes del mismo



**SW RANGE:** Distancia máxima de detección del sensor **SENSIBILIDADES:** 0.2 mas duro – 1.5 mas sensible

CZ : Angulo 0 NEAR : Cerca MIDDLE : Media FAR : Lejana



**DEFINICION DE SALIDAS / OFF:** NC / ON : NA

LEGACY MODE: En el caso de disponer de mas equipos ADPRO (No E) en la instalación Activar

CZ: Angulo 0, habilitar o deshabilitar



### AJUSTES DE PUESTA EN MARCHA

1. Colocar una persona en el punto mas alejado y ver la mitad de su cuerpo para iniciar desde ese punto las lecturas de prueba

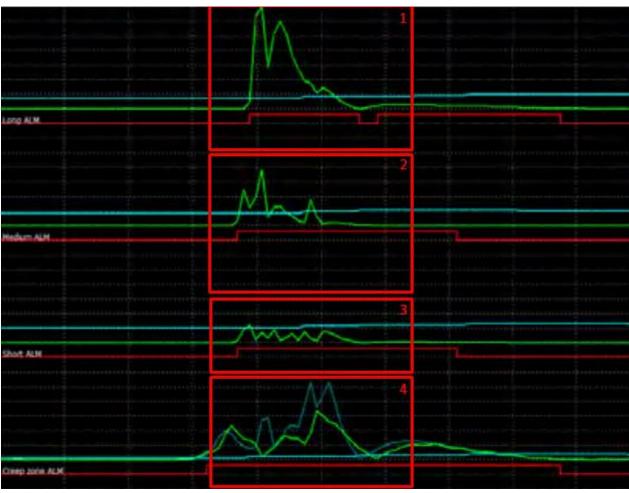


3. Conectar el dispositivo de pruebas CT PRO mediante el conector RJ11 y desplazarse hasta el punto mas lejano para ver la cobertura en el dispositivo.

\*En el caso de no disponer del comprobador de señal

Visualizar la gráfica y observar la línea lejana mientras la persona se desplaza en la visión del sensor, observar si la señal de alarma se activa y si la sensibilidad por defecto

es correcta, en caso negativo modificar la altura del detector y los ajustes de sensibilidad hasta encontrar un punto correcto de ajuste



- 1. Detección de largo alcance
- 2. Detección medio alcance
- 3. Detección corto alcance
- 4. Detección Angulo 0

LINEA VERDE : Contador de pulsos

LINEA AZUL : Señal normalizada sin ruido LINEA ROJA : Activación de la alarma

# ADPRO® PRO =

Passive-Infrared Perimeter Intrusion Detection Systems (PIR PIDS)

System Setup Manual

May 2018

Document: 26571\_04



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# **Document Conventions**

The following typographic conventions are used in this document:

Convention	Description	
	Used to denote: emphasis Used for names of menus, menu options, toolbar buttons	
	<b>Used to denote:</b> references to other parts of this document or other documents. Used for the result of an action.	

The following abbreviations are used in this document.

Abbreviation	Description
AA	Aperture Angle
CZ	Creep Zone
DR	Detection Rate
ESD	Electrostatic Sensitive Device
FAR	False Alarm Rate
GND	Ground
QSG	Quick Setup Guide
PID	Perimeter Intrusion Detector
PIDS	Perimeter Intrusion Detection System
PIR	Passive-Infrared

The following icons are used in this document:

Convention	Description	
$\triangle$	<b>Caution:</b> This icon is used to indicate that there is a danger to equipment. The danger could be loss of data, physical damage, or permanent corruption of configuration details.	
A	<b>Warning:</b> This icon is used to indicate that there is a danger of electric shock. This may lead to death or permanent injury.	
	<b>Warning:</b> This icon is used to indicate that there is a danger of inhaling dangerous substances. This may lead to death or permanent injury.	
$\triangle$	Danger! This icon is used to indicate that there is a danger of falling down! There is acute danger, when working with unsecured ladders. Unsecured ladders can slip and cause a fall that can lead to serious injuries. Additional information: refer to local "Safety at Work Act".	
	<b>Note!</b> This icon is used to highlight useful advice and recommendations as well as information for an efficient and trouble-free operation.	

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# 1 Install ADPRO PRO E-Tool Software

The ADPRO® PRO E-Tool for Windows® connects PRO/ PRO E detectors using RS-232/USB/IP via bus converters or virtual communication ports and it is used for setting up detectors during commissioning, optimizing the settings and monitoring detectors in use. It can be used for all types of detectors.

You can download the software from www.xtralissecurity.com (doc. no. 29650). This chapter explains how to install the software on a Windows computer.

**Note:** By default the software is installed in English language but you can select other languages using the Options menu, refer to section "Set language".

# 1.1 Hardware and software requirements

**Note:** Make sure that the latest firmware is installed on every detector. Refer to the section describing the firmware update in the ADPRO PRO E PIR Installation Manual, document no. (27386). The version currently installed is displayed in the ADPRO PRO E-Tool as Version parameter.

For installation and operation of the ADPRO PRO E-Tool software the receiver PC should meet the following minimum requirements:

- Intel Pentium processor 1,7 GHz or faster
- 512 MB RAM
- 54 MB free hard disk capacity
- Graphics card with 32768 or 65536 colours and a resolution of 1024x768 pixels (small fonts) for optimal image display.
- Operating system Microsoft Windows 10, Windows 8, Windows 7
- COM port with IFM-485-ST or virtual COM port with the aid of IFM-485-ST as well as FTDI driver

### 1.2 Installation on the PC

Proceed as follows when installing the software:

- 1. Download the installation file from www.xtralissecurity.com (doc no. 29650).
- 2. Store the installation file on your computer. The file name includes the version number of the software, e.g. "Setup\_PRO0946.zip".
- 3. Unpack the file "Setup PROxxxx.zip".
- 4. Rename the file "Setup\_PROxxxx.txt" in "Setup PROxxxx.exe".
- 5. Start the installation by double-clicking on the .exe file. Confirm any security prompts in order to start the installation wizard. Follow the instructions on screen.
- 6. To complete the installation click Finish.
- 7. Start the ADPRO PRO E-Tool; using the Start menu or the desktop icon you might have created during installation.

ADPRO PRO E-Tool for Windows<sup>®</sup> has been installed in the specified folder on your computer and the following folder structure has been set up:

- BMP
  - Contains all images you can create using the software, see "Take image (Screenshot, [Ctrl] + [P])".
- CFG
  - Contains all detector configuration files, see "Backup settings and transfer to other detectors".
- DAT
  - Contains all statistics and debugger files.
- INI
  - Contains all detector INI files. Each detector model requires its specific INI file.

The ADPRO .CFG file in the program folder contains settings and configuration data which are relevant, e.g., for the display of logos on images etc. within the software. The file must not be deleted.

