



Wireless Presentation Solution

Klick & Show K-10S - Art.-Nr. 7488000300

Klick & Show K-10L Lite - Art.-Nr. 7488000305

Installation and User Manual



Release: Firmware 3.1.8 C / E



1.2020

Overview

The Kindermann **Klick & Show K-10S** is a modern Wireless Presentation System for small to mid-sized meeting rooms, classrooms and huddle spaces. Klick & Show allows users to share content from their laptops or mobile devices in a simple way – with no configuration, no cables and without wasting time. Windows/Mac users simply connect the **Klick & Show TOUCH Transmitter** to a USB port of their laptop. With a touch on the sensor button the live laptop content is mirrored to the main display device. The universal starter program "**WirelessMedia for Windows**" can also be used without TOUCH sensor button (with LAN or Wi-Fi from the laptop). Users of Apple/Android smart devices can download our free apps to share their content or use Airplay (iOS only). In addition, Klick & Show K-10S offers a **4K HDMI input** to display wired content from PC / DVD.

The Klick & Show K-10S Kit (7488000300) already contains of one Base-unit and two Sensor-buttons TOUCH (7488000301). Additional Sensor-buttons TOUCH (7488000301) are available.

The Kindermann **Klick & Show K-10L Lite** is only supplied with the Base-unit, with accessories, but without the TOUCH transmitter. Windows / Mac users simply start the Klick & Show Universal PC-Client Software on the laptop (available from www.klickandshow.com or from the base unit for download) to mirror content to the main screen. If required, up to four additional sensor buttons (7488000301) are available and connectable at the same time.

The **current version of this manual** can also be downloaded from the website www.klickandshow.com. Go to the DOWNLOAD/Documentation tab.

Contents Klick & Show K-10S Kit (7488000300)

- 1 Kindermann Klick & Show Base-unit
- 2 Antenna
- 2 Klick & Show Sensor-buttons TOUCH
- 2 USB-token with Windows-, MAC-driver, User manual (PDF)
- 2 Closing flaps with screws, for USB-token in Sensor-button TOUCH
- 1 Universal power-supply 100 – 240 VAC, 12 VDC/2A, with different adapters
- 1 Mounting set for installation at wall
- 1 Quick-start-Guide

Contents Klick & Show K-10L Lite (7488000305)

- 1 Kindermann Klick & Show Base-unit
- 2 Antenna
- 1 Universal power-supply 100 – 240 VAC, 12 VDC/2A, with different adapters
- 1 Mounting set for installation at wall
- 1 Quick-start-Guide

Main features

- Wireless transmission of Windows or Mac laptops / PCs to a central screen
- Can transmit PC's mirror/extended windows-desktop (depending on the operating system, Klick & show "Extension Display" driver may be required) or mirror of Macbook desktop to the Base-unit (extended desktop is possible via AirPlay)
- Preview function of connected laptops (max. 14)
- Can transmit smart devices' mirror, photos, videos, music etc., supports AirPlay 2
- Transmits USB-HID (f.e. mouse) for interactive units (Touch-displays, interactive WhiteBoard)
- Support VESA PC resolution input, auto-detecting
- Can remote monitoring the active display on screen from a smart devices ("Remote View")
- Support remote mouse to control the active source devices **from other smart devices** ("Remote Control")
- External HDMI-Input at Base-unit for cable-linked connection to another video-source (PC, document camera, DVD, ...)
- Universal Starter-program "**WirelessMedia**" for Windows or Mac laptop / PC for use with or without Sensor-button TOUCH (using LAN or Wi-Fi of laptop) – [see chapter 6.1.](#)
- Grafical user interface (GUI) of the Stater-program "**WirelessMedia**" for Windows/MAC
- New graphic design (GUI) of Starter-program "**WirelessMedia**" for Windows with or without touch sensor TOUCH usable (with LAN or Wi-Fi from laptop) - [see chap. 6.1.](#)
- Optional Starter-Program "**WirelessMedia-pro**" for Windows, for use with or without Sensor-button; if it is not possible to install the standard driver "WirelessMedia" for Windows, due to IT administrator security policies – [see chap. 6.1.](#)
- Support Over-the-Air (OTA) for automatic (option) firmware upgrading via Ethernet – [see chap. 5.7.](#)
- Extended, individual IT Security settings

Sensor-buttons TOUCH

- Sensor-button with "Show-me" function with fast signal switching (app. 1s)
- Status display with colored LEDs: green indicates active source signal, red indicates power/link.
- Support USB plug-in auto configuration/pairing at Base-unit
- "Show-me" button can independently step in/out the source of PC

New features Firmware 3.0

- **Dual Network**, provides the access to Base-unit from either Guest Wi-Fi network or secure Corporation network without the need to change the Wi-Fi for not only Guest but also the company staff, [see chap. 5.2.](#)
- **White Board & Annotation**, to be compliant with the touch screen, which supports USB HID touch technology for quickly start free writing, or annotations to a picture / text for capturing ideas, thoughts and inspiration better, [see chap. 4.4.](#)
- **Security Settings** can be set in three levels, as required by the organization, [see chap. 5.5.](#)

Accessory:



Klick+Show TOUCH T1 Transmitter (7488000301)

Sensor-button for expansion of Klick & Show K-10S Kit



Klick+Show TRAY (7488000303)

Tray for four Sensor-Buttons TOUCH



Klick+Show USB-C Cap (7488000304)

USB Typ-C adapter for use with Klick & Show TOUCH Transmitters at USB-C port at PCs/Mac.



Safety instructions

WARNING

- Please read the instructions carefully and store them
- The Kindermann Klick & Show K-10S can only be operated with a safety low voltage via the associated power supply unit
- The device must only be stored and used in a dry, closed environment without mechanical stress
- Install the unit in a place with adequate ventilation
- Do not use any liquids or thinners for cleaning (remove the power supply before use!)
- Remove the power supply for long periods of non-use!
- The use of unsuitable accessories may result in damage or malfunction
- Please observe the safety instructions of the devices to be connected

Contents

1. Overview	10
1.1 Action Chart.....	10
1.2 Network-Integration:	11
1.2.1 Standard (Direct-mode, Guest or Staff).....	11
1.2.2 Standard with existing Access Point (Direct-mode)	11
2. Device Setup	12
2.1 Connections and Buttons	12
2.1.1 Front Panel	12
2.1.2 Rear Panel.....	13
2.1.3 Factory Reset.....	14
2.2 Sensor-Button TOUCH	16
2.3 User Interface	17
2.3.1 Home screen	17
3. Installation	20
3.1 Installation methods for the Base-unit.....	20
3.2 Wiring Diagramm Base-unit	21
3.3 Power Connection.....	21
3.4 Video Connection.....	22
3.5 Audio Connection	23
3.6 LAN Connection	24
3.7 Usage of USB device.....	25
4. Getting started with Klick & Show	26
4.1 Mobile units: Wireless Connection.....	26
4.1.1 Enable portable access point:	27
4.2 Pairing Sensor-button with Base-unit	27
4.3 Set displayed information of the menu bar	28
4.4 Mirroring of the desktop - First steps.....	28
4.4.1 PC / Laptop.....	28

4.4.2	Mobile Devices.....	29
4.4.	Whiteboard & Annotation.....	32
4.4.1	Whiteboard.....	33
4.4.2	Annotation.....	34
5.	Settings in Main-menu	36
5.1	Ethernet	37
5.1.1	IP address	37
5.1.2	Ethernet MAC address	37
5.1.3	Proxy & IP settings	37
5.1.4	PPPoE settings.....	38
5.2	Wireless & network	38
5.2.1	Wireless network configuration wizard	40
5.2.1.1	Wireless Direct Mode.....	40
5.2.1.2	Wireless Infrastructure mode	44
5.2.1.3	LAN Infrastructure Mode.....	46
5.2.1.4	Firewall Settings.....	47
5.2.1.5	Network Configuration Diagram	50
5.2.2	Show Wi-Fi name and Wi-Fi password in main screen.....	50
5.2.3	Auto change Wi-Fi access point password.....	51
5.2.4	Wi-Fi analyzer.....	52
5.3	Moderator Control.....	54
5.3.3	Preview window	54
5.4	General settings	55
5.4.3	Automatic creation of Starter-program.....	55
5.4.4	Auto Standby	55
5.4.5	AirPlay screen quality	56
5.4.6	HDMI output resolution.....	56
5.4.7	HDMI input AUTO switch	56
5.4.8	Background image Home screen	57
5.4.9	Volume.....	57
5.5	Security setting	57

5.5.1	Security level	57
5.5.2	LAN discovery & Connection	58
5.5.3	“Remote View” lock	59
5.5.4	Show PC’s user status when mirroring (Yes/No) :	59
5.5.5	Clear History after meeting	59
5.5.6	Change admin password	60
5.6	Language & input	60
5.7	System Update	60
5.8	Date & Time	61
5.9	About Device	62
6.	Operate Klick & Show	63
6.1	Mirroring PC desktop	63
6.1.1	Extended Desktop for Windows 10.....	63
6.1.2	Microsoft Windows PC / Laptop, with Sensor-button TOUCH.....	63
6.1.3	Microsoft Windows PC / Laptop, without Sensor-button TOUCH	65
6.1.4	Options für Microsoft Windows PC / Laptop – Extended Screen.....	67
6.1.5	Mac OS PC/Laptop, with Sensor-button TOUCH	70
6.1.6	Mac OS PC/Laptop, without Sensor-button TOUCH	72
6.1.7	Optionen für Apple MacOS, MacBook – Extended screen.....	74
6.2	Transmitting iOS mobile device	76
6.2.1	How to use AirPlay?.....	76
6.2.2	App “WirelessMedia” for iOS	76
6.3	Transmitting Android device wireless	81
6.3.1	“WirelessMedia” Apk for Android.....	81
6.4	HDMI Input Select	84
7.	Firmware-Update	86
7.1	Check current firmware information	86
7.2	Upgrading Firmware Base-unit	87
7.3	Upgrading and Pairing of Sensor-button TOUCH	88
7.4	Software update of USB-token	89
7.5	Install newer version of Starter-Program at Laptop	89

7.6	Clean left files of older versions of Starter-program in Laptop	91
8.	TCP/IP Commands: Telnet	92
9.	Specifications Klick & Show	93
9.1	Dimensions	95
9.2	Open Source-Software provisions	96
9.3	EG-declaration.....	98
10.	Trouble Shooting	99

1. Overview



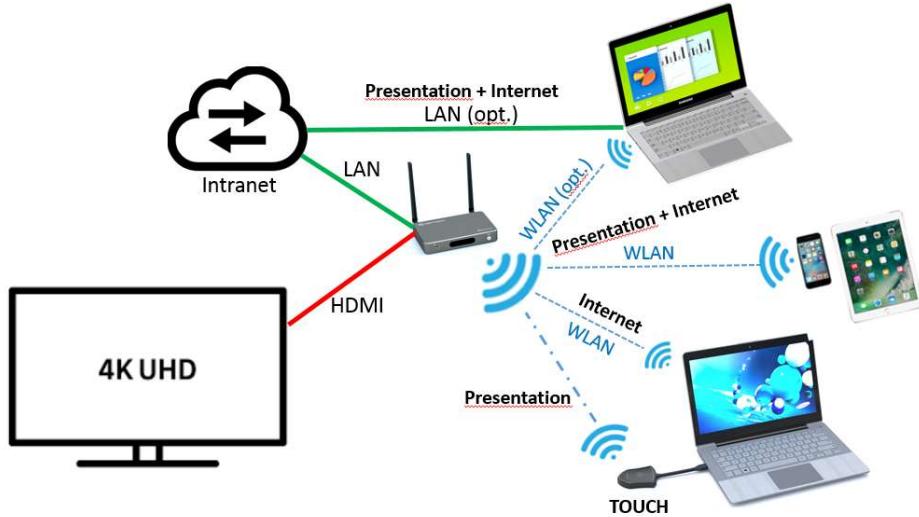
ID	Name	Description
1	Klick & Show Base-unit	Host / Base-unit with Wi-Fi receiver
2	Sensor-button TOUCH	Sensor-button with Wi-Fi transmitter for PC/Laptop to share the desktop/extended desktop
3	WirelessMedia for Android	App for smart android devices to share the screen, transmit photos/music/video/files, exchange files, "Remote View" and "Remote mouse".
4	WirelessMedia for iOS	App for smart iOS devices to share the screen, transmit photos/music/video/files, exchange files, "Remote View" and "Remote mouse".

1.1 Action Chart

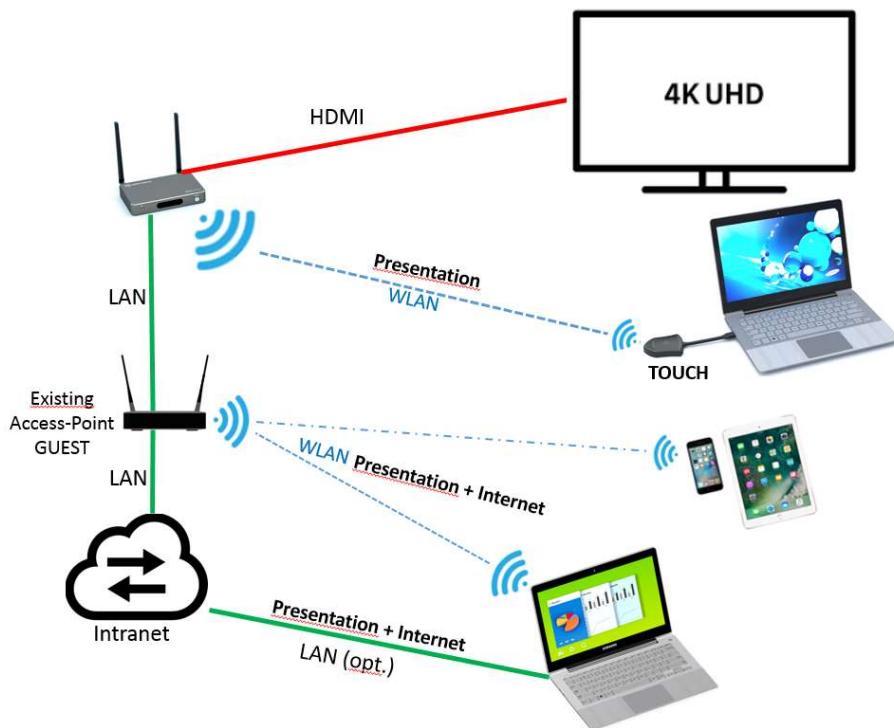


1.2 Network-Integration:

1.2.1 Standard (Direct-mode, Guest or Staff)



1.2.2 Standard with existing Access Point (Direct-mode)



- Function depends on the infrastructure of the network in the company.
Access to the GUEST-AP may be blocked by firewall settings in the company network.

2. Device Setup

2.1 Connections and Buttons

Overview

- Front panel
- Rear Panel
- Sensor-button TOUCH

2.1.1 Front Panel



ID	Name	Description
1	Front USB connector	USB port, for Klick & Show TOUCH pairing, mouse control, USB touch screen, firmware upgrading
2	STANDBY-LED	STANDBY-mode: green LED (2) flashing
3	POWER button with LED indicator	Unit ON/OFF with green status-LED ON/OFF

USB port

To be able to use a Sensor-button it should be paired to the Base-unit you are using. Insert the sensor button to an USB port of the Base-unit you are using. If necessary, the Firmware of the button is automatically updating. Follow the instructions at screen.

Other functions of USB-port.

- The USB port is used to update the software of Klick & Show.
- The USB port is used for connecting a mouse to:
 - Navigate in the **SETTING** configuration
 - Control a PC desktop that is mirroring to the screen by using the Sensor-button TOUCH
- Instead of a Mouse also a local connected touch Screen can be used

- Via this USB Port you can create a USB Stick containing the Starter-Program-Software for the Sensor-button TOUCH

POWER button

The button at the front of the Base-unit has a power on/off function once the Base-unit is powered.

Pressing the Button switches the unit on and off in **Deep-Standby**: the Base-unit shuts down completely, Wi-Fi is deactivated, and can only be turned on by the POWER button. Green LED in button signals status.

2.1.2 Rear Panel



ID	Name	Description
1	DC Power socket	Connect the included power adapter DC 12V/2A to this socket, and connect the plug to an available electrical outlet
2	LAN	Connect an Ethernet cable between this jack and a LAN to connect the Base-unit to LAN; PoE ready
3	USB port	USB port, for pairing Sensor-button TOUCH, mouse control, USB touch screen etc.; same functions as front-USB
4	Reset	for restoring the factory default setting (needs tool)
5	HDMI OUT	To connect an HD or 4K/HDMI 2.0 output device
6	LINE OUT	2 channel analog audio output, de-embedded from HDMI OUT; connect a 3.5 mm mini-jack PC connector from this jack to the LINE IN jack of an audio system
7	HDMI IN	Connect a local HDMI output (PC, document camera, DVD) up to 4K/60Hz, HDCP 2.2 source device
8	LINE IN	2-channel analog audio input is only active, when it detects no audio signal in HDMI IN data flow, like DVI-Input. Connect a 3.5 mm mini-jack PC connector from this jack to the Line Out jack of external audio source devices
9	ANT.	Screw up the included two antennas to these two ports

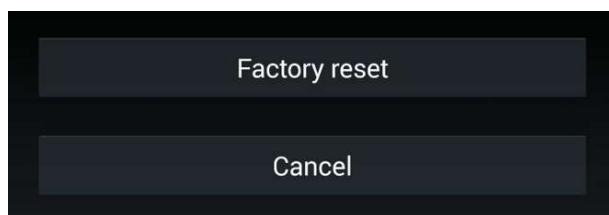
2.1.3 Factory Reset

On pressing the Reset button, a Hardware-reset is initiated at Base-unit. A „**FACTORY RESET**”, can also be performed via the menu „**System Update**” / „**Factory Reset**”, see chapter 5.7. Both types will be set the unit back to default.

All data of configuration will be lost. So that you do not have to re-configure all data in an elaborate process, note all settings within the Sub-menus before doing Factory Reset.

- Start up the Base-unit.
- When the *Home screen* is shown up, press the reset button at the rear panel of Base-unit. Press this button with a pointed object, e.g. an unbent paper clip, until the “*Factory Reset*” page is shown up as below, for at least 2 seconds.
- The Base-unit will reboot after 3 seconds to be default configuration.
- If you do not have a picture, press and hold the reset button until the **blue LED** in the front window will lit, to execute the reset.

All previous settings will be lost and you will need to do the set-up once more.



After Reset, all Sensor-buttons TOUCH must be paired again to Base-unit, because SSID has changed (see chapter 4.2).

Factory settings after Reset

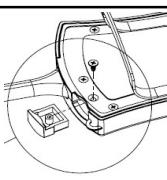
- **Ethernet**
 - Proxy: None
 - IP setting: DHCP
- **Tethering & portable access point**
 - Wi-Fi-Network mode: Wi-Fi Direct mode, connected DUAL network
 - SSID: KlickandShow-xxxx,
 - Password: 0000xxxx
 - Guest-SSID: SSID Klick & Show-xxxx
 - STAFF-SSID: Staff SSID
 - Security: WPA2 PSK
 - Frequency: 5 GHZ
 - Channel: 40
 - Auto change of Wi-Fi password: every 5 minutes, when there is no signal
- **Moderator Control**
 - Preview windows: ON
- **Settings**
 - Auto create launcher (Starter APP): OFF
 - Auto Standby: Never
 - AirPlay quality: High
 - Resolution HDMI OUT: 1920x1080p@60Hz
 - HDMI-input AUTO switch: Manual
 - Background image Home screen: Standard
 - Volume: 100
- **Security setting**
 - Security level: Level 1
 - LAN connection: Enable mobile devices can discover/connect the Base-unit in same LAN: ON
 - Disable "Remote View" from mobile device application: ON
 - Show PC's user name when mirroring: ON
 - Clear history after meeting: Always
 - Password for menu: **admin (Please change password on first login!)**
- **Language:** English
- **System Update** Upgrading Mode Setting of firmware: manual
- **Date & time** Automatic date & time: use network-provided time: ON
Use 24-hour format: ON
Time zone: GMT +00:00

2.2 Sensor-Button TOUCH

The Klick & Show Sensor-button TOUCH is a dongle, which is used for extending or mirroring the desktop from a personal **PC** or **MAC** desktop to the Base-unit and the main screen in a meeting. Newer (Mac) computers with **USB-C** interface can be connected via an optional adapter (7488000304). Furthermore, the button can be connected to the **Base-unit** to update the software or for pairing.

Handle the Button cable with care. Rough handling might cause defects.



ID	Name	Description
1	USB connector	<ul style="list-style-type: none"> - Connect to an USP-port of a PC/Laptop (for sharing of screen) - Pairing the Button to the Base-unit - Updating of its software)
2	Sensor-button TOUCH	Touch-function with tactile response, for switching On and Off the presentation of the screen
3	Status LED	Indicates the status of the button
4	USB-C Adapter (optional)	Adapter USB-C to USB-A (7488000304), for devices with USB-C ports; can be permanently attached to the button
w/o pic.	Closing flap	 <p>To close the hole after removing the USB-Token</p>
w/o pic.	USB-Token	USB-stick with Starter-program „WirelessMedia.***“ for copying of to PC or MAC; printable PDF of User manual.

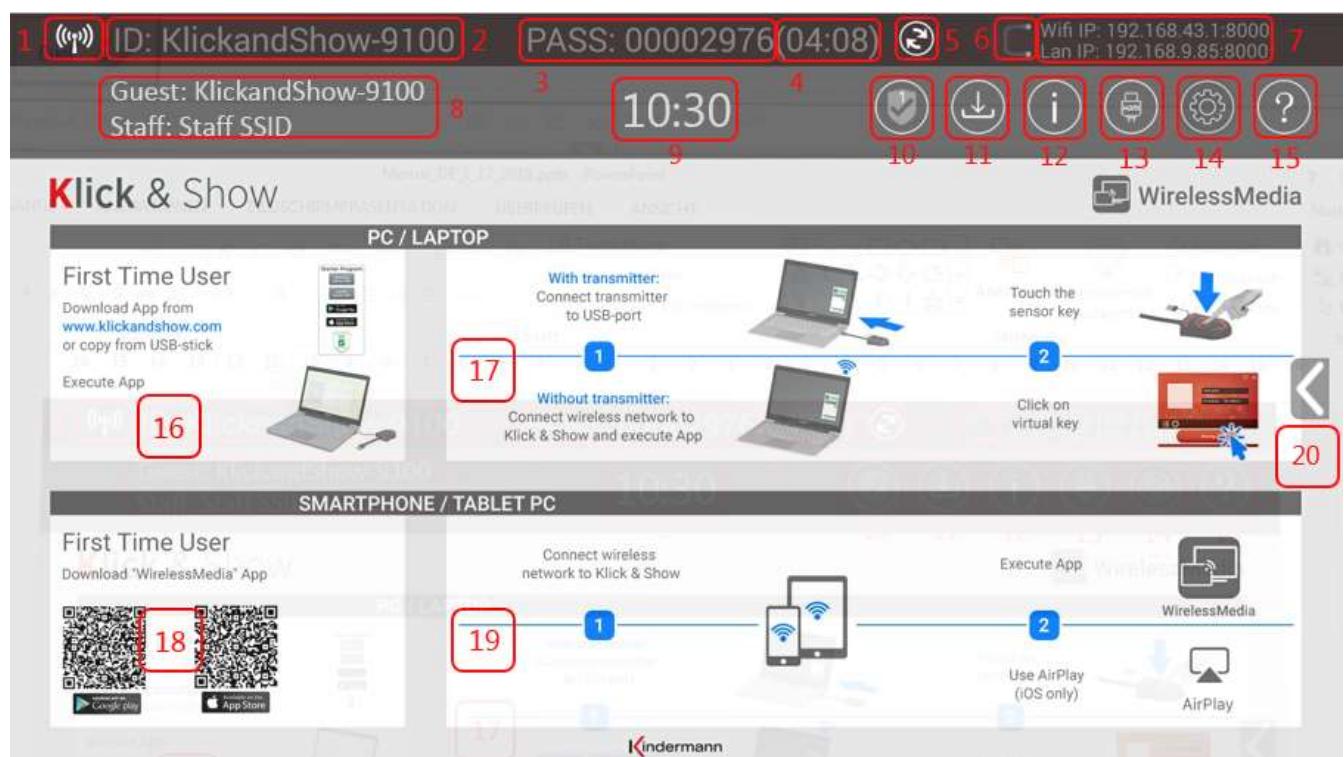
Status LED

- LED indicator is static green: ready to transmit a picture, waiting on USER for touch.
- LED indicator is static red: 1. Transmits a picture,
2. Pairing is done (at the Base-unit). You can now unplug the Button from the Base-unit.
- LED indicator is flashing green: 1. The button is plugged in the laptop and initializing,

2.3 User Interface

2.3.1 Home screen

The following picture shows Home screen of Klick & Show. Connect an input device (mouse, touch) to either USB port to navigate in the menu.



