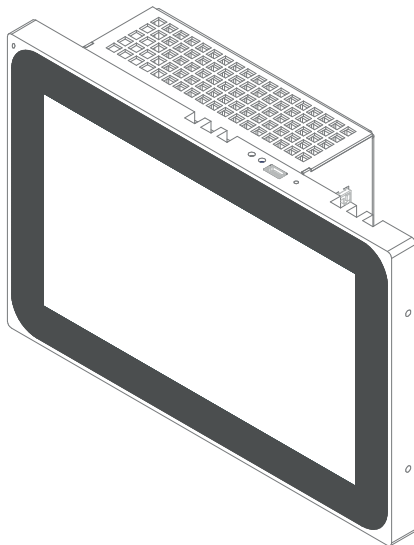


Operating and
assembly instructions

Instrucciones de uso
y de montaje

B.
Berker



7574 01 .., 7574 02 ..

Touch Panel Android/Windows

Panel táctil para Android / Windows

Painel táctil Android/Windows

Pekskärm Android/Windows

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Touch Panel 7'' Android

Order no.: 7574 01 07

Touch Panel 10'' Android

Order no.: 7574 01 10

Touch Panel 10'' Windows 7

Order no.: 7574 02 10

Touch Panel 16'' Windows 7

Order no.: 7574 02 16

Operating and assembly instructions

1 Safety instructions

Electrical equipment may only be installed and assembled by qualified electricians in accordance with the relevant installation standards of the country.

Failure to comply with these instructions may result in damage to the device, fire, or other hazards.

This is equipment of class A. It can cause radio interference in residential areas that the operator must counteract by means of appropriate measures.

When supplying the system with Power over Ethernet (PoE) the overall performance including all loads connected (e.g. USB devices) may not exceed the power consumption of IEEE 802.3af class 3.

In the case of device variants with PoE functions, make sure that no differential ground potentials are used so that this function can be used.

When integrated into a door communication system (e.g. Elcom) or usage of audio files the permissible PoE current consumption may be exceeded. This may lead to a shutdown of the PoE supply. In this case a 24 V DC auxiliary voltage supply is to be connected.

Do not operate the user interface with sharp-edged or pointed implements.

Do not use any sharp-edged implements for cleaning. Do not use any acids or organic solvents.

These instructions are an integral component of the product and must be retained by the end user.

2 Design and layout of the device

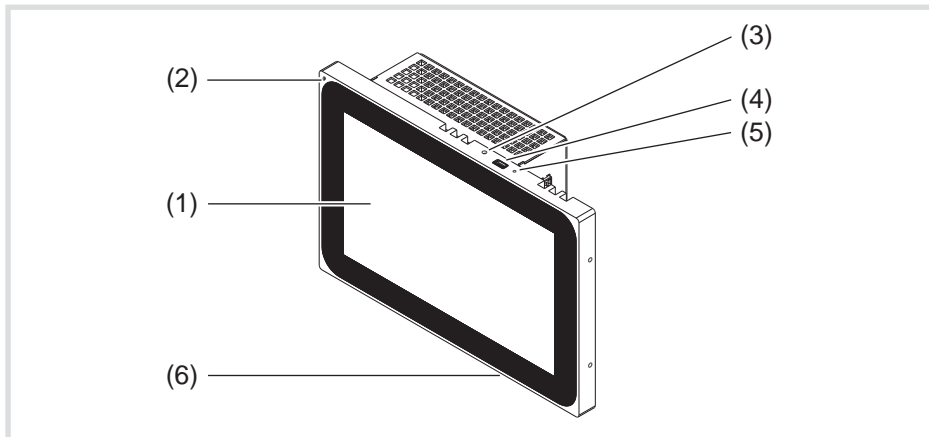


Figure 1: Front view – Example 7'' Android variant

- (1) Touch-sensitive user interface
- (2) Microphone
- (3) Brightness sensor
- (4) Socket for mini USB 2.0
- (5) Reset button **R** for rebooting device
- (6) Speaker