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# 1.3 Set language

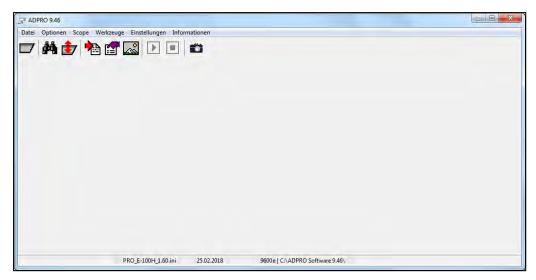
You can display the settings and parameters of the software in various languages. The default is English. To switch to one of the available languages proceed as follows:

- 1. Select Language in the Options menu.
- 2. Select the desired language from the sub-menu.

The parameter and settings are then displayed in the selected language. However, the actual interface language is always English.

# 2 Work with ADPRO PRO E-Tool

The ADPRO PRO E-Tool for Windows® provides functions for configuration and monitoring of PIR detectors. The Software shows all current operation parameters and real time sensor signals of the selected detector and thus supports re-alignment of the detector as well as adapting certain parameters. Start the software using the Windows Start menu or the desktop icon you might have created during installation. The image below shows the user interface:



Connecting to a detector and the functions are described in the following sections.

### 2.1 Initial detector connection

**Note:** For a detailed description of the installation and the connection via the IFM-485-ST interface module refer to the ADPRO PRO E PIR Installation Manual, document no. (27386).

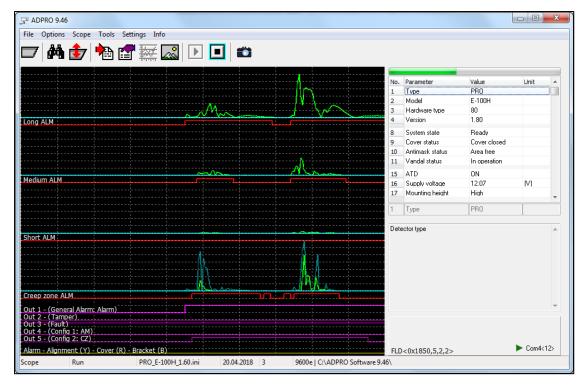
In order to be able to use the ADPRO PRO E-Tool functions, connect to a detector:

- 1. Connect the detector's RS485-BUS to the IFM-485-ST interface module.
- 2. Connect the interface module to the PC.
- 3. In the Windows Device Manager of the PC update the driver software for the virtual serial port (**Browse my computer for driver software**) and install the driver from the installation directory of the ADPRO PRO E-Tool.
- 4. Start the ADPRO PRO E-Tool and the search function (**Search detector** or [F3] key, see " Search detector").
- 5. Double-click on the respective item in the search results list (Search list). The oscilloscope view (Scope) of the respective detector is opened.

The software user interface and the available functions are described in the following sections.

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### 2.2 Software user interface



The image shows the software's user interface with a detector connected:

- Title bar
  - The title bar displays the ADPRO PRO E-Tools software version.
- · Menu bar and tool bar
  - Here you can access the individual functions of the software.
- Oscilloscope panel (Scope)
  - In this panel the alarm states of the individual detection zones are displayed.
- · Side bar
  - The side bar on the right displays information on parameter settings.
- · Status bar

On the status bar various information are output, e.g. the current view,.INI file currently loaded, date, as well as the Baud rate (9600) and the program directory of the software.

The following sections describe the screen elements in detail.

### 2.2.1 Access functions—tool bar and shortcuts

You can access the individual functions of the software using menu commands, keyboard shortcuts, or via the tool bar. When you move the mouse pointer on one of the icon a description text is displayed as tooltip.

Note: The functions in the Settings menu are described in chapter "Configure detector (Settings menu)".

The following table describes the individual icons of the toolbar as well as the menu commands and keyboard shortcuts.

Icon	Menu command / keyboard shortcut	Function
	File, Open Detector INI [F2]	Open the detector INI file (legacy function; please do not use)
		Note: For current detector models the ADPRO PRO E-Tool automatically selects the corresponding .ini file. Manually selecting an .ini file which is not suitable may result in malfunction .

	Options	Options menu to configure des ADPRO PRO E-Tool and to connect to a detector. Refer to "Configure the
		software (Options menu)".
#4	Options, Search Detector [F3]	Search for detectors connected.
	Options, Com Port	Select COM port.
	Options, Language	Select the user interface language.
	Option, Beep [Ctrl] + B	If this option is checked a beep is output whenever the detector detects something.
	Scope	Scope menu to control the oscilloscope view. In this menu you can start and stop the Scope view or change its direction, increase and decrease the signal speed, and reset the display. See also "Oscilloscope panel (Scope view)".
<b>I</b>	Scope, Run [F5]	Start oscilloscope.
	Scope, Stop [Ctrl] + [F5]	Stop oscilloscope.
	Scope, Scroll Mode [F6]	Toggle the scroll direction right/left. When pressing [F6] the direction of the scope view changes and the signal restarts.
	Scope, Grid [F7]	Display / hide the grid on the oscilloscope view.
	Scope, Step up [F8]	Increase signal speed, to accelerate scrolling.
	Scope, Step down [Ctrl] + [F8]	Decrease signal speed, to slow down scrolling.
	Scope, Clear [F9]	Clear oscilloscope view.
	Scope, Delete all triggers [F10]	Delete all triggers.
	Tools	Tools menu. Here you have access to various functions supporting the evaluation of signals and alarms received from the detectors. See also "Tools menu".
<b>***</b>	Tools, Scope [Ctrl] + [K]	Oscilloscope panel, see "Oscilloscope panel (Scope view)".
	Tools, Take image [Ctrl] + [P]	Take image. To create and save a snapshot of the current oscilloscope view.
Z.	Tools, View image [Ctrl] + [V]	Display previously saved images.
	Tools, Image Auto Save [Ctrl] + [A]	When activating this option an image is taken and stored in the BMP sub-folder when the detector detects a signal or motion.
	Tools, Picture memo [Ctrl] + [O]	Only if this option is active you can use the command <b>Tools</b> , <b>Take image</b> (see above) to take and save images of the oscilloscope view.
	Tools, Statistics [Ctrl] + [M]	Open the Statistics view.

*	Tools, Debugger [Ctrl] + [D]	Open the debugger.
<b>1</b>	Settings, Settings [F4]	Display, configure and upload settings to the connected detector. See chapter "Configure detector (Settings menu)".
	Settings, Output Settings	Display, configure and upload output settings to the connected detector. See chapter "Output settings (PRO E-detectors only)".
	Info, About [F1]	Display information on the software.

# 2.2.2 Oscilloscope panel (Scope view)

The oscilloscope view (scope view) is displayed automatically after having selected a detector using the Search list.



