KRAMER



USER MANUAL

MODELS:

KT-107, 7" Touch Panel

KT-107RB, 7" Touch Panel





P/N: 2900-300696 Rev 2 www.kramerAV.com

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KT-107 - Introduction

Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront the video, audio, presentation, and broadcasting professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 15 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format & Standards Converters; GROUP 5: Range Extenders & Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Mounting and Rack Adapters; GROUP 11: Sierra Video; GROUP 12: Digital Signage; GROUP 13: Audio; GROUP 14: Collaboration; and GROUP 15: KM & KVM Switches.

Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment.
- Review the contents of this user manual.



Go to www.kramerav.com/downloads/KT-107 to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

Achieving the Best Performance

- Use only good quality connection cables (we recommend Kramer high-performance, high-resolution cables) to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables).
- Do not secure the cables in tight bundles or roll the slack into tight coils.
- Avoid interference from neighbouring electrical appliances that may adversely influence signal quality.
- Position your Kramer KT-107 away from moisture, excessive sunlight and dust.



This equipment is to be used only inside a building.

Safety Instructions

(!)

Caution: There are no operator serviceable parts inside the unit

Warning: Use only the Kramer Electronics power supply that is provided with the unit

Warning: Disconnect the power and unplug the unit from the wall before installing

Recycling Kramer Products

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and will cover any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer's recycling arrangements in your particular country go to our recycling pages at www.kramerav.com/support/recycling/.

Overview

Congratulations on purchasing your Kramer KT-107 Touch Panel.

Throughout this manual **KT-107** refers to both **KT-107** and **KT-107RB**, unless specified otherwise.



KT-107RB Wi-Fi 5GHz frequency band range is restricted to up to 5.35GHz.

KT-107 is a 7-inch IPS multi-touch, powerful **Touch Panel** with 1280x800 resolution. The elegantly designed portable **Touch Panel** can be deployed either on a table or on the wall. **KT-107** supports wired Power over Ethernet (PoE) and advanced Wi-Fi connectivity options.

To ensure easy installation with elegant wiring and secured mounting, the **Touch Panel** comes with table and wall mounts, a USB cable and a power supply unit.

The **KT-107** is an Android-based **Touch Panel** that is ideal for any 24/7 Kramer-supported commercial AV or control application and features a user-friendly, fully customizable graphical user interface configured by Kramer software.

The **KT-107** provides exceptional quality, advanced and user-friendly operation, and high-level security options.

Exceptional Quality

- Elegant Design Smooth integration with room furniture, either on tables or walls, with flexible panel cabling and locking design options.
- Superior User Experience IPS 1280x800 high-resolution screen with ±85° horizontal and vertical wide viewing angles, built-in lighting sensor for auto-adaptable brightness, advanced 10 multi-touch points, and 2-finger gesture capabilities.
- Powerful Processing Quad-core CPU, GPU, 2GB RAM, 16GB ROM processing performance for smoothly running complicated media- and graphics-rich applications, encoding and decoding H.265 video and audio streams, and seamlessly operating the high-resolution 2MP HD front camera.
- Flexible Services Advanced Android 6.0 Operating System with rich Kramer and market-available software applications offered via cloud/store, such as K-Touch Control.

Advanced and User-friendly Operation

- Easy Installation Powering and connectivity via a single Ethernet cable.
- Flexible Mounting Including table and wall mounts that fit into standard market-available 2 Gang in-wall junction boxes.
- Optional Connectivity Simple wireless BTLE 4.0 Bluetooth as well as connection to USB peripheral devices for either table or wall-mount installations, using the included USB cable.
- Reliable Networking Seamless switching between wired and wireless 802.11ac connectivity.
- Versatile Powering Options PoE, PSU and battery.
- Auto Sensing Optimized performance and operation according to automatically detected LAN speed.
- Firmware Upgrade Via USB port.

Security

- Secured Deployment Flexible locking options to prevent unwanted panel-mount removal, elegantly designed to remain out of site.
- Secured Operation Highly secured operation of applications such as auto boot start for a selected application, password protected exit, hidden control buttons and so on.
- Red LED alert when camera is active.