ID	Name	Description
1	Wi-Fi-Indikator	<p>Wi-Fi Direct mode: internal access point is enabled </p> <p>Wi-Fi Infrastructure mode: „Client-Mode“ Wi-Fi connection to router is established, icon displays the current signal strength</p> <p>A secure Wi-Fi connection is established, or connection to a router failed: </p> <p>Wi-Fi is not available: </p> <p>LAN Infrastructure mode: access point is disabled </p>

2	ID	Wi-Fi name or device name of the Base-unit access point
3	PASS	Wi-Fi-password of Base-unit
4	Password-timer	Is only displayed, when timer is active; time until the password is changed automatically
5	Change Wi-Fi-password	Generate new password manually for securing your Wi-Fi network, for example to end the REMOTE-view function of mobile units
6	Status Dual Netzwerk (Wi-Fi + LAN)	 : <u>Connected Dual</u> network (Wi-Fi + LAN)  : <u>Segmented Dual</u> network (Wi-Fi X LAN)
7	Wi-Fi IP LAN IP	<ul style="list-style-type: none"> • Wi-Fi IP-address of Base-unit in wireless LAN • Assigned IP-address of Base-unit in LAN; „N/A“ = no connection to network
8	SSID: Guest SSID: Staff	Guest: KlickandShow-9100 Staff: Staff SSID Name of Wi-Fi network for Guest and Staff , which allows mobile devices to connect with the Base-unit without using button TOUCH
9	TIME	Show time, if LAN has access to a time server; even after disconnecting the LAN connection, the time is displayed until the device has been disconnected from power
10	Security level	Security level 1-3, <u>display ONLY</u> ; the security features of the displayed level are displayed in detail by clicking on the symbol; the settings can only be changed by administrator in the Setting menu (14)
11	Create Starter-program	Copy Start-program „WirelessMedia.exe“ for Windows, MAC to USB-stick
12	Info	Show status-bar (1) – (8) in Home screen showing/hiding
13	HDMI Input	Switch to the external HDMI input
14	Setting	Klick & Show system configuration
15	Help (?)	User manual in PDF format. The current version of manual can also be downloaded from the website www.klickandshow.com .
16	Windows / MacOS Quick Start First-time-user	<u>First-time users</u> must first install the starter program from the web page www.klickandshow.com or from the USB stick one time

17	Quick Guide Windows / MacOS	Operating instructions for operation with laptop / Mac, with and without transmitter TOUCH; First time users have to install starter program once (16)
18	Load „WirelessMedia“- App from Store	Scan corresponding QR-code for iOS or Android device and download the App from the Store
19	Android/IOS Quick Start First-time-user	Steps to instruct how to transmit smart mobile devices either powered by Android or IOS, onto the main screen
20	Preview function of the screen contents of the participants	Switch on or off the optional preview function of the screen contents of all connected participants

3. Installation

3.1 Installation methods for the Base-unit

The Base-unit can be placed on a table in meeting room or be mounted on the wall.

To avoid damage during transport, the antennas are delivered unassembled. The antennas can rotate or tilt for better wireless connection.

Note:

For optimum function, install the Base-unit near monitor. Avoid obstacles between Sensor-button TOUCH and Base-unit.

Necessary tools

- A drill (type of drill depends on the type of wall/table)
- Flat screwdriver
- Additional screwdriver that matches the mounting screws (mounting screws not included in the package).

Necessary parts

- 2 mounting screws (the head of the screw has to be smaller than the whole of the bracket)
- 2 plugs fitting to Wall and Screws
- 2 mounting bracket (included in the box).

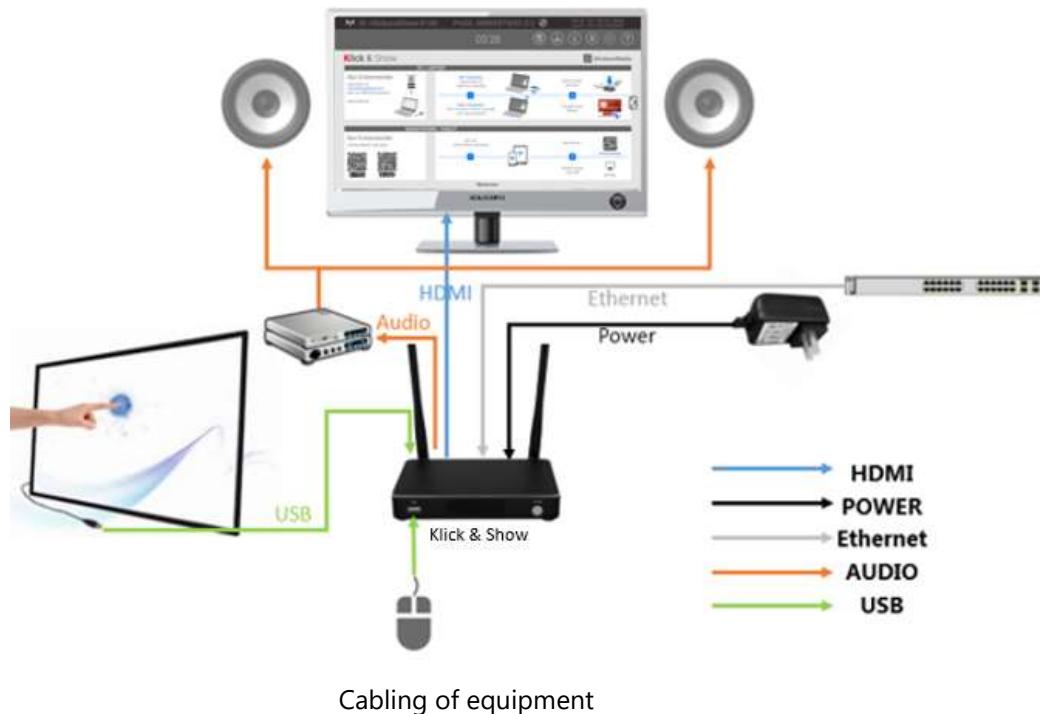
How to install

- Drill two holes in the wall as indicated on the drawing. Horizontal distance: 177 mm ± 0.15.
- At the bottom of Base-unit, place the bracket on the 4 holes and turn in four delivered flat screws to be fasten enough.
- Drive in 2 screws. Please leave at least a dimension 0.15mm space to place the bracket between the screw header and wall.
- Place the Base-unit on the wall, so that the holes on the bracket matches the 2 unfixed screws on the wall.. Hoop the bracket on the screw and slide the Base-unit downwards until it is fixed in the two screw on the wall.

Antenna placement rules

- The antennas should be oriented vertically.
- The antennas should be installed far enough (at least 50cm/1.6ft) from metallic surfaces to avoid unwanted reflections and far enough (at least 1m/3.3ft) from other radio equipment that operates in the same frequency range, e.g. other Wi-Fi access points, cordless telephone, microwave ovens,... It is also best to install antennas at least 15 cm (6 inches) from concrete walls.
- The most favorable situation is a direct line of sight between antennas and Sensor-buttons TOUCH. Any obstruction will cause the signal to follow a longer propagation path, which can result in performance degradation.
- Due to the particular radio pattern of the dipole antennas, the antennas should not be placed just above potential positions of Sensor-buttons users. As a result, the advised position for the obstruction antennas is at the side of the meeting room.

3.2 Wiring Diagramm Base-unit

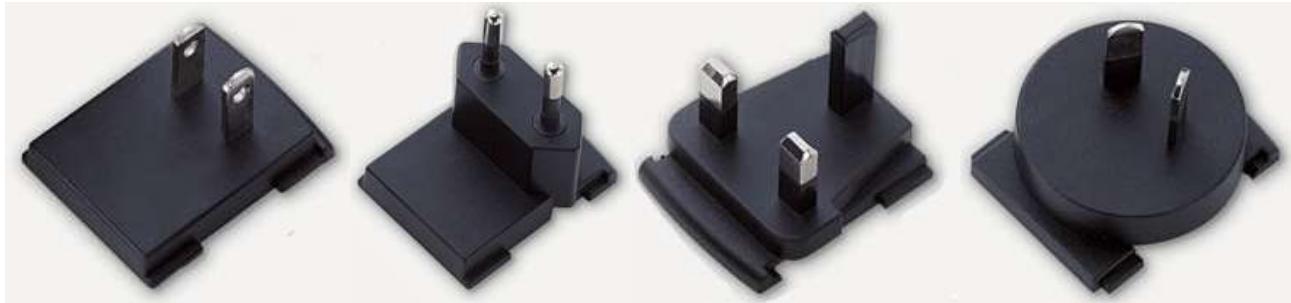


3.3 Power Connection

Supplied is a universal power supply for mains 100 – 240 VAC, 12 VDC/2A with different, regional power adapters.

Adapter types

1. Choose the appropriate power plug for your country (see www.iec.ch/worldplugs) and slide it in power supply
2. Connect the power adapter with the Base-unit.
3. Connect the power cable plug into the wall outlet.



TYP A

(USA, Japan)

Typ C (EU, except UK)

Typ G (UK etc.)

Typ I (Australia)

Note:

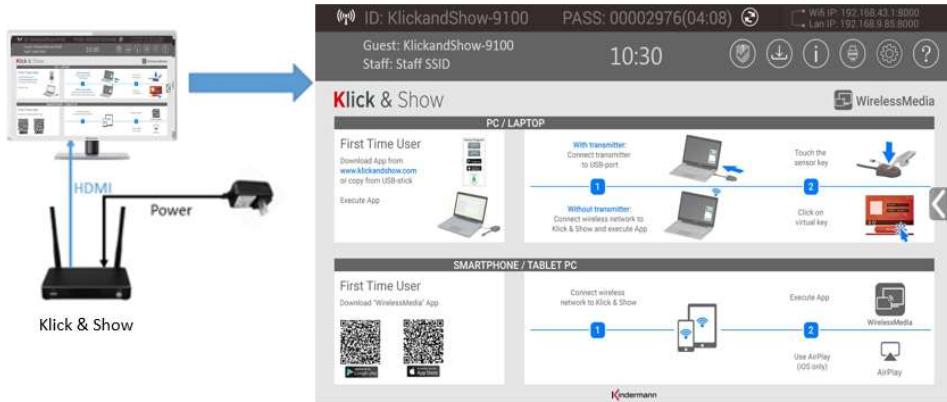
Once the Base-unit is powered, it starts up (booting). From now on please use the **POWER button with Status LED** on front of Base-unit to **switch ON or OFF**.

Power over Ethernet

If the LAN Ethernet switcher support **PoE** (Power over Ethernet), it could power up the Base-unit instead of using the external power adapter.

3.4 Video Connection

1. Connect the **HDMI-Output** of Base-unit to a Full-HD-/4K display by a quality HDMI cable.
2. Switch the Base-unit ON.
3. After started, the system shows the **Home screen**.



3.5 Audio Connection

The Wi-Fi of Sensor-button TOUCH transmits the audio output of the PC/Laptop, re-direct and send to the Base-unit together with the video signal. The audio will be output at line levels from mini jack socket 3.5 mm connector and via the HDMI output connectors simultaneously.

Audio via HDMI output

When your display/projector is connected via HDMI and it support audio together with video than a separate audio connection is not necessary. The audio signal is sent together with the video signal to the display.



Note:

If there is no sound from speaker check the settings of volume-mixer in taskbar of laptop, "WirelessMedia" or "Video-Playback" must be activated.

Audio Output

Connect the analog audio "LINE OUT" (mini Jack 3.5mm) of the Base-unit with the meeting room's sound system by using a fitting cable.

PC/Laptop Sound

As default set, Klick & Show will mute the internal speaker of PC/Laptop and route the audio to the Base-unit, after PC/Laptop is successfully mirroring desktop to the main screen, in order to avoid the repeated audio. When transmission is stopped at Sensor-button, local loudspeaker will return to previous status.

Note:

If there is no sound, it can have different causes, for example:

- 1 Check the volume control on your laptop's taskbar; see in "Mixer" if "WirelessMedia" or "Video Playback" is activated. To keep the internal speaker of PC/Lap muted while route the audio to the Base-unit, use the audio mute icon in the status bar.
- 2 The used video-player may need an update to latest version.
- 3 An active virus scanner can block the sound reproduction, check the "settings" in your virus scanner, and check the influence by turning off the virus scanner.

3.6 LAN Connection

The Base-unit can be connected to a local network or directly to a PC/Laptop. For normal operation, a LAN connection is not necessary. When needed, it is suggested to connect the Klick & Show to the internet.



The LAN connection can be used for:

- network integration of Base-unit in guest or company network
- telnet control of the Base-unit

- Over-The-Air -Update (OTA) of firmware of Base-unit
- maintenance purpose (in preparation)

Telnet commands

Telnet is a relatively simple, text-based protocol by which a computer of another person can connect via internet to Klick & Show. Control via TCP/IP (port 5656) is possible. You can find the list of commands in chapter 8.

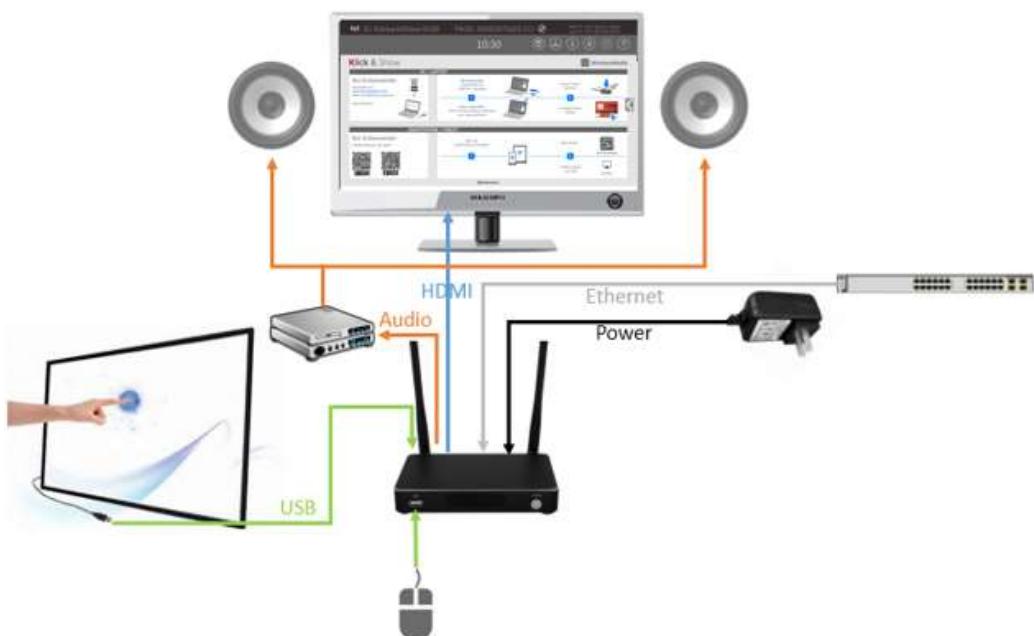
LAN indicator

LAN "connected" or "disconnected" is shown briefly in a message in lower/right corner on the Home screen.

3.7 Usage of USB device

Please use a USB Mouse or Touchscreen:

1. For configuration of Klick & Show,
2. To control the sharing PC/Laptop („Remote-Control“ can be blocked in settings),
3. For white board or annotation during a presentation, Klick & Show transmits Video, Audio and the USB-HID function for mouse-control and click-function of a touchscreen. Connect touch-interface of your screen to the USB-port on your laptop or PC.



4. To run a system upgrade.

USB control

USB mouse for configuration menu

- Single click to select
- Right-click to back to the Home screen

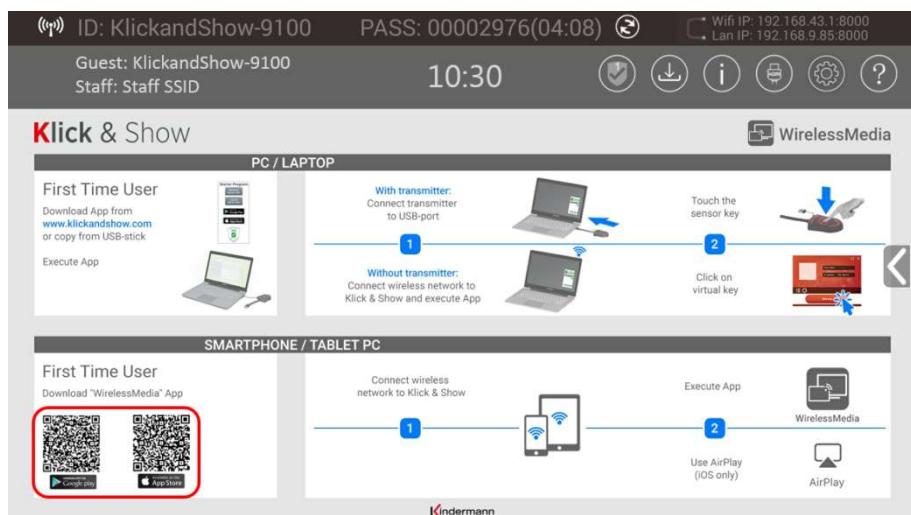
Touchscreen

- Single click to select
- Long press to open the contextual menus, as double-click or click the right button of a USB mouse.

4. Getting started with Klick & Show

4.1 Mobile units: Wireless Connection

Download the application namely "WirelessMedia" (for example scan QR-Code in Home screen) in Android Play Store or Apple App Store or download it from website <https://www.klickandshow.com/>.



After unpacking or after Factory reset, Klick & Show starts in **standard configuration "Wireless Direct Mode"** ("Linked Single Network"), where the base unit creates its own wireless access point, to which all the TOUCH buttons connect. This is typical for quick setup, temporarily installations or for small business meetings with a small number of meeting rooms.

The Wi-Fi icon for "WiFi Direct Mode" appears in the top status bar of the Home screen. The "Connected

Dual Network (LAN + WLAN) icon appears in the top status bar in front of the Wi-Fi and LAN address.

The SSIDs for these hotspots appear in the Start screen of Klick & Show:

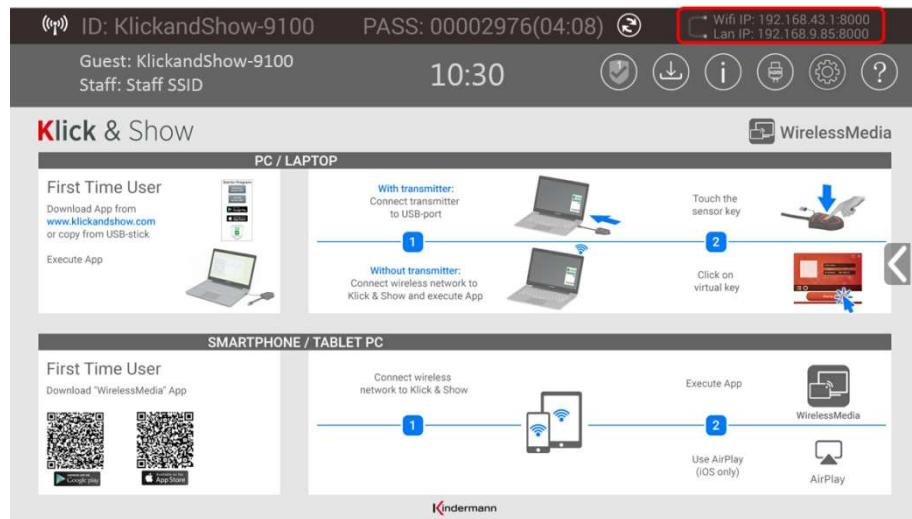
**Guest: KlickandShow-9100
Staff: Staff SSID**

Guests and staff have access to the internet when LAN is enabled, see 4.1.1.

Further options of the configuration for integration into a company network are provided in section 5.1.

4.1.1 Enable portable access point:

Make sure Klick & Show is connected to the network. If a local address is displayed on the Home screen, this means: the base device is correctly integrated in the LAN and has received an IP.



Note:

When it shows "N/A", means the Base-unit is not connected to the LAN by by CAT cable. This may be desirable or the connection failed or got an available IP address by the corporation router.

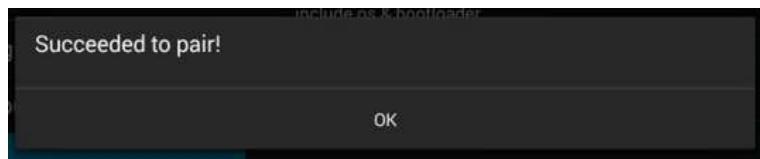
For basic function, a LAN connection is not needed.

Please refer to the LAN-settings in 'Ethernet', as below.

Default password for entering the Main menu is "**admin**".

4.2 Pairing Sensor-button with Base-unit

Connect the USB-connector of Sensor-button TOUCH to either of one USB port of Base-unit, to pair both units at same Wi-Fi. Follow all OSD messages. A successful pairing is shown at OSD and static red LED.



Then, please disconnect the Sensor-button TOUCH and use it for the mirroring on your laptop.

Pair all other buttons in the same way.

If error-message "Configuration fail" is shown, please check the connection of USB to keep stable after plug-in, and try again.

Note:

After each **changing the SSID/Wi-Fi channel** in menu, all the Sensor-buttons TOUCH must be paired again!

When you buy additional Buttons or when a Button should be assigned to another Base-unit, the Button must be paired again.

A Button can only be paired to **one** Base-unit at a time. The Button will always make connection to the Base-unit it was last paired to.

4.3 Set displayed information of the menu bar

In the WLAN network settings you can hide the information from the top menu bar of the start page: Hide SSID, Password & IP in the status bar.

This will hide positions 1,2,5 and 6 (page 18).

The 'i' icon on the home screen (12 on page 18) will show or hide the SSID display (position 8 on page 18) and the top menu bar. This function can be deactivated in the settings under WLAN network with the following option: Lock the status bar of the start screen

Thus, the display of the top line and the SSID information can be configured individually.

4.4 Mirroring of the desktop - First steps

More detailed instructions for operation can be found in chapter 6.1

4.4.1 PC / Laptop

When you are using Klick & Show **for the first time** on your laptop or for guests, you have to copy the **Starter-program first on your Laptop / PC. Run this Starter-program.**

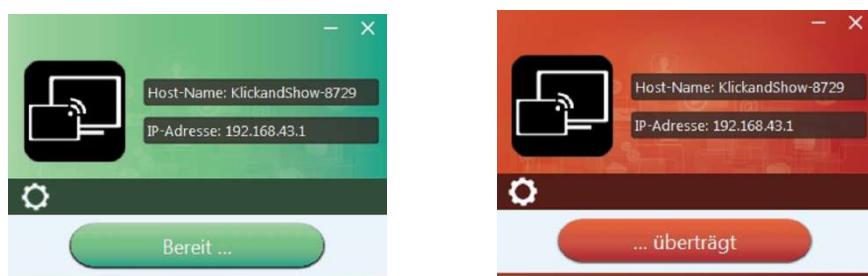
When the Starter-program is pre-installed one time, with plugging-in of the Sensor-button TOUCH, Klick & Show is ready to use, continue with step 6.

There are **four possibilities** for loading and executing the Starter-App „**WirelessMedia-windows**“ for Windows, or „**WirelessMedia-macOS**“ for Apple:

1. **The best and safest way:** download the App via **LAN** or **Wi-Fi** of **Base-unit**, enter IP-address (3) of status-bar of Home screen in a browser, download „WirelessMedia for Windows“, or „WirelessMedia for MAC“, continue with 5.
2. Download App from Internet www.klickandshow.com, continue with 5.
3. Store APP on a **USB-stick** at Base-unit: plug a USB-stick to USB port of Base-unit and copy Start-program „WirelessMedia.exe“ to USB-stick by clicking on symbol , continue with 5.
4. Copy the App **from enclosed USB-token** to the PC. (After a FW Update of the base unit the **USB-token** has to be updated via 3.)

Execute the *.exe file.

5. Plug a **Sensor-button TOUCH to the USB port of your PC or Laptop**. The Klick & Show application is starting automatically and a symbol is displayed in the task bar of the PC/laptop  .
(You may need to click the up arrow  in the task bar, to view the icon.)
6. Till the transmitter button shows a static **green** LED indicator, or till you see a message table showing up at the right bottom corner of desktop **“Ready to share”**.



7. **Click the Sensor-button** or with mouse the symbol at screen, to start mirroring the desktop on the main screen, LED is static red. An OSD message shows: logged in user name (option) and status of "Remote Control" and "Remote View" of desktop (locked/unlocked).
8. Click the Sensor-button again, to stop mirroring, LED shows green again.
9. Disconnect the Sensor-button at end of meeting.

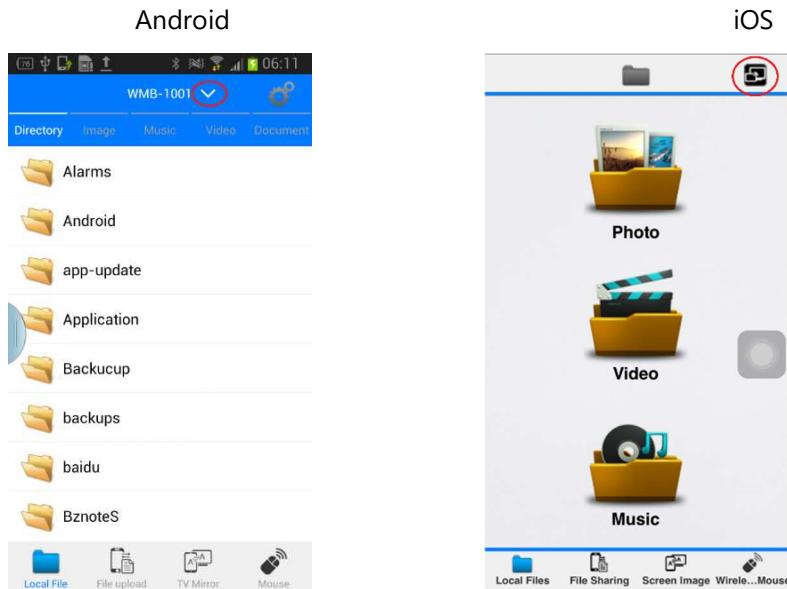
4.4.2 Mobile Devices

More detailed instructions for operation can be found in chapter 6.2.

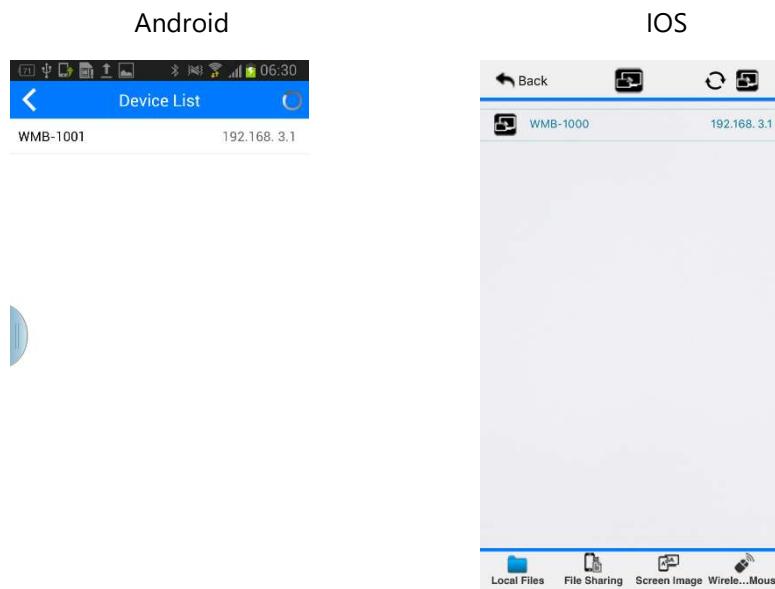
1. Connect your mobile device to one of the displayed Wi-Fi networks:

Guest: KlickandShow-9100
Staff: Staff SSID

2. Connect your Mobile with the LAN of Klick & Show. Open the App "WirelessMedia" on your phone. Press symbol "✓" for Android, or "☒" for iOS in start page, to get a list of available devices of Klick & Show.