The display shows the signal strength in each zone if the connected detector features multiple detection zones. It illustrates the cause/response relationship between inputs and output. The signals on the screen represent the current readings of the detector in graphical form. The view shows all signals and their levels on a time axis; it allows for a detailed analysis of the detector's operation and monitoring of alarm states. Depending on the detector model a different number of graphs is displayed:

- Green (sensor signal): shows the signal levels of the PIR sensor.
- Red (IR alarm): shows the IR event caused by the sensor signal.
- Purple (output alarms): shows the actual output signal at relay, depending on model and setup up to 5 signals, General, Sabotage, Fault, Config1 and Config 2.
- Blue (alarm threshold)
- Yellow (tamper / vandalism alarm). Indicates that the detector's alignment has been manipulated.

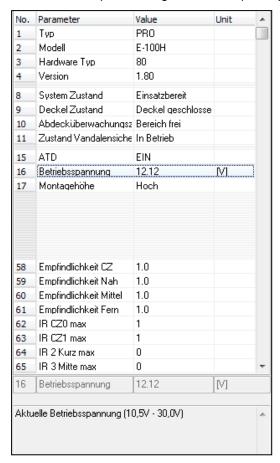
Note: Alarms are only displayed in Scope view if the detector generating the alarm is currently selected.

### 2.2.3 Side bar (parameter display)

#### **Parameter list**

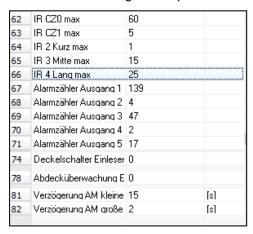
The side bar on the right displays the current parameter settings of the currently connected detector, e.g. the actual alarm threshold, general alarm status, as well as various parameters like overall number of alarms, max. signal level received and current settings of the DIP switches on the detector. To display values and, if available, additional information on a specific parameter below the list, click on the respective parameter.

**Note:** The number of parameters displayed depends on the detector model connected. For descriptions of the individual parameters refer to chapter "Configure detector (Settings menu)".



#### Measured values

In the lower part of the parameter list the current readings of the parameter values are output in real-time.



The values displayed include the IR amplitude, depending on the detector model for the respective zone, as well as maximum value measured and the number of alarms.

#### Status information

At the bottom of the side bar the firmware ID (FLD[]) as well as the number of the COM port used and the address of the current detector are displayed. For PRO detectors also the real-time status of the DIP switches are shown:



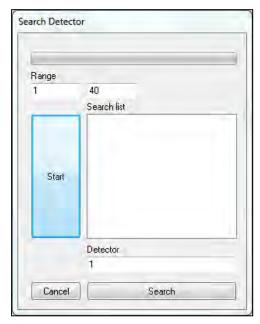
# 2.3 Configure the software (Options menu)

The Options menu, or the toolbar respectively, provides functions for configuration of the ADPRO PRO E-Tool.

### 2.3.1 Search detector

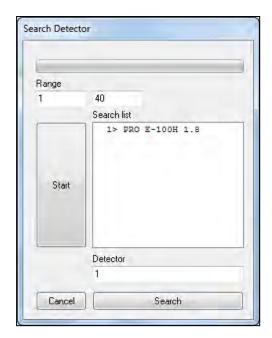
Proceed as follows:

1. Select **Options**, **Search Detector** or press [F3]. The search dialogue is displayed:



### 2. Click on Start.

You can cancel the ongoing search process by clicking **ESC**. In the **Search list** shows the detectors found:



In case of a new detector with factory settings, the detector is displayed as item in the list with address 1. If no detectors could be found, a message is displayed. If more than one detector is connected to the IFM-485-ST, it might happen that addresses are assigned twice so that individual detectors are not listed. Refer to chapter "Troubleshooting" in the ADPRO PRO E PIR Installation Manual, document no. (27386).

3. Double-click on the desired item in the list, or enter the detector address (in the example above 1) in the **Detector** field and click **OK**.

The signals of the selected detector are displayed in the ADPRO PRO E-Tool.

### **2.3.2** Com port

Using this function you can select one of the physical or virtual COM ports available on your PC, which the ADPRO PRO E-Tool uses for communication with the IFM-485-ST interface module. Refer to chapter "Before mounting – detector address and basic configuration" in the ADPRO PRO E PIR Installation Manual, document no. (27386)

# 2.3.3 Language

The user interface is available in various languages. To set the language, select **Options**, **Language** and then select the language. The software immediately switches to the selected language.

# 2.3.4 Audio output (Beep)

If a beep shall be output in case of any detector of the connected detector, select Options, Beep.

### 2.4 Tools menu

Delete this text and replace it with your own content.

# 2.4.1 Scope ([Ctrl] + [K])

Switch to oscilloscope view (Scope view), refer to "Oscilloscope panel (Scope view)"...

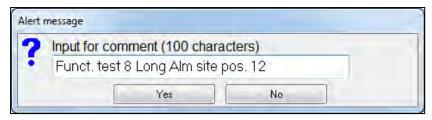
# 2.4.2 Take image (Screenshot, [Ctrl] + [P])

Use this function to create a snapshot of the current oscilloscope view as well as of the current parameter settings and measurement values and to save the image in the BMP sub-folder of the ADPRO PRO E-Tool program directory. The graphics file is automatically saved in two formats: .BMP and .PNG.

Proceed as follows:

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- 1. Select **Tools**, **Take image** (or [Ctrl]+[P]), or click
- 2. Enter your comments in the comment field and click Yes.



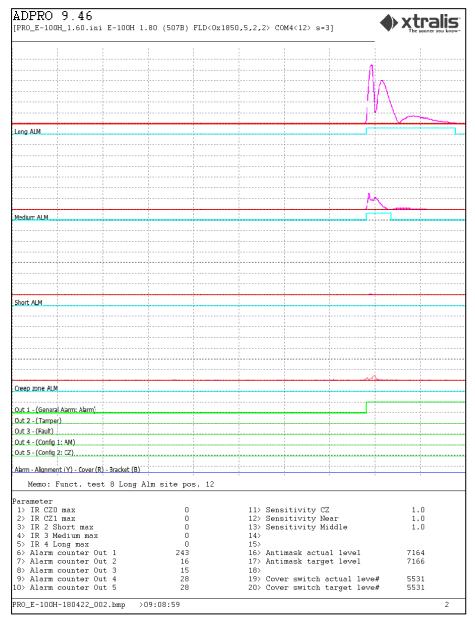
The file is now available for further usage in the BMP sub-folder of the ADPRO PRO E-Tool program directory. The file was named according to the following convention:

<detector model>-<date in format yymmdd><sequ. no. of the day>

### Example:

PRO\_E-100H-180422\_002.png

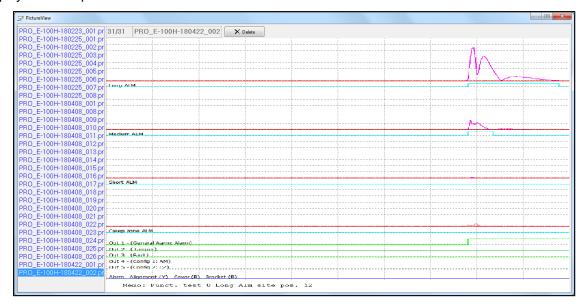
The example file is the second image of the connected PRO E detector taken on 22 April 2018:



Below the oscilloscope image the comments provided when storing the image are displayed under Memo, as well as parameters and measurement values. At the bottom, file name and recording time of the image are shown.