Typical Applications

The **KT-107** is ideal for the following typical applications:

- Control user interface in meeting and conference rooms, boardrooms, and auditoriums.
- · Presentation of room scheduling.

Defining the KT-107, KT-107RB

This section defines the KT-107 Touch Panel, the tabletop and the on-wall mounts.

KT-107 Touch Panel

This section defines the KT-107.

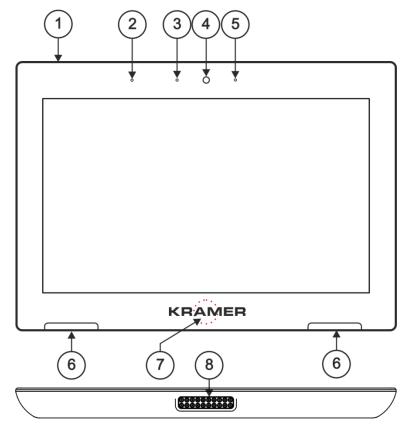


Figure 1: KT-107 Touch Panel Front and lower side Panel

#	Feature	Function	
1	Hidden Reset Button	Located on top-side. Insert a pin and hold for a few seconds to reset KT-107 .	
2	Light Sensor	Automatically adjusts the screen brightness according to the room lighting conditions.	
3	Activity RGB LED	Lights green when powered; flashes green when charging the battery; lights red when camera is on.	
4	Camera	For remote room viewing or video conferencing.	
5	Microphone	For audio communication, recording or conferencing.	
6	Speakers	To output the sound.	
7	Control Button	Press and hold (for 2 seconds) to open the pop-up menu which lets you power down the unit, reboot it or return to the Home-page. The Control button is password protected (default: Kramer). When connected to a power source, the unit reboots when Power off is selected.	
8	Tabletop Mount Connector (on the lower side)	For connecting to the tabletop mount (see Mounting the KT-107 on a Table on page 9).	

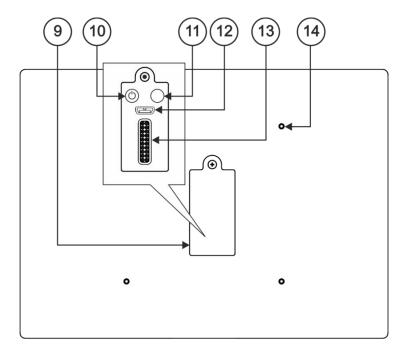


Figure 2: KT-107 Touch Panel Rear Panel

#	Feature	Function	
9	Cover	Covers the wall mount connections and power button.	
10	Power Button	Press to power on the KT-107. When powered, press briefly to open the pop-up menu and power down the device, reboot it or return to the Home-page. This button is also used for firmware upgrade (see Upgrade the Firmware via PC on page 37).	
11)	Volume Up (U) Button	Use for firmware upgrade. Use also to increase KT-107 speaker volume.	
12	Micro USB Port	For connecting to an adjacent on-wall USB device and for firmware upgrade.	
13	Flat Cable Connector	For connecting to the on-wall mount unit (see Mounting the KT-107 on a Wall on page 14).	
14)	Connecting Holes	For connecting to the tabletop mount or the panel mount plate To prevent potential damage to the Touch Panel , use only Kramer supplied screws and mounts (see Mounting the KT-107 on a Table on page 9).	

KT-107 Tabletop Mount

This section defines the KT-107 tabletop mount.

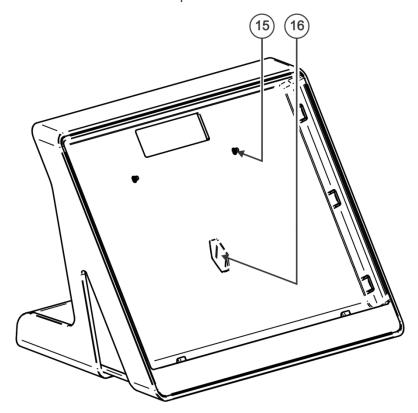


Figure 3: Tabletop Mount Front View

#	Feature	Function
15)		For attaching the Touch Panel to the tabletop mount using the supplied M2x4 screws (see Mounting the KT-107 on a Table on page 9).
16)	M5x60 Secure Screw Opening	For safely securing the tabletop mount to the table from underneath (see Figure 8).