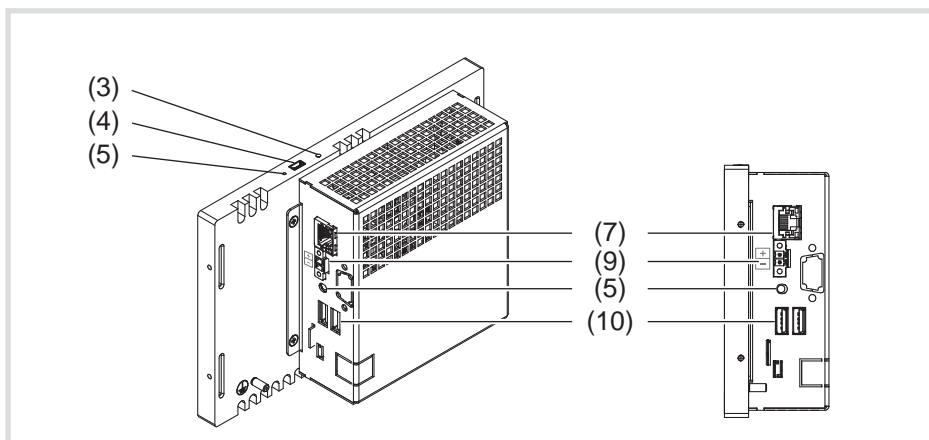


Figure 2: Rear/Side view – Android device variants

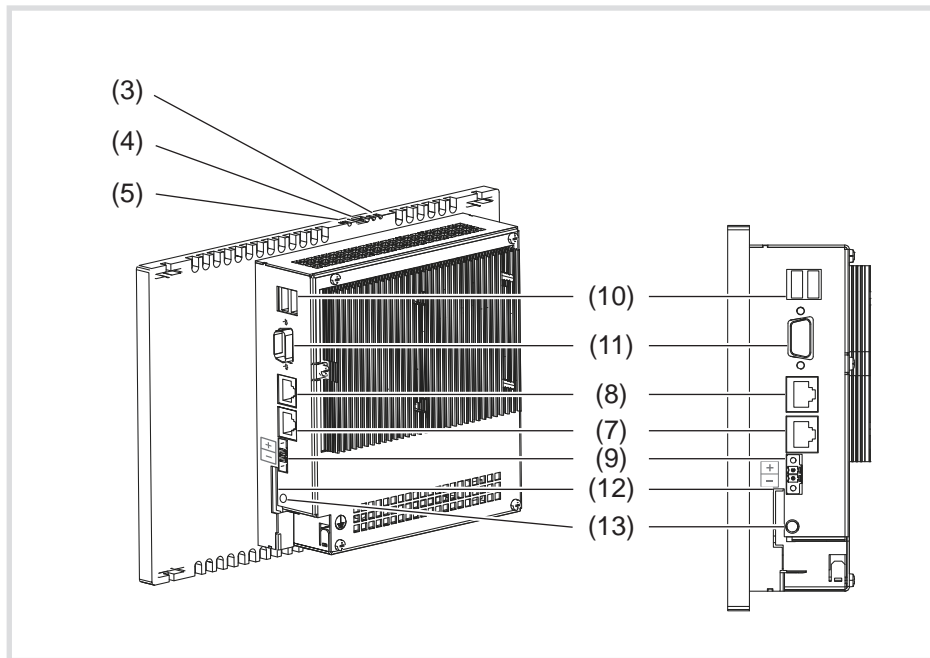


Figure 3: Rear/Side view – Windows device variants

- (7) Gigabit Ethernet connection RJ45, LAN/PoE (7''/10'' Android variant)
- (8) Gigabit Ethernet connection RJ45, LAN2 (10''/16'' Windows variant)
- (9) Connecting terminal for auxiliary voltage 24 V DC
- (10) Connections USB 2.0
- (11) COM1, Serial RS232
- (12) Slot for SD card with firmware and operating system
- (13) Connection 3.5 mm jack

3 Function

System information

The device is a display obtainable as a variant with integrated Windows embedded (PC) or an Android operating system. The capacitive touch display is highly suitable for the central control and visualisation of building system technology. Operating functions and system statuses are transmitted to the touch panel via Ethernet by means of a local server such as the domovea

Server (see Accessories), which establishes the connection to the KNX system.


In this way, for example, light can be switched and dimmed, hangings controlled, temperature and consumption values displayed or emails read and sent by means of a client on Windows or external applications (Apps) in the Android-Launcher.

Product characteristics

- Operation directly on the screen with the touch of a finger
- Multi-touch function
- Displaying of configured functions, measured values and data
- Brightness sensor for screen illumination
- USB connections for external data storage media
- Microphone and loudspeaker with echo suppression
- Silent, long-lasting convection cooling without fan
- Disabling function for cleaning the user interface by means of Touch Blocker (Windows variants)
- Applications (for Android touch panel) and iCom Module for the integration of door communication functions in the Hager domovea client or Elcom VideoFON client
- Visualisation for Berker IP-Control via browser

Correct use

- Only suitable for indoor applications
- The appropriate flush-mounted housing for touch panel (see accessories) must be used for the flush-mounting in hollow walls or solid walls.
- The panel can be mounted in a horizontal or vertical direction.

 Please note that the planned visualisation must correspond to the mounting orientation of the touch panel. If, for example, a domovea visualisation is implemented, both mounting orientations are only possible for the 7'' variant. A horizontal mounting must be provided from a panel size of 10''.

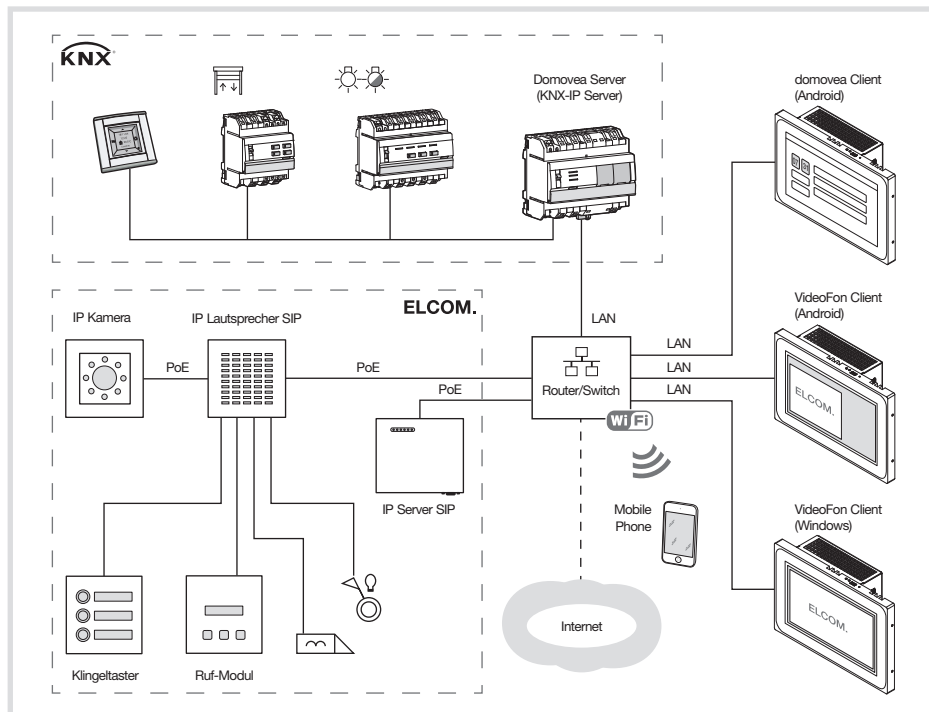


Figure 4: Application environment

Scope of delivery

- Touch panel
- USB/Mini USB type A adapter cable
- Installation material/tool
- RJ45 connector kit with connector and patch cable
- Operating system*) installed - depending on device variant:
 - Windows7® embedded*) or
 - Android 4.0.x


Additionally for Windows variants:

- Touch-Blocker preinstalled on the desktop
- Drivers for the hardware
- Recovery-DVD

*) Windows 7 embedded is a registered trademark of Microsoft Corporation.

