

Management remote control

SendoPro 868-A

Art. Nr. 907 0 675

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English

Operating Manual

Management remote control

SendoPro 868-A

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Thank you for purchasing an Theben HTS presence detector and putting your trust in us.

1. Usage

Please read the operating manual and make yourself familiar with the functionality. The management remote control serves only for the intended use contractually agreed upon between the manufacturer and user. Another or a use in excess thereof does not apply according to the terms of the contract. The manufacturer accepts no liability for damages resulting from such use.

The SendoPro management remote control is used to adjust and perform service work of Theben HTS presence detectors.

Batteries or devices with inserted batteries may not be exposed to excessive heat, e.g. sunlight, fire or similar.

Electrical and/or electronic legacy devices and batteries are not to be disposed of in normal waste. Instead, the products must be taken to the proper waste facility, recycled and recycled in accordance to the country's laws as well as guidelines 2002/96/EG and 2006/66/EG which states that legacy devices and batteries have to be taken to the appropriate collection facility for recycling.



2. Function and performance

- Bidirectional remote control for the start-up and service of Theben HTS presence detectors
- Rapid adjustment to changed operating conditions without uninstalling detectors
- Transmission of individual parameters or complete parameter sets to the detector
- Calling or saving or up parameter sets
- Comparing parameter sets
- Readout parameters from PlanoCentro
- Readout diagnosis and statistic data
- Pre-defined parameter sets (templates)
- Full graphic LCD
- SD card slot

3. Pre-defined parameter sets (templates)

We recommend to use the pre-defined parameter sets for initial start-up. Different applications are available per detector type like:

- Common room/area
- Office
- Office bright
- Office dark
- Corridor
- Corridor bright
- Corridor dark
- Corridor pulse
- WC
- Wet zone

Parameter values see page 80

4. Information about this operating manual

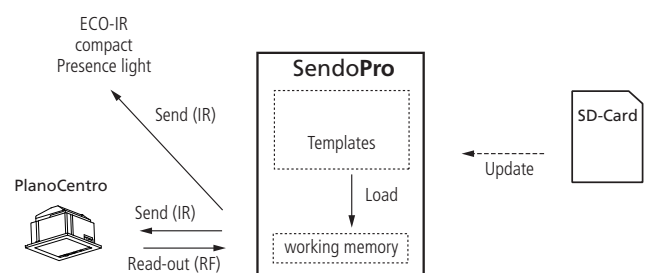
Notation

< > : Menu-functions, function keys, parameter names

[....] : Key names

5. Data exchange

Function	Description
Read-out	Receive data from the presence detector via radio communication. See page 70.
Send	Send parameters via infrared to the presence detector. See page 70.
Update	Implementing SendoPro management remote software updates via the SD card. See page 74 and 76.



6. Operating controls

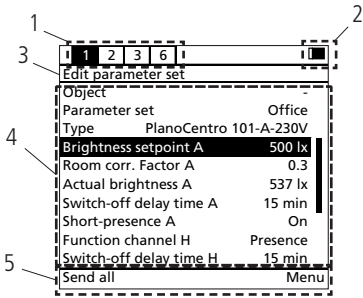
6.1 Display

- 1 Register for grouping functions

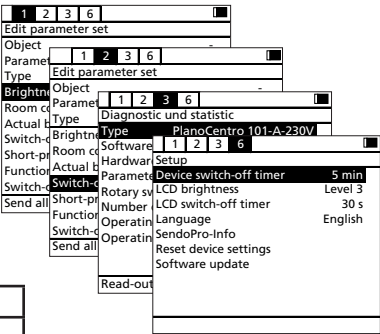
2 Battery charge

3 Register name
- 4 Data area

5 Context dependant functions



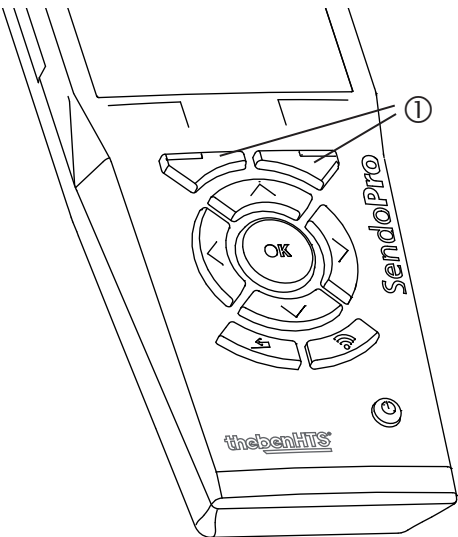
Register	
1	Edit, send, readout parameter set
2	Edit, send, readout parameter set
3	Diagnosis and statistics
6	Settings