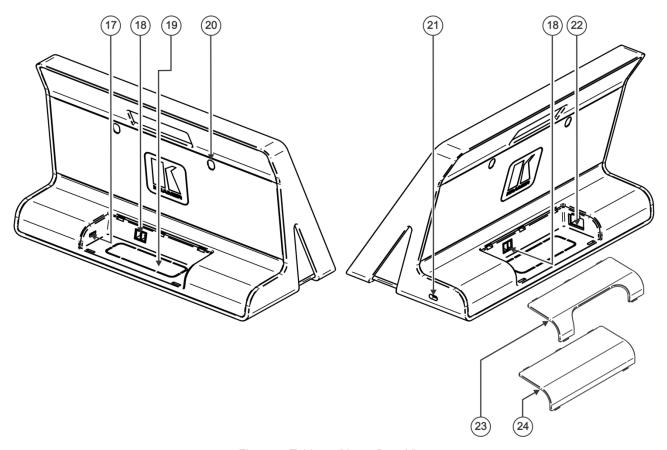


Figure 4: Tabletop Mount Rear View

#	Feature	Function
17)	Micro USB Port	For connecting to an external USB device, such as a headset or a memory disk. Connect external devices only with the OTG type USB cable (supplied). Regular USB cables (such as a smartphone data cable) can be used to connect the device to a PC (for file transfer, and so on).
18)	Power 2-pin Terminal Block Connector	Connect to a power adapter and to the mains.
19	Cable Opening Knock-out area	Cable pass-through area.
20	Screw Openings with Rubber Covers (x2)	For covering the M2x4 screws that are used for attaching the KT-107 to the tabletop mount (see Mounting the KT-107 on a Table on page 9).
21)	Kensington Locker Port	For securely connecting the tabletop mount to a table with a Kensington-compatible locker.
22	PoE Ethernet RJ-45 Port	Connect to the PoE-enabled Ethernet cable.
23)	Cable Cover with Opening	Hides the ports and includes an opening for passing connected cables over the table.
24	Solid Cable Cover	Hides the ports when passing connected cables under the table.

KT-107 On-Wall Mount

This section defines the KT-107 on-wall mount.