4. Operation


The screen has a touch-sensitive surface, called touch screen. By touching the user interface with your finger or with a special touch screen pen (not included in scope of delivery) stored actions and functions are activated.

 Do not operate the user interface with sharp-edged or pointed implements.

Depending on the software visualization, different operating modes are basically possible by means of the touch-sensitive user interface (Table 1).

Operating mode	Explanation with examples
short touch	Switch on/off, stop, activate/deactivate, ...
long touch	Change dimming value, move blind, ...
Single-surface operation:	Switching on/off with the same control surface
Two-surface operation:	Switching on/off using two control surfaces
Sliding	Slide your finger over a control surface to variably adjust a value, e.g. dimming value or temperature value
Wiping	For scrolling forwards or backwards through pages
Multi-Touch control	Simultaneous pressing of several control surfaces to interconnect two actions, e.g. activating function and setting function value simultaneously

Table 1: Operating modes

 If no action is executed on the display within a certain time period, the device returns automatically to standby display (OFF or screensaver). This time period can be configured individually – in the case of Windows variants in the control panel and in the case of Android devices by means of **Settings – Android settings – Display – Sleep** in three levels "Never, 1 Min., 5 Min., 10 Min., 30 Min.". The display is switched on again by touching the user interface once again.

Loading files from external data storage media



CAUTION!

The SD card slot cannot be used for external data storage media with its own pictures, for example.

Factory settings and configurations could be lost when removing the SD card.

Never remove the SD card from the slot.


A mini USB socket (4) is available on the upper edge of the display for loading files, e.g. pictures, audios, updates as well as applications (Apps/programs) from an external data storage medium.

- If a device is mounted flush with the wall, press left and right evenly against the housing until the locking mechanism is audibly released. The device is guided out of the wall. The operating elements on the upper edge are accessible.
- Connect the enclosed adapter cable USB/mini USB to the socket (4) if necessary.
- Connect external data storage medium, such as a USB stick or hard disk, to the adapter cable.
- Store the data in the device or install applications using the Windows Explorer/a file manager.

Update/Recovery of Android Touch Panels via USB stick

The system software of Android Touch Panels as well as the domovea-App can be restored using conventional USB sticks or changed to another software version. The integrated USB update- and Recovery-function can be used in different manners depending on the dataset used::

- Recovery: system recovery, in this case the system software is completely overwritten on the device with a suitable system software (typically the version when supplied).
- Complete update: the system software is completely overwritten with a suitable system software (typically a newer version).

 All user data is lost when performing the recovery and complete updates.

- Partial update: only parts of the system software are overwritten or written. Partial updates can be dimensioned in such a manner that the user data is not lost. Partial updates are particularly suitable for subsequently installing applications or for updating.

The procedure is the same in all cases, the different effects result from the datasets used.

The following is required in order to carry out the software installation:

- Commercially available FAT32 formatted USB memory stick with minimum 512 MB free memory.
- Mini USB adapter cable (included in scope of delivery)
- Update / recovery-dataset (.zip archive, is offered in the download area for the product)
- Archiving software (e.g., Windows Explorer , 7zip or similar)

In order to install a system software, we recommend the following procedure.

- Download the dataset (.zip archive) from the download area for the product
- Unzip the update / recovery dataset into the root directory of the USB stick
- If a device is mounted flush with the wall, press left and right evenly against the housing until the locking mechanism is audibly released.
The device is guided out of the wall. The operating elements on the upper edge are accessible.
- Connect the enclosed adapter cable USB/mini USB to the socket (4) if necessary.
- Connect the USB stick with the touch panel or adapter cable.
- Restart the Android touch panel by pressing the reset button or by disconnecting from the power supply,
Now the update / recovery is started automatically when starting up the device.
- Follow the instructions on the screen in order to conclude the procedure.

Restarting operating system/launcher





If the device does not react properly during operation, the system should be restarted.

- If a device is mounted flush with the wall, press left and right evenly against the housing until the locking mechanism is audibly released. The device is guided out of the wall. The operating elements on the upper edge are accessible.
- Press the sunken Reset button **R** using a thin pointed object. The device will restart automatically. This may take a few seconds. When the home page is displayed, the device is ready for operation again.

Cleaning user interface

A special disabling function, which protects the touch interface against unintended operations for cleaning, can be implemented on Android devices using an App, e.g. the domovea App.

A Touch-Blocker is preinstalled on the desktop of the Windows devices.

- Start the Touch-Block by a double clicking/touching . On the display, a countdown takes place for 60 seconds.
- Clean the screen surface with soft, lint-free cloth. Moisten the cleaning cloth slightly with clear water if necessary. After the countdown has elapsed, the Touch-Block closes automatically. The user interface is no longer blocked.
-  Do not use any sharp-edged implements for cleaning.
-  Do not use any aggressive detergents, acids or organic solvents.
-  Do not allow any moisture to get into the device.

Windows devices

The Windows device variants are supplied with a preinstalled operating system. The interface corresponds to that of a laptop or PC. Furthermore, the domovea client is preinstalled on the desktop interface. All standard applications and clients can be installed and used via the interface.

Android-Launcher

The Android device variants are provided with a Launcher, in which a max. of 5 pages with control panels – 3 x 2/2 x 3 for 7'' (Figure 5), 4 x 2/2 x 4 from 10'' – are configurable. In the device, the Apps that can be used are already preinstalled in a library, e.g. the Elcom App or file manager. A preinstalled App from the library can be assigned to each free control panel (15). The domovea App at the top left is already assigned upon delivery (14).

Depending on the mounting orientation, there is a function bar at the right or bottom edge of the display with standard Android icons (16 ...18) for navigation in the Launcher (Figure 5).

