OmniAssure Touch Square

Honeywell



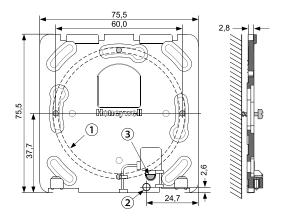
EN Installation Instructions......2

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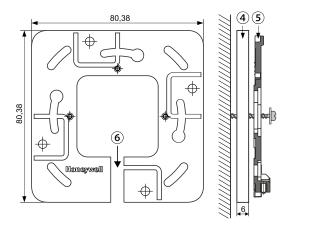
GLOBAL: www.security.honeywell.com DACH: www.security.honeywell.de

Model name	Smart	proX	Mobile	Color	Item. no.
OmniAccure Touch Course	Х	Х	х	Black	OT4800BHONG
OmniAssure Touch Square	Х		Х	Black	OT4700BHONG
OmniAssure Touch Square 16 key	х	×	х	Black	OT4816BHONG
	Х		Х	Black	OT4716BHONG
OmniAssure Touch Square	Х	Х	Х	White	OT4800WHONG
	Х		х	White	OT4700WHONG
OmniAssure Touch Square 16 key	Х	Х	Х	White	OT4816WHONG
	Х		Х	White	OT4716WHONG

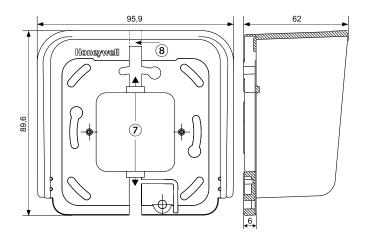
→ I



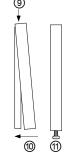
→ II

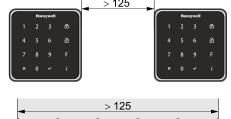


→ III



• IV → V









Subject to change without notice.

1 Scope of delivery

- 1 Installation instructions
- 1 Reader front
- 1 Mounting backplate
- 5 Wall anchors (5 x 25 mm or #8 x 1")
- 5 Screws (panhead, 3 x 30 mm or #4 x 1¼")
- 3 Enclosure screws (metric, M2 x 5 mm panhead)
- 4 Enclosure screw caps

2 General

The OmniAssure Touch Square Reader was tested at the panels:

- NetAXS 123 V6 (Wiegand)
- ProWatch 6k (Wiegand)
- Pro32 (Wiegand)
- Mercury EP1502 (OSDP)

Mobile credentials:

- proX (EM4102)
- MIFARE classic
- MIFARE DESFire EV1/EV2
- OmniAssure OES
- QKev
- HID
- ISO-SNR Quadrakey
- Bluetooth Low Energy

Physical interfaces:

- Wiegand
- RS-485 (OSDP 2.1.7.)

The Reader Utility Application is used to configure:

- credential bit formats and length

3 Installation

All dimensions in drawings are in mm.



All wiring shall be in accordance with applicable codes and regulations. Observe applicable building codes and safety regulations in determining the reader position.

UL 294: Installation must be done in accordance with National Electrical Code, ANSI/NFPA 70.

General terms

- The reader base can be used as a drilling template where necessary.
- When positioning the reader base, ensure that the backtamper can be securely screwed in; otherwise the tamper detection is reduced to opening monitoring.
- We recommend that the connection cable of the reader is guided through the reader base from the side with the lettering reading "Honeywell" before fixing the reader base.
- Secure the reader base without exerting excessive force.
- Use the mounting material included in the accessories. If you need more materials, ensure that these have the same diameter.
- The power supply of the reader must be switched off while the reader is connected. Risk of damage!

3.1 Important notes on mounting

- Pay attention to the minimum distances (<u>see "V", page 1</u>).
 Mounting readers in close proximity of each other will reduce performance, the minimum recommended mounting distance side-by-side or back-to-back is 125 mm (5").
- Mounting the reader on a metal surface may reduce performance, a plastic separator of at least 6 mm (¼") is recommended.

3.1.1 Mounting height

In order to operate the keypad and read the indications optimally, install the reader at a height of 130 to 140 cm (51 to 55") above the floor.