- Click the right device to connect.



- After complete the pairing, it shows OSD "Welcome ***" on the Home screen. For example, it shows a „Welcome iPhone“, as shown below (here „Welcome iPad“).



- With **AirPlay** technology, user can stream his screen or music, (YouTube-) videos, pictures ... wireless to Base-unit. Connect your iOS device with the same Wi-Fi network from Klick & Show.

For **iOS devices** activate the control center. Click the **AirPlay** icon  on your Apple device and select the target, for ex. „**KlickandShow-9100**“ (ID of Base unit) to start mirroring to the main screen.

- For above **Android 5.0** devices, please click the devices list to select the target Klick & Show Base-unit, click the **Mirror** icon  on main interface of the App „**WirelessMedia**“ Apk for Android. For lower than Android devices than 5.0, please click the **Local Files** icon  to select the sharing picture, music and video.

4.4. Whiteboard & Annotation

Whiteboard and **Annotation** requires an HID compatible device, such as interactive white board or interactive touch screen. It is easy to use, makes collaboration in your business more productive and effective: documents can be easily written, edited, captured and shared.

Note: "Remote View" on every mobile device reduces the speed, possibly switch off "Remote View".

Whiteboard: write all your ideas and share the digital notes with anybody. Different colors of pen and background can be selected.

Annotation: draw or write annotations in overlay within your documents, presentations. Save and share everything that was discussed. Different colors of pen can be selected.

How to start Whiteboard or Annotation mode

The "Preview window" in Main-menu settings, Moderator Control, chapter 5.3.1, must be activated, for selecting this mode.

Tap (click) the LEFT-arrow (1), located on the right side of the screen, and select

Whiteboard  or **Annotation** icon  in (2).



Close the "Preview window" at RIGHT-arrow tap (1) to be able to use the full screen again.

The toolbar for Whiteboard or Annotation appears in the bottom of your screen.

If another user is mirroring, the Whiteboard & Annotation function is closed.

4.4.1 Whiteboard



Click on the icon to enter the white Whiteboard page. You can create free drawings with your finger at touch screen, mouse or remotely by a mobile device with the WirelessMedia-APP (multitouch capability).



Use the toolbar to select one of the following functions.

ID	Icons	Function
Toolbar 1	Add an empty page Delete the actual page Display previous or next page	
Toolbar 2	Undo: one step backward in changes Redo: one step forward in changes Erase part of drawings or annotation, change diameter by a longer tap Clear the entire drawing/writing on the screen Pen allows writing/drawing in different colors Draw basic geometric shapes Select color of board, the drawing will be kept	

	Toolbar 3 will pop up, when "Pen" or "Draw shape" or "Select color of board" is selected, for individual change of size of Pen, Shape or color.
Toolbar 4	 Save the current screenshot on local storage (PNG+WMN)  Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN)
File options	 File options: <ul style="list-style-type: none"> • Open WMN-file from local storage and continue/edit an older project • New project • Save as WMN on local storage in unit, it will be erased after POWER-OFF • Import from U disk stored project (WMN) • All pages are saved as PDF on local storage • Clear history – delete all whiteboard&annotation files on local storage

4.4.2 Annotation

Tip or click on icon  to enter the Annotation-function.



Use the toolbar to select one of the following functions.

ID	Icons	Function
Toolbar 1		Undo: one step backward in changes
		Redo: one step forward in changes
		Erase part of drawings or annotation, change diameter by a longer tap
		Clear the entire drawing/writing on the screen
		Pen allows writing/drawing in different colors
		Draw basic geometric shapes
		Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN)
		Save the current screenshot on local storage (PNG)
	Toolbar 2 will pop up, when "Pen" or "Draw shape" for individual change of size of Pen, Shape or color.	

Download the drawings to connected clients

Scan the QR-code with your mobile's camera or enter the given IP-address in a browser. If the network connection is set properly, you will get the saved files on Base-unit, which you can download as PNG and WMN file. The possibility for download will be closed after you click OK. You can copy data to USB disk and put this USB disk into the Base-unit and import with "Import from U disk" to the Whiteboard-section.

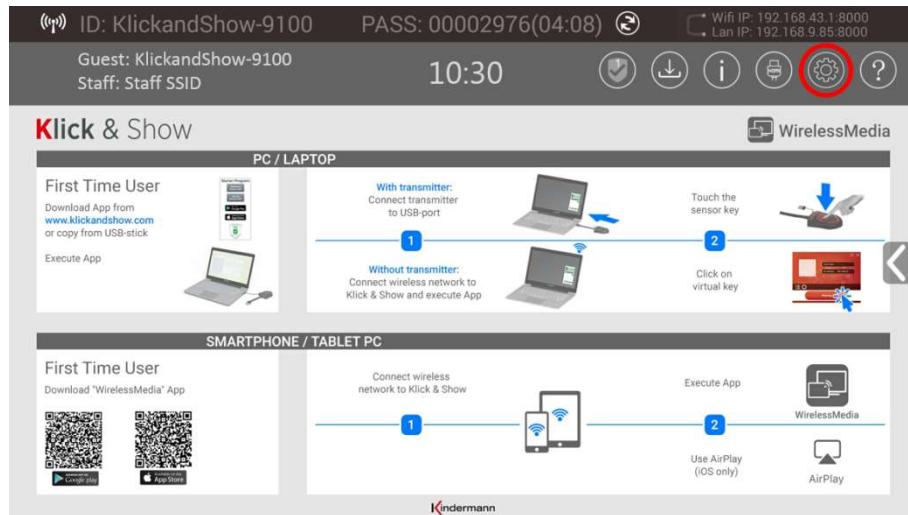


Files on wmb:/

name	size	modify date	action
0.png	32.88 KB	19-03-05 nachm.12:31	download
1.png	22.71 KB	19-03-05 nachm.12:31	download
20190305123147.wmn	5.52 KB	19-03-05 nachm.12:31	download

5. Settings in Main-menu

Connect a mouse to the Base-unit. Click the Settings-icon  on the top right corner, to open the menu.

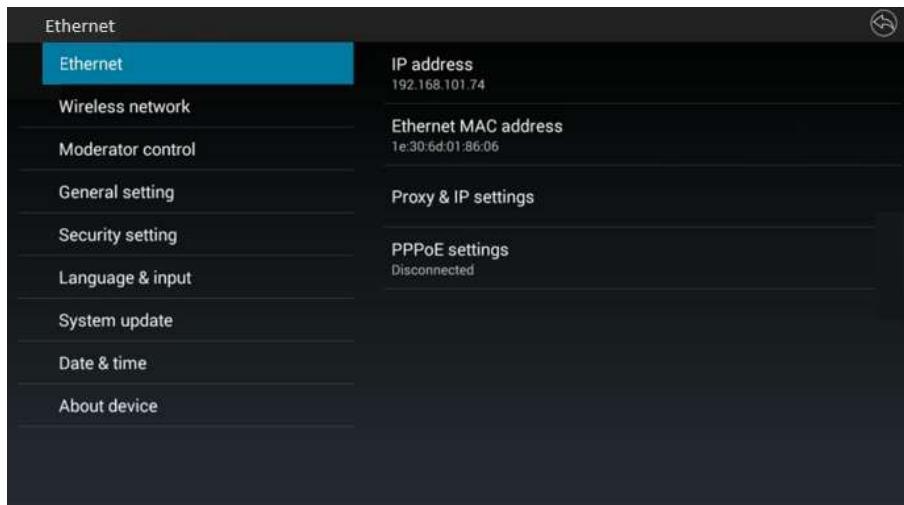


A password is required to enter the configuration menu. The default password at delivery or after Reset is "**admin**". You can change the password in menu "Security setting" or you can switch off the request of the password.

Note:

If user has forgotten his password, you need to make a Factory Reset to restore "admin" as password.

The main interface of Setting is shown as below, including **Ethernet**, **Wireless network (network wizard)**, **Moderator Control**, **General setting**, **Security setting**, **Language & Input**, **System Update**, **Date & time**, **About Device**.



5.1 Ethernet

5.1.1 IP address

Shows the local IP address of Base-unit. Mobile devices can also connect to the internet via the LAN port.

5.1.2 Ethernet MAC address

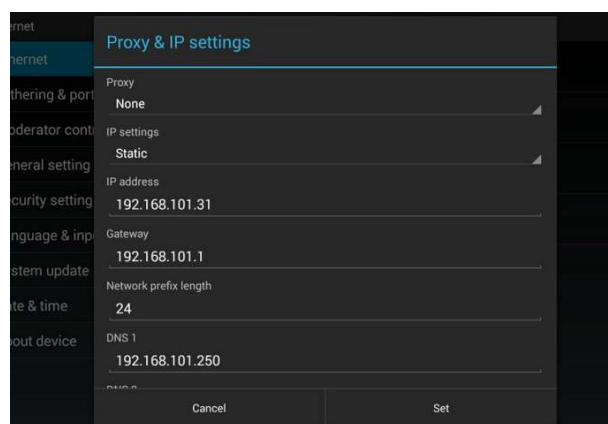
Shows the static MAC address of the Base-unit. The MAC Address clearly designates the hardware of each individual network device.

5.1.3 Proxy & IP settings

Click to configure a proxy server.

Proxy & IP settings

- **Proxy:** Click in the check box, to select the check box of "None" or "Manual".
 - **IP settings:** A network connection can be configured via DHCP or static address.
 - DHCP (default):** the device receives its IP address from the DHCP server in the network.
 - Static:** the device is manually assigned a fixed IP address.
- When incorporating into an existing network structure, it may be better to manually set a fixed IP address. When set to Static IP address, it will open-up an advance setting page, which including the set items below. Click in the input field to fill out the number.
- **IP address:** Fill out the 4 fields correct.
 - **Gateway:** Fill out the 4 fields correct (usually the Gateway has the IP address of the router). If no router on the local subnet, then just set it to any IP address on the subnet.)
 - **Network prefix length:** fill out the number defined by the subnet mask. Default is 24.
 - **DNS1:** (DNS server) - Fill out the 4 fields correct.
 - **DNS2:** Fill out the 4 fields correct.
- After finish, please click the "Set" to save and return. Alternatively, click "Cancel".



5.1.4 PPPoE settings

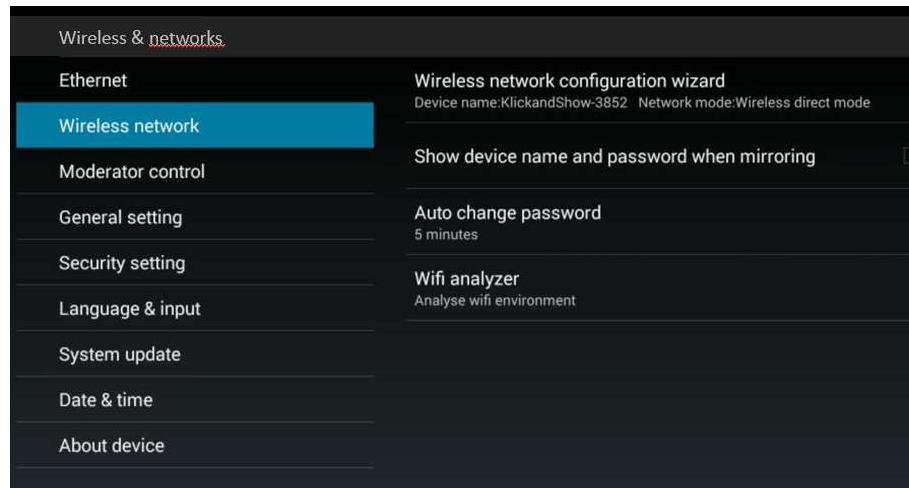
Click to configure the PPPoE (Point-to-Point Protocol over Ethernet) settings.

PPPoE Setting:

- **User name:** Fill in the appropriate user name.
- **Password:** Fill in the right password for this user.
- Check box to choose "Save Account and Password" and "Show Password".

After finish, please click the "connect" to save and return. Or, please click "Cancel".

5.2 Wireless & network



When newly unpacked or after Factory Reset, Klick & Show starts up in the **default Stand-Alone "Wireless direct mode"** (linked-single network) configuration, where the Base-unit creates its own wireless access point, which all buttons TOUCH use to connect. This is typical for a quick setup for small group meetings.

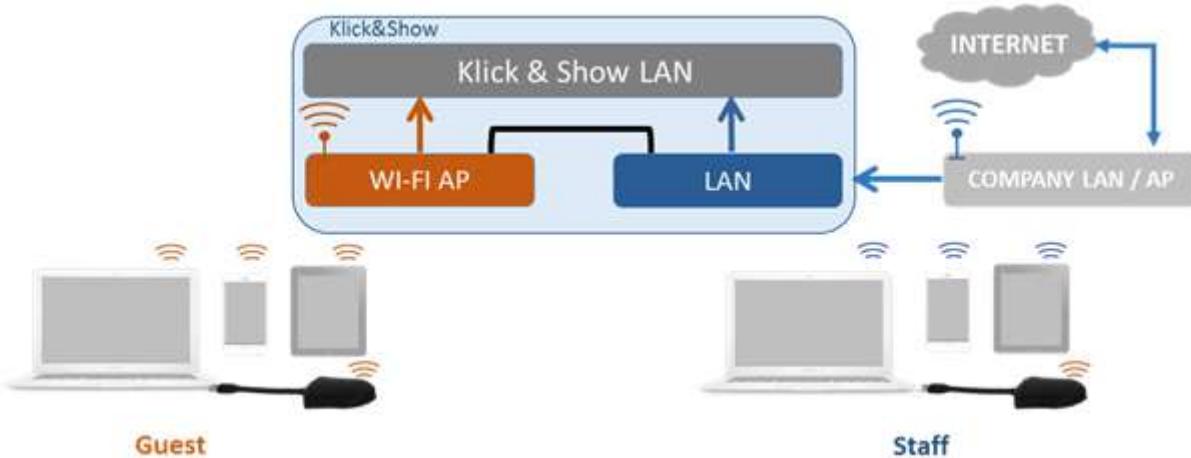
The Wi-Fi icon for the "Wireless direct mode" is displayed in top status-bar of Home screen. The icon for "linked-single network" is displayed in top status-bar at place of Wi-Fi- and LAN IP-address in Home screen.

Guest connect to the access-point of Klick & Show, while **Staff** can also connect to Base-unit via Wi-Fi or via LAN connection to their corporate network.

The SSIDs for these hotspots are shown in the Home screen of Klick & Show, see example:

Guest: KlickandShow-3852
Staff: Staff SSID

Guest and Staff have access to the internet.



You can start using Klick & Show in this mode without any other wireless network configuration.

Wireless network configuration

To take the full benefits of the Klick & Show possibilities, Klick & Show should be properly integrated in the organization's network (company/university/school).

This wizard allows user to create a **custom configuration** for integration of Klick & Show into the existing wireless infrastructure in larger organizations.

Important Note:

The configuration of Klick & Show in the corporate network requires the help of your IT department, especially for the integration in the network infrastructure, security-concept, firewall-questions...

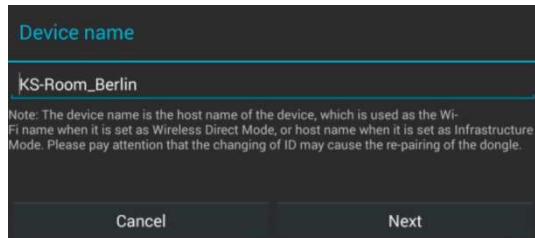
It cannot be guaranteed, that each described feature is working on your network infrastructure.

The quality, speed and stability depends primarily on the reliability of the IT-infrastructure of your network. Specially the quality of high definition video (dropouts, jerking in movement) can suffer from stability issues based on the network infrastructure.

5.2.1 Wireless network configuration wizard

The Assistant guides you through the network configuration.

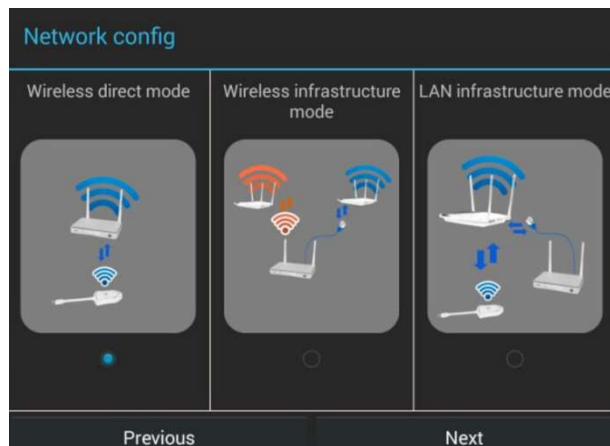
Enter a device name for the Base-unit. We recommend to take a descriptive name, if you have more than one Klick & Show installed. The default name is "KlickandShow-xxxx".



Double click in 'name', to enable the on-screen virtual keyboard.

Only "a-z", "A-Z", "0-9", "-_" and space are legal character. National characters can cause problems with Apple AirPlay.

Click "Next". The following three connection methods are available:



5.2.1.1 Wireless Direct Mode

Stand-Alone Connection

The internal Wi-Fi access Point of Klick & Show is active . The dongle TOUCH is paired directly to him.

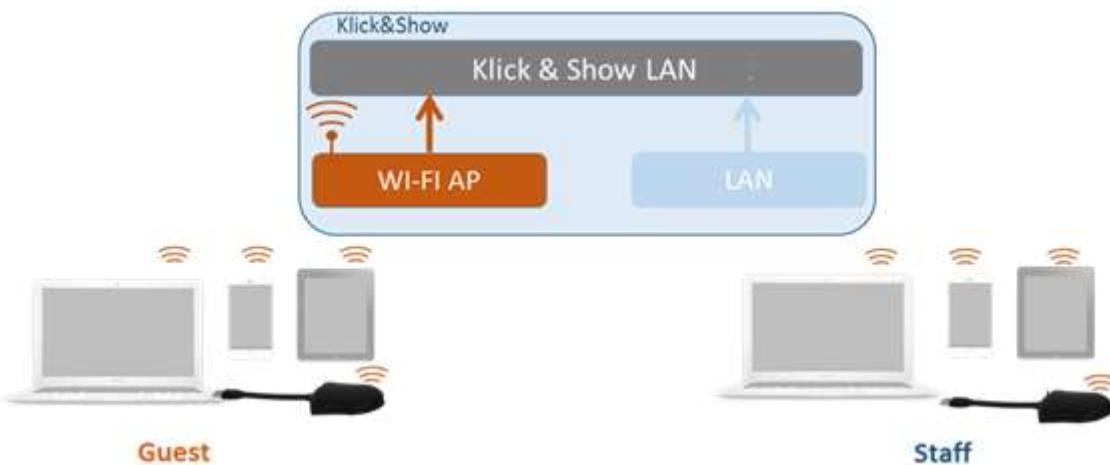
Guest and Staff use the internal Wi-Fi access point of Base-unit to present with all their units. This prevents an intense traffic load on the internal Network.

No Internet access is required.

The LAN-Port of Base-unit is not connected. The PC-users can present with or without dongle TOUCH by WirelessMedia PC driver (Windows or MacOS). Android and iOS users (BYOD) can share their content by installing the free APP on their device or using AirPlay (Apple only).

Recommended Environment

This option is best for temporary operation, small installations, and rooms without network access or networks that do not allow network access for Guests, due to strict security concerns, and are completely separate from the corporate network.

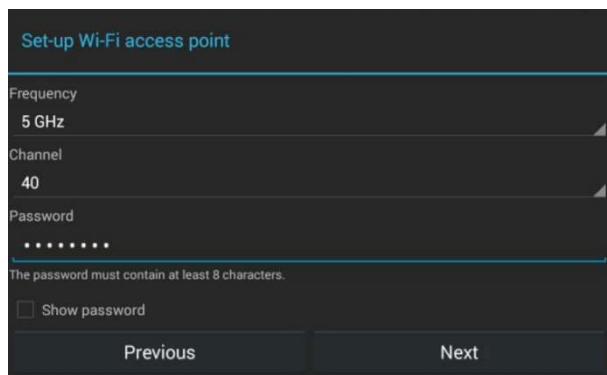


Before Staff users can stream information from PC (without dongle) or mobile device to Klick & Show, they must connect their device to the Wi-Fi network of Klick & Show. This may be a disadvantage, because meeting participants may have to switch their network to connect with Klick & Show.

Click "Next" to

Set up Wi-Fi access point

Set-up Wi-Fi access point includes, Frequency, Channel, Password, and Show Password.



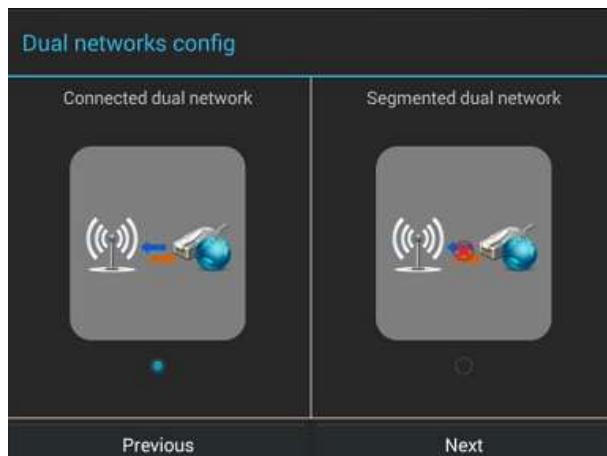
- **Frequency:** Click to select 2.4 GHz or 5 GHz Wi-Fi frequency. Default is 5 GHz.

Note:

Klick & Show button TOUCH supports 2.4 GHz- and 5 GHz-band. The 2.4 GHz-band has a higher range; the 5 GHz-band is less sensitive to interferences. Please check the surroundings which frequencies and channels are used, for example with a Wi-Fi analyzer, see chapter 5.2.5. Some mobile devices will only apply to one GHz band. Default is 5 GHz band, channel 40.

- **Channel:** Click to select the Wi-Fi channel. Default is 5 GHz, 40.
If the Wi-Fi channel is changed, no new coupling of the sensor buttons is necessary.
2.4 GHz frequency band: channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11;
5 GHz frequency band: channels: 36, 40, 44, 48;
Default is 5 GHz, channel 40.
- **Password:** Click in the input field to fill out the appropriate password with length of **8 characters**.
- **Show Password:** Check to show up the visual able password.

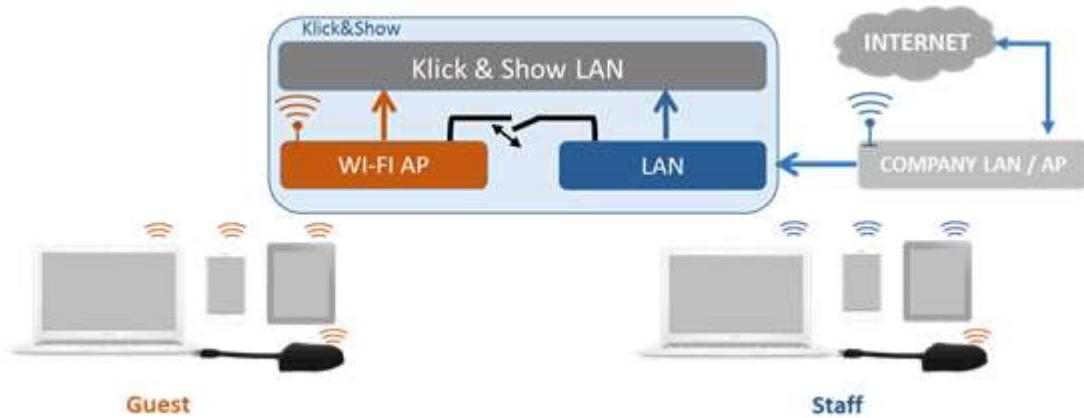
After finish, please click "Next" to save and go forward to "Dual networks config":



The internal Wi-Fi access Point of Klick & Show is active . The dual networks can be configured within the wizard as „connected/linked“ or as „segmented“. When “segmented” is set, there is no risk of unauthorized access by Guest. The disadvantage is, the Guest can not access to internet while mirroring his mobile units.

Connected dual network with Internet (LAN)

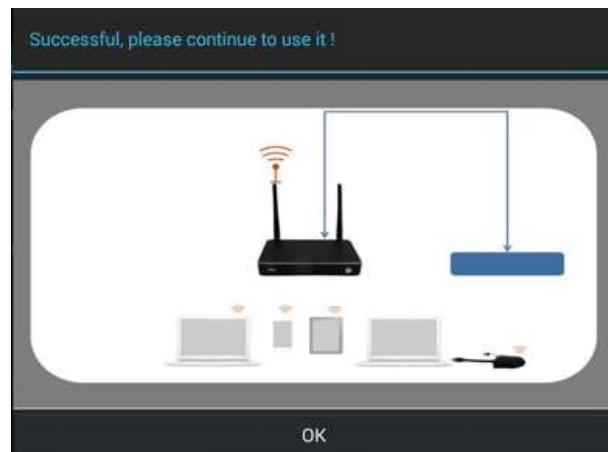
The Base-unit is hard-wired connected with LAN to Company network. Guest users connect to the Wi-Fi access point of Klick & Show. The Staff-users can be connected to their usual access point of corporate network, without the need to change the Wi-Fi. Now Internet connection is available for all users.



Click "Next" to enter the Staff-SSID for the secure wireless network of employees. This information will be shown at Home screen of Klick & Show.



Click "Next" to get the information for re-pairing the dongle TOUCH with the Base-unit.



Click OK to finish the configuration wizard.

Segmented dual network

Guest and Staff use the internal Wi-Fi access point of Base-unit to present with all their units.

No Internet access is required.

The LAN-Port of Base-unit is not connected. The PC-users can present with or without dongle TOUCH by WirelessMedia PC driver (Windows or MacOS). Android and iOS users (BYOD) can share their content by installing the free APP on their device or using AirPlay (Apple only).

In this option, unauthorized people (guests) cannot access the corporate network and have no Internet access, e.g. for strict security reasons. If LAN is connected, employees have internet access.