### 2.4.3 View image ([Ctrl] + [V])

To view a previously saved image select **Tools**, **View image** (or [Ctrl]+[V]). In the image display you can select an image in the list on the left by clicking on it. However, in this view only the oscilloscope image is displayed and no parameters.



To delete an image select it and click **Delete**.

### 2.4.4 Image Auto Save ([Ctrl] + [A])

When this option is active, each time the detector reads a signal or detects a movement, a picture is automatically taken and saved in the BMP sub-folder.

To activate the auto save function select Tools, Image Auto Save ([Ctrl] + [A]). The respective menu item is ticked off.

In case of a detection the resulting graphics file is automatically saved in two formats: .BMP and .PNG. The files are available for further usage in the BMP sub-folder of the ADPRO PRO E-Tool program directory. The files are named according to the following convention:

<detector model>-<date in format yymmdd><sequ. no. of the day>

Example:

PRO E-100H-180422 011.png

The example file is the image no. 11 of the connected PRO E detector taken on 22 April 2018.

# 2.4.5 Picture memo ([Ctrl] + [O])

**Note:** Only if this option is active you can use the command **Tools**, **Take image** (see above) to take and save images of the oscilloscope view.

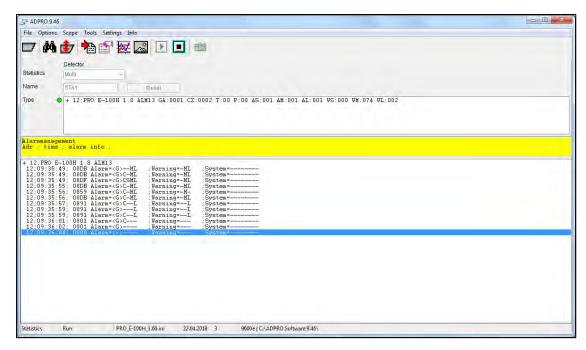
To activate the Take image function select Tools, Picture memo (or [Ctrl] + [O]). The respective menu item

is ticked off. The command **Tools**, **Take image** (or [Ctrl]+[P] or icon) is then active and responds.

# 2.4.6 Statistics ([Ctrl] + [M])

Use this function to record the data transferred by the detector and to write the data into log files. For each change in status of a detector a new line is recorded in the log.

To open the statistics view select **Tools**, **Statistics** (or [Ctrl] + [M] or icon):



The window is divided into the following sections:

- In the upper part the connected detectors are listed under Type with additional information such as identification number, firmware version and alarm counter. In front of each item the current status is displayed:
  - ∘ I ( ): no alarm.
  - ∘ I (**●**): alarm
- In the bottom part the actual log is displayed, see examples further below.

To create a statistics file proceed as follows:

- 1. Open the Statistics view by selecting **Tools**, **Statistics** (or [Ctrl] + [M] or icon).
- 2. In the Name field enter the file name.
- 3. Click (or press [F5]) to start display and recording of events.

  The alarm status of all detectors are logged which were found on initial detector search (see "Search detector"). For each event detected and for each change in status of a detector a new line is written with date and description of the event. In addition to general alarm information the view indicates the zone which triggered the alarm. Also, warnings and detector status are displayed.
- 4. To stop recording click (or press [Ctrl]+[F5]).

  The file with the data recorded is then written to sub-folder DAT ADPRO PRO E-Tool program directory for further processing.

The information are stored in text files (csv format, semicolon as delimiter). Depending on the detector (and in case of long recordings) one file is created per day.

### Note:

When leaving the statistics view without stopping the recording as described above, no file is written. The recorded data are lost.

The files for the connected detectors are named according to the following convention: <file name>-<date format yymmdd>\_<sequ. no. of the day>.<detector address>

#### Example:

STA1-180422\_003.012

The example file

- has the file name "STA1" (entered in field Name) and
- on 22 April 2018 it is
- the third recording of a PRO E detector (sequential number)
- with address "12" (ID address of the 485-bus for the detector)

### File contents

### Example:

```
Adr; Zeit
            ; Alarm; Warnung; System; ;
+ 12; PRO E-100H 1.8 ALM13
12;16:36:07; 1000 Alarm=<->---
                                        ;Warning=---
                                                         ;System=-V
12;16:39:36; 1091 Alarm=<G>---L ;Warning=--L 12;16:39:36; 10D3 Alarm=<G>---L ;Warning=-ML
                                                         ;System=-V-
                                                                          -M
                                                        ;System=-V--
12;16:39:37; 10DB Alarm=<G>--ML ;Warning=-ML 12;16:39:38; 18DB Alarm=<G>C-ML ;Warning=-ML
                                                         ;System=-V--
                                                                          --м
                                                         ;System=-V--
 12;16:39:40; 1891 Alarm=<G>C--L
                                        ;Warning=--L
                                                         ;System=-V----
12;16:39:40; 1091 Alarm=<G>---L ;Warning=--L
                                                         ;System=-V----M
                                                         ;System=-V----
 12;16:39:43; 1001 Alarm=<G>----
                                        ;Warning=---
                                        ;Warning=---
                                                         ;System=-V----
 12;16:39:45; 1000 Alarm=<->----
```

The first line contains the column headings for the events:

- Adr = Detector address (ID address of the 485-bus for the detector)
- Zeit = Logged time of the event
- Alarm = Alarm code transferred for the event, e.g. 1000 is an antimasking event
- Warning = Two thirds of the alarm threshold exceeded twice within a short time span
- System = System status bits, everything except actual motion alarms

Below a list of connected detectors is provided with type, firmware version and number of alarms since the start of recording. The events are listed in real-time.

The example above shows a single detector with a number of alarms in the long and medium range. For example "System=-V" indicates vandalism / tamper alarm.

Abbreviation	Event		
G	General Alarm		
	I = Alarm in main detection zone		
	For multi-zone detectors:		
	S = short; alarm in near range		
	M = medium; alarm in medium zone		
	L = long; alarm in the long range		
Т	Tamper		
Р	Power faults		
CZ	Creep zone (only PRO E)		
Ax	Alarm in respective zone S, M, or L		
Wx	Warning respective zone S, M, or L		
V	Vandal (vandalism / tamper)		
	B = bracket open		
	M = masking		
	A = alignment		

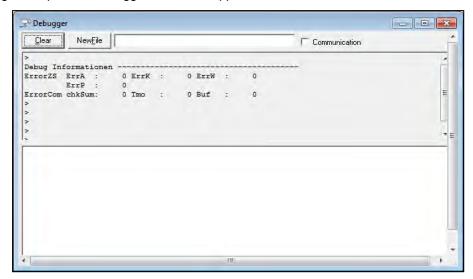
# 2.4.7 Debugger ([Ctrl] + [D])

Note:

This feature of PRO E-Tool offers no benefits for commissioning, maintenance and fine tuning. The debugger is specifically meant for software developers to debug their protocol implementation by giving the opportunity to view, analyse and record the whole data stream of the RS 485 bus.