6.2 Keys

Key	Description
Function keys ① see following page	Function key lettering can be found at the bottom of the display on the right and left side. Function keys are allocated according to context dependant functions. Lettering in the display is respectively matched.
Key up ^	- Move cursor one position/line up - Select parameter
Key down v	- Move cursor one position/line down - Select parameter
Key left <	- Displays the register on the left of the current register - Automatically display the last register when going over it

Key	Description
Key right >	- Displays the register on the right of the current register - Automatically display the first register when going over it
Back ←	- Press key once: Interrupts current action or goes back on level in the menu - Press/hold key: Interrupts current action and goes back to the top level in the menu
OK	- Execute action/function - Confirm action - Selecting in menu - Put highlighted object (e.g. parameter) in edit mode - Quick access to the most important function in the cursor position context. See page 68.
Send	Send current selected parameter to the detector via IR.
On/Off	Switch the remote control on and/or off. Press the key for 1 sec.



6.3 Batteries

Battery status

The battery status display depends on the battery type used. The status display applies to non- rechargeable batteries (e.g. alkali-manganese). The battery status is displayed in 5 levels:


	Battery status very good (new)
	Battery status good.
	Battery status sufficient. Middle position.
	Batteries are almost empty. The background lighting (LCD brightness) is set to level 1. Have new set of batteries ready.
	Batteries are empty and must be replaced immediately.

6.4 Function menu


Available functions in the register are called up via the function key <Menu>. ①

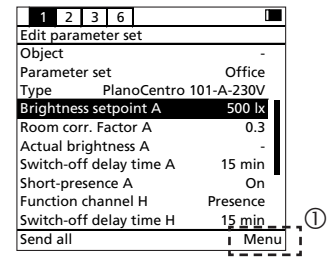
7. Switching remote control on/off

Switching the remote control on

- SendoPro is switched on via the On/Off key .
- The Theben HTS logo and the software version is displayed for a couple of seconds when the device is switched on.
- The batteries are checked for sufficient capacity.

Switching the remote control off

- SendoPro is switched off via the On/Off key .
- The SendoPro switches off automatically if no key is pressed during a specified time. This extends the life of the batteries. The switch off timer can be set in register 6.

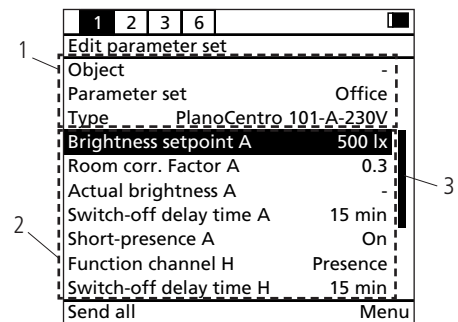


8. Register 1 and 2: Edit parameter set


Register 1 and 2 contain all functions needed for detector start up / configuration. Pre-defined parameter sets (templates) can be loaded and the parameters can be adjusted. Parameter sets as well as individual parameters can be sent to the detector. Current parameters can be readout (Plano series) from the detector for checking. Control commands for the detector are available for assistance during start up. The same functionality of register 1 and register 2 enable comparisons of parameters and parameter sets.

GB

- Parameter set description
 - Object (Name)
 - Parameter set (Name)
 - Detector type
- Parameter list
 - In accordance with the selected detector type the available parameters are listed.
- Scroll bar



8.1 Short-cut functions

Cursor position	Key	Function
Object	[Menu]	Available object functions are displayed.
Parameter set	[OK]	Select a pre-defined parameter set from the list of different applications.
	[Menu]	Available parameter set functions are displayed.
Type	[OK]	The list of detector types is displayed. Select the detector type and then a template (Application), which is then loaded. The parameters for the selected detector are displayed in the parameter list.
	[Menu]	Available detector type functions are displayed.
Parameter	[OK]	Change parameters: The selection list for selected parameter is opened
	 [Send]	The selected parameter is sent to detector.
	[Menu]	Available parameter functions are displayed.
	<Send all>	All parameters of the shown parameter set are sent to the presence detector.