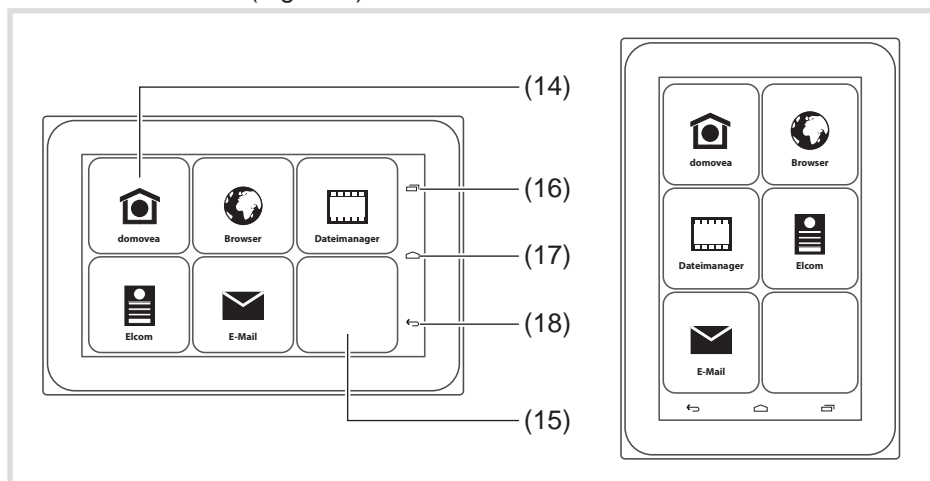





Figure 5: Launcher horizontal/vertical

- (14) Control panel **domovea** App
- (15) Free control panel
- (16) Control panel recently requested Apps 
- (17) Control panel back to home page 
- (18) Control panel Back 

Assigning an application to a control panel

- "Wipe" over the user interface with your finger until the required page is displayed.

- Empty control panel > Touch for 2 seconds.

A dialogue window opens for logging in.

Before the App selection can start, the user must log in (Figure 6).

- Select **Password** row.

A dialogue window with a numerical keyboard opens.

- Input 4-character password using the keyboard and terminate with **Done**.

- In the dialog window, confirm the displayed password with **OK**.

The dialog window for the App selection opens (Figure 7).

- i** The password **8273** for the Administrator and **0000** for the user is set at the factory for the initial login.

- i** If the wrong password is entered, the Launcher will change automatically to the home page.

- Select the required App

The dialog window for configuration of the App display opens.

- Define the display of the App on the Launcher page. To do this, activate **Select icon from Library** and select icon from the bottom row (Figure 8).

The selected icon is applied and displayed at the top of the page.

- i** The row with the icons can be moved by wiping sideways in order to select other icons.

- Give the App a name. To do this, press the input field with the flashing cursor.

A window with a keyboard opens (Figure 8).

- Enter the name for the App and finish the input with **Done**.

- With **Add** finish the display configuration for the App or terminate the assignment without saving with **Cancel**.

- i** If the App is not configured or the configuration is aborted, icons and names of the App are applied and displayed on the Launcher by the respective manufacturer.