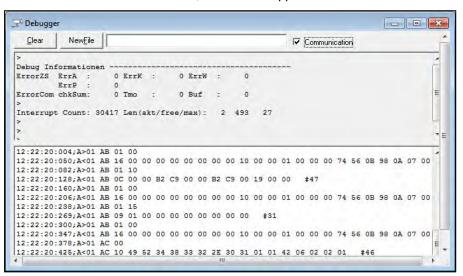
The debugger helps record all communication made between the detector and computer and save this information in files stored in the computer. These files are saved in the "DAT" sub-folder accessed through the ADPRO®PRO E-Tool for Windows® folder.

Click "Debugger" to open the Debugger window, it appears as follows:



To start recording of data traffic and save this information in the computer, follow these steps:

1. Click the checkbox next to "Communication", the window appears as follows:



#### 2. Click "New File".

Data is saved in the file; you can create another file by clicking "NewFile".

To stop recording of data, click "Clear".

Files are named according to the following naming convention:

"DBG-yymmdd\_nnn.txt" where

уу	year
mm	month
dd	day
nnn	sequential number (1 - 999)

The following abbreviations are used in data recording:

Abbreviation	Error
ErrA	Error counter
ErrK	Error counter configuration
ErrW	Error counter working
ErrP	Error counter synchronisation
ChkSum	Error counter check sum
Tmo	Error counter timeout
Buf	Error counter buffer

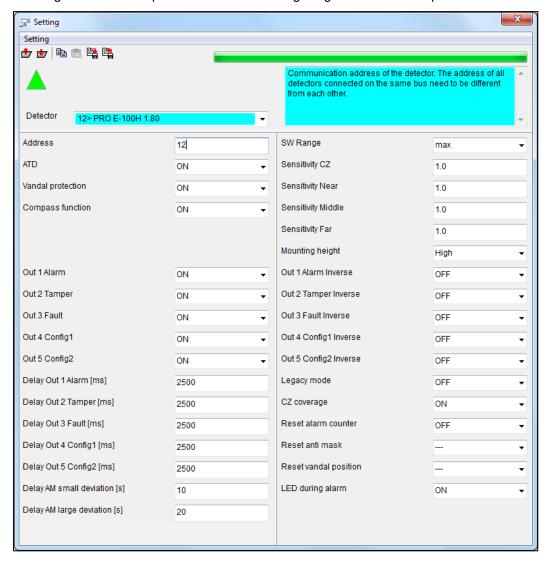
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# 3 Configure detector (Settings menu)

**Note:** The configuration options depend on the detector used. The dialogues and settings shown are examples which vary according to the detector model.

# 3.1 Settings dialogue

To open the Settings dialogue click the icon or select **Settings**, **Settings**. The Settings dialogue serves to check and change the detector's parameters. The following image shows an example:



For some of the fields explanatory texts are stored. A click on the respective field displays the text in the top right-hand part of the dialogue. In case of numeric input fields the value ranges as well as the factory settings (default) are displayed as tooltip when you move the mouse pointer on the field. The functions described in the following sections can be selected using the settings menu of the toolbar of the dialogue. The available settings depend on the detector model. This includes address, sensitivity, output functions etc. The image shows the factory settings (except the address) of a PRO E-100H detector. The individual settings for PRO E and PRO E-RF as well as PRO detectors are described in separate sections:

- "PRO E and PRO E-RF detector settings"
- "PRO detector settings"

The respective configuration status in the dialogue is indicated by the following icons:

	The progress bar on the right of the toolbar indicates the progress when the configuration is uploaded to or downloaded from the detector.
	Loading configuration from the detector in progress or completed.
	The settings in the dialogue have been changes and differ from the settings stored in the detector.
<b>V</b>	The current configuration is transferred to the detector.
	Red icons indicate a communication problem between software and detector.

### 3.1.1 Change settings

To change settings either select predefined values in list fields or enter numeric values in the input fields. In case of incorrect input error messages are displayed informing about the permitted value range.

When you change values in the Settings dialogue this is indicated by the icon in the upper part of the dialogue.

### Transfer settings to detector

**Note:** When you change settings these will not become effective until you upload the settings to the detector.

To transfer settings to the detector click , or select **Setting**, **Write settings to detector** (or [Ctrl]+[D]).

After successful completion of the process the \_\_\_ icon is displayed in the upper part of the dialogue.

#### **Discard changes**

There are different options to discard changes in the Settings dialogue.

If the previously set values shall be displayed in the dialogue again, click or select **Setting**, **Read settings** from detector (or [Ctrl]+[U]). The settings in the dialogue are overwritten by the settings stored in the detector.

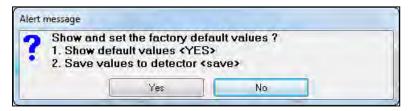
Alternatively you can close the Settings dialogue without saving the changes. A warning is displayed:



To discard changes and to close the dialogue select **Yes**. Select **No** to return to the Settings dialogue and to proceed.

# 3.1.2 Factory settings

To set the values in the Settings dialogue to the default factory settings select **Setting**, **Factory** or [Ctrl]+[D]. The following message is displayed:



Click **Yes**. **No** cancels the process and the values remain unchanged.

All values except the Address are set to factory settings.

**Note:** The factory settings will not become effective until you upload the settings to the detector.

To transfer the settings to the detector click , or select **Setting**, **Write settings to detector** (or [Ctrl]+

[D]). After successful completion of the process the 🔔 icon is displayed in the upper part of the dialogue.

# 3.1.3 Backup settings and transfer to other detectors

### Copy and paste via clipboard

To copy the settings of a detector to the Windows clipboard and to transfer the settings to another detector connected to the same bus (i.e. COM-Port) proceed as follows:

- 1. Select **Setting**, **Copy** (or [Ctrl]+[C]), or click
- 2. From the **Detector** list select the detector the data are to be transferred to.
- 3. Select **Setting**, **Insert** (or [Ctrl]+[V]), or click ...
- 4. To transfer the copied settings to the detector select **Setting**, **Write settings to detector** (or [Ctrl]+[D]), or click

**Note:** Copying the settings to the clipboard only works if proceeding as described. If you wish to save the settings in a file use the Save function, see "Save and load configuration file".

### Save and load configuration file

To create a backup or to transfer settings to another detector you can save the detector settings in a file.