8.2 Parameter set menu

1. Mark parameter set
2. Select <Menu>

Function	Description
Load	Short-cut function: Mark parameter set - [OK] - Select a pre-defined parameter set (template).

8.3 Type menu

1. Mark detector type
2. Select <Menu>

Function	Description
Edit	Short-cut function: Mark type - [OK] 1. Change detector type with the [^] [v] (up/down) key. 2. Confirm the selected type with [OK]. - If the buttons [^] or [v] pressed and held, scrolled
Read-out data	see pages 70 and 71 (Plano series)
Control commands	<Function key left> , see page 71

8.4 Search type

The management remote control must be set to the correct detector type. By means of the functions <Search↑> and <Search↓> the detector type can be determined.

1. Mark detector type
2. Select <Menu>
3. Select <Edit>

Function	Description
Search ↓	Short-cut function: Mark type - [OK] 1. The list of detector types is displayed.
Search ↑	2. By using the function keys <Search↑> und <Search↓> the detector types in the list are selected one by one. The detector indicates the correct type selection by means of the LED which will flicker for 2 seconds. An incorrect selection of the type will be indicated by a brief one-time illumination of the LED.

8.5 Parameter menu

1. Mark parameter
2. Select <Menu>

Function	Description
Edit	Short-cut function: Mark parameter - [OK] Change selected parameter: 1. Select <Edit> 2. Change parameter values with the [^] [v] (up/down) key. 3. Confirm the selected parameter value with [OK]. - If the buttons [^] or [v] pressed and held, scrolled.
Read-out data	see pages 70 and 71 (Plano series)
Control commands	<Menu> <Control commands> , see page 71

8.6 Send parameter

The displayed parameter set must correspond with the detector type installed.

Send individual parameter	1. Select the parameter with the [^] [v] (up/down) key 2. Press [Send] key
Send parameter set <Send all>	1. Mark one parameter 2. Press function key <Send all>



Aim the SendoPro at the detector during sending.

8.7 Read-out parameters

Reading data from the detector is possible with the Plano series.

Procedure:

1. Mark a parameter
 2. <Menu> <Read-out data>
- (Hint: 2 x <Function key right>)

8.8 Parameters set read-out completed

The data read-out are available as follows:

Object	The object name is unknown after data readout.
Parameter set	The parameter set does not have a name after data readout.
Type	Detector type whose parameter were read-out.
Parameter list	Detector specific parameters are displayed with the values.
Actual brightness	The brightness value measured by the detector below the detector in Lux.

8.9 Control commands

The control commands are listed according to the selected detector type.

Procedure for control commands:

Cursor position has no influence

1. Select <Menu> ① (right function key)
2. Select <Control commands> ② (left function key)
3. Use the function keys to perform the control commands.

1	2	3	6
Edit parameter set			
Object	-		
Parameter set	Office		
Type	PlanoCentro 101-A-230V		
Brightness setpoint A	500 lx		
Room corr. Factor A	0.3		
Actual brightness A	-		
Switch-off delay time A	15 min		
Short-presence A	On		
Function channel H	Presence		
Switch-off delay time H	15 min		
Send all	Menu		

①

②

1	2	3	6
Edit parameter set			
Object	-		
Parameter set	Office		
Type	PlanoCentro 101-A-230V		
Menu - Parameter			
Edit			
Control commands			
Read-out data			

9. Register 3: Diagnostic and statistic

Register 3 contains the detector diagnostic and statistic data. The data displayed depend on the detector type. Data can be read-out from detectors of the Plano series. After switching the remote control off and on, the last diagnosis data viewed will be displayed again.

Procedure for reading data

- Select <Read-out data> (left function key) ①

9.1 Diagnostic and statistic menu

These functions are commands that are sent to the detector (Plano series only). Aim the SendoPro at the detector.