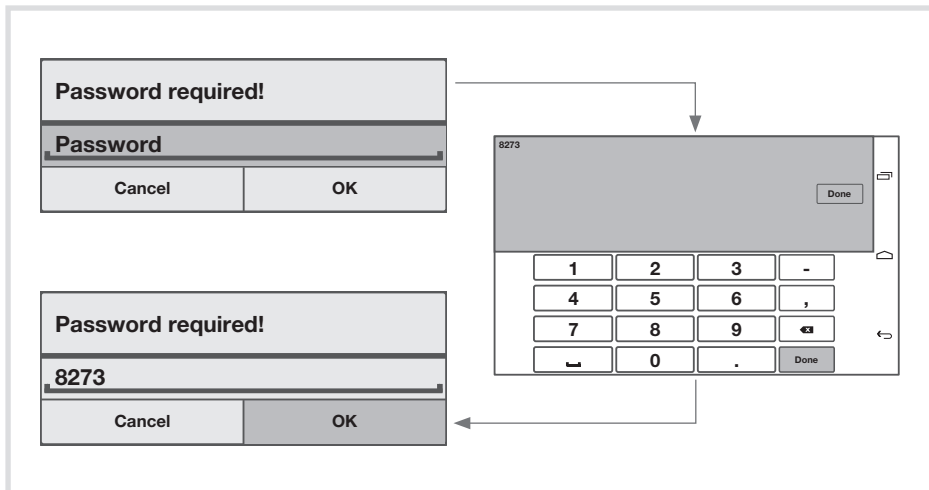


Figure 6: Login

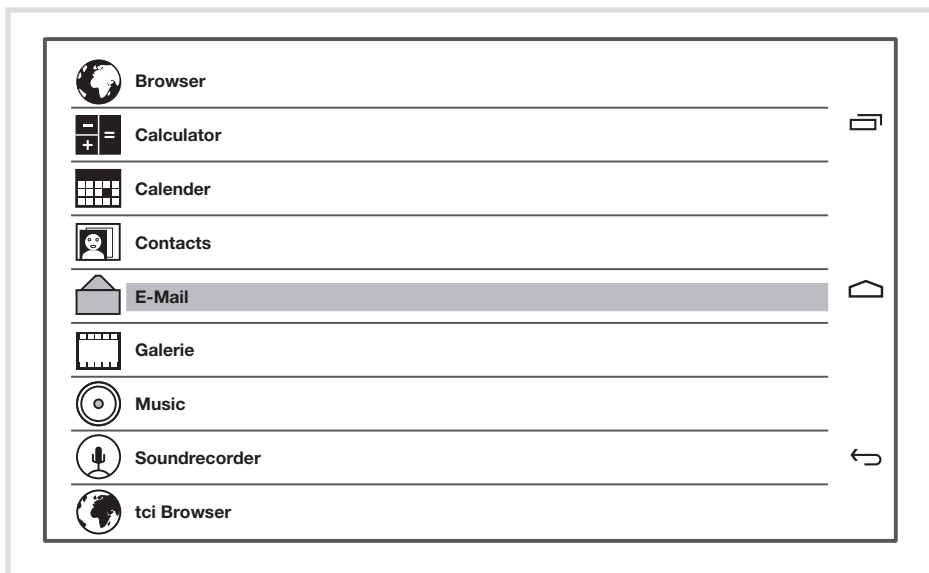


Figure 7: App selection

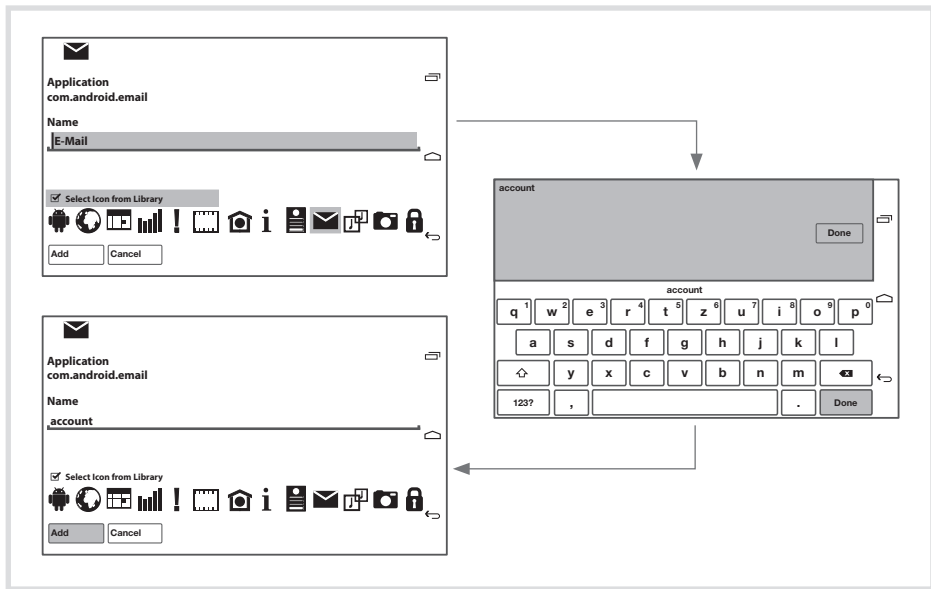


Figure 8: Configuration of the App display

Replacing/deleting the existing assignment

The user is logged in.

- An assigned control panel > Touch for 2 seconds.
Dialogue window opens.
- With **Replace** open the dialogue window for App selection (Figure7), select another App and configure its display (see Assigning application to a control panel).
- With **Delete** release the assignment.
The control panel in the Launcher is empty.

Setting the parameters

On the last page, the settings are located unalterable in the last control panel on the bottom right. The possible settings (Table2) are described here **Change user password** as an example (Figure 10).

The user is logged in.

- Press the control panel **Settings** on the last page of the Launcher.
The dialog window for the selection of the setting parameters opens (Figure 9).

- Select **Change user password**

Dialogue window **Enter new user password!** opens.

- Select **Password** row.

A dialogue window with a numerical keyboard opens.

- Input new 4-character password using the keyboard and terminate with **Done**.

- In the dialog window **Enter new user password!** confirm the displayed password with **OK**.

- Similarly, repeat the input of the new password and finish with **OK**.

The device confirms the new setting with the message **Password changed**.