If you wish to transfer the basic configuration in the Settings dialogue to other detectors proceed as follows:

- 1. Select **Setting**, **Save** (or [Ctrl]+[S]), or click ...
- 2. Enter a meaningful file name and click **Yes**.

  The settings are saved on the hard disk of the PC in a .CFG file in the CFG sub-folder of the ADPRO PRO E-Tool program directory. The file name entered is preceded by the detector's model designation a prefix, e.g. "PRO E-100H-".
- 3. To transfer the settings stored in the file to a different detector connect to that detector using the ADPRO PRO E-Tool.
  - See "Initial detector connection".
- 4. Select **Settings**, **Settings**.
- 5. To load the basic configuration of the first detector select **Setting**, **Load from configuration file** (or [Ctrl]+[O]) or click . The following dialogue is displayed in which all stored configurations are listed:



- 6. Double-click on an item to load the respective settings.
- 7. To transfer the settings to the detector select **Setting**, **Write settings to detector** (or [Ctrl]+[D]), or click

# 3.1.4 PRO E and PRO E-RF detector settings

**Note:** The available settings depend on the respective PRO E detector.

Field	Value range	Description	
Detector		List of all selectable detectors which are connected to the same RS485-BUS (i.e. COM port of the PC). Using the list you can switch the view to display the settings of one of the available detectors, e.g. to transfer settings from one detector to another, see "Copy and paste via clipboard".	
Address	1 – 255	To set the ID address of the 485-bus for the detector(factory setting: 1).	
		<b>Note:</b> Make sure that all detectors have a unique address of 1-255 before they are connected to one common bus.	
ATD	On/Off	Activate / deactivate adaptive threshold determination with automatic alarm threshold adaptation.	
		The active threshold determination can be used to prevent unwanted alarms triggered by, e.g., long grass moving in the wind. The alarm thresholds are then automatically adapted. If the constant signal is no longer present the alarm threshold is automatically reset to the original value.	
		<b>Note:</b> We recommend deactivating the ATD function before a walk test to optimise the detector performance.	
Vandal protection	On/Off	"On" activates tamper protection. Alarms are then triggered if the vandal protection is triggered, e.g. by opening the cover or the bracket or by removing the detector.	
Compass function	On/Off	"On" activates the compass function. Alarms are then triggered if the detector is rotated.	
Out 1x	On/Off	Activate / deactivate output relay 1 x. Standard detectors of the PRO E series have 3 relay outputs, detectors of the H series have 5 and detectors of the PRO E-RF series have one single relay output. Therefore the related settings (here activation of the function) are displayed for one, three, or five relay outputs.	

Delay Out 1x	2 – 60.000	Power-off delay for output relay 1 x in milliseconds (factory setting: 2500). If, e.g., the value 2500 is set for Out 1 Alarm, then the alarm remains active for 2.5 seconds if the impulse triggering the alarm is no longer present. Standard detectors of the PRO E series have 3 relay outputs, detectors of the H series have 5 and detectors of the PRO E-RF series have one single relay output. Therefore the related settings (here delay of the deactivation) are displayed for one, three, or five relay outputs.		
Delay AM small deviation [s]	0 – 65.535	Antimasking detects an alarm if the detector is covered. This is an active infrared detection transmitting a weak infrared signal in order to detect partial or complete masking of the detector by a reflection of the infrared signal sent out.  This value specifies the delay which applies when triggering an alarm due to a partial masking of the detector.		
		<b>Note:</b> Setting "0" results in a very sensitive detector. Depending on the application this might result in a large number of unwanted alarms.		
Delay AM large deviation [s]	0 – 65.535	Antimasking detects an alarm if the detector is covered. This is an active infrared detection transmitting a weak infrared signal in order to detect partial or complete masking of the detector by a reflection of the infrared signal sent out.  This value specifies the delay which applies when triggering an alarm due to a complete masking of the detector or of large parts of it.		
		Note: Setting "0" results in a very sensitive detector. Depending on the application this might result in a large number of unwanted alarms.		
SW Range	e.g. 75 – 135 m or max.	The detection range can be limited individually. The values listed depend on the detector model. Lowering the range only applies to the long range channel.  The factory setting is "max.", i.e. the full length of the detector's detection range.		
Sensitivity CZ / Near / Middle / Far	0.2 – 1.5	Depending on the model this setting defines the detector sensitivity in the creek zone (360PROtect) as well as in the IR detector main zone or in the different zones 1-3 or 1-6 (depending on the number of available channels).		
		Factory settings: 1.0. The value 0.2 stands for the lowest sensitivity.		
		<b>Note:</b> The value has no effect on the sensitivity of the actual sensor but on the respective detection threshold triggering an alarm.		
Mounting height	High / Low	Optimised settings for different installation locations: "High" for a mounting height of more than 3 m "Low" for a mounting height of less than 3 m		
Out x Inverse	On/Off	Inverting the relay outputs. When inverted then the alarm is triggered if the signal drops, i.e. also in case of outages or tamper of the electrical power supply.		
		"Off" = Relay opens upon alarm, normally closed (factory setting). "On" = Relay closes upon alarm, normally open.		
		Standard detectors of the PRO E series have 3 relay outputs, detectors of the H series have 5 outputs. Therefore the related settings (here inversion) are displayed for three or five relay outputs. This setting is not available for PRO E-RF detectors.		

Legacy mode	On/Off	"On" = activates the legacy mode.	
		The legacy mode is required if a PRO E series detector is to be used in a PRO detector environment. If in such an environment PRO series detectors were integrated and if PRO E detectors shall be integrated in that environment without adaptations, then PRO E detectors have to be set to this compatibility mode (legacy mode) so that the PRO E detector becomes backward compatible. New alarm functions are then mapped to the old ones. For example, an anti-masking alarm in is translated into an unspecific tamper alarm, the bracket alarm becomes a cover alarm and so on. This way, the new alarms which a PRO detector would not have are still triggered but without the respective designation as the old protocol does not know the new kind of alarm.	
CZ coverage	On/Off	Activate the 360PROtect sensor (Standard = "ON"). "OFF" deactivates the 360PROtect sensor.	
Pulse count SW	20-10	Number of additional pulses (0-10) before an alarm is triggered. "OFF" triggers an alarm on first pulse.	
		Only for volumetric detectors; curtain detectors do not have a pulse count function.	
Reset alarm counter	On/Off	To reset the internal alarm counter select "On" and then Setting, Write settings to detector (or [Ctrl]+[D]). This resets all alarm counters to 0, and the value in this field is automatically reset to "Off" (factory setting).	
Reset anti mask	/ Yes	In order to set a new sensor reading as baseline for anti-masking in case of a known (tolerated or deliberate) masking of the detector front. To store the baseline select "On" and then Setting, Write settings to detector (or [Ctrl]+[D]). This way the current sensor reading is stored as reference value, and the value in this field is automatically reset to "Off" (factory setting).	
Reset vandal position	/ Yes	In order to store a new alignment position as baseline for tamper protection in the detector in case of a (tolerated or deliberate) change in alignment. To store the baseline select "On" and then Setting, Write settings to detector (or [Ctrl]+[D]). This way the current sensor reading is stored as reference value, and the value in this field is automatically reset to "Off" (factory setting).	
LED during alarm	On/Off	"On" = LED at the front of the detector lights up when an alarm is triggered.  Factory setting: "Off"	

# 3.1.5 PRO detector settings

This software is also fully compatible with all PRO detectors which have the following settings: (screenshot example shows a PRO-45DH in hardware configuration mode).