3.1.2 Necessary cable reserve

In order for the reader to be able to dismounted when necessary, there must be a sufficient cable reserve in the direct vicinity of the reader. Depending on the type of mounting, the cable reserve can be placed in the flush mounted socket, or in a nearby junction box.

3.1.3 Outdoor use

- If the reader is to be used outdoors, the cable entry must be sealed on both sides of the wall, to prevent condensation.
- The connector for the connection cable of the reader should be located indoors.

3.2 Mounting for flush mounted wiring

see "I", page 1

Screw the reader base onto a DIN-style f.m. socket [1] (preferred mounting) or directly onto the wall. For sockets from Switzerland, the reader is fixed at the corners.

Screw the backtamper [2] onto the wall, so that if the reader is torn off the wall, the actuator pin [3] remains secured to the wall, thus releasing the cover contact and signalling a tamper situation.

3.3 Mounting for surface mounted wiring with wall plate

see "II", page 1

Place the wall plate for surface mounting [4] (Item no. LU45BB) between the reader base [5] and the wall and screw both firmly onto the wall. Then screw on the tear-off protection (see chapter "Mounting for flush mounted wiring")

The wall plate can be rotated in 90° steps so that the surface mounted cable entry [6] can be from at the bottom, at the top, on the left or right.

3.4 Mounting with Visual Cover

see "III", page 1

The visual cover (item no. OT4XBHONG/OT4WHONG) is suitable for flush wiring and surface wiring.

The mounting is identical to the mounting with the wall plate.

Note that the visual cover cannot be rotated. For this reason, a surface mounted cable entry [7] is therefore only possible from below or above. Break [8] if necessary.

For a lateral cable entry, it is therefore necessary to provide the wall plate under the sight protection.

3.5 Fasten the reader

see "IV", page 1

[9] Hang the reader from above in the reader base.

[10] Snap shut below.

[11] Close with the two attached screws.

After completing the mounting and functional testing seal the housing.

To do this, press the enclosed seals into screw holes.

3.6 Test the reader / Commissioning

Apply power (the green LED indicates power) and present a valid credential. The light ring should flash and the sounder should produce a short tone indicating a successful read. If the Host system is connected the light ring and sounder should follow the functionality of the Host system.

3.7 Cable specification

 The reader is supplied with 2 m (6 ft.) of shielded, 8-conductor 0,14 mm² (AWG 26) cable which may be extended with the length and size of cable listed below.

Interface	max. cable length		min. conductor size for panel power suppy						
			9,5 V ¹⁾		12 V		18 V		
	meters	feet	mm²	AWG	mm²	AWG	mm²	AWG	
Wiegand /	61	200	0,55	20	0,33	22	0,22	24	
RS-485 (cable	91	300	0,82	18	0,5	20	0,33	22	
power)	152	500	1,35	16	0,81	18	0,54	20	
RS-485 (local power)	1220	4000	0,16 mm² / AWG 25						

1) to ensure that the reader power supply is at least 7 V DC

3.8 Wire assignments

The connection must be carried out in de-energized state! Risk of damage!

To ensure reliable functioning, ensure that a possible extension of the 4 m connecting cable does not exceed 152 m (condition: no external voltage supply unit is required). For extension purposes up to 152 m an additional JY(ST)Y (6x2x0.6 mm) cable can be used.

The reader can be used remotely for extension purposes at a distance of max. 1220 m. We recommend using a Cat 5 connecting cable (condition: an external voltage supply unit for the reader is required).

In general, by use of RS-485 interface: When the reader is the last user on the RS-485 bus, a 120 Ω end-of-line resistor (from TRX+ to TRX-) must be installed in front of the reader. For further information, refer to the description of the corresponding controller.

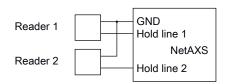
Wire color	Interface				
	Wiegand	RS-485			
red	POWER (+U_b)	POWER (+U_b)			
black	GND (0 V)	GND (0 V)			
white	D1	TRX+			
green	D0	TRX-			
blue	Hold line	do not connect			
yellow	Buzzer	do not connect			
orange	LED green	do not connect			
purple	Tamper	do not connect			

Caution

Floating communication lines may cause spurious emissions, invalidating certification. Ensure all communication lines are properly biased and terminated.