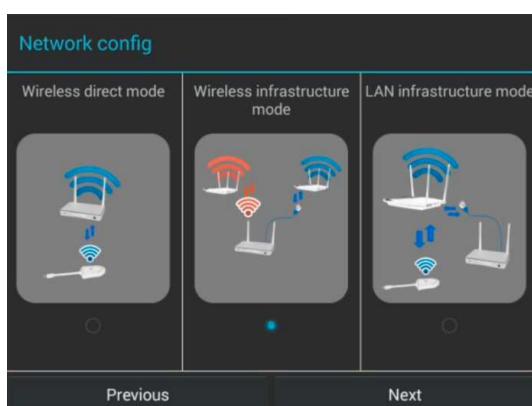


Before Staff users can stream information from PC (without dongle) or mobile device to Klick & Show, they must connect their device to the Wi-Fi network of Klick & Show. This may be a disadvantage, because meeting participants may have to switch their network to connect with Klick & Show.

Recommended Environment

Small to medium size rooms with not more than 5 other access points. In larger organizations, it can come to interfering with the existing wireless network infrastructure.

5.2.1.2 Wireless Infrastructure mode



Klick & Show can connect to a wired and a wireless network simultaneously. The basic unit is firmly connected to the company network with LAN. Guest users connect to Wi-Fi "Guest" access. The employees ("Staff") connect to their usual access point of the corporate network, without having to change the Wi-Fi. This is very useful for organizations, which have a wireless "Guest" network for external visitors and a wired "Staff" network for their employees. The segmented Dual Network of Klick & Show provides two separated routing ways to connect to the Base-unit at same time. Guest-users are not able to access any resource on the Ethernet of the company. Klick & Show uses the existing wireless network infrastructure. Guest and Staff have internet access.

Note:

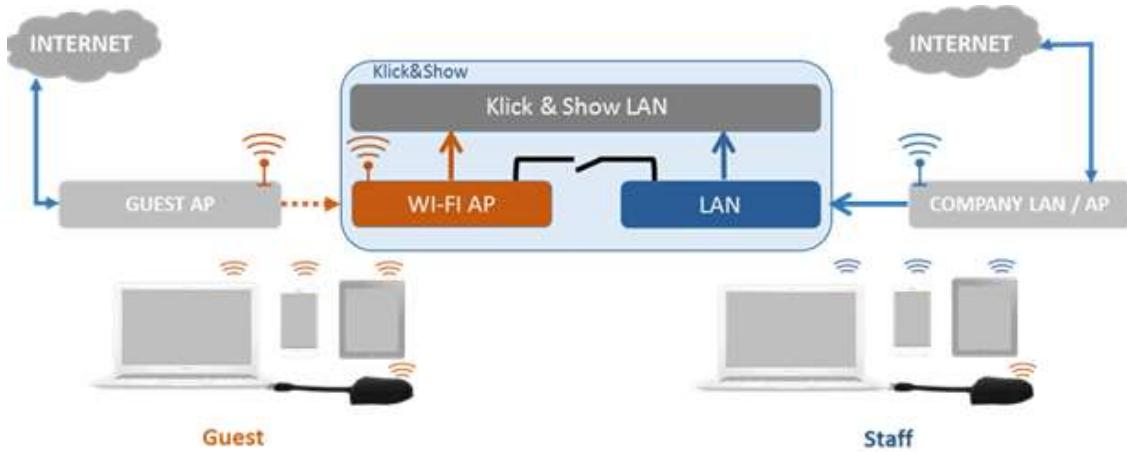
To access Klick & Show with mobile units over the LAN, you have to activate the "LAN discovery & connection" in "Security setting" menu of Klick & Show.

Dual Network Configuration

The internal the Wi-Fi network of Klick & Show is connected to Guest Wi-Fi network of the organization, (**Client**

Mode: the indicator-icon  shows the actual signal strength). The Base-unit is still wired with LAN-cable to the internal company network

The PC-users can present, with or without dongle TOUCH by WirelessMedia PC driver (Windows or MacOS). Android and iOS users can share their content by installing the free APP or using AirPlay (Apple only).



The dongle TOUCH is connected to the Wi-Fi access Point of Guest network, which in turn is connected to the internal Wi-Fi access Point of Klick & Show. (The dongle can also be configured to connect to the enterprise's access point.) Mobile users stay connected to their current network, have access to their normal corporate environment, as well as Internet access.

The actual received signal strength from Guest network is shown in Home screen of Klick & Show: .

Follow the instructions of the configuration wizard for "Wireless infrastructure mode".

When pairing the dongles, by plugging the dongle in the USB port of the Base-unit, it will automatically pair to the associated access point of Guest or Staff Wi-Fi and NOT to Klick & Show.

Note:

Two wireless transmissions between PC and Base-unit may influence the performance. The performance, reliability, quality and stability when mirroring depends on the corporate network infrastructure.

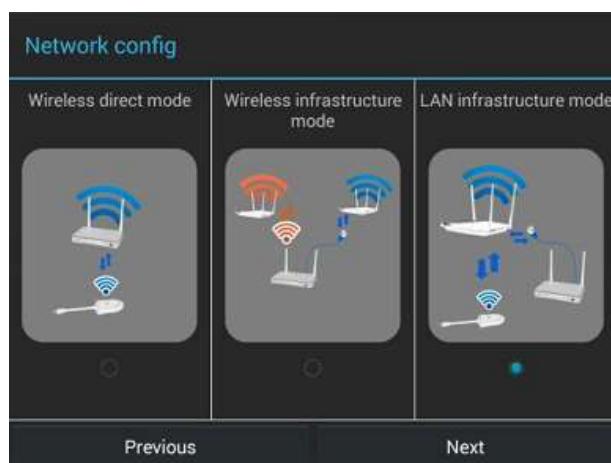
Take in account the amount of bandwidth, that each dongle TOUCH needs to stream the mirrored screen to the Base-unit, which is between ~ 1 Mbps (typical PowerPoint presentation), ~ 5 Mbps (web browsing), up to ~25 Mbps (1080p video streaming).

Recommended Environment

Rooms in office or university/school, with many access points currently installed. In environments where more Klick & Show units are closely deployed. Ideal for scenarios where separate Guest- and Staff-Wi-Fi structure exists. Ideal for security, by separated Dual network structure. The company administrator can customize the guest access in the firewall according to the security level in the organization.

*Note: The stand-alone Windows "**ManageTool**", (in preparation) enable system administrators to manage multiple Klick & Show devices remotely from a single PC: change ID or password, copy the settings from one to another Klick & Show in the same LAN. This tool is ideal for companies, or larger institutions.*

5.2.1.3 LAN Infrastructure Mode



In this configuration the **built-in Wi-Fi** access point of Klick & Show **is disabled**:

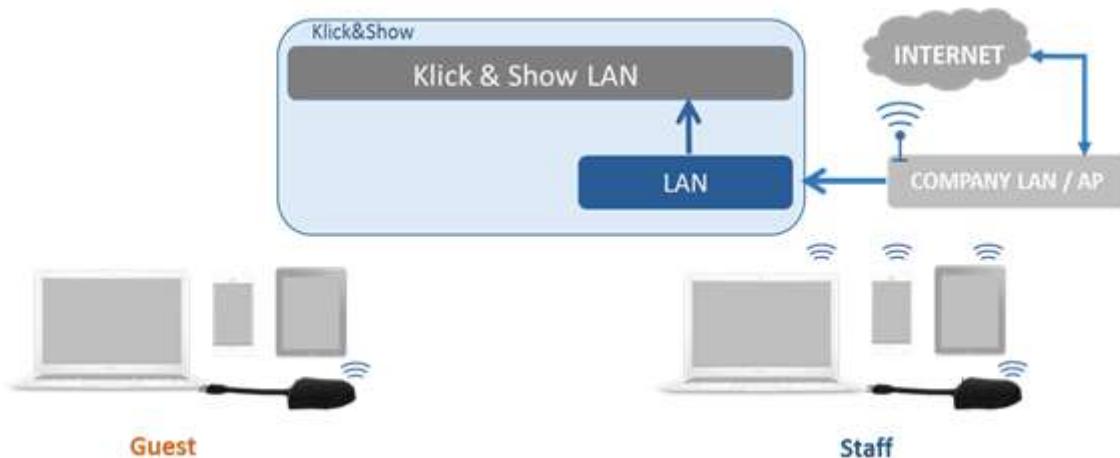


The dongle TOUCH and/or the mobile devices can connect to the secured wireless access point of the company network. The Base-unit of Klick & Show is hard-wired connected via LAN to the Ethernet of the Company network.

The Staff-users connect to their usual access point of Company network, without the need to change the Wi-Fi.

Follow the instructions of the configuration wizard for "LAN infrastructure mode".

When pairing the dongles, by plugging the dongle in the USB port of the Base-unit, will be automatically paired to the Staff access point, and NOT to Klick & Show' Base-unit.



Recommended Environment

Rooms in office or university/school, with many access points currently installed. In environments where more Klick & Show units are closely deployed. Ideal for internal meeting-rooms. Ideal for networks that do not allow additional Wi-Fi access due to security concerns.

5.2.1.4 Firewall Settings

The WirelessMedia software communicates with the target Klick & Show unit passing through network security devices such as a firewall. The firewall monitors the traffic which is coming from Klick & Show streaming and permits or blocks data packets based on a set of security rules, to establish a barrier between Company's internal network and incoming traffic from external sources (such as Internet) to block malicious traffic like viruses and hackers.

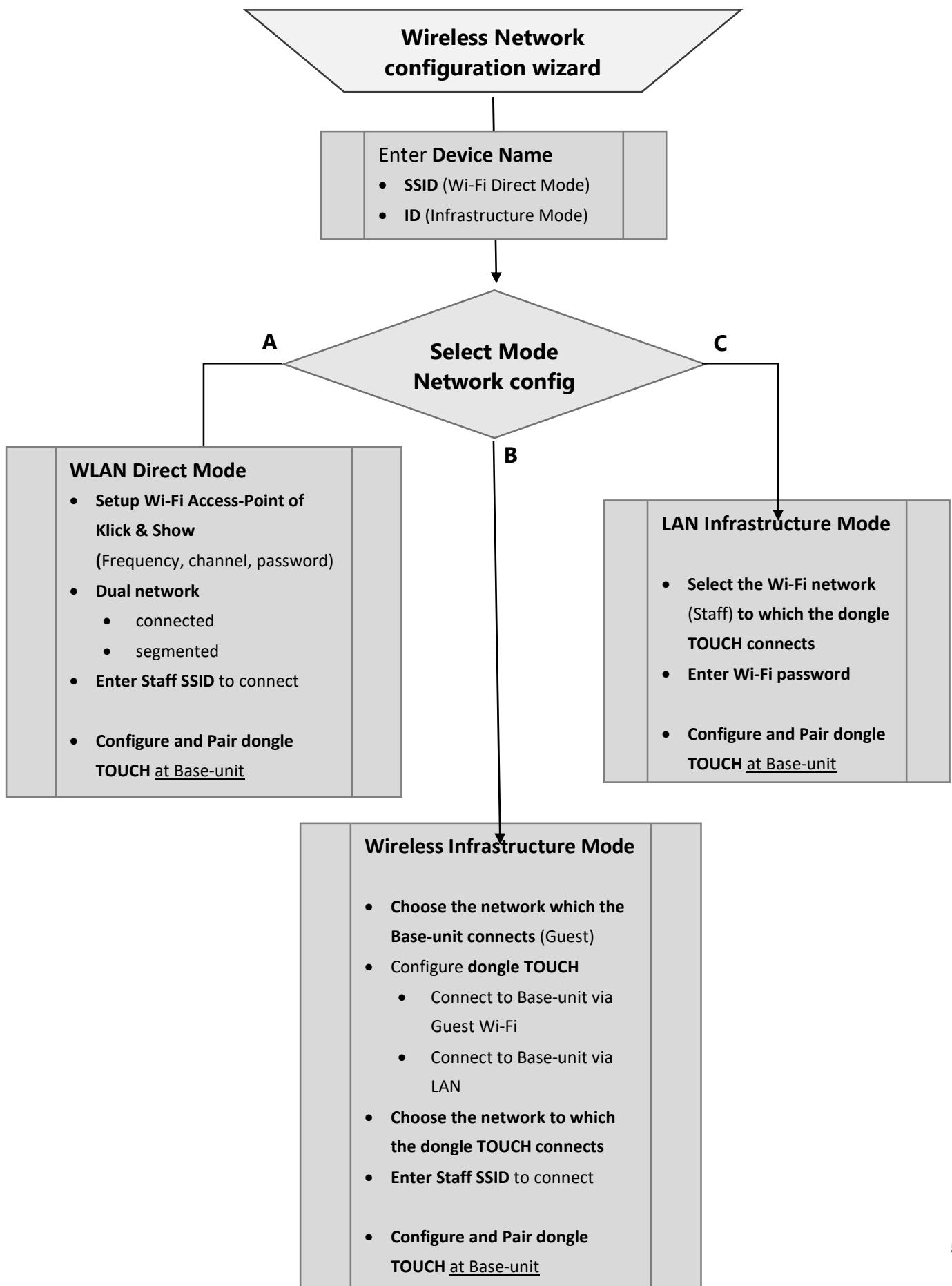
Firewalls are analyzing the traffic at so-called „ports“, where the information is exchanged with external devices. The Firewall administrator has to add a rule for the Klick & Show system, if a rule does not exist. The Administrator can allow or restrict certain data to be communicated from user to Klick & Show using the Port Table. The network address of the Base-unit can be configured through DHCP or by a manually entered fix IP address.

To work with wireless mobile devices, these ports must be open for communication through your firewall:

From	To	Protocol	Direction	Usage	Description
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 20000	TCP	↔	Command	Transfer control command between Transmitter/PC software and Base-unit
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 20002	TCP	→	Video	Transfer video from Transmitter /PC software to Base-unit
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 20003	TCP	→	Audio	Transfer audio from Transmitter /PC software to Base-unit
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 20005	UDP	↔	Preview window Fast cursor Command	Transfer preview video from Transmitter /PC to Base-unit Transfer cursor from Transmitter /PC to Base-unit Transfer command between Transmitter /PC software and Base-unit
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 8887	Multi cast	→	Discovery	Used by Transmitter / PC software to send multicast message to network to search Base-unit. The group IP is "239.1.1.1"
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	WMB, port is 8889	Broadcast	→	Discovery	Used by Transmitter / PC software to send broadcast message to network to search Base-unit
PC:Port is assigned by windows/MAC; Transmitter-Port is assigned by system	port is 6667	UDP	↔	Discovery	After search, authentication message is transferred through this port
Transmitter-Port is 80/8080	remote OTA server port is 8080/80	HTTP	↔	OTA	communication between Base-unit and remote OTA server. Such as query firmware info, download new firmware OTA server: http://www.fw-service.com
Any telnet client	port is 23	Telnet	↔	Telnet Command	Send command from telnet client to Base-unit, response result to telnet client send info to telnet client
Any client	port is 5656	TCP	↔	Telnet Command	the same as telnet
Apple device	port is 5353	Multi cast	→	Airplay	For apple device to search Base-unit
From apple device	port is 51010	TCP	↔	Airplay	Apple device push URL to Base-unit

From apple device	port is 51020	TCP		Airplay	Airplay protocol event port
From apple device	random port	UDP		Airplay	Airplay protocol random assign an UDP port for connected apple device to transfer audio
From apple device/Mobile app(ios/Android)	port is 51030	TCP		Airplay /Mobile APP	Transfer video data, for screen mirror
From Mobile app(ios/Android)	port is 51040	TCP		Mobile app(ios/Android)	RTSP control protocol, transfer control command
From Mobile app(ios/Android)	port is 52020	TCP		Mobile app(ios/Android)	Remote control
From Mobile app(ios/Android)	port is 52030	TCP		Mobile app(ios/Android)	When sharing, sync status between Mobile app and Base-unit
From Mobile app(ios/Android)	port is 8121	TCP		Mobile app(ios/Android)	Mobile app transfer photo, audio, video to Base-unit
From Mobile app(ios/Android)	port is 48689	Multi cast		Mobile app(ios/Android)	For mobile app to search Base-unit
			.		
Transmitter (Dongle TOUCH) Base-unit					

5.2.1.5 Network Configuration Diagram



5.2.2 Show Wi-Fi name and Wi-Fi password in main screen

Name (SSID) and Wi-Fi-password can be shown or hided at top status-line of **main screen**.

Note: The picture of the external HDMI input is not shown.

5.2.3 Auto change Wi-Fi access point password

Authentication with a password secures the connection of wireless LAN for authorized users only. To avoid that a participant of last meeting can view an actual meeting from outside with the App "Remote View" of WirelessMedia, the Wi-Fi password will change on a certain configurable time, unless at least one button is connected to the Base-unit.

The password remains unchanged for all participants of the meeting, while at least one Sensor-button TOUCH **or** a Wi-Fi-network of a mobile device are connected with Base-unit. After the user is disconnected, a configurable time runs.

- The changeable password will be fixed by connecting a Sensor-button TOUCH to PC/Laptop or connect a mobile unit to the Wi-Fi of the Base-unit, and continue to be changeable after 15s after disconnecting the last Sensor-button TOUCH or disconnect the Wi-Fi of a mobile unit.
- User do not need to re-pair the Sensor-button TOUCH again, if only the password is changed. A **Smart mobile device** has to enter the correct SSID and password to connect to the Base-unit access point, in order to access all functionality.
- When the last Sensor-button TOUCH (or mobile device) is disconnected for 15 s, it will open up a dialog box for user to confirm whether to clear the meeting history, including all data/files to be temporarily memorized in the Base-unit.

Configure to automatically change Wi-Fi password to a random number every period of time.

Click to set the configuration, including

- **Never:** never change Wi-Fi password. (Even after POWER-OFF condition)
- **5 minutes:** change Wi-Fi password every 5 minutes.
- **30 minutes:** change Wi-Fi password every 30 minutes.
- **1 hour:** change Wi-Fi password every 1 hour.
- **2 hours:** change Wi-Fi password every 2 hours
- **hours:** change Wi-Fi password every 4 hours
- **24 hours:** change Wi-Fi password every 4 hours

Important Notes:

A new Wi-Fi-password for securing your Wi-Fi network can be generated also manually by pushing  in Home screen, also see chapter 2.3.1.

Even a switched-off mobile unit can hold a Wi-Fi-connection to Klick and Show in the background, and inhibit the automatic password-change and/or going to Standby-mode!

Tip: If the adjustable password timer in Home screen is not running at least one participant is still connected.

A change of Wi-Fi-password does only affect the user of mobile units, **NOT** the sensor-button TOUCH!

Every new Wi-Fi network name SSID needs a new re-pairing of all Sensor-button TOUCH, see chapter 4.2.

5.2.4 Wi-Fi analyzer

To get the best performance from Klick & Show in the Wi-Fi network, careful frequency planning is important to avoid interferences with other Wi-Fi devices.

Klick & Show can be inserted in both frequency bands 2.4 GHz and 5 GHz. In the 2.4 GHz band, the range is higher, but the 5 GHz network is less susceptible to interference and the Wi-Fi speed is higher.

- At the 5 GHz band choose one of the following channels for indoor use only: 36, 40, 44, 48
- At 2.4 GHz, channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 are available.

By default, Klick & Show is set to channel 40 in the 5 GHz band.

When installing Klick & Show, the 5 GHz band should be preferred because the channels in that band do not overlap. In the 2.4 GHz band there are only a maximum of three channels that are without overlapping (channels 1, 6 and 11).

Note: Check if the Wi-Fi interface of your PC or mobile device supports the 5 GHz band before you select it.

Find the best Wi-Fi channel

If there are several routers nearby, it is particularly important to find an unused and interference-free Wi-Fi channel, otherwise Klick & Show would have to share the frequency band with other transmitters, which can lead to interference. The built-in Klick & Show analysis tool scans all available wireless networks in the area. If there is another router nearby, select a Wi-Fi channel for each meeting room that is three channels higher or lower.

The diagnostic tool "Wi-Fi Analyzer" has two modes:

- **Simple mode** to check a wireless access point: select a network and get a channel rating (unused channels have a high number of stars).
- **Expert mode** to check the Wi-Fi spectrum and the received signal strength "RSSi".

Basic rules to set up the WLAN of Klick & Show

Ask your IT department for help when planning larger installations, possibly even on different floors. Most devices are in the 2.4 GHz band. To prevent devices from interfering with each other in one place, you should avoid a frequency range that is three or more channels higher. Recommended are the channels 1, 6 and 11 if you want to use the 2.4 GHz band, there are the fewest overlapping.

Note: If quality issues suddenly arise after a successful setup, it may also be that new wireless networks have been set up, or existing routers have switched to new wireless channels that overlap with Klick & Show Wi-Fi.

Basically it would be possible to choose the same channels. Which results in lower throughput (quality) when multiple users simultaneously participate and stream videos. Sharing documents is less critical.

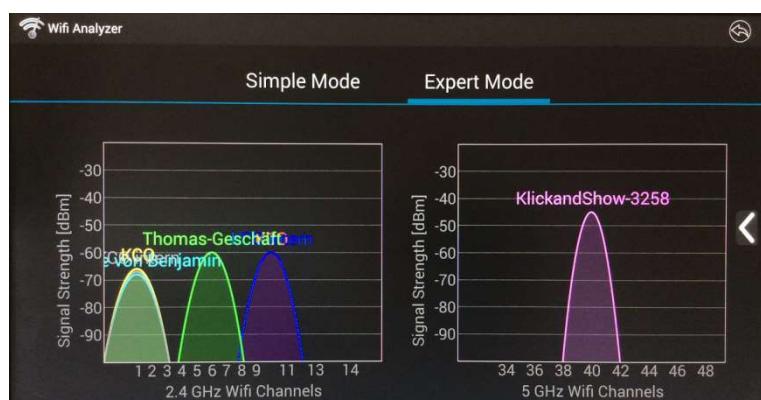
The use of a 5 GHz channel is recommended.

Do not remove the antennas from the base unit. However, it is possible to find a better place for reception through an antenna extension cable, e.g. outside a rack.

Undisturbed propagation of the Wi-Fi can be achieved with a line of sight between the TOUCH sensor button and the base unit, with as few obstacles as possible to attenuate radio waves. Avoid placing transmitter and receiver where metal or other dense materials may be present.

The measurement of the signal strength RSSI may e.g. with a smartphone and a free Wi-Fi analysis program, such as the Android application "Wi-Fi Analyzer" or with another Klick & Show device. At least a signal strength of RSSI = -70 dBm should be displayed at the location of the base unit (-60 dBm, for example, would be a stronger signal).

Even if the selected channel is free from other Wi-Fi transmitters, a too weak signal from the TOUCH sensor button (or from mobile devices) can cause interference.

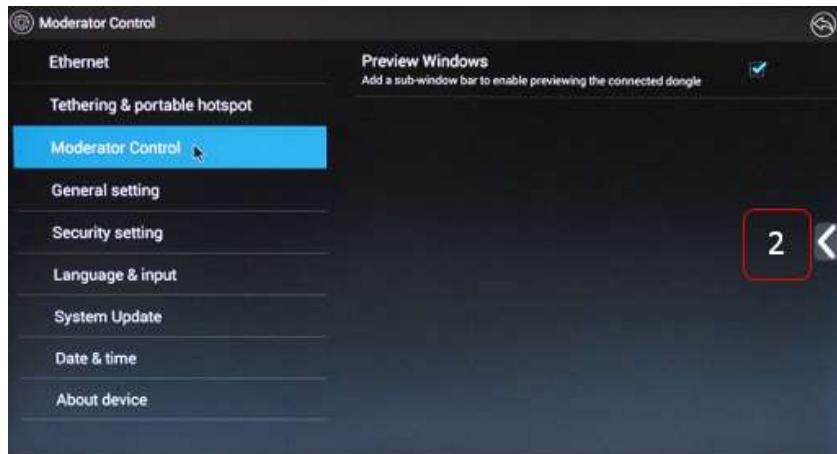


The field strength should be more than -70 dBm. If the measured RSSI value is too low, mind the above points for optimization.

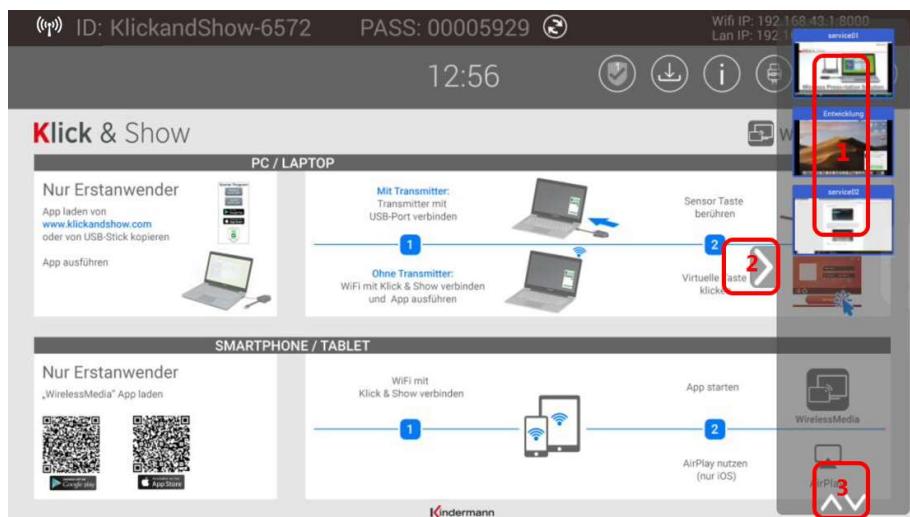
5.3 Moderator Control

5.3.3 Preview window

A sub-window of screen content of every connected source can be switched on or off in the menu.