1. Select <Read-out data> (left function key)
2. Select <Menu>

1	2	3	6	
Diagnostic und statistic				
Type	PlanoCentro 101-A-230V			
Software version	1.01			
Hardware state	OK			
Parameter state	OK			
Rotary switch position SW1	OK (2)			
Number of parallel signals	2549			
Operating hours light A	534 h			
Operating hours presence H	727 h			

Read-out data				Menu

Function	Description
Check P-terminal overload	Starts testing P-clamp effected overload. The results are sent to and displayed on the SendoPro.
Reset statistic value	Reset a before selected diagnostic- statistic value in the detector.
Reset operating hours	Reset all operating hours in the detector.

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10. Register 6: Settings

Parameter	Description
Device switch-off timer	Elapse time after the last key press, until the SendoPro switches off automatically.
LCD brightness	Brightness level of the display background lighting. 1 stands for minimum and 5 for maximum brightness. Background lighting is switched off with the value «Off». The use of the background light influences the life of the battery.
LCD switch-off timer	Elapse time after the last key press, until the display background lighting automatically switches off. If the SendoPro is still switched on, the background lighting will switch on the next time a key is pressed. This extends the life of the batteries. The timer is active if a brightness level is set with the <LCD brightness>.
Language	Select user language. The following languages are available: German, French, English, Spanish, Italian, Dutch, Swedish, Norwegian, Finnish and Danish
SendoPro-Info	Display of SendoPro software version, as well as additional SendoPro management remote data.
Reset decice settings	Reset the SendoPro management remote back to factory settings. All data in the internal memory will be deleted. Data on the SD-card will remain. Software updates are not reversed. Reset at power on: Press and hold the left function key then press the On/Off key ⏻.
Software update	Program and language update. Updates take place via the SD-card. See page 74 for the updating procedure.

GB

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10.1 Software update

SendoPro software updates take place via the SD-card. Text is displayed in the current set language during the update. Both newer and older SendoPro software versions can be loaded. New versions are available on the Theben HTS website www.theben-hts.ch.

Procedure:

1. Download files from the Theben HTS website
2. An empty SD-card is required
3. Copy files to the SD-card
4. Insert SD-card
5. Select register 6
6. Select function <Software update>
 - The update process is shown on the display.
7. Please wait (may take up to 5 minutes)
8. The successful completed software update is displayed.
9. Select function <Next>
10. The SendoPro restarts.



Do not remove batteries during the update.

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11. Detector response

Detailed information can be found in the presence detector operation manual.

11.1 Receiving a value/command

Acceptance of a valid value or a command from the detector is confirmed through a flickering LED for 2 seconds.

11.2 Receiving new configuration values

Changed parameters are immediately accepted and applied by the detector.

11.3 Local potentiometer settings



All potentiometer settings are adopted if potentiometer values are changed on the presence detector. All values programmed with SendoPro are lost!

11.4 Power loss

All current setting values remain, independent of whether they were set via remote or locally on the device.

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11.5 Special case: KNX presence detectors

KNX presence detectors can only be parameterised using the ETS (Engineering Tool Software). In the case of remotely controllable KNX presence detectors (ECO-IR, compact series), SendoPro has the following functions:

- Test, Reset
- Selecting the programming mode. The LED on the front side indicates when the detector is in programming mode.
- As a tool for determining the brightness value; parameterisation is carried out by means of ETS, the KNX commissioning software. This is explained in the presence detector operating instructions.
- Checking to find out whether a detector is a master (by means of control command). A master responds by flicker its LED for 2 seconds. If it is not a Master it will be indicated by a brief one-time illumination of the LED.
- Checking to find out whether a detector is a slave (by means of control command). A slave responds by flicker its LED for 2 seconds. If it is not a Slave it will be indicated by a brief one-time illumination of the LED.

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12. Update

SendoPro can be used on future Theben HTS presence detector models. Please contact Theben HTS and/or the responsible Theben HTS representative for this.

For implementing a program and language update see page 74.

13. Troubleshooting

Fault	Cause / Remedy
Remote will not switch on, and/or the display goes off again.	Batteries are empty. Replace with new batteries.
LEC in the detector does not react to send.	Aim the remote directly at the detector when sending; distance from detector is too great; check detector type in the remote; detector not remote controlled
Background lighting is automatically deactivated.	Batteries are almost empty. Note: Have a set of replacement batteries available for use in background lighting!