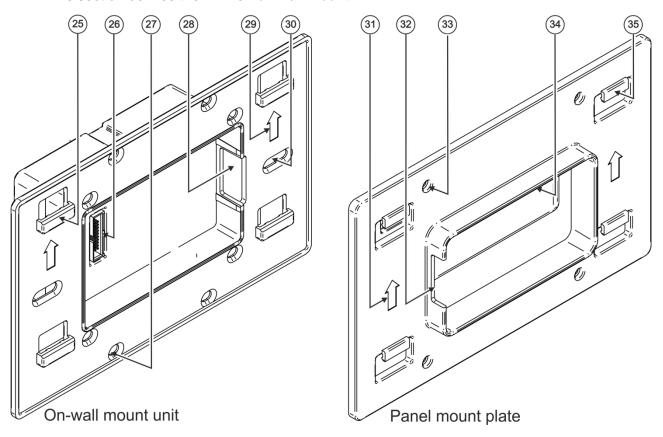


Figure 5: KT-107 Touch Panel Front Panel

#	Feature	Function	
25)	Groove (x4)	For hanging the panel mount plate (attached to KT-107) on a wall.	
26	Flat Cable Connector	Connect to the rear side of the KT-107 using the supplied flat cable. Passes the Ethernet signal and power to the KT-107 .	
27)	Screw Opening (x8)	For attaching the on-wall mount unit to a standard in-wall junction box (various holes fit different standard in-wall junction boxes), see Mounting the KT-107 on a Wall on page 14 .	
28)	Unit Cable Opening	Pass the supplied right-angle OTG USB cable through the opening to connect to the rear side of the KT-107 .	
29	Indication Arrows	Top side up; shows the correct direction for mounting the on-wall mount unit and for hanging the Touch Panel .	
30	Screw Opening (x2)	For attaching the on-wall mount unit to a standard in-wall junction box (various holes fit different standard in-wall junction boxes.	
31)	Indication Arrows	Top side up; shows the correct direction for hanging the panel mount plate.	
32)	Plate Cable Opening	Fits the opening on the on-wall mount unit. Pass the right-angle OTG USB cable through the opening to connect to the rear side of the KT-107.	
33	Screw opening (x4)	Attach the KT-107 to the panel mount plate using the supplied screws.	
34)	Cable opening	Pass the cables through the opening to connect to the rear side of the KT-107 .	
35)	Tab (x4)	For hanging the KT-107 with the attached panel mount plate on the on-wall mount unit.	

Mounting the KT-107, KT-107RB

The KT-107 can be placed on a table or mounted on a wall.



Always be careful when attaching or removing the **Touch Panel** from either mounts.

Mounting the KT-107 on a Table

When mounting **KT-107** on a table:

- You can mount KT-107 either in secure mode or portable mode.
 - In secure mode, KT-107 is attached to the table (or other surface)
 - In portable mode, **KT-107** is placed without damaging the table, is not secured and can be moved.
- The cables connected to **KT-107** can be hidden by connecting them under the table via the cable pass-through opening (in secure mode) or they can be connected over the table, thus remaining visible (for both mounting modes).

Preparing the Table for a Secure Mount



To mount **KT-107** in portable mode, go to <u>Setting KT-107 on the Tabletop Mount</u> on page <u>12</u>.

When mounting **KT-107** on a table in secure mode, prepare the table as follows:

- Drill a hole in the table to fit the M5x60 screw used for securing the tabletop mount to the table.
- Cut an opening in the table if you need to pass the cables from underneath.



The thickness of the table should be 76.2mm (3") or less.

Use the following cutout drawing to correctly measure the location of the M5x60 screw hole and the cable pass-through opening:

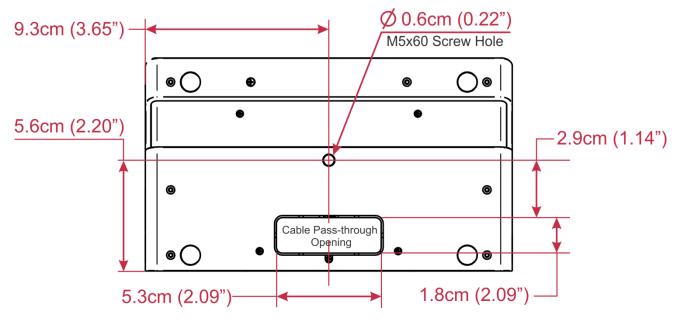


Figure 6: Cut-Out Dimensions

The cut-out dimensions in Figure 6 are **not to scale**.

1

Refer to the cut-out template available on the Kramer website at www.kramerav.com/downloads/KT-107.

Kramer Electronics is not responsible for any damage caused to the table.

To drill the M5x60 screw hole in a table:

- 1. Measure the exact location on the surface of the table where you want to install the **KT-107**.
- 2. Drill a hole in the table and cut the cable pass-through opening with a saw according to the dimensions shown in Figure 6 (not to scale).
- Take care not to damage the table. Kramer Electronics is not responsible for any damage caused to the table.

To cut the cable pass-through opening (if required):

1. Carefully measure the exact location of the cable pass-through opening.



Verify that the opening is correctly positioned in relation to the drilled M5x60 screw hole.

2. Cut out the cable pass-through opening.

Secure the Tabletop Mount

To secure the KT-107 tabletop mount:

- 1. Remove the rubber covers (20) from the rear tabletop mount.
- 2. Remove the cable cover (23).