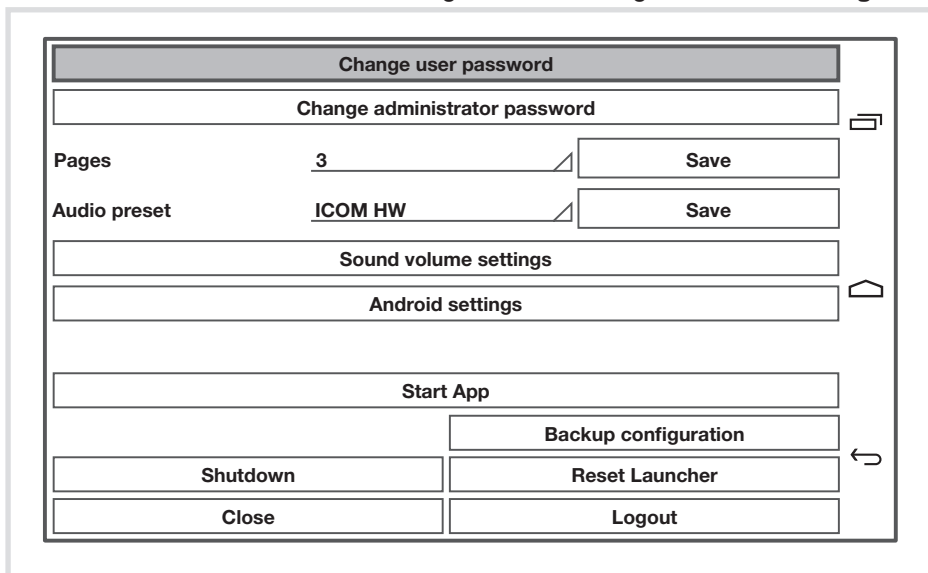


Figure 9: Setting parameters when logging in as Administrator

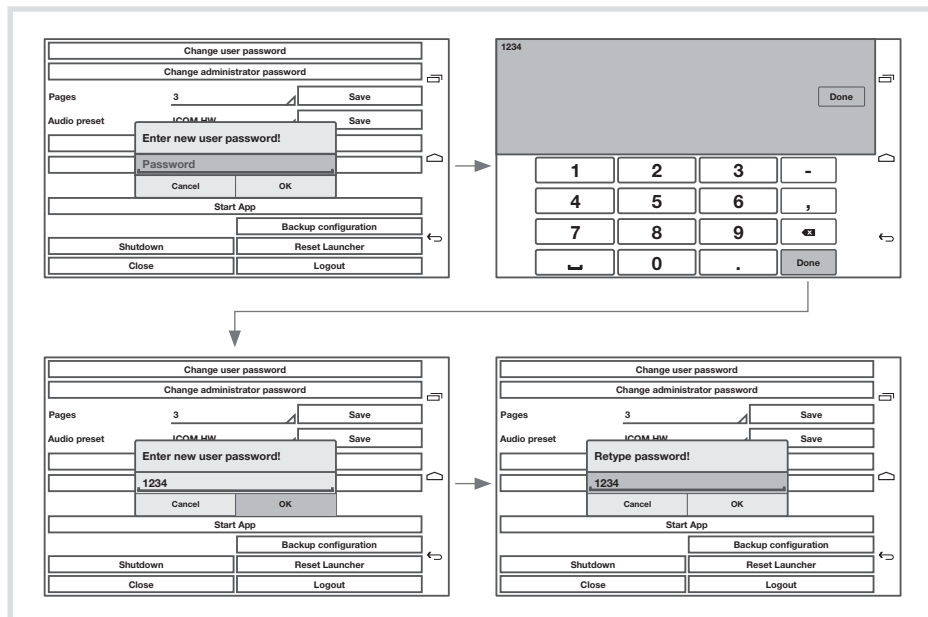


Figure 10: Changing the user password

Parameters	Setting
Change user password ¹⁾	Enter new 4-character password, confirm
Change administrator password	Enter new 4-character password, confirm
Pages	Change and save the number of Launcher pages using icon
Audio preset	Select ICOM SW, ICOM HW, save
Sound volume settings ¹⁾	Set, confirm volume of videos, music, language and notifications variably by "sliding" Select, confirm silent mode Off, mute sound for notifications Activate/deactivate sounds by touching

Parameters	Setting
Android Settings	Configure network with WLAN, Ethernet or Proxy Set sounds, display for device, information for memory, display Apps Store user profile with account, security and language settings Set/display system data, such as date & time, operational aids, developer options, via the tablet
Start App	Starting an App, which e.g. is not permanently assigned in the Launcher
Backup configuration	The message Configuration saved successfully confirms that the device settings have been saved
Shutdown ¹⁾	After confirming with OK , the message Power off signals the process. Device shuts down. The device can be rebooted using the reset button R .
Reset Launcher	All configurations in the Launcher are deleted with OK . Delivery condition is restored. User is logged off.
Close ¹⁾	Return to the Launcher page with the App Settings
Logout ¹⁾	Logout

¹⁾ When logging in as a user, only the marked setting parameters can be changed.

Table 2: Settings

5 Information for electricians

5.1 Installation and electrical connection



DANGER!



Touching live parts in the installation environment can result in an electric shock.

An electric shock can lead to death.

Disconnect the connecting cables before working on the device and cover all live parts in the area!

Preparing installation

As a display and operating panel, the device should be mounted in a place that is easily accessible. The user habits are decisive when determining the installation height. We recommend an installation height from the display/housing centre to the finished floor of approx. 1.65 m.

-  Direct sunlight or powerful light sources could impair the brightness sensor.
-  Prevent humidity and excessive dust at the installation location. Do not install the device near heat sources, such as radiators, storage heaters or ovens.

The touch panel must be installed in a separately available flush-mounted housing (see accessories).





CAUTION!

Damage to the device if installed in a warped housing.

The device can be damaged.

When installing the housing in a wall, ensure that the wall opening is big enough and the device can be inserted without tensions.

-  Information concerning the installation of the flush-mounted housing in solid and hollow walls can be referred to in the instructions enclosed.
-  To avoid EMC interference, do not install network input cables parallel to mains cables.

Prepare the supply voltage

Respective connection cables should be provided for the power supply of the device.

The Windows versions must be connected to a power supply 24 V DC (see accessories).

The Android versions have a limited PoE capability. When selecting the supply voltage, the intended use must be considered.

A 24 V DC auxiliary voltage is available when

- the device is integrated into a door communication system (Elcom)
- Audio-files are played-back (music, internet-radio)
- no PoE-supply (Power over Ethernet) is available)

i Ongoing exceeding of the permissible PoE-power consumption, from increased use of the audio applications may lead to the PoE power supply switching off.

Installing connector (RJ45) on the network cable (figure 11)

The flush-mounted housing is installed firmly in the wall. The empty conduit with the network cable is guided through an entry on the housing.

- Insert the network cable through the metal cap's earthing cover of the connector.
- Strip the Ethernet strands of the network cable, do not remove insulation.
- Insert the strands into the plug-in connector (19) of the connector and bend up 90°. Shorten any protruding strands.

i When doing so, it is imperative to observe the colour code EIA/TIA -568 A or B of the system. This can be found in the documentation of the installed network components and routers. The Ethernet connection has been connected to the device compatible with wired networks in accordance with TIA/EIA-568-A or B

- Insert the plug-in connector into the connector (20) and snap it shut. The plug-in connector is locked in place in the connector.
- Tighten the enclosed cable tie over the earthing cover.