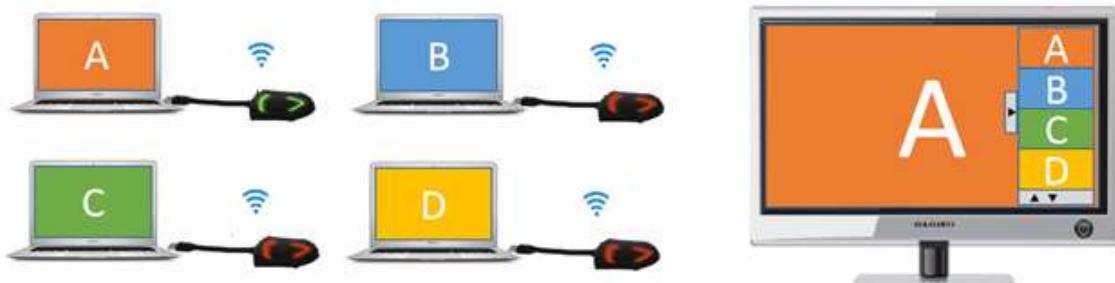
At touch-screen or with mouse of Base-unit, you can click on LEFT or RIGHT-arrow (2), to show the small preview-windows as a bar on the right edge of the screen, or to hide them, if they are disturbing. Once the preview windows are activated, you see live-pictures (1) of all connected sensor buttons TOUCH at the right edge of the screen. Just scroll UP or DOWN (3) to see further preview pictures.



Note:

You can use these functions directly with touch-screen too.

Principle illustration:



As soon as speaker or moderator is clicking with mouse of Base-unit, or clicking with finger at touch-screen, the appropriate participants of the meeting is activated, another click at the arrow ► shows his picture at the main screen in full format. A red frame is shown for the active picture.



5.4 General settings

Includes: automatic creation of Starter-program on an USB-stick, Standby, AirPlay screen quality, HDMI output resolution, mode of HDMI input, individual Home screen, volume at display.

5.4.3 Automatic creation of Starter-program

Determines, when using a USB memory at one USB-port of Base-unit, the Starter-program "WirelessMedia" will be copied automatically on USB memory. Activate or deactivate the corresponding box.

5.4.4 Auto Standby

If the Auto Standby mode is activated, Klick & Show will automatically switch to power saving mode, a selectable time after the last Sensor-button TOUCH was plugged off, or Wi-Fi of a mobile unit was disconnected, there is no

active signal at external HDMI-input, or there is no operation at the system. Time is selectable from **Never** to **30 minutes**. In Standby green LED (2) in window of front of Base-unit is flashing and **HDMI-output is switched off**.

When a **Sensor-button TOUCH is plugged in and connected**, or a **mobile unit is connected**, or **an active signal is at external HDMI-input**, Standby is deactivated.

Pressing of Power-button or movement of mouse at USB-input at Base-unit deactivates Standby mode also.

5.4.5 AirPlay screen quality

Click to select the image quality when transmit apple device by "AirPlay" mode, including

- High: 1920x1080
- Medium: 1280x720
- Low: 1136x640.

Note:

Different AirPlay quality will occupy different data rate. Under a certain data rage, lower resolution will get better frame rate.

5.4.6 HDMI output resolution

Select the resolution at HDMI output of Base-unit. When the new resolution can not be displayed, the previous resolution is displayed after approx. 15 seconds. System will reboot to make changes.

Existing HDMI output resolution:

3840x2160 @60Hz	3840x2160 @30Hz (nur K-10S)	Auto (nur K-10S)
1920x1200 @60Hz	1920x1080 @60Hz (K-10S / K-10L Lite)	

In **AUTO**-mode Klick & Show automatically switch the output-resolution to the monitor preferred resolution (EDID), when the Base-unit is booting (Power-key). (One of these four available output resolutions).

5.4.7 HDMI input AUTO switch

You can set, if HDMI-signal at HDMI-input of Base-unit is active, main screen is switched manually, automatically or with changing of status of Sensor-button TOUCH the wired HDMI source is displayed.

User can select three options:

- **"Manual switching"** of external HDMI input, see chapter 6.4.

- “**Last connect switch**”, switch to HDMI-IN, when Base-unit detects active HDMI signal, auto-switch to Home screen, when HDMI signal at input is inactive.
- “**Switch to active HDMI input when Home screen is shown longer than 5 sec:**” when sensor button is active, the Home screen is shown for 5 sec., and then switched to external active HDMI-input. During the 5 sec. of Home screen, settings can be made in the Menu. When there is no active HDMI-IN signal, Home screen is shown.

5.4.8 Background image Home screen

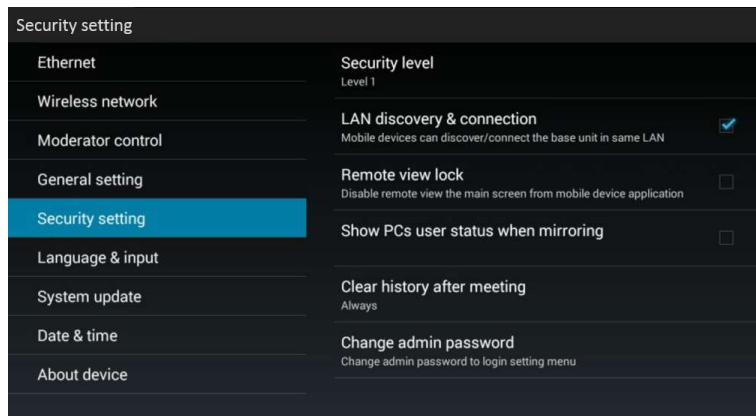
When powering Klick & Show the start screen will be displayed. User can change background image of Home screen. Select the image (jpg, bmp, png with resolution 1920x1080 p.) from suitable directory and activate box for selection. You can return to Standard Home screen every time.

5.4.9 Volume

User can select volume of display from 0 to 100.

5.5 Security setting

Includes Security level, LAN discovery & connection, “Remote View” access, show User-name when mirroring, clear history, Admin password.



5.5.1 Security level

Based on user requirements, **three different security levels** can be set in the menu of Klick & Show, to satisfy different security requirements, according to different security sensitive environments or security policies. A security level is a predefined set of settings. Click on the corresponding entry in the menu if you want to adjust the respective security features. The default setting is level 1.

Level 1: normal safety; keeps the security in normal and daily usage for any organization, such like classroom,

regular meeting room etc.

Level 2: higher security; provides increased security for companies, organizations, government agencies, etc., through powerful encryption of audio and video data; other security features include limiting the transmission of "AirPlay" by introducing a password and blocking the "Remote View" feature for mobile devices.

Level 3: is used for strict security requirements of companies, organizations, authorities, banks.

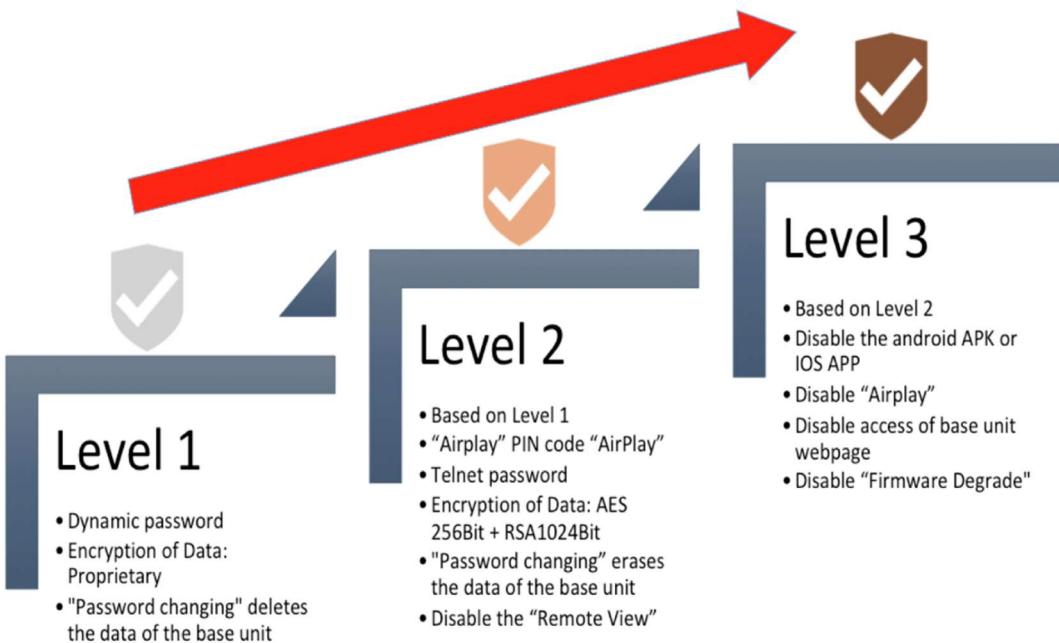
This level contains all 'Level 2' security measures; in addition, all mobile applications, such as the Android APP or iOS APP, as well as AirPlay are blocked, the web browser (WebUI) of the Base-unit is blocked. In addition, the downgrade of the firmware is not possible.



The setting of the security level is displayed in the Home screen, click the icon for more information.

More detailed information on the security concept of Klick & Show can be downloaded from the web at www.klickandshow.com. Go to the DOWNLOAD / Documentation tab.

The following table explains the different security features.



5.5.2 LAN discovery & Connection

Allow the PC/Mobile/tablet to discovery the Klick & Show unit in LAN and connect it, instead by Wi-Fi.

For example, a guest may connect through the guest Wi-Fi in a company. If Klick & Show is also integrated into this guest network, the guest can also connect with Klick & Show.

5.5.3 “Remote View” lock

Presenter is able to turn on/off the “Remote View”, to enable/disable the Klick & Show APK/App to remotely watch the main screen (mirrored screen), for example with “Remote View” of WirelessMedia App in Wi-Fi (or LAN in same network).

Note:

Each **active** attendee of a meeting can overwrite the “Remote View” setting at “Starter-APP-menu”, and it will be effective for all attendees until next person overwrites again, see chapter 6.1.

Important Safety-Notes:

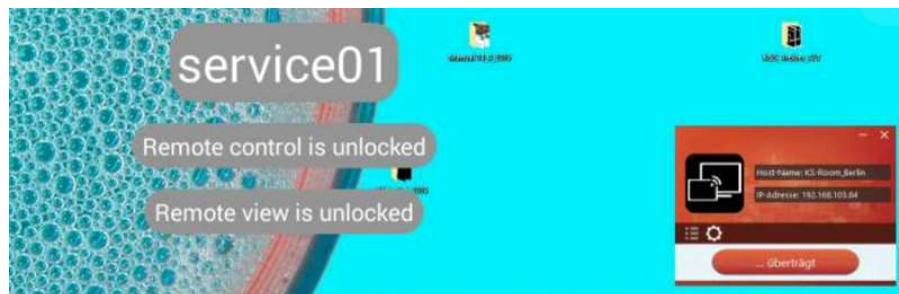
When “Remote View” is active, a user can connect his mobile to the Base-unit and **watch the main-screen**, when he **knows the momentary Wi-Fi-password**, see Wi-Fi password chapter 5.2.5.

If “Remote View” and “Remote Control” is activated with ‘Savety Level 1’, mobile users can control mirroring content and change or interrupt presentation by unintentional actions from their mobile device also from outside of room. Therefore each active user can block “Remote Control” individually at his laptop in GUI, see chapter 6.1.

When “Remote View” is active, it has consequences for the speed and performance of streaming of HD-videos and the USB-HID feedback from a touchscreen to the laptop or pc, with a slower reaction of the mouse.

5.5.4 Show PC’s user status when mirroring (Yes/No) :

User name, status of „Remote control“ and „Remote view“ (locked/unlocked)



5.5.5 Clear History after meeting

Pictures, videos, music of mobile units will be stored in memory of Base-unit. This memory can optionally be erased, at the end of a meeting, when the Sensor-button is pulled from the Laptop / PC.

Settings are:

- Decide by User – a dialog appears, when Sensor-button TOUCH is pulled
- Never – storage space is automatically erased, when memory is filled for 90%
- Always – memory is automatically deleted.

5.5.6 Change admin password

Change admin password for entering setting menu. Default password, or after a RESET, is "admin". You can change the password, as you like. Click to open on-screen keypad and enter signs. You can also deactivate the password entry, set the appropriate checkmark and 'Save'. Grayed out fields can not be described

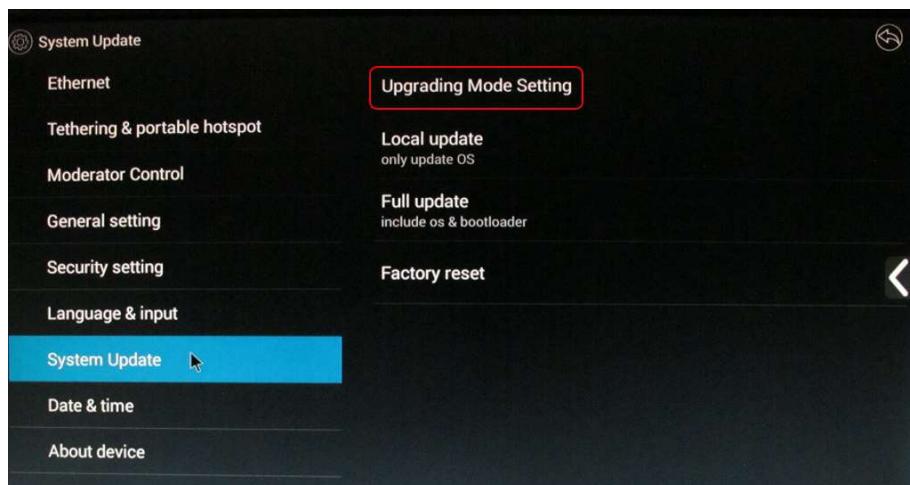
5.6 Language & input

Select an installed display language (GE, GB, SP, FR, IT, TR).

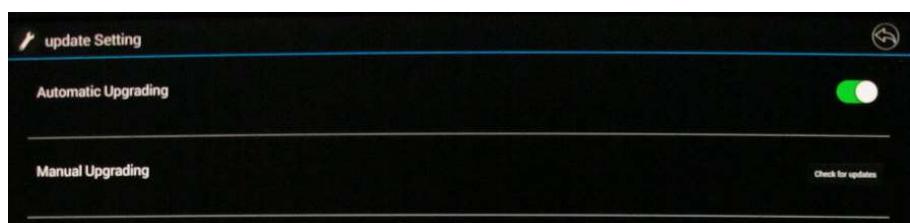
5.7 System Update

There are two ways to update the firmware of the basic device:

1. Install firmware via **USB-stick**, if no internet connection is available, continue with **section 7.1**
2. Download firmware via **LAN cable online (OTA) and upgrade**.



Select „Upgrading Mode Setting“:



- "**Automatic Upgrading**". Klick & Show automatically searches every night, between 0 and 7 o'clock, for one newer update, that will be automatically loaded and installed. Base-unit will automatically re-boot and display the Home screen.

Check the current firmware: "Check for updates".

Note:

Klick & Show uses the incremental OTA-firmware update package (package has very small size). As a result, version jumps are automatically loaded in several consecutive nights.

- „**Manual Upgrading**“. Click „Check for updates“. When Base-unit detects any newer firmware available from OTA server, it shows a dialog-box, to ask if you want to download. During the download progress, a dialog box is indicating the current firmware version number and the latest firmware on the server. Please note the OSD messages. After finish of downloading, you can start the upgrading immediately. After succeed to update the unit will automatically reboot to execute the latest firmware and shows Home screen. Check the actual Firmware, see 5.9.

Note:

Klick & Show uses the incremental OTA-firmware update package (package has very small size). If the Base-unit detects more than one newer firmware from the OTA server, it will download automatically all oft the at one time.

1. **After updating the firmware of the Base-unit**, all Sensor buttons TOUCH must be coupled again. It may be necessary to install a new Starter program on the user laptops. Observe the notes in chapter 7.3 below.

Notes on the OTA upgrade:

- *The automatic firmware update also works when the device is in STANDBY.*
- *If the LAN connection is lost during download, the download will continue after LAN is working again*
- *The downloaded firmware will be checked after the download and deleted in case of any problems.*
- *A power interruption during the OTA upgrade process does not cause the device to malfunction.*
- *A downgrade of the firmware to an earlier version is only possible via USB stick.*
- **Local update:** Includes application software.
- **Full update:** Includes application software and firmware.
- **Factory Reset**, see also chapter 2.1.3.

5.8 Date & Time

Includes Automatic date & time, Set date, Set time, Select time zone, Use 24-hour format and Choose date format.

- **Automatic date & time:** Check to use a NTP time server to provide time as system time.
- **Set date:** Click in the input field to fill out the appropriate date.
- **Set time:** Click in the input field to fill out the appropriate time manually. The setting is **not** saved, when power is off.
- **Select time zone:** Click in the input field to fill out the appropriate time zone.
- **Use 24-hour format:** Click to select use 24-hour format or not.
- **Choose date format:** Click to select the data format.

5.9 About Device

Includes Model number and Software Version.

Example: V2.2.8C.K1050V2.2.8C=Firmware-Version **C=K10S** K1050=Kindermann-Build 1050
V2.2.8E.K1050V2.2.8E=Firmware-Version **E=K10L Lite** K1050=Kindermann-Build 1050

Note: Software version is also shown in User screen, see chapter 7.1.

6. Operate Klick & Show

6.1 Mirroring PC desktop

The standard **AutoRun-Starter program** of "**WirelessMedia for Windows**" is designed for maximum user-friendliness: when plugging in the TOUCH sensor button into the computer's USB port, the driver starts automatically. No admin rights are required to run and install the Starter program "**WirelessMedia for Windows**". However, the Windows registry is entered, in Windows Autostart section, the driver "WirelessMediaAutoStartC3.exe" is set up as a service, which detects the insertion of the **Sensor-button TOUCH** into USB and the application launches automatically.

If, due to active Group Policy by IT administrators, the installation of "automatic executed software" in Windows Autostart is blocked for security reasons, there is the new alternative **ManualRun-Starter program** without installation, "**WirelessMedia-Pro for Windows**", which should be manually executed each time, before using Klick & Show in a meeting. This driver can be downloaded from Web-server of the Base-unit or from the web page <https://www.klickandshow.com/>, see also chap. 7.4, 7.5. To start the program faster, we recommend setting up a shortcut on the desktop.

You can operate Klick & Show for Windows optionally **with** or **without Sensor-button TOUCH**. If there are several participants in a meeting, mixed operation is also possible.

The procedure "without Sensor-button TOUCH" can be found in chapter 6.1.3 for Windows or 6.1.6 for Mac.

6.1.1 Extended Desktop for Windows 10

Starting with firmware **2.2.8C / E**, the Starter program "**WirelessMedia for Windows**" and "**WirelessMedia Pro for Windows**" includes by default an additional virtual driver "**ExtendedDesktop**" to optionally install the Windows 10 Extended Desktop functionality, if it is needed. This may require admin rights, see also Chap. 7.4, 7.5.

6.1.2 Microsoft Windows PC / Laptop, with Sensor-button TOUCH

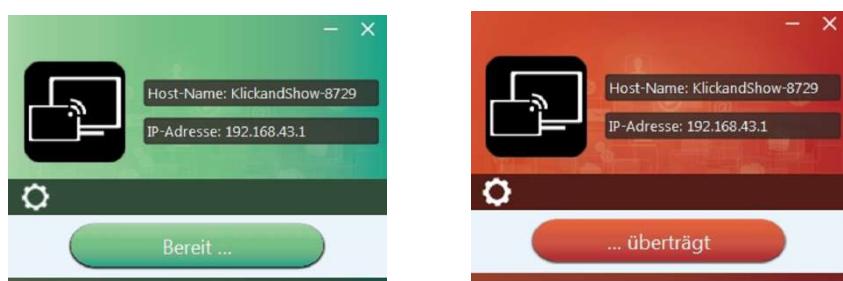
Operating system requirement: Windows XP/Vista/7/8/8.1/10 32 & 64 bit.

When you are using Klick & Show **for the first time** on your laptop or for guests, you have to **copy the Starter-program "WirelessMedia" first on your Laptop. Run this Starter-program.**

When the Starter-program is pre-installed one time, Klick & Show is ready to use, with plug-in of Sensor-button. Continue with Step 2.

When Starter-program „**WirelessMedia-windows.exe**“ is not yet been installed on PC, please proceed, as is explained in **chapter 7.4, 7.5.**

1. Plug a **Sensor-button TOUCH to the USB port of your PC or Laptop**. The Klick & Show application is starting automatically and a symbol is displayed in the task bar of the PC/laptop  .
 - (If necessary, first click on the icon arrow "up" ). If the driver "**WirelessMedia-Pro for Windows**", has been loaded (see above), you must start this program with a double-click.
2. Until the Sensor-button shows a static **green** LED indicator, or until you see a message in the APP-window at desktop "**Ready to share**", Klick & Show is ready.



3. Click the **Sensor-button** or with **mouse** the **symbol key 'Ready to share'** on the screen, LED is static red: the screen is mirrored to the Main screen. An OSD message shows: logged in user name (optional) and whether Remote-desktop control, "Remote Control" and "Remote View", is locked or unlocked.
4. **Click the Sensor-button** again, to stop mirroring, LED shows green again.

Right click the symbol  in Windows-taskbar to open up the **context-menu**.

- **„About“:** You can determine the software versions of the Base-unit, the TOUCH sensor key and the Starter program.



- „Exit“: end APP. Exiting the App completely.

If you click the cross "X" in the upper right corner of the app, the app in the task bar is only minimized and can be recalled again from the taskbar at any time.

- Disconnect the Sensor-button at end of meeting.

6.1.3 Microsoft Windows PC / Laptop, without Sensor-button TOUCH

When you are using Klick & Show **for the first time** on your laptop or for guests, you have to **copy the Starter-program "WirelessMedia" first on your Laptop**. To run the program faster, we recommend to create a shortcut on the desktop.

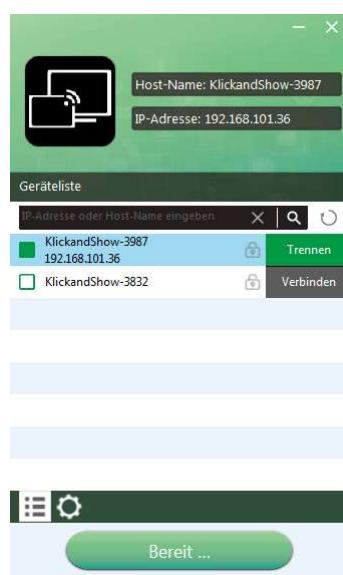
When the Starter-program is already loaded, continue with Step 2.

- When Starter-program „**WirelessMedia-windows.exe**“ is not yet been installed on PC, please proceed, as is explained in **chapter 7.4, 7.5**.
- Connect your laptop to **Wi-Fi network displayed on the Home screen** ("Guest", "Staff"), or connect to the **LAN** on the network using a network cable.
- Double-click the "WirelessMedia-windows.exe" starter program  , a list of all available Klick & Show in the **same network** will be displayed, select which device you want to connect to.

The connections are password protected (lock icon ).



(**LAN** connection: several receivers possible)



(**Wi-Fi**: only 1 receiver)

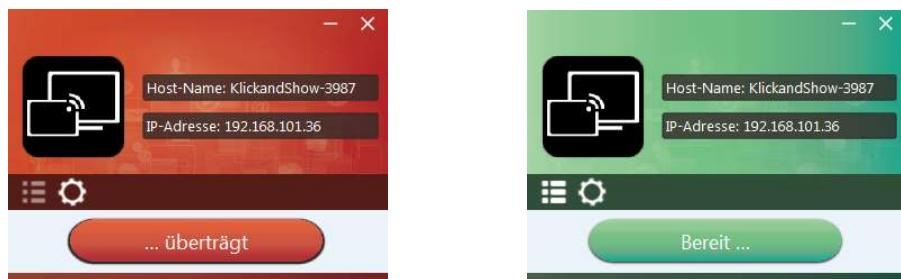


You can also manually connect by entering the name (SSID) or IP address. (click icon).

If the **Base-unit is not in the same network segment** as the mobile device provide a bridge from one network to the other or enter the IP address of Klick & Show manually and click .

Enter the corresponding Klick & Show password, press 'OK', the system is '**Ready to share**'.

4. Click with **mouse** the **symbol key 'Ready to share'** on the screen, window color is static red, the screen is mirrored to the Main screen. An OSD message shows: logged in user name (optional) and whether Remote-desktop control, "Remote Control" and "Remote View", is locked or unlocked.



5. Click the **symbol key again**, to stop mirroring, window color shows green again.

You can minimize the APP-window, in Windows taskbar you can see if screen is mirroring or not .

Right click the symbol in Windows-taskbar to open up the **context-menu**.

- „**About**“: You can determine the software versions of the Base-unit, the TOUCH sensor key and the Starter program.

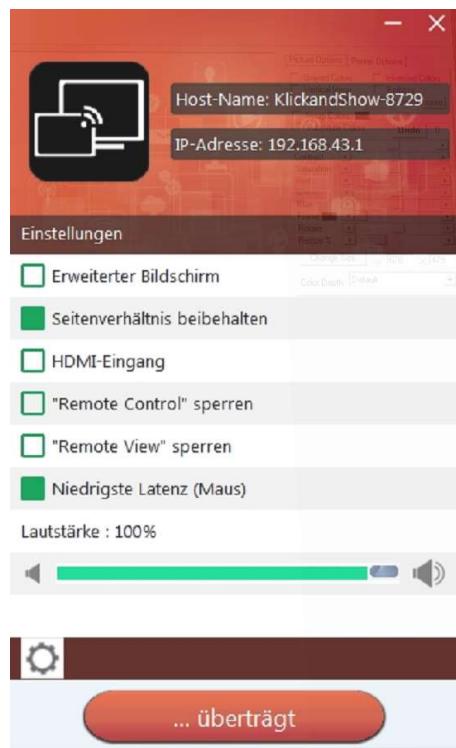


- „**Exit**“: end APP. Exiting the App completely.

If you click the cross "X" in the upper right corner of the app, the app in the task bar is only minimized and can be recalled again from the taskbar at any time.

6.1.4 Options für Microsoft Windows PC / Laptop – Extended Screen

Click the gear icon  in App to open/close "options".