Note:

Several of the PRO detector settings have the prefix "SW". This indicates, that they can be set here in software, but also in hardware through DIP switches.

If the detector is set to software installation mode (DIP 1 and 2 both "ON") these settings can be adjusted using this tool, if the detector is in hardware mode (DIP 1 and 2 in any other combination) those settings are greyed out and are controlled by DIP switch settings. See details in PRO detector manual "ADPRO PRO-Series EN, document no. (20780)".

List of settings for PRO detectors					
Choice	Selectable list of all detectors connected to the same bus (i.e. COM port), which allows for convenient copying / pasting of common settings between the detectors.				
Address	1-255	Set de	Set detector's identification bus address (1-255, default 1).		
		Note:	Make sure that each and every detector has an individual address from 1-255 before connecting them to a common bus.		
Configuration	HW/SW	Displa	ys current operation mode: Hardware or Software.		
		Note:	Operation modes can only set by DIP-switches 1 and 2 on connector board of detector.		
Channel L/M/S <sup>1)</sup>	ON Long, medium and short range channels may be enabled individually by selecting "ON" from drop-down menu.				
	OFF	Long, medium and short range channels may be disabled individually by selecting "OFF" from drop-down menu.			
Output function [Relay   Transistor]	If relay function is set to "ON", the following two options are available in the drop-down menu:				
	<ol> <li>"IR + VAN   IR + VAN": Using relay and transistor open collector to signal intrusion alarms and tamper alarms.</li> <li>"IR + VAN": Using only relay to signal intrusion alarms and using only transistor open collector to signal tamper alarms. This allows identifying alarms.</li> </ol>				
Output [OC1   OC2] <sup>5)</sup>	This feature is only available with intrinsically safe detectors.				
	These detectors have two open collector outputs, which have to be connected via the recommended ex-barriers and through which two relay outputs can be used.				
	The following options can be accessed via a drop-down menu:				
	"IR   VAN":     This serves to issue intrusion alarms on relay 1 and vandalism alarms on relay 2 at the ex-barrier, which serves to clearly distinguish the alarms. This is the factory setting.				
	2. "IR + VAN   IR + VAN":  This setting is used to issue both alarms at the same time for intrusion and vandalism on relays 1 and 2 at the ex-barrier. Therefore it is not possible to distinguish the alarms.				
Relay function	OFF [	Disables out	out function of relay.		
	ON E	Enables outp	ut function of relay.		
Relay output logic Normal Relay opens when in alarm.		when in alarm.			
	Inverted F	Relay closes	when in alarm.		

	Normal	OC opens when in alarm.	
logic	Inverted	OC closes when in alarm.	
Channel right/left <sup>2)</sup>	ON/ OFF	Enables/ Disables right/ left channel.	

List of settings for P	List of settings for PRO detectors				
SW sensitivity	Modifies sensitivity of right/left channel within bandwidth 20 % - 140%.				
right/left [%] <sup>2)</sup>	Reduction of overall sensitivity changes alarm threshold but leaves coverage of right/left channel unchanged.				
SW range <sup>4)</sup>	Detection range can be individually set, . pre-set values vary depending on n				
	Reduction of nominal range affects only coverage of long-range channel.				
SW sensitivity [%]	Modifies the overall sensitivity within a bandwidth 50% - 150% for long range (multichannel) detectors or 20%- 140% for mid-range (single channel) detectors.				
	Reduction of overall sensitivity changes alarm threshold but leaves coverage of long-range channel unchanged.				
SW ATD	ON	Enables "Adaptive Threshold Determination".			
	OFF	Disables "Adaptive Threshold Determination".			
		Note: Disable ATD function prior to walking test to optimize performance of detector.  When putting "SW Test" to "ON", ATD function is disabled automatically in Software mode.			
SW Test (legacy feature)	Legacy function for very old device constellations. Do not use.				
SW Vandalism protection	ON/ OFF	Enables/ Disables "Tamper Protection".			
SW Mounting	HIGH	Mounting height above than 3 m (10 ft).			
height 1)	LOW	Mounting height less than 3 m (10 ft).			
Reset vandal position	ON	Writes new alignment position into non-volatile RAM as baseline for anti-tamper protection in case of manipulated alignment.			
	OFF	Upload of settings to control device happens always automatically in "OFF".			
	-	Not selected.			
Reset alarm counter	ON	Resets alarm counter to "zero" at next download of settings to detector.			
	OFF	No resetting of alarm counter to "zero" at next download of settings to detector.			
	-	Not selected.			
SW pulse count <sup>3)</sup>	0 - 10	Number of additional pulses (0 - 10) before an alarm is generated.			
	OFF	Triggers alarm on first pulse.			

### Notes:

 $<sup>^{1)}</sup>$  Applies only to long-range curtain detectors PRO-100/ PRO-100H and PRO-250H  $\,$ 

 $<sup>^{2)}\,\</sup>mathrm{Applies}$  only to directional detectors PRO-45 and PRO-45H

<sup>3)</sup> Applies only to volumetric detectors

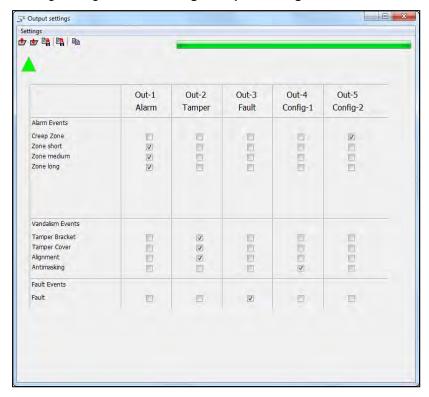
- <sup>4)</sup> Applies only to long range detectors PRO-100/ PRO-100H and PRO-250H
- 5) Applies only to intrinsically safe detectors

# 3.2 Output settings (PRO E-detectors only)

**Note:** This function is not available for PRO and PRO E-RF detectors.

If you open the output settings for a PRO detector then an empty window is displayed. The relay output settings for PRO E-RF detectors are deactivated (greyed out).

To open the Output settings dialogue select Settings, Output Settings.



**Note:** Depending on the firmware used, the antimasking default setting might deviate from the settings adjusted ex works. Check the respective settings here in the Output settings dialogue.