Input Hold line

This input makes it possible to switch 2 readers in parallel (e.g. at NetAXS).

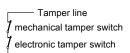


Tamper line

Physical tamper switches:

- tear-off
- enclosure

The electronic switch opens when the operating voltage +U_b fails.



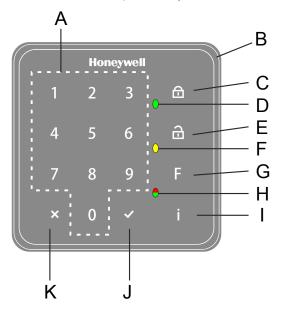
4 Operation

When a credential is read successfully, the light ring lights briefly, the sounder sounds a short tone and the credential associated code is sent to the Host system.

The light ring and sounder are also controllable by the Host system.

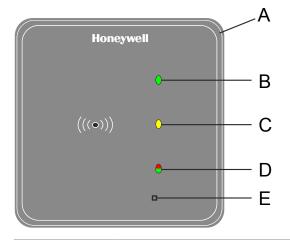
Reader output formats are determined by the personalization of the credential and/or configuration of the reader; on SmartTech and MultiTech readers the behaviour of the light ring and sounder can be modified through configuration.

4.1 Short briefing of buttons and LEDs OmniAssure Touch Square 16 key



A	Numeric keypad for PIN entry (PIN= Personal identification number)
В	LED light ring
C, E, G, I	Not used
D	LED green
F	LED yellow
Н	Duo LED red/green
J	Acknowledge: execute the PIN code / Activate the BLE credential
K	Clear PIN code entry

OmniAssure Touch Square



Α	LED light ring
В	LED green
С	LED yellow
D	Duo LED red/green
Е	Activate the BLE credential by touching the touch-sensitive surface

4.2 Requirements to credential type and operation

The following notes and information can be found in the product accompanying documents of the panels:

- NetAXS 123 V6 (Wiegand)
- ProWatch 6k (Wiegand)
- Pro32 (Wiegand)
- Mercury EP1502 (OSDP)

All credential type, i.e. Bluetooth authentication requirements including the following:

1. Electronic credential transmission technology Bluetooth and RFID.

Bluetooth and RFID protocol names:
Default Square OES WG38,BLE,HID-Prox,EM-Prox
DF UID WG26
DF UID WG32
DF UID WG37
DF UID WG56
DF UID-L WG26
DF UID-L WG32
DF UID-L WG37
DF UID-L WG56
EM-Prox WG26
EM-Prox WG32
EM-Prox WG34
EM-Prox WG40
HID
MF UID WG26
MF UID WG32
MF+DF UID WG26
MF+DF UID WG32
MF+DF UID WG37
MF+DF UID WG56
MF+DF UID-L WG26
MF+DF UID-L WG32
MF+DF UID-L WG37
MF+DF UID-L WG56
OSDP OmiAssure OES WG38 HID UniKey
OSDP OmiAssure OES WG38
OmniAssure OES WG38
OmniAssure OES WG38 UniKey 38 bit
EM-Prox(+EM4450)WG32
QKey WG34

2. Config App for programming the reader (Reader Utility by HON). Also the credential bit format and length will be configured by the App during the configuration, so find details in description of App. The following abbreviations are used in the Config App:

DF	DesFire
MF	Mifare Classic
UID	Serial Number, continuous numbers like Omni-Assure
UID-L	Serial Number, format like LuminAXS, Omniprox
WGxx	Wiegand xx Bit
EM-Prox	EM-Marin 125 kHz H4102 + H4450
HID	HID 125 kHz
OES WG38	38 Bit Wiegand Diversified Keys, card ODPEV28N38
BLE	Bluetooth UniKey format
QKey WG34	Quadrakey Wiegand 34 Bit

- Use the following operating system (OS) and revision level, along with the credential device application software with following level: Bootloader V4.2.xxx / Application 4.2.xxx / OS 4.2.xxx
- 4. Installer/dealer can access the reader via config app 'Reader Utility by Honeywell' (Google Play store). Verification is required (SITE code). The access control system uses 3 types of verification for the user: Available are pin code, physical credential and mobile credential.
- The reading of a physical credential and an electronic device (BLE), transmitting user data to the reader interface is the same.
- Have a look at the manual of the system for more details like instructions on how to silence a trouble, functions of all switches/buttons, description of the conditions that might be expected to result in false alarms or impaired operation of the product and service information.