„Options“:

Extended Screen:

*Transfers extended desktop of active source,
(depending on your operating system, may require the installation of
the virtual driver „**ExtendedDesktop**“ for function with Windows 10).*

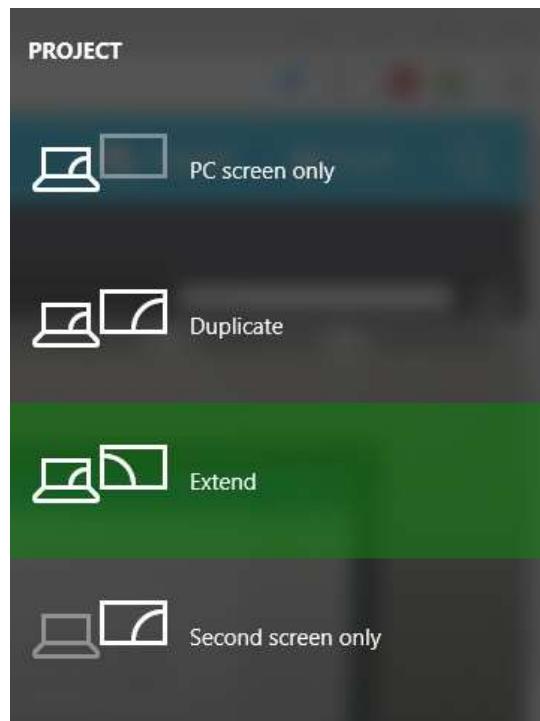
The primary screen (1) is displayed on the laptop and the virtually extended screen (2) is displayed on the main screen.

If the PC has already connected an extended screen (3), the extended screen (2) will always be displayed on the main screen.

Note:

If you select the "Extended Screen" feature, Windows automatically switches to "Extended Mode". If you stop the transfer with Klick & Show

(Pause), Windows remains in "Extended Mode" until you press "Windows key + P" on the laptop to select the "PC screen only" mode.



"Remote Control" is not possible for "Extended Desktop".

Keep Aspect Ratio:

Keep the original aspect ratio to display on the main screen.

HDMI-Input:

Enables HDMI-Input at Base-unit.

Remote Control Lock:

Remote control („Remote Mouse“) of the mouse of active presentation laptop with WirelessMedia App for mobile unit, can be unlocked (no check) / locked (check mark).

Attention!

When "Remote View" and "Remote Control" is unlocked, other participants can control the presentation, but also interrupt or do some consciously or unintentionally actions. Therefore, each user of a meeting can configure this setting individually at his laptop, when he is actively sharing his presentation. Otherwise setting cannot be changed (greyed out). Default setting is 'ON', when connecting the Sensor-button TOUCH.

"Remote View" Lock:

„Display ,Main screen‘ on mobile device“ is un-locked / locked (check mark). At the begin of a meeting, the setting is adopted of "Remote View" configuration in Setting menu in Home screen. Each user can

overwrite it for all users, when he is actively sharing his presentation. Otherwise setting cannot be changed (greyed out). The setting is taken over in configuration menu for all participants. It is effective until another person overwrites it.

Note: When "Remote View" is active, the video streaming transmission performance to the main screen may be affected: picture and sound dropouts.

Note: Remote View does not transmit audio in the video.

Lowest Latency (Mouse):

Native (no check): the setting is applied individually for this laptop only. The shape of mouse-pointer is equal the shape in application. There may be a small delay in movement of the cursor (approx. 150 ms).

*The movement of mouse-pointer is displayed very smooth with **hardly noticeable delay** (about 20 ms) on the main screen, which significantly improves the operation of the application from the main screen. The look of the mouse pointer is every time, in all applications, like a typical cursor arrow.*

"Volume Slider":

Adjust the playback volume of the main screen when presentation laptops is active.

6.1.5 Mac OS PC/Laptop, with Sensor-button TOUCH

As from firmware 3.0 you can use Klick & Show for macOS **without Sensor-button TOUCH** too, see chapter 6.1.6..

At least **operation system macOS 10.9** is required.

When you are using Klick & Show **for the first time** on your MAC or for guests, you have to copy the **Starter-program "WirelessMedia for MAC"** **first on your Mac. Run this Starter-program.**

When the Starter-program is pre-installed one time, Klick & Show is running automatically with plug-in of Sensor-button. Continue with Step 2.

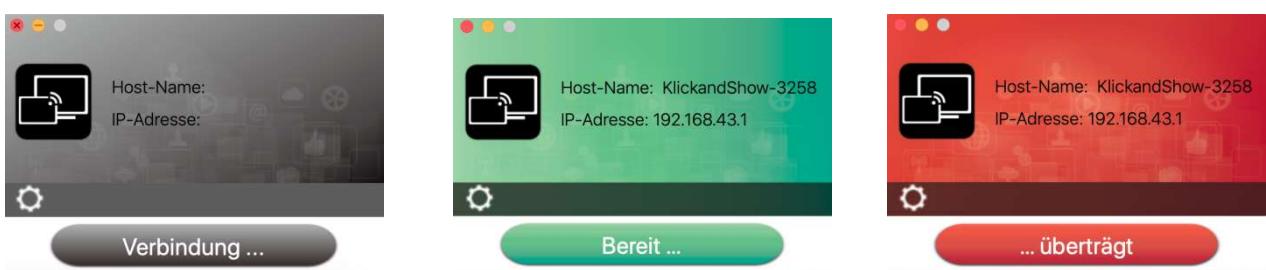
1. When Starter-program „**WirelessMedia-macOS.app**“ is not yet been installed on Mac, please proceed, as is explained in **chapter 7.4, 7.5**.
2. Plug a **Sensor-button TOUCH to the USB port of your Mac.**

Note:

*If your Mac has only **USB-C** ports, use the **USB-C adapter (7488000304)** that fits in form and function perfect to Klick & Show.*

The Klick & Show application is starting automatically and an icon  is displayed in the dock and in top menu-bar.

When Sensor-button shows a static **green** LED indicator, or and you see a message in App-window "**Ready to share**", Klick & Show is ready to mirror.



3. Click the **Sensor-button** or with **mouse** the **symbol key 'Ready to share'** on the screen, LED is static red, the screen is mirrored to the Main screen. An OSD message shows: logged in user name (optional) and whether Remote-desktop control, "Remote Control" and "Remote View" is locked or unlocked.
4. Click the Sensor-button again, to stop mirroring, LED shows green again.

You can minimize the APP-window, in top menu-bar you can see if screen is mirroring  or not .

Right click the symbol  in top menu-bar to open up the **context-menu**.

- „**About**“: You can determine the software versions of the Base-unit, the TOUCH sensor key and the Starter program.



- „**Exit**“: end APP WirelessMedia. Exiting the App completely.

If you click “**Close**” in the menu bar of the app, the app will only be minimized in the dock and can be recalled at any time in the dock.

5. Disconnect the Sensor-button at end of meeting.

Note:

If you do not hear video sound in the main screen when transferring with the MacBook, or if you see a "WireleeMedia macOS enter password...." when inserting the TOUCH sensor button in MacBook, the internal "Soundflower App," which is integrated in "WirelessMedia for MAC", is blocked, admit the execution: please note the information in chap. 10.

6.1.6 Mac OS PC/Laptop, without Sensor-button TOUCH

As from firmware 3.0 you can use Klick & Show for macOS **without Sensor-button TOUCH** too.

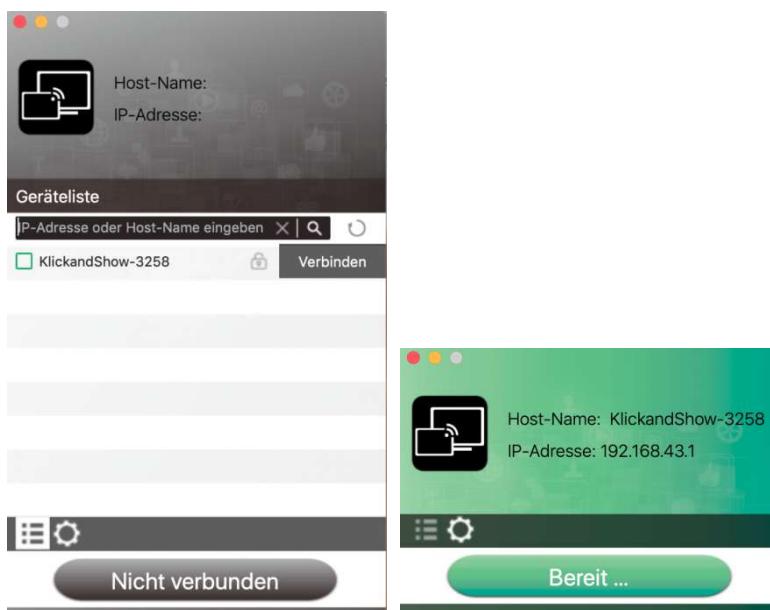
When you are using Klick & Show **for the first time** on your MAC or for guests, you have to copy the **Starter-program "WirelessMedia for MAC"** **first on your Mac. Run this Starter-program.**

We recommend creating a shortcut for this program on your desktop.

When the Starter-program is pre-installed already, continue with Step 2.

1. When Starter-program „**WirelessMedia-macOS.app**“ is not yet been installed on Mac, please proceed, as is explained in **chapter 7.4, 7.5**.
2. Connect your Mac to the corresponding **Wi-Fi network**, or connect to the **LAN** using a network cable.
3. Double-click the "WirelessMedia for MAC"  starter program, a list of all available Klick & Show in the same network will be displayed, select which device you want to connect to.

The connections are password protected (lock icon ).



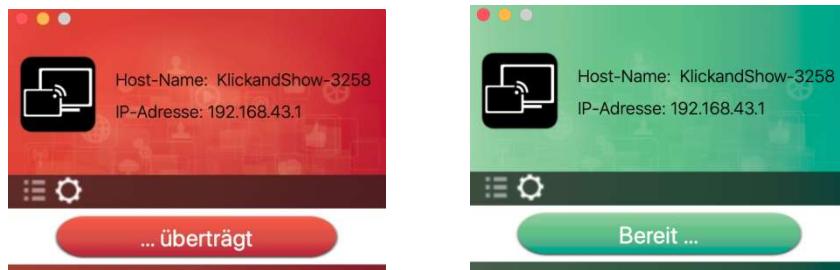
(**LAN** connection: several receivers are possible, **WLAN**: only 1 receiver)

Enter the Klick & Show password, press '**Connect**', the system is '**Ready to share ...**'.

You can also manually connect by entering the name (SSID) or IP address with a Klick & show.

("Search" icon). 

- Click the **symbol key 'Ready to share'** on the screen, window color becomes red, the screen is mirrored to the Main screen. An OSD message shows: logged in user name (optional) and whether Remote-desktop control, "Remote Control" and "Remote View", is locked or unlocked.



- Click the **symbol '... mirroring'** again, to stop mirroring, window color becomes green again.

You can minimize the APP-window, in top menu-bar you can see if screen is mirroring or not .

Right click the symbol in top menu-bar to open up the **context-menu**.

- About**: You can determine the software versions of the Base-unit, the TOUCH sensor key and the Starter program.



- Exit**: end APP WirelessMedia. Exiting the App completely.

If you click "**Close**" in the menu bar of the app, the app will only be minimized in the dock and can be recalled at any time in the dock.

6.1.7 Optionen für Apple MacOS, MacBook – Extended screen

Click the gear icon  in App to open/close "options":



„Options“:

Extended Screen:

*Transmits the Extended desktop ("Use a Separate Display") **only via AirPlay**, when activated for Display on Klick & Show.*

Keep Aspect Ratio:

keep the original aspect ratio to display on the main screen.

HDMI-Input:

enables HDMI-Input at Base-unit.

Lowest Latency (Mouse):

Native (not checked): the setting is applied individually for this laptop only.

The shape of mouse-pointer is equal the shape in application. There may be a small delay in movement of the cursor (approx. 150 ms).

*The movement of mouse-pointer is displayed very smooth with **hardly noticeable delay** (about 20 ms) on the main screen, which significantly improves the operation of the application from the main screen. The look of the mouse pointer is every time, in all applications, like a typical cursor arrow.*

Remote Control Lock:

Remote control („Remote Mouse“) of the mouse of active presentation laptop with WirelessMedia App for mobile unit, can be unlocked (no check) / locked (check mark).

Attention!

When "Remote View" and "Remote Control" is unlocked, other participants can control the presentation, but also interrupt or do some consciously or unintentionally actions. Therefore, each user of a meeting can configure this setting individually at his laptop, when he is actively sharing his presentation. Otherwise setting cannot be changed (greyed out). Default setting is 'ON', when connecting the Sensor-button TOUCH.

"Remote Control" is not possible for „Extended Screen“.

"Remote View" Lock:

„Display ,Main screen‘ on mobile device“ is un-locked / locked (check mark). At the begin of a meeting, the setting is adopted of "Remote View" configuration in Setting menu in Home screen. Each user can overwrite it for all users, when he is actively sharing his presentation. Otherwise setting cannot be changed (greyed out). The setting is taken over in configuration menu for all participants. It is effective until another person overwrites it.

Note: When "Remote View" is active, the video streaming transmission performance to the main screen may be affected: picture and sound dropouts.

Note: Remote View does not transmit audio to the mobile device.

"Volume":

Adjust the playback volume of the main screen and the local audio output when a presentation laptop is active.

6.2 Transmitting iOS mobile device

6.2.1 How to use AirPlay?

AirPlay: Klick & Show supports "AirPlay" which allows the streaming of the desktop or music, (YouTube-) videos, pictures, ... of your Apple device such as iPhone, iPad etc. on the main screen. (Note: iOS devices must first be connected to the Wi-Fi of Click & Show). Support for an not yet released version of AirPlay can not be guaranteed.

Please open the control center on the desktop with the appropriate gesture. Click the AirPlay icon  on your Apple device and select the receiver device Klick & Show to connect. Now you mirror your screen content wireless through the Base-unit to the main screen.

6.2.2 App "WirelessMedia" for iOS

Operating system requirement: iOS 7.0 and later.

Download App via the internet www.klickandshow.com, or download from **Apple-Store:**

<https://itunes.apple.com/de/app/wirelessmedia/id1116104784?mt=8> , execute App.

1. Open the "WirelessMedia" application.



Note: permit access of photos and pictures, when installing.

2. The **main interface** of "WirelessMedia" is shown as below. It includes the features including:



Functional Zone:

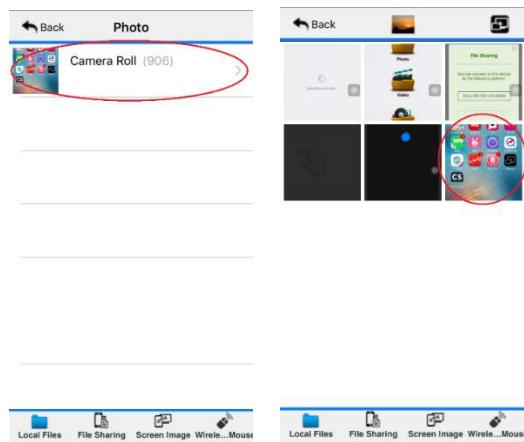
- **Local Files:** Can transmit the local file, including Photos, Video, Music to the Base-unit for playback.
- **File Sharing:** Can store data (videos, office-files...) inside the iOS APP (prepare data before the meeting), show data in meeting from mobile device. Data are shown via the internal media-player in Klick & Show.
- **“Remote View”:** Shows main screen at mobile device. Allows “Remote Control” of mouse of active signal on main screen, and control the PC/Laptop device like a wireless mouse.
- **Remote Mouse:** Can control the Base-unit or the sharing device, like 3D-movements of an air-mouse.

Menu Icon: show the directory menu icon, like photo, video, music, file sharing.

Device list: Click to discovery the available Klick & Show Base-units to connect them. (*Note: Mobile devices have to be connected with Klick & Show Wi-Fi first*).

Files & Operation Zone: Select the file to transmit.

3. **Local Files:** select the file stored in local iPhone / iPad, as shown below:



Note:

The last displayed image remains in Klick & Show memory, until the unit is turned off. To protect the privacy it is recommended to delete manually the last image, before leaving the meeting.

Click with left-mouse into the picture, the Return-icon appears, click to return and delete the shown picture in display.

Click at iPhone / iPad the Return-icon to create the same effect.

- 4. File Sharing:** Exchange data between a laptop and the mobile unit. The files are stored within the WirelessMedia App in all iOS units, which are connected to Klick & Show. Click the ?-symbol (Help) to get the IP-address in Wi-Fi of Klick & Show for the meeting. Close the window with the cross-icon.



To access the files, enter the IP address by our PC/Laptop's web browser while your PC/Laptop has connected to Klick & Show by access point connection or LAN connection.

PC/Laptop page (iOS)

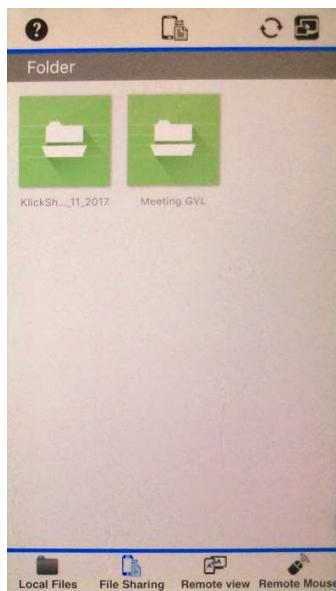


At website you can create folders (+), select files (pictures, videos (wmv ...), Word, PPT, PDF,...). Click **Start Upload**, to select files from PC directories and upload them to the iOS mobile device. If you want to play the media file via Klick & show, it will be uploaded to the Base-unit and played back using the internal Media player. This is the best way to play HD video smoothly. Klick & Show Media Player does not support some formats.

Data of the mobile units can be uploaded to the given folders "Music, Photo, Video".

Select the desired data, which should be shown at the main screen.

Folder list



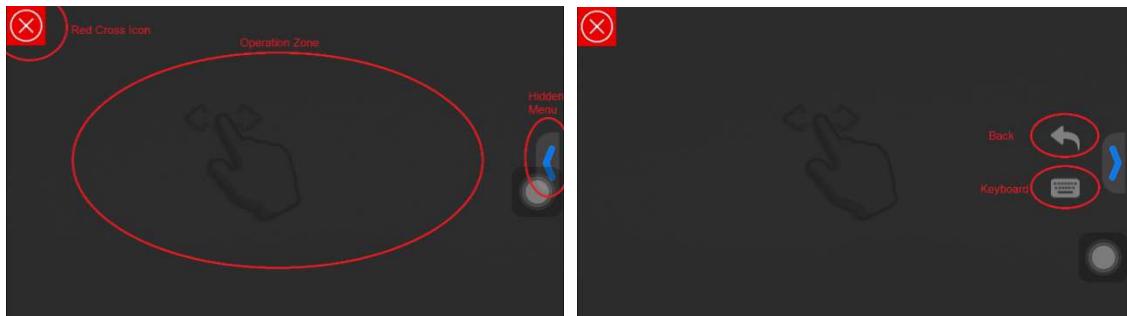
File list



Klick „**“Remote View”** in menu bar, to control your application with mouse, or edit data with displayed keyboard of WirlessMedia App. All changes can be stored, to capture all results of a meeting.

5. **“Remote View”:** Control of mouse and keyboard via Wi-Fi. Click the “Remote View” in menu bar to show the main screen of Klick & Show on your mobile where you can control the mouse of PC or laptop (Remote Mouse).

When there is no connected Klick & Show, it shows:



Operation Zone: Zone to “Remote View” the active signal and control it as a mouse.

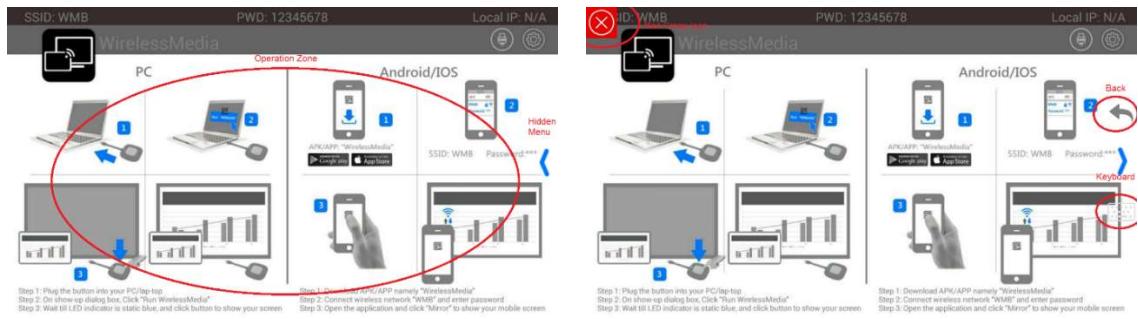
Hidden Menu: Click to open the hidden function features, including Back and Keyboard when available.

Back: It sends a “Return” command to the Klick & Show to go back to the previous directory menu.

Keyboard: Open the keyboard to enter character/number.

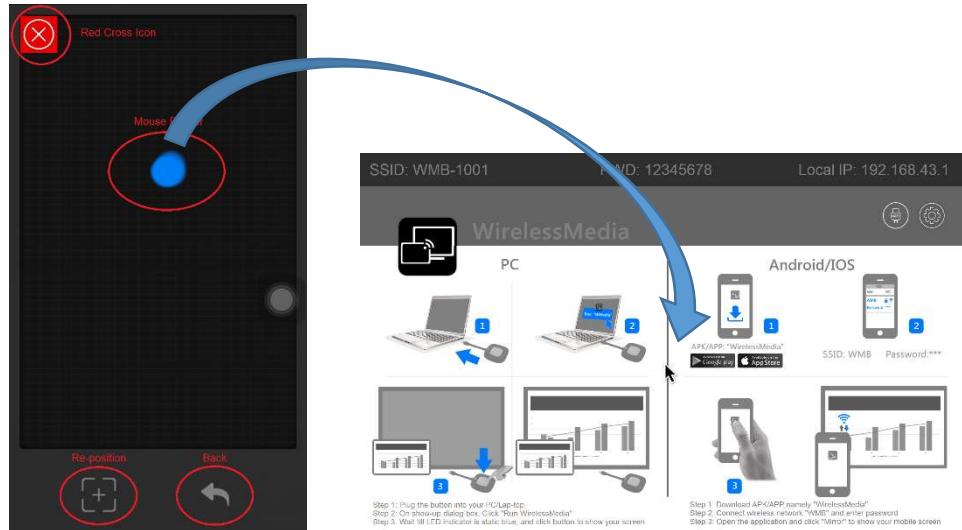
Red Cross Icon: return to the main interface.

When there is an active signal showing on the main screen, you will see it, and click the screen to control it as a mouse, as shown below.



Click the Red Cross icon to return.

- 6. Remote Mouse:** click the "Remote Mouse"-icon to generate a mouse pointer to control the Klick & Show Base-unit with 3D-movements like an air-mouse. Hold the phone horizontally in front of you, touch Re-position to center the mouse-pointer and begin with movements out from the wrist.



Mouse Pointer: represent the relative position of the mouse on the main screen.

Re-position: reset the positon to be the center of the screen.

Back: sends a "Return" command to the Klick & Show Base-unit to go back to the previous directory menu.

Red Cross Icon: return to the main interface.

Note:

In "Remote Mouse" the accelerations sensors are active. This has the consequence of a higher power current consumption in mobile unit.

6.3 Transmitting Android device wireless

6.3.1 "WirelessMedia" Apk for Android

1. Open the "WirelessMedia" application:



Note: permit access of photos and pictures, when installing.

2. The main interface of "WirelessMedia" is shown as below. It includes the features including:

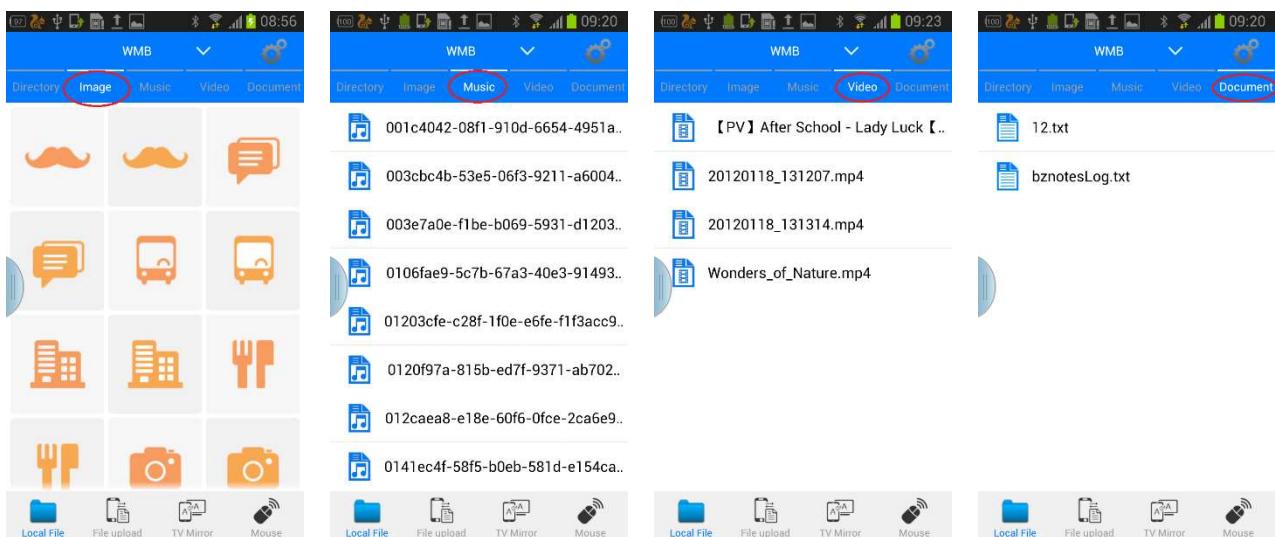


Menu Bar (Functional Zone):

- **Local Files:** Can transmit the local file, including Photos, Video, Music to the receiver for playback.
- **Mirroring:** Shows screen of Android-phone on main-screen of Klick and Show.
- **TV Mirror:** Shows main screen of Klick & Show on screen of Android-phone, and can control the PC/Laptop device like a remote mouse.
- **Mouse:** Can control the Klick & Show unit or screen of the sharing device, like a wireless air-mouse.

Device list: Click to discover the available Klick & Show Base-units to connect them. (*Note: Mobile devices have to be connected with Klick & Show Wi-Fi first*).

3. Local Files: select the file stored in local Android phone as shown below (*Note: at the actual version the memory of internal memory card is not shown*).