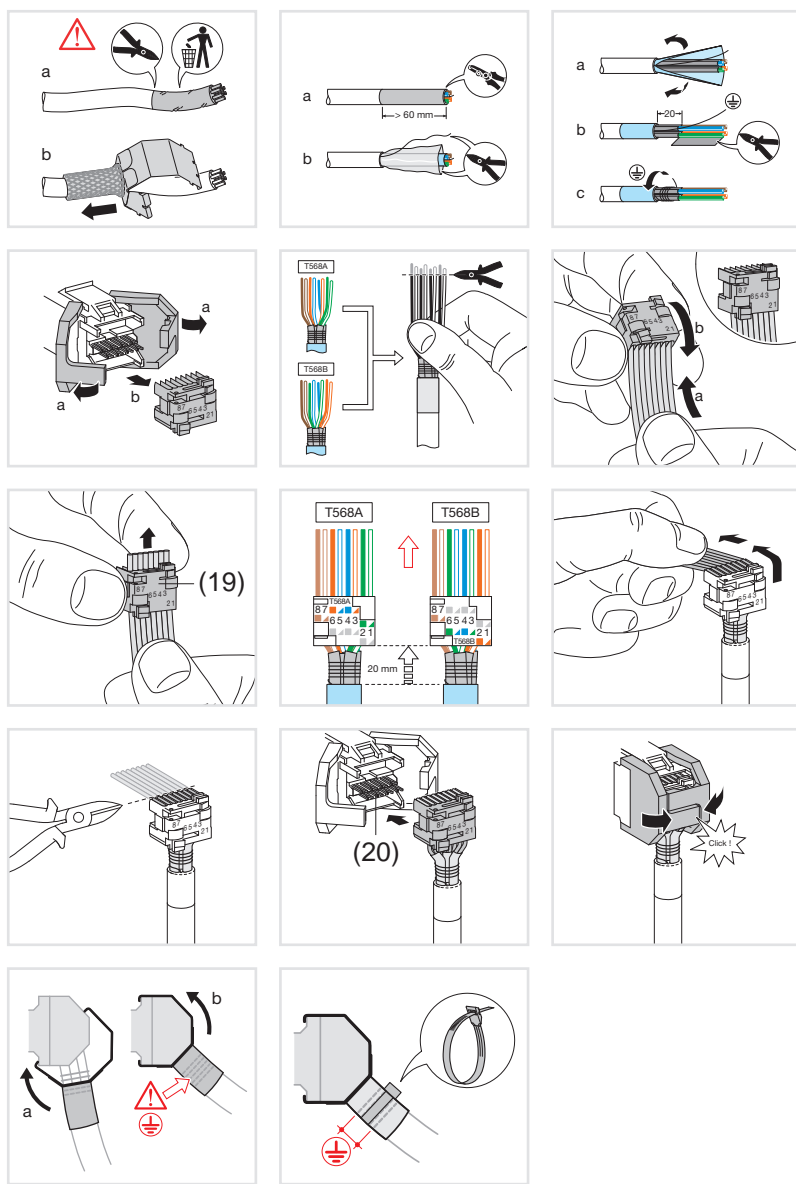


Figure 11: Installing connector on the network cable

Connecting and installing the device

The RJ45 installing connector is mounted on the network cable.

- Connect the jack to an RJ45 socket on the touch panel (7/8) using the enclosed, pre-assembled RJ45 patch cable.
- If required connect a 24 V DV auxiliary voltage (see Accessories) using the enclosed terminal (9). Ensure correct polarity (figure 2/3).
- **i** Recommendations for connecting the supply voltage, see Prepare the supply voltage.
- Insert touch panel in the housing (21) in such a way that the mounting plates (22) of the housing are pushed under the frame.
- Tighten the four screws and the mounting plates through the frame from above and below using the enclosed Allen key (Figure 12/13). The screws must be countersunk in the frame.

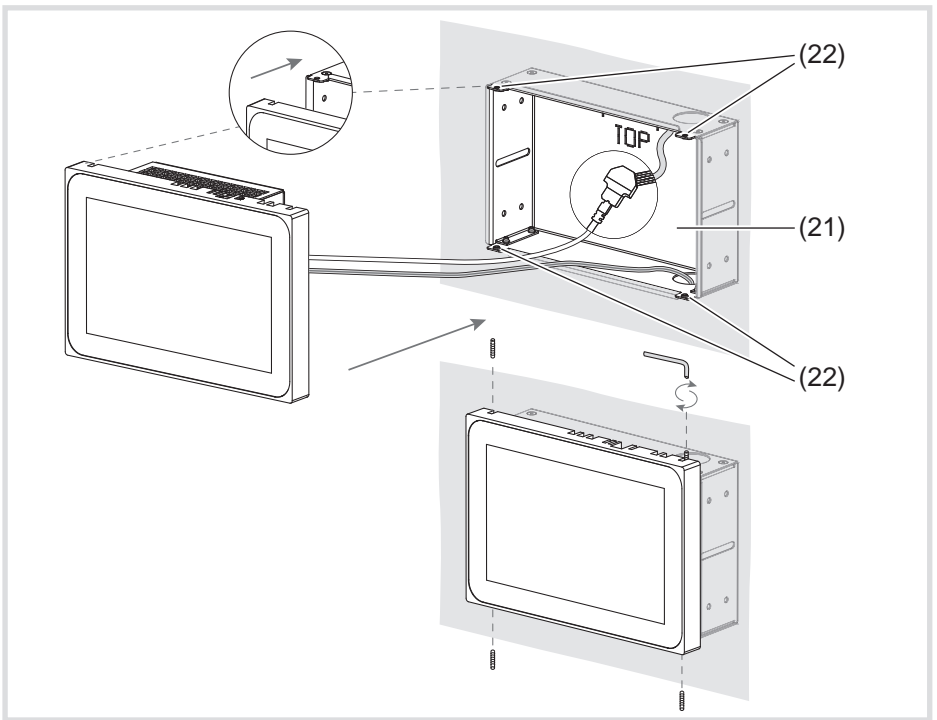


Figure 12 a/b: Installation in the flush-mounted housing

(21) Flush-mounted housing (not included in scope of delivery)

(22) Mounting brackets

- If a device is mounted flush with the wall, guide it into the housing by applying even, slight pressure on the left and right (Figure 13) until the >>Push-to-open<< lock of the housing engages.
- **i** When pushing in the touch display into the housing, make sure that the connected cables do not get wedged in.
- Remove the protective foil from the user interface.
- Switch on auxiliary voltage.

The device charges the operating system/Launcher and displays the desktop interface/home page of the Launcher after a few seconds. Device is ready for operation.