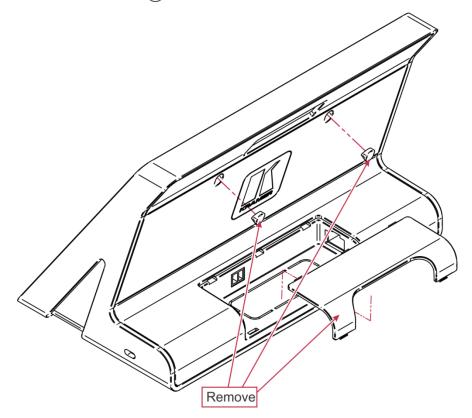


Figure 7: Removing Cable Cover and Rubber Screw Cover

3. Place the tabletop mount on the table.

- 4. Insert the M5x60 screw through the M5x60 screw opening (16) to secure the tabletop mount to the table at the desired location.
- 5. Tighten the screw from under the table using an M5 Wing nut or a regular M5 nut.

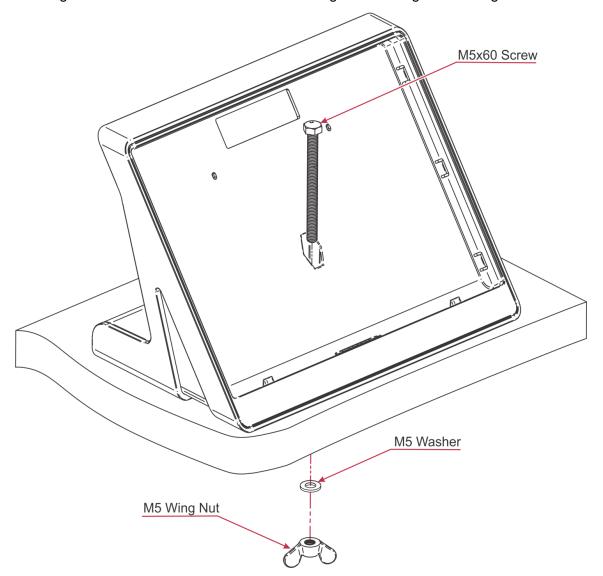


Figure 8: Securing Tabletop Mount

Setting KT-107 on the Tabletop Mount

Before you begin, verify that the cable cover (23) is removed.

To connect the cables and set the KT-107 on the tabletop mount:

- 1. Connect the RJ-45 port on the tabletop mount to the PoE-enabled network.
- 2. Connect the power adapter to the Power 2-pin terminal block connector (8) on the tabletop mount and to the mains power.
- 3. Place the **KT-107** over the tabletop mount (the **Touch Panel** is magnetically held in place), by first inserting the lower part of the **Touch Panel** then carefully laying the **KT-107** in place.

4. Wait for the Home-page to load.



We recommend that you complete **KT-107** setup (see <u>Setting up the KT-107</u>, KT-107RB, on page <u>22</u>) before securing the **KT-107** to the tabletop mount.

Once setup is complete, carry on with the installation process.

- 5. Secure the **KT-107** to the tabletop mount using the two M2x4 screws (supplied) that are inserted via the openings (15) on the rear side of the tabletop mount.
- 6. Replace the rubber covers to hide the screws.

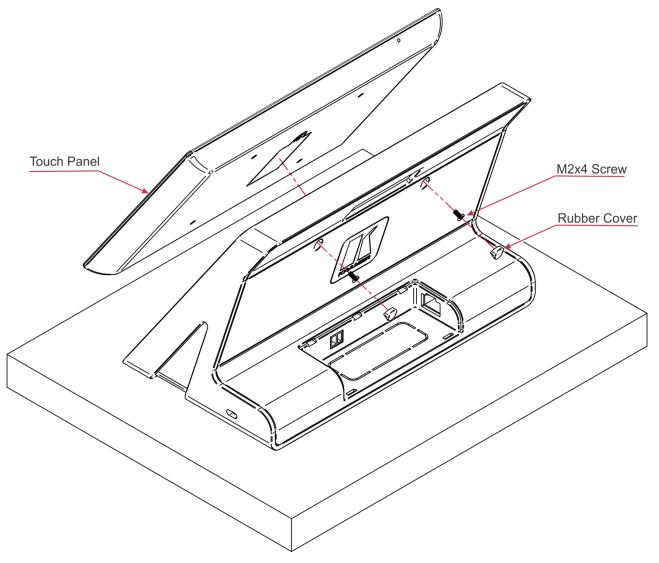


Figure 9: Connecting to the KT-107 Rear Panel

7. Connect the Ethernet and micro-USB cables by either passing the cables from underneath the table via the cable opening (see Preparing the Table for a Secure Mount on page 9), or by placing them over the table.