Note:

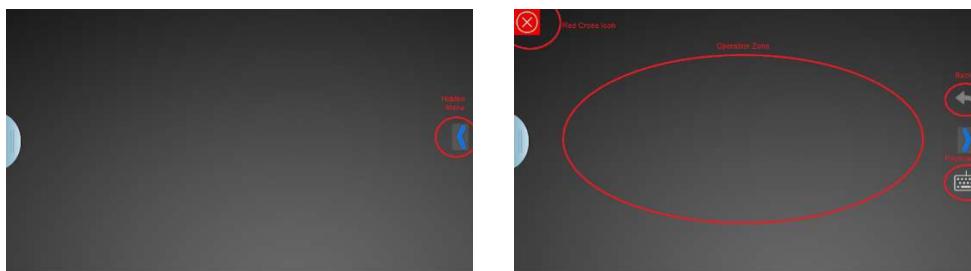
The last displayed image remains in Klick & Show memory, until the unit is turned off. To protect the privacy it is recommended to delete manually the last image, before leaving the meeting.

Click with left-mouse into the picture, the Return-icon appears, click to return and delete the shown picture in display.

Click at iPhone / iPad the Return-icon to create the same effect.

- 4. TV Mirror:** Click the icon in menu bar to shows main screen of Klick & Show on screen of Android-phone. You can control the PC/Laptop device like a remote mouse with a finger.

When there is no connected Klick & Show, it shows:



Operation Zone: Zone to "Remote View" the active signal and control it as a mouse.

Hidden Menu: Click to open the hidden function features, including Back and Keyboard when available.

Back: It sends a "Return" command to the Klick & Show Base-unit to go back to the previous directory menu.

Keyboard: Open the keyboard to enter character/number.

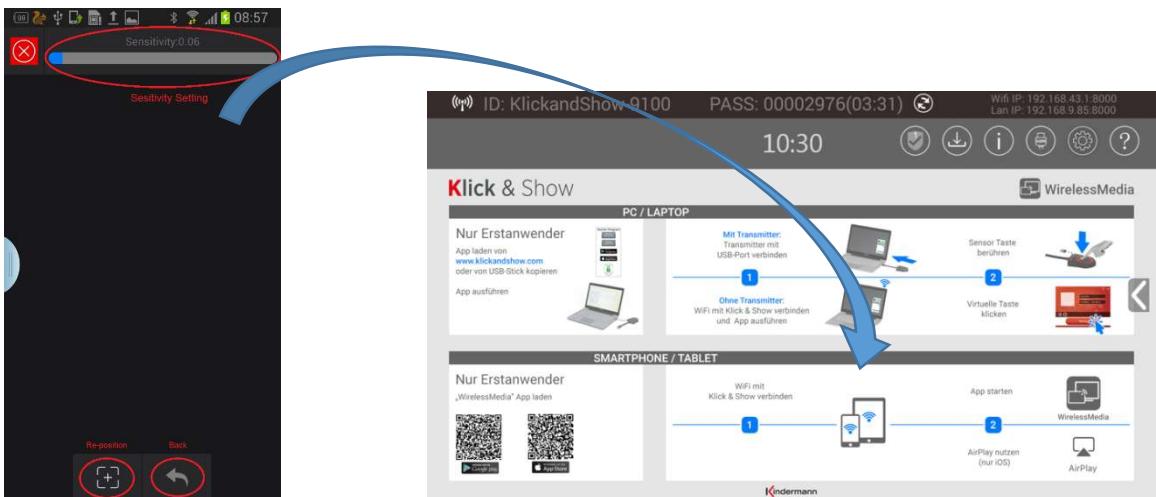
Red Cross Icon: return to the main interface.

When there is an active signal showing on the main screen, you will see it, and click the screen to control it as a mouse, as shown below.



Click the Red Cross icon to return.

- 5. Mouse:** click the "Remote Mouse"-icon to generate a mouse pointer to control the Klick & Show Base-unit with 3D-movements like an air-mouse. Hold the phone horizontally in front of you, touch "Re-Position" to center the mouse-pointer and begin with 3D movements out from the wrist.



Mouse Pointer: represent the relative position of the mouse on the main screen.

Re-Position: reset the positon to be the center of the screen.

Back: It sends a "Return" command to the Base-unit to go back to the previous directory menu.

Red Cross Icon: return to the main interface of WirelessMedia App.

Note:

In "Remote Mouse" the accelerations sensors are active. This has the consequence of a higher power current consumption in mobile unit.

6.4 HDMI Input Select

To enter the HDMI input mode, please plug a mouse into one of the USB ports of the Base-unit and click on icon 'External HDMI Input' in the start screen.

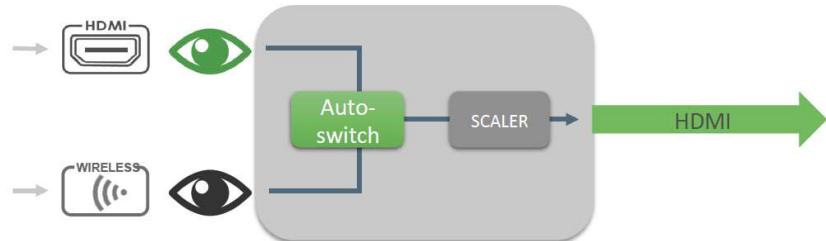
If the Base-unit is at External HDMI input, click on 'Back' to get to the start screen.



You can also switch to HDMI input at the laptop Click the cogwheel icon  in App to open/close "options", enable HDMI-Input.



The Base-unit can also be configured in menu settings 5.4.5, whether it will switch **manually** or **automatically** to an active source at the HDMI-input.



Note:

A right-click of the mouse button returns to Home screen also.

7. Firmware-Update

An update of the firmware can be useful to take the advantage of new features of Klick & Show or to fix known issues and bugs. Check website www.klickandshow.com/ if there are newer versions of the firmware available.

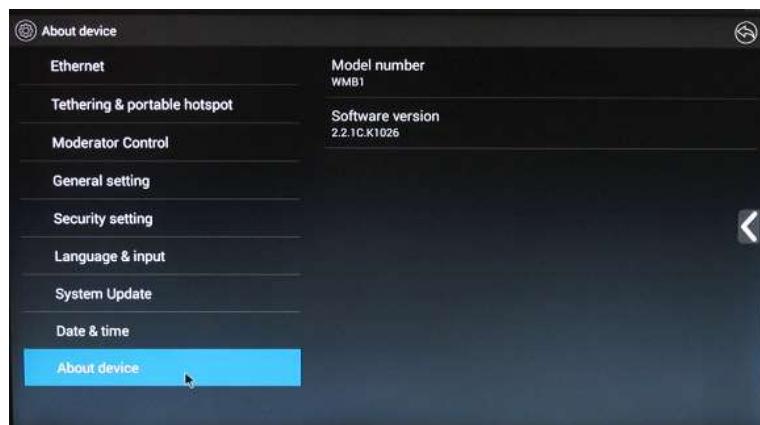
After updating the Base-unit, always check, whether the other parts still fit together or should be updated also. There are **up to three different areas** for updating: Firmware **Base-unit**, Firmware **Sensor-button TOUCH** and **Starter-program** for PC/Laptop or MAC „WirelessMedia.exe“. All software is stored in Base-unit, to be transferred manually to different devices.

From **firmware-version 2.2.6C** there are two ways to update the firmware of the basic device:

- Install firmware via **USB stick** if no internet connection is available
=> continue with section 7.1
- Download firmware via **LAN** cable over the Internet (OTA) online
=> continue with section 5.7 .

7.1 Check current firmware information

- **Base-unit:** Configuration menu / About device/ check item “**Software version**”



- Check the web page <https://www.klickandshow.com/> with a PC, whether a newer version of the firmware of Klick & Show is available.

7.2 Upgrading Firmware Base-unit

Download the actual firmware from <https://www.klickandshow.com/>.

1. You need to unzip the file “**update.bin**” first and copy the updating file to the root directory of the USB drive.



2. Connect the USB drive to either USB port of **Base-unit**.

Note: each port can handle max. load of 500 mA.

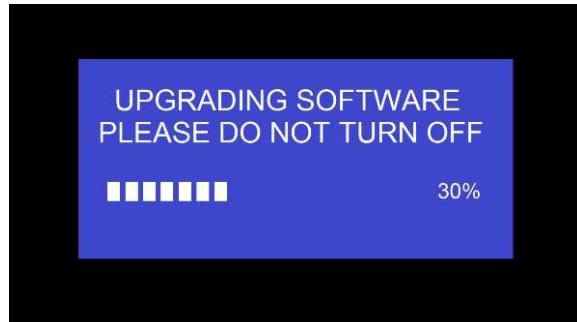
Klick & Show recognizes the “**update.bin**”-file at a plugged-in USB stick automatically and starts the “Full update” procedure.

You can plug out the USB stick within 10 seconds to stop the update.

Attention !!

Do not disconnect power during upgrading progress. Or, the unit firmware will be corrupted.

The upgrading progress displays as shown below, and the unit will reboot automatically after complete the updating 100%, as shown below.



Note: During the update, screen can be temporary dark.

If the progress bar stops at 1%, use another USB stick, it may be defective.

The display device shows the Home Screen after normal boot of the device, you can disconnect USB-drive.

3. Perform “Factory Reset”when the firmware update is complete?

Only when the associated “**Release notes**” are requiring an additional „**Factory Reset**”, perform it via the menu „**System Update**“ / „**Factory Reset**“.

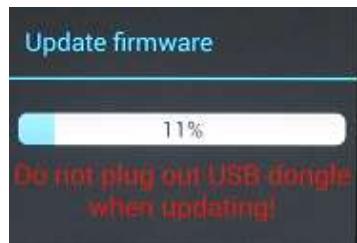
All data of configuration will be lost. So that you do not have to re-configure all data in an elaborate process, therefore note all settings within the Sub-menus before doing Factory Reset.

4. The **update of Base-unit** is finished.

7.3 Upgrading and Pairing of Sensor-button TOUCH

1. Plug the to be updated Sensor-button TOUCH to either of the two USB port of Base-unit. It will automatically show up a message to indicate if the installed firmware of Sensor-button is older, and needs to be upgraded.

The upgrading progress starts automatically with the progress bar, as shown below.



2. “**Pairing**” to the Base-unit is done automatically afterwards.

When you get the message:



You can plug out the Sensor-button TOUCH. Update all other Sensor-buttons accordingly.

7.4 Software update of USB-token

After updating of **Base-unit** and **Sensor-buttons** the **supplied USB-token** should be written with the actual STARTER-program for Windows, MAC and Apps for mobile-units.

1. Plug the USB-stick of Sensor-button TOUCH to an USB port of Base-unit.

2. Enter Menu "Settings" of Klick & Show, and click on symbol  :



3. The Starter-program „WirelessMedia“ is written to the USB-stick, an OSD-windows shows the progress. When ready, unplug the USB-stick.

7.5 Install newer version of Starter-Program at Laptop

If you get an error-message when connecting the Sensor-button TOUCH at the laptop, the version of the Starter program has also to be updated.

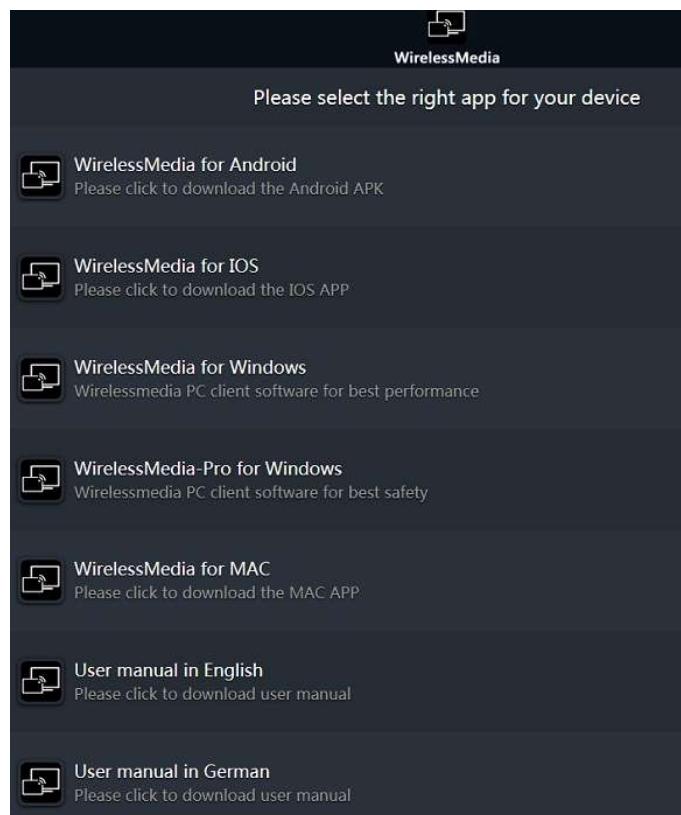


There are several possibilities doing this.

1. Best and safest possibility:

you can download the Starter-program **direct from the web-browser of Base-unit**.

Note **SSID, PASSWORD** in status-line of Home screen of Base-unit. Connect your PC with the **Wi-Fi** of the Base-unit. Open a Browser on your PC and enter Wi-Fi-IP <http://192.168.43.1:8000> see webpage of Base-unit below:



Select Starter-Program „**WirelessMedia for Windows**“ or „**WirelessMedia for MAC**“.

Copy this file to a local directory or desktop of the laptop. Continue with 3.

2. Copy the relating STARTER file **from the USB-token** to your laptop.

3. To run the program faster, we recommend setting up a shortcut on the desktop.

4. **Execute the Starter-program once.** You do not need admin-rights for this action.

Starting with firmware **2.2.8C / E**, the Starter program "**WirelessMedia for Windows**" and "**WirelessMedia Pro for Windows**" includes by default an additional virtual driver "ExtendedDesktop" to optionally install the Windows 10 Extended Desktop functionality, if they are needed. This may require admin rights.

7.6 Clean left files of older versions of Starter-program in Laptop

If you still get an error-message, when connecting the Sensor-button TOUCH, although all programs have been updated, it may possible that there are some old version "WirelessMedia" files left in the laptop, which may influence the performance of the newer "WirelessMedia" program.

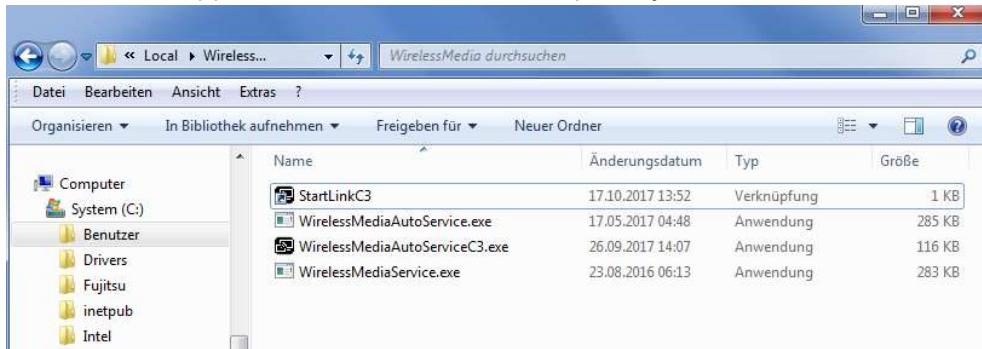
At the web page www.klickandshow.com/ you can download the file **WindowsClear** or **MacClear**, which deletes the traces of an old starter program. Run this file and start the current version of the starter program.

Otherwise, these files must be manually deleted, before you can use the actual version of "WirelessMedia".

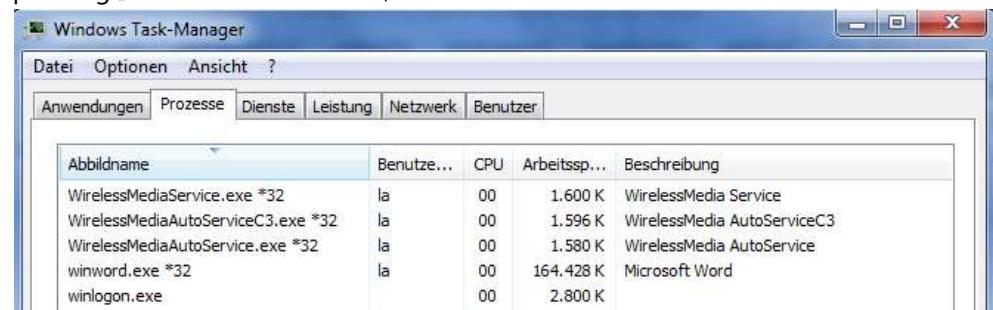
Steps required:

1. Find the place where „WirelessMedia“ programs are stored, normally in:

C:\User***(name)\AppData\Local\“WirelessMedia”, (possibly enable "Hidden files").for ex.:



2. If the files „*Service“ or „ServiceC3“ can not be removed and shows an alert message, „*The action can't be completed because the file is open...*“, please use combined hot key to open the task manager by pressing „**CTRL + Alt + Delete**“, as shown below



Right-click on all "WirelessMedia*" programs and 'End Process'.

3. Go to step 1. and repeat deleting all „WirelessMedia“ Programs, if necessary.
4. Execute the actual version of STARTER-program.

Upgrading progress is completed.

8. TCP/IP Commands: Telnet

Command Tag	Command Param	command response	effect	command example
hdmi	on	OK	switch screen to hdmi input	hdmi on
	off	OK	switch screen to home screen	hdmi off
	?	#hdmi on OK	query current screen is hdmi input or not	hdmi ?
help			list all command	help
	xxx		show xxx command details	help hdmi
home		OK		home
	?	#home on OK	force go to home screen	home ?
wifi	on	OK	turn on wifi hotspot	
	off	OK	turn off wifi hotspot	
	channel	OK	set wifi hotspot channel	wifi channel 40
	ssid	OK	set wifi hotspot ssid	wifi ssid room506
	pass	OK	set wifi hotspot password	wifi ssid romt34 pass 12345678
	list	#wifi 08:d4:0:c:d1:1e:92 192.168.43.180 #wifi 08:ea:40:5d:24:66 192.168.43.152 OK	list all clients which are connected to wifi hotspot param1: mac param2: ip	wifi list
	amount	#wifi 2 OK	return how many wifi device which are connected to wifi hotspot	wifi amount
	?	#wifi ap-on 10 ty56nytt 234324rtyuu OK	query wifi hotspot settings param param1: ap-on means wifi hotspot is on off meas wifi hotspot is off param2: wifi hotspot channel param3: wifi hotspot ssid param4: wifi hotspot password	wifi ?
	on	OK	mute volume	mute on
	off	OK	unmute volume	mute off
	?	#mute on OK	query mute status	mute ?
standby	set	OK		standby set off standby set 1min standby set 5min standby set 10min standby set 15min standby set 30min
	wakeup	OK	set auto standby timeout time, as menu general setting->auto standby	standby wakeup
	?	#standby 1min wakeup OK	param1: auto standby timeout setting param2: standby status, wakeup means system now is working, sleep means system is dreaming	standby ?
	listconnected	#button 1513849033 c0a82b98,8:ea:40:5d:24:66,V2.0.5C.A1009,1,1,0,1513848909,1513848845,1513848213,ter	list connected button info	
	lc	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	the same as listconnected	
button	listdisconnected	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	list buttons which had ever connected to base unit.These info won't be saved to disk, so when the power of base unit is cut off, these info will be lost.	
	ldc	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	the same as listdisconnected	
	listsharing	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	list button info which is sharing his screen	
	ls	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	the same as listsharing	
	listall	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	list all buttons connected/disconnected	
	la	#button 1513849033 c0a82b98,8:ea:40:5d:24:66,V2.0.5C.A1009,1,1,0,1513848909,1513848845,1513848213,ter	the same as listall	
	?	#button 1513849033 c0a82b85,ec:3d:fd:3a:9c:2c,V2.0.5C.A1009,1,1,0,1513849008,1513849006,0,LYCAN	the same as listall	
	statusbar	hide OK	hide home screen statusbar	statusbar hide
	show	OK	show home screen statusbar	statusbar show
pass	refresh	OK	refresh password	pass refresh
	?	#pass : 12345678	query password	pass ?

You also can download the actual Telnet command list with instruction at web-site www.klickandshow.com

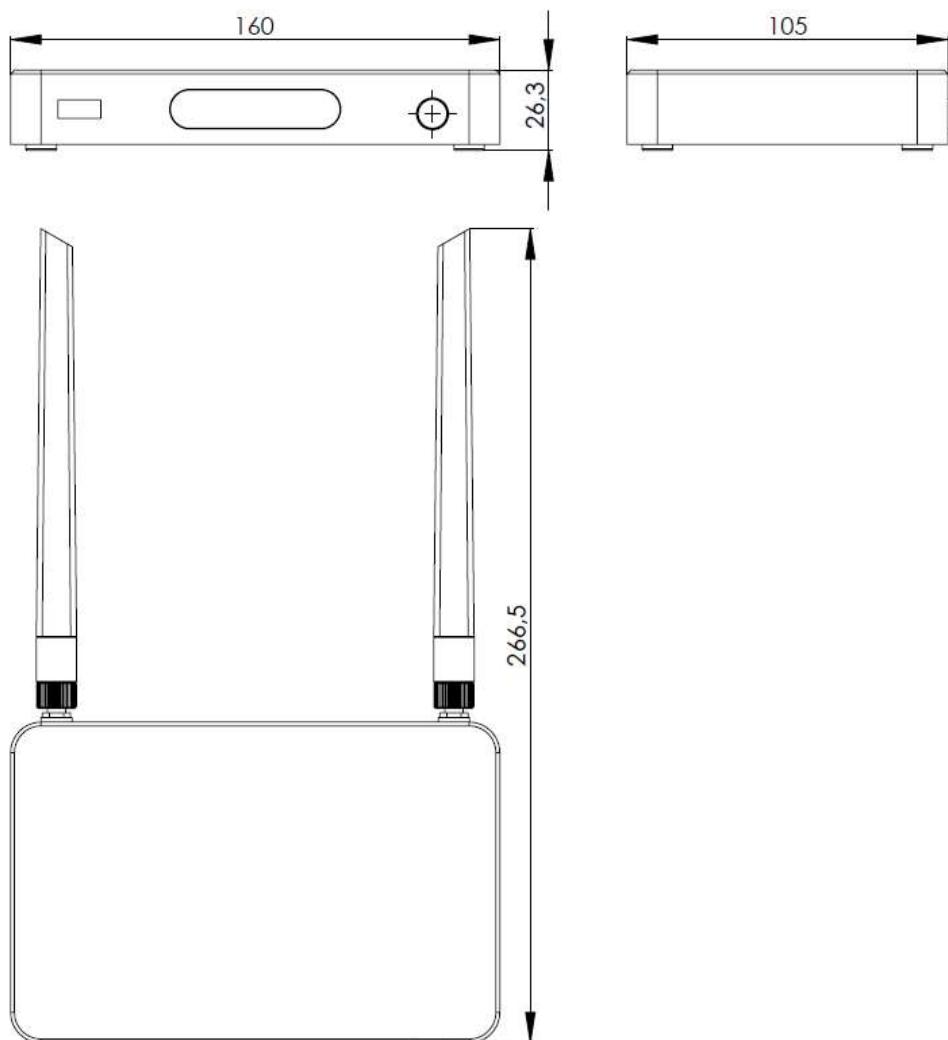
\Documentation.

9. Specifications Klick & Show

	Klick & Show TOUCH Sensor-Button	Klick & Show K-10S / K-10L Lite Base-unit
Input Formats		
Video input format	1x USB	1x Wireless, 1x HDMI-IN
Video compliance / connector	USB 2.0 with type A connector	IEEE 802.11n/ac, HDMI 2.0 with 19-pin female connector
Video input resolution	VESA, maximum 4096 x 2160* pixels	HDMI 2.0, up to 4K/60Hz/4:4:4
Audio input	PC embedded digital	HDMI embedded Digital Audio IN, 1x DVI Analog Audio IN via 3.5mm Stereo female connector, IEEE 802.11n/ac
Output Formats		
Video output format	1 x Wireless	1x HDMI-OUT
Video compliance / connector	IEEE 802.11n/ac	HDMI 1.4/HDMI 2.0 with 19-pin female connector
Video output resolution	* Encoded to 1080p for wireless transmission	1920x1080@60Hz, 1920x1200@60Hz, 3840x2160@30Hz, 3840x2160@60Hz, Chroma 4:4:4 / Lite: 1920x1080@60Hz, 1920x1200@60Hz
Audio output	IEEE 802.11n/ac	HDMI embedded Digital Audio OUT, 1x Stereo Analog Audio OUT via 3.5 mm Stereo female connector; Digital-, Analog-Audio Out ist 2.0 (Stereo)
Additional Ports		
Ethernet		LAN-RJ45
USB	USB-Token 8GB with Starter-program (Launcher) for Windows and MacOS	2x USB Type-A connector
Features		
Wireless transmission protocol		IEEE 802.11n/ac
Frequency band		2.4 GHz or 5 GHz
Encryption		AES WPA PSK, WPA2 PSK
Wireless data rate		Up to 1 Gbps
Transmission distance		Max. 35 m without obstacle between Klick & Show TOUCH sensor-button and K-10S Base-unit
Transmission power (2.4 GHz & 5 GHz)		Controlled dynamically, depends on reception strength max 13 dBm (20 mW)
Wireless transmission video capacity:	1080P @ <30Hz	1080P @ <60 Hz via iOS/Android app 1080P @ <60 Hz via AirPlay (for iOS devices) 1080P @ <30 Hz via Klick & Show TOUCH sensor-button
Simultaneous connections		Max. 14 (TOUCH sensor-button or mobile device together) / Lite: Max 14, but of max. 4 Touch sensor buttons
Content windows on main screen		1
Mobile device capability		Free iOS app, Free Android app
Remote Viewing		Remote mirroring of the main screen to mobile device

		720P @ < 10 Hz via iOS/Android App
Remote Mouse		"Remote Control" of presenter's PC
Control		
Operation	Sensor button with tactile response (vibration)	Virtual buttons on OSD for USB mouse or touch display, "Remote Control" with mobile device via iOS/Android app
Status indicator	3 color back-lit LEDs: Red, Green, White* * reserved for future use	On-Screen-Display menu (OSD) for configuration and information overlay
Control protocol		Telnet, via Ethernet port
Mechanical		
Dimensions (W x D x H)	80mm x 60mm x 15mm, USB-cable 12cm	160mm x 105mm x 26mm, without antennas
Weight	0,09 kg (90 g) complete	0,45 kg, with antennas
Environmental		
Operating temperature		+32° to +104° F (0° to +40° C)
Storage temperature		-4° to +140° F (-20° to +60° C)
Humidity (storage / operating)		20% to 90% (non-condensing)
Power		
DC power	5V supplied via PC USB port, (no battery required)	12 VDC / 2A universal power supply for mains 100-240 VAC, 50/60 Hz; with interchangeable power adapters type A, C, G, I (for Europe, UK, US, Australia)
Power consumption	2 W (max.)	Operation (typical) 10 W; Standby 5 W, Switch off < 1 W
Accessories included, Klick & Show K-10S Kit (7488000300)		
Klick & Show K-10S	Base-unit, 2x antennas, 2x Klick & Show TOUCH sensor-buttons, USB-token, mounting brackets, quick-start guide, power supply	
Accessories included, Klick & Show K-10L Lite (7488000305)		
Klick & Show K-10L Lite	Base-unit, 2x antennas, mounting brackets, quick-start guide, power supply	

9.1 Dimensions



9.2 Open Source-Software provisions

This product contains software components released under an Open Source license. A list of third party open source components used is below or in the file "LicenseMatters.txt", which is included with the download software, to find.