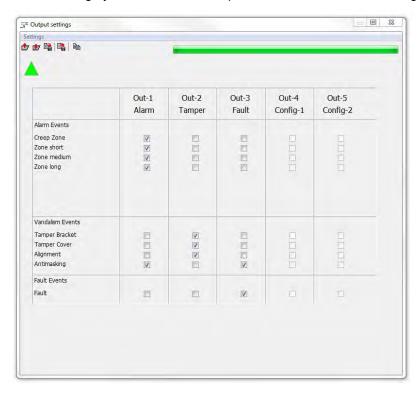
#### **CAUTION:**

In the factory setting (see [cross-ref. to section "Factory settings" below]) the settings in this dialogue correspond to the outputs printed on the circuit board of the detector, see section "Overview of the circuit board" in the ADPRO PRO E PIR Installation Manual, document no. (27386). If you change the settings, the assignment is overruled so that the printed designations do no longer show the actual assignment of outputs.

In this dialogue you can freely assign various output events to all available output relays. In case of PRO E detectors three output relays are available, in case of PRO E H detectors five. This way you can link the output relays to any type of event or alarm the connected detector can generate. The respective configuration status in the dialogue is indicated by the following icons:

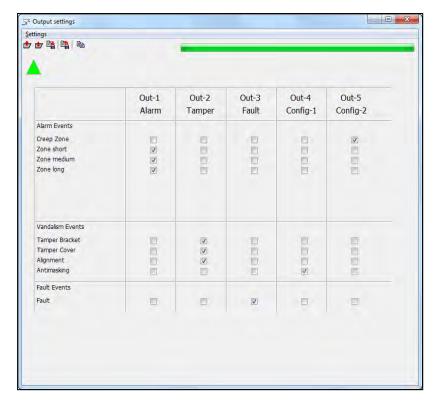
	The progress bar on the right of the toolbar indicates the progress when the configuration is uploaded to or downloaded from the detector.
	Loading configuration from the detector in progress or completed.
<b>V</b>	The current configuration is transferred to the detector.
	Red icons indicate a communication problem between software and detector.

**Example 1**: default settings, three outputs available, standard PRO E-detector, (screenshot below: PRO E-45, single zone; thus out 4 and 5 greyed out, one zone, no pulse count event; default settings).



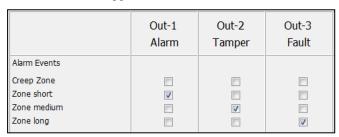
- 1. Alarm: 360PROtect™ (creep zone and rear side of detector) and main zone trigger output 1. Anti-masking triggers output 1 as well, but together with output 3.
- 2. Tamper: tamper switch in main housing and in bracket and any manipulation of the alignment trigger output 2.
- 3. Fault: Power supply or outside temperature outside of specified range (e.g. supply voltage too low, outside temperature too high) failure or if the outside temperature is out of range of the specified operational range. Anti-masking triggers output 3 as well, but together with output 1.

**Example 2**: using all five relays available on a PRO E H-detector: (screenshot below: PRO E-100H, three zones, no pulse count event; default settings).



- 1. Alarm: Zones 1-3 (here: L, M, S) trigger output 1.
- 2. Tamper: tamper switch in main housing and in bracket and any manipulation of the alignment trigger output 2.
- Fault: Power supply or outside temperature outside of specified range (e.g. supply voltage too low, outside temperature too high) failure or outside temperature out of range of the specified operational range trigger output 3.
- 4. Config1: Anti masking triggers output 4.
- 5. Config2: 360PROtect (creep zone) triggers output 5.

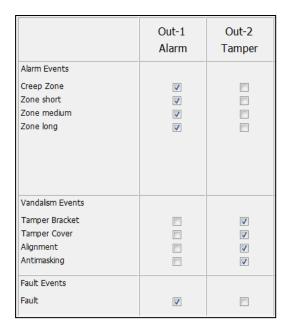
**Example 3**: alarm localisation, each zone triggers its own alarm.



**Example 4**: Legacy mode (see "PRO E and PRO E-RF detector settings"), using only 2 Outputs: In case the PRO E-detector replaces an older PRO detector in an existing installation, you need to bundle the 5 Outputs into 2 Outputs to maintain all functions of PRO E-detectors without changing the existing cabling.

The following image shows an example:

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### 3.2.1 Change output settings

To change output settings check and uncheck the checkboxes according to your needs. It is possible to activate multiple checkboxes for one event so that multiple outputs are triggered in case of that event. If required, it is also possible not to activate any checkbox for an event to completely deactivate that output.

#### Transfer settings to detector

**Note:** When you change settings these will not become effective until you upload the settings to the detector.

To transfer settings to the detector click , or select Settings, Write settings to detector (or [Ctrl]+[D]).

After successful completion of the process the Aicon is displayed in the upper part of the dialogue.

#### **Discard changes**

There are different options to discard changes in the Settings dialogue.

If the previously set values shall be displayed in the dialogue again, click or select **Settings**, **Read settings from detector** (or [Ctrl]+[U]). The settings in the dialogue are overwritten by the settings stored in the detector.

Alternatively you can close the Settings dialogue without saving the changes. A warning is displayed:



To discard changes and to close the dialogue select **Yes**. Select **No** to return to the Settings dialogue and to proceed. The dialogue is closed then.

# 3.2.2 Factory settings

To set the values in the Settings dialogue to the default factory settings click or [Ctrl]+[D]. All output settings are immediately reset to factory settings.

The factory settings will not become effective until you upload the settings to the detector.

To transfer the settings to the detector click , or select **Settings**, **Write settings to detector** (or [Ctrl]+

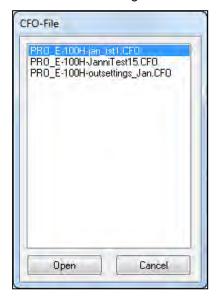
[D]). After successful completion of the process the \_\_\_ icon is displayed in the upper part of the dialogue.

### 3.2.3 Save and load configuration file

To create a backup or to transfer settings to another detector you can save the detector settings in a file.

If you wish to transfer the basic configuration in the Output settings dialogue to other detectors proceed as follows:

- 1. Select **Settings**, **Save** (or [Ctrl]+[S]), or click ...
- Enter a meaningful file name and click Yes.
   The settings are saved on the hard disk of the PC in a .CFO file in the ADPRO PRO E-Tool program directory. The file name entered is preceded by the detector's model designation a prefix, e.g. "PRO E-100H-".
- 3. To transfer the settings stored in the file to a different detector connect to that detector using the ADPRO PRO E-Tool.
  - See "Initial detector connection".
- 4. Select Settings, Output Settings.
- 5. To load the basic configuration of the first detector select **Settings**, **Open** (or [Ctrl]+[O]) or click following dialogue is displayed in which all stored configurations are listed:



- 6. Double-click on an item to load the respective settings.
- 7. To transfer the settings to the detector select **Settings**, **Write settings to detector** (or [Ctrl]+[D]), or click

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