5 Classifications

UL 294: Destructive attack level IV, line security level I,

endurance level IV, power level I.

Access Control Feature: Single Point Locking

Device with Key Locks Level I.

EN 60839-11-1: Grade 3, environmental class III

6 Certifications

CE, FCC, UL294

FCC ID: UA2OT4XXXBHON

UA2OT4XXXWHON

Intertek: ETL listed Intertek 5014020

7 FCC Regulations

7.1 Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

7.2 Compliance statement

This device complies with part 15 of the FCC Rules and with the Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

7.3 Information to the user (Part 15.105 (b))

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

8 CE Declaration of conformity



Hereby, the Novar GmbH declares that the radio equipment readers OmniAssure, item no. OT4700BHONG, OT4716BHONG, OT4800BHONG, OT4816BHONG, OT4700WHONG, OT4716WHONG, OT4800WHONG and OT4816BHONG are in compliance with Directive 2014/53/EU.



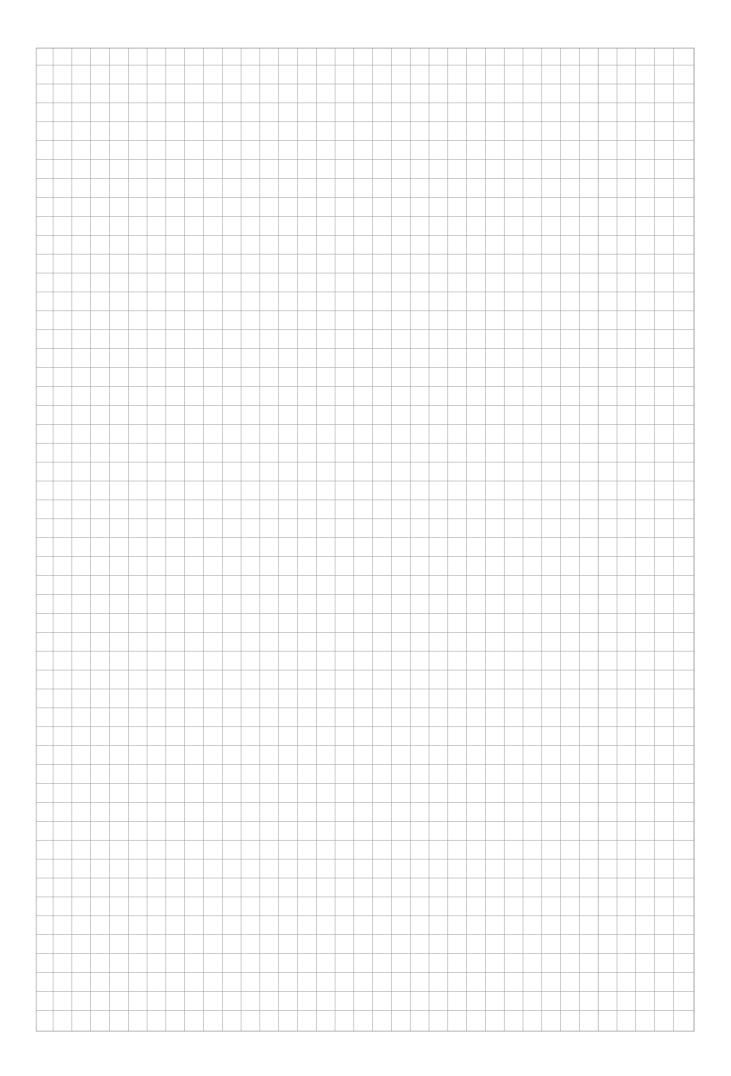
This symbol on our product shows a crossed-out "wheelie-bin" as required by law regarding the Waste of Electrical and Electronic Equipment (WEEE) disposal. This indicates your responsibility to contribute in saving the environment by proper disposal of this Waste i.e. Do not dispose of this product with your other wastes. To know the right disposal mechanism please check the applicable law.