Within at least three (3) years after receiving the Kindermann Firmware, you and any third party may obtain a copy of the source code of the software components falling under the scope of an Open Source license. Please direct your request stating

- the name of the desired component(s),
- the version number of the Klick & Show software,
- your name as well as the name of your company, if applicable, and
- a reply mail or email-address

by mail to

Kindermann GmbH
Mainparkring 3
D-97246 Eibelstadt

[or by E-Mail to: info@kindermann.de.]

The copyright of each of the Open Source components lies with the respective copyright holder(s). Others, including contributors and/or their representatives, are not allowed to remove or modify existing notices of copyright or applicable license, warranty disclaimers or liability limitations in the source code.

You agree to comply with the conditions of the respective Open Source software license.

Warranty Disclaimer, Limitation of Liability:

EACH SEPARATE OPEN SOURCE SOFTWARE COMPONENT AND EACH DOCUMENTATION REFERRING THERE TO IS PROVIDED AS IS, WITHOUT EXPLICIT OR IMPLICIT GUARANTEE FOR, INTER ALIA, THE GENERAL USABILITY OR THE SUITABILITY FOR A SPECIFIC PURPOSE. UNLESS DECLARED PERSONALLY AND IN WRITING IN AN INDIVIDUAL CASE, NEITHER THE COPYRIGHT HOLDER NOR ANOTHER CONTRIBUTOR IS LIABLE FOR DIRECT, INDIRECT, SPECIAL, FINE-RELATED OR SUBSEQUENT DAMAGES, EVEN IF YOU WERE NOT INFORMED CONCERNING THE POSSIBILITY OF SUBSEQUENT DAMAGES, IRRESPECTIVE OF THE CAUSE AND INDEPENDENT OF ANY THEORY OF LIABILITY, NO MATTER WHETHER CONTRACTUAL, STRICT, TORT (INCLUDING NEGLIGENCE OR OTHER) LIABILITY THAT RESULT IN ANY WAY FROM THE USE OF THIS OPEN SOURCE SOFTWARE. FURTHER DETAILS MAY BE FOUND IN THE RESPECTIVE OPEN SOURCE LICENSE.

In the development of the Software, the following Open Source Software components have been used:

Package	Version	License	Download URL
vmlinux	3.10.40	GPL	http://git.kernel.org/cgit/linux/kernel/git/stable/linux-stable.git
busybox	v1.19.2	GPL	http://www.busybox.net/
libc	[libc] glibc : 2.16(ARM)	[libc] glibc : LGPL	[libc] glibc : http://www.gnu.org/software/libc/
cares	1.7.3	MIT	https://c-ares.haxx.se/
curl	7.21.3	MIT/X	https://curl.haxx.se/
iconv	1.13.1	LGPL 2	http://www.gnu.org/software/libiconv/
Xml2	2.7.7	MIT	http://xmlsoft.org/
sqlite	3.7.11	Public domain	https://www.sqlite.org/
zlib	1.2.8	ZLIB	http://www.zlib.net/zlib_license.html
cairo	1.10.2	LGPLv2.1	https://cairographics.org/download/
libnl	3.2.24	LGPL v2.1	https://github.com/tgraf/libnl
fontconfig	2.7.1	FontConfig	https://www.freedesktop.org/wiki/Software/fontconfig
icu	4.2.1	ICU	http://site.icu-project.org/home
pixman	0.19.6	MIT	http://www.pixman.org/
pango	1.28.1	LGPL	https://www.pango.org/
glib	2.24.2	LGPL 2	https://directory.fsf.org/wiki/Glib
sqlcipher	3.4.1	BSD	https://github.com/sqlcipher/sqlcipher.git
Sound flower	2.0b2(for mac)	MIT	https://github.com/mattingalls/Soundflower
ffmpeg	3.4.1	LGPLv2.1	http://ffmpeg.org/download.html
libmp3lame	1,192	GPL	http://lame.sourceforge.net/
alsa	1.0.23	LGPL v2.1	https://www.alsa-project.org/main/index.php/Main_Page
DFB	1.4.2	LGPL	http://directfb.org/
android	4,4	APACHE2.0	https://source.android.com/source/downloading.html
dmalloc	2.8.4	public domain	http://g.oswego.edu/dl/html/malloc.html ftp://gee.cs.oswego.edu/pub/misc/
iniparser	3.0	MIT	http://ndevilla.free.fr/iniparser/
jpeg	6b.	IJG	http://www.ijg.org
png	1.2.32	PNG	http://www.libpng.org/pub/png/src/libpng-LICENSE.txt http://www.libpng.org/pub/png/
freetype	2.5.3	FreeType	http://www.freetype.org/license.html
neon	0.29.3	LGPL2	http://www.webdav.org/neon/
openssl-0.9.8	0.9.8	SSLeay license and OpenSSL License	http://www.openssl.org/source/license.html
uboot	201106	GPL	http://www.denx.de/wiki/U-Boot/

9.3 EG-declaration



EG - Konformitätserklärung

Hersteller/Bevollmächtigter: Kindermann GmbH
Mainparkring 3
D - 97246 Eibelstadt

erklärt hiermit daß das Produkt: Klick & Show K-10S; -Touch, -Lite

mit der Modellnummer/den Modellnummern:
1 7488 000 300
2 7488 000 301
3 7488 000 305

in seiner Konzeption und Bauart in der von uns in Verkehr gebrachten Ausführung den grundlegenden Sicherheits- und Gesundheitsanforderungen der betreffenden, unten aufgeführten EG Richtlinien entspricht.
Bei einer mit uns nicht abgestimmten Änderung des Produktes verliert diese Erklärung ihre Gültigkeit.

das Produkt ist in Übereinstimmung mit folgenden Richtlinie/Bestimmungen:
Die Produkte entsprechen den Anforderungen der RE-Richtlinie 2014/53/EU und der ElektroStoffV 2011/65/EU.

Angewandte harmonisierte Normen sind insbesondere:
Sicherheit: EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
EN 62479:2010; EN 62311:2008
EMV: EN 301 489-1 V2.2.1; EN 301 489-17 V3.1.1
EN 55032:2015; EN 55035: 2017
EN 300 328 V2.1.1; EN 300 440 V2.1.1
RF: EN 300 440 V2.1.1; EN 301 893 V2.1.1
Ecodesign:
RoHS: EN 50581:2012

Eibelstadt 25. September 2019


CE Beauftragter J. V. J. Schäfer

The full text of the EU Declaration of conformity is available at the following internet address:

https://shop.kindermann.de/erp/KCO/avs/7/7488/7488000300/12_Zertifizierungen/CE748800030x.pdf

Hereby Kindermann GmbH declares that the radio equipment type Klick & Show is in compliance with the Directive 2014/53/EU.

Klick & Show is restricted for use indoor, when operation in 5 GHz band.

For indoor use ONLY, when operating in 5 GHz-band !						
AT	BE	BG	CH	CY	CZ	DE
DK	EE	EL	ES	FI	FR	HR
HU	IE	IS	IT	LT	LT	LU
LV	MT	NL	NO	PL	PT	RO
SE	SI	SK	TR	UK		

2.4 GHz frequency band: channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11;

5 GHz frequency band: channels: 36, 40, 44, 48;

Bandwidth: 20 MHz

Transmission power: max 20 dBm (100 mW), controlled dynamically

10. Trouble Shooting

Here you can find some fundamental problems and possible causes, which can happen during the use of Klick & Show. Find out the problem you have encountered in the table below and apply the solution.

If you still have difficulty, contact your technical support, your dealer or your IT-administrator.

Problem	Cause	Solution
When the Sensor-button TOUCH was plugged in USB of a Laptop, the Sensor-button TOUCH is flashing continuously green and the Software "WirelessMedia" is not starting or there is no connection to Base-unit .	When you are using Klick & Show <u>for the first time</u> on your laptop or for <u>guests</u> , you have to copy the Starter-program "WirelessMedia-windows.exe" or "WirelessMedia-macOS.app" for first on your Laptop / PC. Run this Starter-program. You can run the Starter App without Admin-rights.	There are 4 possibilities to load the Starter-program, see chapter 7.4 . Best is: download the App via LAN or Wi-Fi of Base-unit. When the Starter-program is pre-installed one time, Klick & Show is ready to use later immediately.
	The alternative Starter program without installation „ WirelessMedia-Pro for Windows “ has been adapted.	This program must be started manually each time <u>before using Klick & Show</u> .
	If Sensor-button TOUCH does not work, it may be due to an outdated version of HID driver. The Sensor-button TOUCH adds four USD HID devices into Windows Device Manager, when plugged in.	Check Windows device manager for a not working HID device. right-click on it and "update the driver software".
	Due to active Group Policy by IT administrators, the installation of "automatic executed software" in Windows Autostart is blocked for security reasons.	Load the alternative ManualRun-Starter program without installation in registry and Windows-Autostart, " WirelessMedia-Pro for Windows ", which should be <u>manually executed each time, before using Klick & Show</u> in a meeting. This driver can be downloaded from the Web-server of the Base-unit or from the web page https://www.klickandshow.com/ , see also chap. 7.4, 7.5. To start the program faster, we recommend setting up a shortcut on the desktop.

	<p>Windows: Executing of *.exe file is blocked from administrator or from antivirus software. An active anti-virus program may cause the anti-virus program to block the AutoRun feature.</p>	<ul style="list-style-type: none"> Check in Task Manager if "WirelessMediaMain.exe" is running. Connect Sensor-button TOUCH to USB, check in Device Manager, if relevant HID drivers (mouse, HID compatible device) are active. Activate or update drivers. De-activate the antivirus software, when running Klick & Show or configure it accordingly: activate the AutoRun function in the antivirus program configuration.
	Mac:	Check in preferences "\Security&Privacy", if execution of App from "App-store and identified developers" is permitted.
	Using of USB-port on your computer is blocked by admin, due to corporate policy.	Change authorization by administrator. When company policy prevents using USB-port, you can use external HDMI-IN port at Base-unit with HDMI-cable.
		Perform a Factory-Reset to factory settings of Click & Show.
	<p>The LED (gn/red) in the button TOUCH indicates the status of the transmitter.</p> <p>System Initialization: GREEN flashes 100ms ON; 300ms OFF</p> <p>Connect to Wi-Fi: GREEN flashes 500ms ON; 500ms OFF</p> <p>Get IP: GREEN flashes 200ms ON; 800ms OFF</p> <p>Establish communication with the base station: GREEN flashes 800ms ON; 200ms OFF</p> <p>No communication between PC and button: GREEN flashes 300ms ON; 100ms OFF</p> <p>Ready to transfer: GREEN is static</p> <p>Mirroring: RED is static</p>	
	Sensor-button TOUCH is defective.	Take another button.

When plugging in the USB stick, a Windows error message appears.	The USB stick was not previously "safely removed" and simply removed.	In the Windows error message, click "Check and Repair" to prevent future messages. Always choose Eject Disk from the context menu of the USB drive's icon.
When the Sensor-button TOUCH was plugged in USB of a Laptop, Software "WirelessMedia" is starting, but a message shows: " Connection failed. "	<ul style="list-style-type: none"> • The SSID was changed. • Did not do the pairing successfully between the Sensor-button TOUCH and Base-unit. 	Pair Sensor-button TOUCH to the Klick & Show Base-unit by connecting Sensor-button to either USB port of Base-unit, and follow OSD-messages. Please refer to chapter 4.2.
	It may possible that there are some old version "WirelessMedia" files left in the laptop, which may influence the performance of the newer "WirelessMedia" program.	Clean left files of older versions of Starter-program in Laptop, see chapter 7.6. Run Starter-program, which should be stored on PC.
	Bad connection at USB port on the Laptop.	<ul style="list-style-type: none"> • Reconnect to the USB port. • Try another USB port. • Reboot the Laptop.
OSD-message: " Firmware Launcher is not compliant! "	Software-version of Starter-program does not fit to current firmware.	<ul style="list-style-type: none"> • <u>Normally you can click away the message, to be able to work with the basic functions</u> (mirroring ...). Newer features may not be available. • Download actual Starter-program and execute, see chapter 7.4, 7.5, 7.6.
App "WirelessMedia" (Android or iOS) for mobile units does not work.	Wi-Fi access point password changed, when Android or IOS device is connected to the Wi-Fi access point of Base-unit.	<ul style="list-style-type: none"> • Connect the mobile device with Wi-Fi of the Base-unit again. • Password of Base-unit has changed automatically. Please enter the changed password, which is shown in Home screen.
	The mobile unit was connected to another Base-unit.	On Android or IOS devices application, please click the " DEVICE LIST ", and click the desired device.
In App "WirelessMedia" will be displayed no pictures, videos.	When installing the App on mobile unit, the folders for pictures, videos have not been confirmed.	Install App again and confirm security query for pictures, videos or permit in settings of mobile unit.
In App "WirelessMedia", the last displayed image remains active in screen.	The last displayed image remains in the RAM of Klick & Show until Klick & Show is turned off.	Manually delete image in Klick & Show before leaving the session. Click with the left mouse button into the picture,

		<p>the back icon  appears in the upper right corner, click on the icon. If you press the back icon</p>  <p>on the mobile device, you'll get the same effect.</p>
The App does not work with Android device?	Operation System Requirement Android 5 and later (Klick & Show App).	Update the Android device to a newer operating system.
The App does not work with Windows device?	Operation System Requirement Windows XP/Vista/7/8/8.1/10 32 & 64 bit or newer.	Update PC/Laptop to a newer operating system.
The image quality on the main display screen is not good.	The quality or length of the cable between the Base-unit and the display are insufficient.	<ul style="list-style-type: none"> Try another cable. Check the cable to be fasten properly.
	Inappropriate resolution for the main screen. The Basis-unit supports 3840x2160/60Hz, 3840x2160/30Hz, 1920x12000/60Hz. and 1920x1080/60Hz. Scaling has negative impact on image quality.	Change the resolution on Menu " Setting ". Best result is, set to 'native resolution' of the main display.
Bad wireless connection. The connection between the Sensor-button TOUCH to the Base-unit is not stable.	<p>Wi-Fi problems.</p> <ul style="list-style-type: none"> Interference in the radio channel. Overload in the radio channel. <p>Klick & Show does not automatically jump to other channels when there are changes in the RF environment</p>	<p>Use a Wi-Fi scanner to find a free wireless frequency and channel and select it via the setting configuration, see chapter 5.2.5.</p> <p>Regularly check the RF <u>environment if there are frequently changes in Wi-Fi networks</u> in your environment. Add your IT department to the Wi-Fi design in critical cases.</p>
	<p>Low signal strength: Metal cabinets, walls, construction elements, ...can cause reflections deteriorating the wireless signal</p> <p>Obstacles between Buttons and Base-unit cause lowering of the wireless strength and quality.</p>	<ul style="list-style-type: none"> Put the Base-unit closer to the main screen. Change the orientation of the antennas at Base-unit. Remove or limit as much as possible all obstacles between the buttons and Base-unit. Avoid to place the Base-unit in (metal) cabinets, suspended

		ceilings, under tables or in adjoining rooms.
Low video performance (sharpness, audio and video dropouts, video stream is jerking, ...)	<ul style="list-style-type: none"> “Remote View” on mobile device consumes bandwidth and performance and reduces speed of Klick & Show The media-player is not ideal. The video quality also depends on the <u>computing power of the PC / laptop</u> and the interaction and CPU load with other running software applications. A laptop in battery mode can be switched to reduced computer power, to save energy. The transmission of HD video requires a certain amount of CPU power to guarantee the optimum quality of the transmission. 	<ul style="list-style-type: none"> Lock “Remote View” in the App of mobile unit or lock “Remote View”, see chapter 5.4.2 Use another media-player (VLC-player ...), another browser. Update the software of your Video-player to the latest version. Reduce the CPU usage of other software applications. Lower the screen resolution of the Laptop. Update driver of graphic-card End low-power mode at laptop.
	Bad wireless communication.	Please see problem “Bad wireless communication”.
Video is not shown on main screen.	The content use HDCP.	<p>Klick & Show does not support showing HDCP content.</p> <p>If possible, connect the source device to local HDMI input at Base-unit.</p>
	The display cable (HDMI) is not correctly connected.	Insert the display cable to the display and the Base-unit.
	The display does not recognize or is not able to display the Base-unit output resolution, for example when “4K-resolution” has been set.	<p>Change the corresponding setting via the Setting Configuration <u>with another appropriate</u> monitor. You also can change the configuration with the mobile App and “Remote View”, see 6.2.</p> <p>Finally you can do a Hardware-Factory-Reset, see chap. 2.1.3.</p>
	The displays is switched off.	Switch on the display.
	The Base-unit is in standby mode, “Power-LED” is flashing at Base-unit.	Push the standby button on the Base-unit or power off and on again the

	Power-supply is missed.	Base-unit or insert a Sensor-button and touch.
Your content is removed from the main display and the LEDs on the button are flashing.	Connection to Base-unit is lost.	Klick & Show tries to restore the connection automatically. If it fails, the LEDs on the button start blinking green. Unplug the button from your Laptop and try a new Sensor-button.
Touch function of Main Touchscreen is not working.	Touch function needs a separate USB cable between Touchscreen and Base-unit of Klick & Show.	Connect Touchscreen with USB cable to USB-port of Base-unit.
Touch function of Main Touchscreen is working slowly and delaying.	„Remote View“ is active and affects the performance.	Lock „Remote View“ in menu, see, chapter 5.4.2.
No LAN connection with the Base-unit	Wrong IP address	IP address is not within LAN range. DHCP is not enabled.
Bad Wi-Fi connection between Sensor-button TOUCH and Base-unit.	Congestion of the wireless channel	Use wireless network scan tool to look for free or the least congested channels.
		Move the Base-unit to another place in the room.
		Avoid placing it inside cabinets, false ceiling, below the table, behind the wall, in another room.
		Re-orient the Base-unit Antennas
No Wi-Fi connection between mobile device with Base-unit	Wrong Wi-Fi frequency	Check mobile device to select the correct 2.4 GHz or 5 GHz
	SSID or password not correct	Enter the correct SSID, password.
There is no sound at main-display.	No connected audio device.	Make certain, that Audio is turned on.
	Volume is set to OFF.	Adjust level in menu configuration Menu\General settings\Volume of Klick & Show.
	The volume level is set too low in the options of the "WirelessMedia" starter program on the PC.	Adjust the volume in the "WirelessMedia" starter program on the PC.
	Audio signal may be muted.	Click with right-mouse button at speaker icon In task-bar and switch on.
	The volume level is set too low.	Adjust the volume level at Options in menu of Klick & Show.
	Audio is muted in mixer of volume in taskbar.	Right-mouse click at speaker icon in taskbar, open mixer and unmute "WirelessMedia" or "Video-Playback".

	The WirelessMedia driver adds a new audio USB output device in Device Manager. Audio is transferred to the Klick & Show main screen via this output device. If you stop the transmission, the internal laptop speaker has no sound at Win10, at Win7 the internal speaker becomes active again as a standard output device and you hear a sound.	This behavior can not be changed on the various Windows operating systems.
	The software of used Video-player is not actual	Update Video-player. Try another player.
	An active virus scanner can block the Audio.	Check the filter-settings in Virus-scanner. De-activate the player for a check.
There is no sound with MacBook.	Problem of sound-flower App, which is integrated in driver WirelessMedia.app.	<ul style="list-style-type: none"> • You need Admin-password • Go to the macOS System Preferences and select the "Security & Privacy" tab. • Find the "allow to run/install the sound-flower" there click on "Allow" next to "Matt Ingels", in order to allow this sound-flower to install on the Mac Book. • Run the WirelessMedia.app again, it'll auto-install the sound-flower to the MAC Book.
When inserting the TOUCH sensor button in MacBook , a "WirelessMedia-macOS" window appears for entering the password	Problem of sound-flower App, which is integrated in driver WirelessMedia.app.	<ul style="list-style-type: none"> • You need Admin-password • Go to the macOS System Preferences and select the "Security & Privacy" tab. • Find the "allow to run/install the sound-flower" there click on "Allow" next to "Matt Ingels", in order to allow this sound-flower to install on the Mac Book. • Run the WirelessMedia.app again, it'll auto-install the sound-flower to the MAC Book. • Re-plug sensor-button TOUCH again.

There is no sound via AirPlay or the "WirelessMedia" App.	The volume is set too low, on the mobile device,	Increase the volume on the mobile device.
There is no sound at main-screen, when mirroring a video by the App "WirelessMedia for Android" .	Due to the limit of the Android system, Android doesn't provide an interface to capture the audio. In this case, there is no sound when mirroring the video.	On the main page of the App use the "Local Files" function to transfer files from folders on your mobile device, such as photos, video and audio. In this case, video and sound will be streamed and played from there.
No audio when transmit local file to Base-unit.	Unsupportive audio format, including Dolby MS11, DDCO DTSLBR, DTSE, DTS-Neo Ultra, SRS-THEATERSOUND, DTS Studio Sound 3D, DTS HD.	If possible, reformat it to the other audio format, like DD, DD+, HE-AAC, DTS DMP, WMA, DRA, COOK
Can't enter the File Sharing/File Exchange when use Klick & Show for iOS on mobile devices.	Klick & Show App is set to run background. Due to Apple policy, any program which set to background can't run anymore.	Put Klick & Show application back to front stage
Can not update (Firmware) Klick & Show.	Flash disk format is NTFS.	Please re-format the flash disk to be FAT format to update it.
After the firmware update, Klick & Show is not running	The firmware has not been loaded correctly. The device does not start anymore.	<p>"Force FW Upgrade":</p> <ul style="list-style-type: none"> • Disconnect power supply from Base-unit • Plug the USB disk with Update firmware „update.bin“ into the USB port of Base-unit • While press and hold POWER button in the front, power on the Base-unit by connecting the power supply • Wait until the blue LED in the window is ON, loose the POWER button • FW is upgrading automatically.
Can not work AirPlay with MacBook/iPhone/iPad.	Operation System Requirement macOS 10.9, IOS 8.0 and later (Klick & Show app) are required.	<ul style="list-style-type: none"> • To use AirPlay, you must connect the iOS device to the Wi-Fi of Klick & Show, and enable the AirPlay feature in the Control Center. • Update the iOS device to a newer operating system. Support for a <u>previously unreleased AirPlay version</u> can not be guaranteed.

When using AirPlay the message is coming " Apple TV is searched ... "	A firmware-update at Klick & Show was just made.	<ul style="list-style-type: none"> • Restart the MacBook / iPhone / iPad, or • Restart Klick & Show, or • Perform a Factory Reset of Klick & Show
Poor Video-quality with AirPlay .	There are 2 states for AirPlay: a.) Mirroring: 1: 1 copy of the screen b.) Streaming: Videos (Internet, Youtube); the image will not be displayed on the iOS device. => picture is jerky	Reduce "Quality! In settings of Youtube, for example from "Automatic" to 720p.
The " WirelessMedia.app " for Windows installs the following components in the directory after execution: C:\ Users \ ... \ AppData \ Local \ Wireless media. The App " WirelessMedia-Pro.exe " does not install files, but always has to start manually and runs directly	<p>1. WirelessMediaMain.exe is the actual screen scraper software.</p> <p>2. StartLinkC3.Ink specifies the location for the WirelessMedia.exe file.</p> <p>3. WirelessMediaAutoServiceC3.exe runs in the background and detects the insertion of the TOUCH button and starts the link file StartLinkC3.Ink.</p> <p>Each user must install WirelessMedia separately in their account.</p>	<p>In the Task-Manager, check if you can find the file WirelessMediaAutoServiceC3.exe.</p> <p>The App "WirelessMedia-Pro.exe" must always be started manually</p>
The " WirelessMedia.app " for macOS installs the following components after execution:	<p>1. WirelessMediaMain.exe (Screen scraper software). Is executable without admin right.</p> <p>2. StartLinkC3.Ink is saved in: Macintosh / username / *** / library / WirelessMedia /StartLink.Ink; Specifies the location where WirelessMediaMain.app is stored on the hard disk.</p> <p>3. WirelessMediaAutoServiceC3.app will be saved in: Macintosh / username / *** / library / WirelessMedia / WirelessMediaAutoServiceC3.app; Is a watchdog-program. Detects the insertion of the TOUGH button and starts the app.</p> <p>4. Soundflower.app: transmits AUDIO; Installation requires admin rights.</p>	Under 'Applications' find 'Utilities folder', open the 'Activity Monitor' and see if you can find " WirelessMediaAutoServiceC3 ".

The WirelessMedia-window will open automatically after a restart of the laptop even though no TOUCH button has been inserted	The APP WirelessMediaMain.exe is still active. It is not terminated by clicking the cross "X" in the upper right corner.	Close the APP by right-clicking (context menu) on the icon  : " Exit ".
Integration in the Corporate Network.		
Mobile units do not find the base unit.	To find the device in the same subnet, broadcast or multicast routers are needed. AirPlay requires Bonjour services.	
	The firewall blocks the traffic.	Open the corresponding ports, see chap. 5.2.1.4.
	Klick & Show not in the same subnet as the mobile device.	Connect the different subnets via a bridge in router or: Enter the IP address manually.
Low video performance (sharpness, audio and video dropouts, video stream is jerking, ...)	The distance between button TOUCH or mobile device to the next wireless access point is too long.	
	Wi-Fi has problems interfering with frequency interference or radio interference. ,	
	The network traffic is limited by other network participants with large amounts of data. Klick & Show requires a data rate between 5 and 15 Mbps.	