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14. Technical data

Management remote control	SendoPro 868-A
Supply voltage	6V
Batteries	4xAA, 2500 mAh, 1.5 V
Transmission medium for sending	Infrared (IR)
Transmission medium for receiving	Radio
Radio frequency	868MHz
Range IR	Approx. 8m
Emission angle	± 15°
External memory	SD card (SD, SDHC)
Dimensions	190 x 82 x 25 mm
Ambient temperature mode	0° - +50°C
Ambient temperature	-20° - +60°C
Colour	Black

Item numbers	
SendoPro 868-A	907 0 675
SD card	Accessories 907 0 676

14.1 Compatibility (Software version 1.01)

- PlanoCentro 101-A-230V
- PlanoCentro 000-A-230V
- PresenceLight 180
- PresenceLight 360
- compact office
- compact office DIM
- compact office 24V
- compact office 24V Lux
- compact office EIB
- compact passage
- compact passage 24V
- compact passage KNX
- compact passimo
- compact passimo KNX
- ECO-IR 360C NT
- ECO-IR DUAL-C NT

CE declaration of conformity

This device conforms with the protection provisions of the EMC directive 2004/108/EC and of NSR 2006/95/EC.



15. Guarantee bond

Theben HTS presence detectors are manufactured and tested for quality with greatest of care and most modern technology. Theben HTS AG thus guarantees smooth function with correct use. Should a malfunction appear, Theben HTS AG guarantees within the scope of the General Terms and Conditions:

Please notice specifically:

- that the guarantee is valid for 24 months from date of manufacture.
- that the guarantee becomes void if you or a third party makes modifications or repairs to the devices.
- that, as long as the presence detector is connected to a software controlled system, the guarantee for this connection is only valid if the interface specifications are adhered to.

We are obligated to improve or replace as quickly as possible all damaged or unusable parts within the scope of delivery, proven insufficient materials, faulty construction or lacking models up to the end of the guarantee period.

Dispatching

For cases covered by the guarantee, send the device, together with the shipping order and a short description of the problem to the responsible specialised dealer.

Industrial property rights

Concept, as well as hard and software of this device are copyrighted.



Subject to alteration and printing errors.

16. Pre-defined configuration sets (templates)



PlanoCentro 101-A-230V:

Parameter	Application	Common room / area	Office	Office bright	Office dark	Corridor	Corridor bright	Corridor pulse	Corridor pulse	WC
Brightness set point value A		400	500	800	200	200	400	100	200	Meas. of
Room correction factor A		0.3								
Switch-off delay time A		15 min				10 min			Impulse	10 min
Short-presence A		On								
Function channel H		Presence								
Switch-off delay time H		15 min				10 min				
Switch-on delay time H		0 s								1 min
Function mode		auto								
Staircase light function		Off								
Control input S1		auto								
Detection sensitivity		Level 3 (Standard)								
Surveillance sens. reduction		Level 2 (Standard)								
Group address		All								
Scene 1		On								
Scene 2		Off								

compact office
compact office 24V
ECO-IR 360C NT


A 		B 		
LUX	t _{off}	t _{off}	t _{on}	
Office	4.0	15 min	15 min	0 sec
Office clear	5.0	15 min	15 min	0 sec
Office dark	3.0	15 min	15 min	0 sec
Passage	3.0	10 min	10 min	0 sec
Restroom	on	10 min	10 min	1 min

compact passage, compact passage 24V

A 		B 		
LUX	t _{off}	t _{off}	t _{on}	
Passage	3.0	10 min	10 min	0 sec
Passage clear	4.0	10 min	10 min	0 sec
Passage dark	2.0	10 min	10 min	0 sec


GB

PresenceLight 180, PresenceLight 360


A 	
LUX	t _{off}
Standard room	4.0 15 min
Passage	3.0 10 min
Restroom	ON 10 min
Wet room	3.0 15 min

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compact office DIM



A 	
LUX	t _{off}
Office	4.0 15 min 0 sec
Office clear	5.0 15 min 0 sec
Office dark	3.0 15 min 0 sec
Passage	3.0 10 min 0 sec

compact office 24V Lux

A 	
LUX	t _{off}
Office	4.0 15 min
Office clear	5.0 15 min
Office dark	3.0 15 min
Passage	3.0 10 min

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ECO-IR DUAL-C NT

A 		B 
LUX A	t _{off}	LUX B
Office	4.0 15 min	4.0
Office clear	5.0 15 min	5.0
Office dark	3.0 15 min	3.0

GB

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