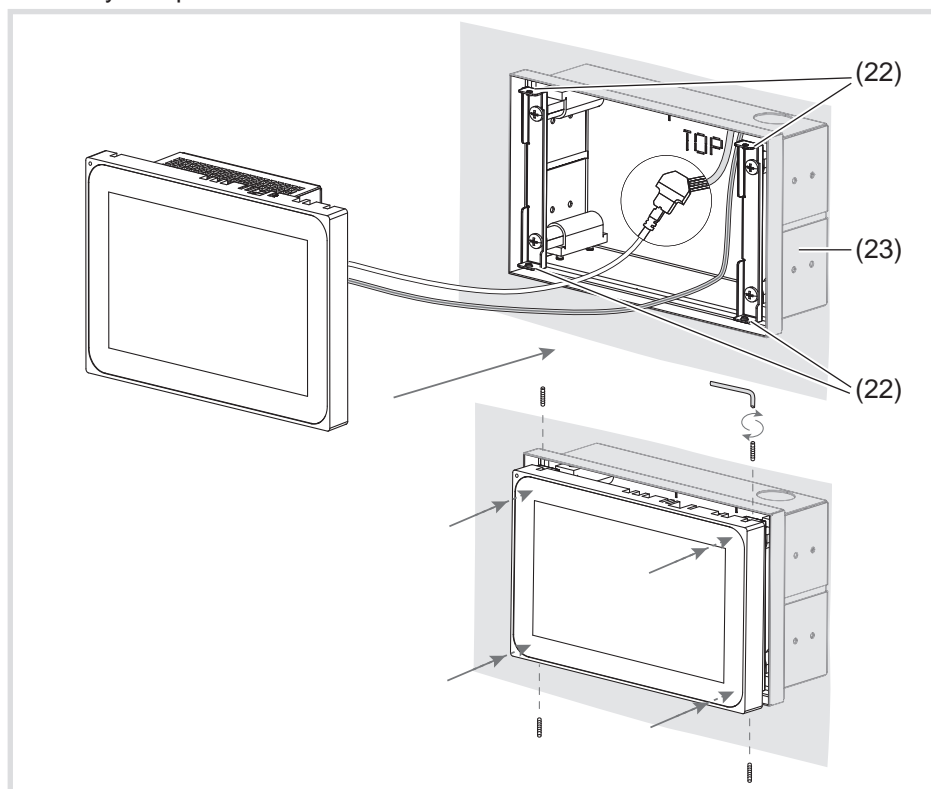


Figure 13 a/b: Flush wall mounting installation in the flush-mounted housing
 (23) Flush-mounted housing, flush-to-wall (not within scope of delivery)

Dismantling the device

- If a device is mounted flush with the wall, loosen it from its fastening in the flush-mounted housing by applying even, slight pressure and release.
The device will move slowly forward out of the housing.
- Loosen the screws and remove the device from the housing.
- Remove connections.

6 Appendix

6.1 Technical data

Capacitive TFT touch display	approx. 16:9
Storage temperature	-20 ... +60 °C
Air humidity	10 ... 90 % at 25 °C, non-condensing
Degree of protection	IP20
Cable cross-section of auxiliary voltage:	
- flexible with conductor sleeve	max. 0.75 mm ²
- rigid	max. 1.5 mm ²
Conformity according to	EMC Directive 2004/108/EC Voltage Directive 2006/95/EC
Standards	EN 55022: 2010 Class B EN 55024: 2010 EN 60950-1 : 2006 + A2: 2013

7 Android variant:

Resolution	800 x 480 pixels
Light intensity	300 cd/m ²
Data transmission Ethernet	10/100 Mbit/s
Port Ethernet	1 x RJ45
Power supply via:	
- PoE (Power over Ethernet) or	
- Auxiliary voltage	18 ... 48 V DC
Power consumption:	
- PoE (visualisation only)	max. 13 W
- with auxiliary voltage (audio-playback, door communication)	max. 18 W
Processor	1 GHz CPU "DaVinci" DM3750 Coretex A8
Main memory	512 MB RAM 8 GB flash on SD card

Operating temperature	+5 ... +45 °C
Dimensions (W x H x D)	189.7 x 125. x 48.3 mm
Assembling height of frame	12 mm

10'' Android variant:

Resolution	1280 x 800 pixels
Light intensity	300 cd/m ²
Data transmission Ethernet	10/100 Mbit/s
Port Ethernet	1 x RJ45
Power supply via:	
- PoE (Power over Ethernet) or	
- Auxiliary voltage	18 ... 48 V DC
Power consumption:	
- PoE (visualisation only)	max. 13 W
- with auxiliary voltage (audio-playback, door communication)	max. 18 W
Processor	1 GHz CPU "DaVinci" DM3750 Coretex A8
Main memory	512 MB RAM 8 GB flash on SD card
Operating temperature	+5 ... +45 °C
Dimensions (W x H x D)	259.4 x 177 x 67.5 mm
Assembling height of frame	10 mm

10'' Windows variant:

Resolution	1280 x 800 pixels
Light intensity	300 cd/m ²
Data transmission Ethernet	1000 Mbit/s
Port Ethernet	2 x RJ45
Auxiliary voltage	24 V DC
Power consumption	max. 20 W
Processor	AMD Dual Core CPU T40E, 2 x 1.0 GHz
Main memory	Graphics Radeon HD6320, 2 GB DDR3 RAM
Operating temperature	+5 ... +35 °C
Dimensions (W x H x D)	259.4 x 177 x 67.5 mm
Assembling height of frame	10 mm

16'' Windows variant:

Resolution	1366 x 768 pixels
Light intensity	220 cd/m ²
Data transmission Ethernet	1000 Mbit/s
Port Ethernet	2 x RJ45
Auxiliary voltage	24 V DC
Power consumption	max. 20 W
Processor	Core CPU T40E, 2 x 1.0 GHz
Main memory	2 GB DDR3 RAM
Operating temperature	+5 ... +35 °C
Dimensions (W x H x D)	377.4 x 231.8 x 66.4 mm
Assembling height of frame	11 mm

6.2 Troubleshooting**Display surface does not react to operations anymore**

Cause: System has been shut down or has crashed.

Press the reset button **R** (5).

The device will automatically restart.

Operation not possible

Cause: Auxiliary voltage is not present.

Check connection for auxiliary voltage.

Check auxiliary voltage by means of measuring device.

6.3 Accessories

Housing flush-mounted for 7574 01 07	7590 01 07
Housing flush-mounted for 7574 01 07, flush-to-wall	7590 02 07
Housing flush-mounted for 7574 0.. 10	7590 01 10
Housing flush-mounted for 7574 0.. 10, flush-to-wall	7590 02 10
Housing flush-mounted for 7574 02 16	7590 01 16
Housing flush-mounted for 7574 02 16, flush-to-wall	7590 02 16
Power supply 24 V DC RMD	7591 00 03
domovea Server REG	7571 00 05



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