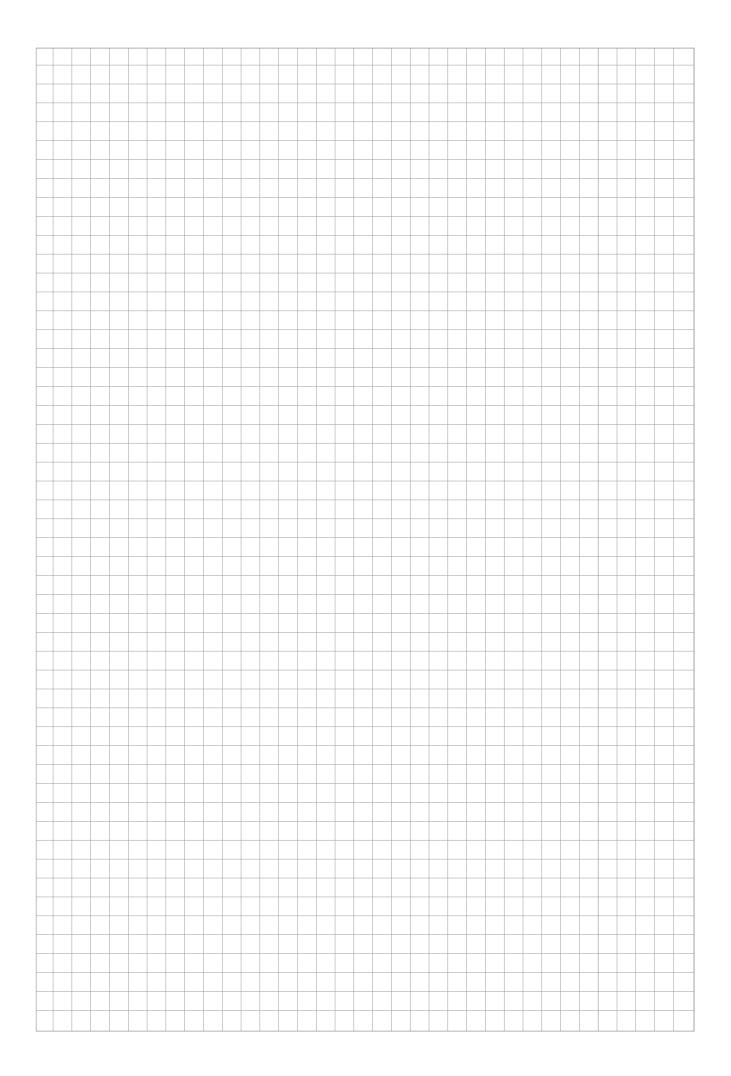
The full text of the EU declaration can be downloaded from our homepage https://www.security.honeywell.de/ in the service/download area.

9 Technical specification

[a	00								
Dimensions	80 x	80 x 80 x 22 mm / 3.15 x 3.15 x 0.87 inch							
Operating temperature	-40 °	-40 °C to 66 °C / -40 °F to 151 °F							
Protection class	IP65	IP65							
Protection class UL/ULC	IP4X / IK04 (enclosure)								
Environmental class	Ш	III							
Humidity condition	max. 93±2% at 32±2 °C / 89.6±3.6 °F 0 - 95% non-condensing								
Installation and use	Indoor and outdoor usage								
Interfaces	Wiegand, RS-485								
Reading range	0 ≈70 mm / 0 ≈2,75" (depending on credential)								
BLE range	0 ≈5 m / 0 ≈197"								
Power supply reader	7.0 V to 18 V DC (12 V recommended)								
Max. Power consumption	Watt								
Current consumption	/ vv	att	at 7	V DC	at 12	V DC	at 18	V DC	
	avg	peak	avg1)	peak2)	avg1)	peak2)	avg1)	peak2)	
	1.8	4.0	250	530	150	320	100	220	
Used frequency bands - 119 kHz to 135 kHz - 13.56 MHz - 2400 to 2483.5 MHz	Transmitted power < 10 dBμA/m < 0 dBμA/m < 1 mW e.i.r.p.								

- The "average" current is measured in Idle mode (factory setting, light ring is slightly blue)
- The "peak" current is measured with card activation (factory setting, light ring is on)







Honeywell Commercial Security

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