8. Replace the appropriate cover (for under-the-table or over-the-table installation).

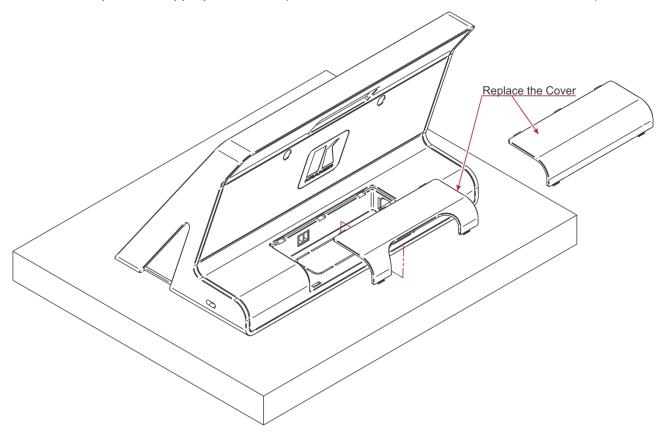


Figure 10: Replace the Cover

9. Optionally, lock the tabletop mount (21) with a Kensington locker (not supplied).

Mounting the KT-107 on a Wall

KT-107 can be safely installed on a wall using standard 2 Gang in-wall junction boxes. The cables are passed inside the wall and then connected to the rear side of the on-wall mount unit.

Before mounting the **KT-107** on a wall, you need to install a standard 2 Gang in-wall junction box.

We recommend that you use any of the following standard 2 Gang in-wall junction boxes:

- USA: 2 Gang electrical junction boxes.
- **Europe**: 2 Gang in-wall junction box, 47mm minimum depth (DIN 49073).
- UK: 2 Gang in-wall junction box, 137x75mm, 41mm minimum depth (BS 4662).
- Other popular in-wall mounting boxes may also be available in the market (such as the GEWISS 4 Gang 144x85x50mm box (GW 24 404)).

Inserting the On-Wall Mount Unit

To mount the on-wall mount unit:

- 1. Attach the on-wall mount unit to the installed in-wall junction box, (top side up, see the indication arrows on the mount (29)).
- 2. Screw the 4 wall-mounting screws (supplied) through the screw openings 27. The on-wall mount screw openings are set in different locations to fit various types of in-wall junction boxes.

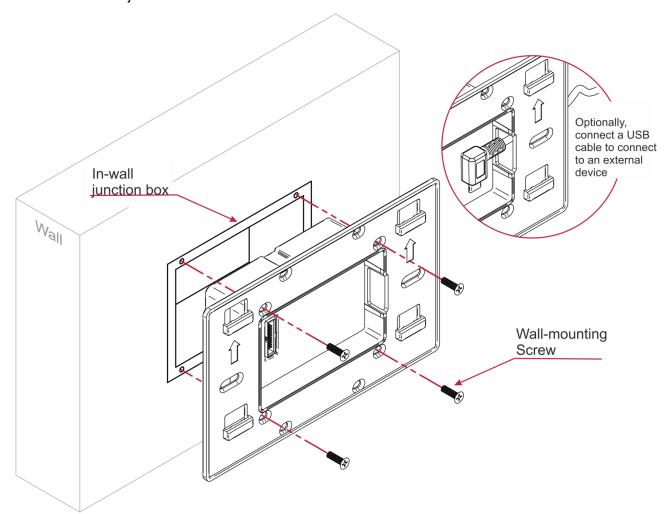


Figure 11: Installing the On-Wall Mount Unit

3. Optionally, insert the supplied right-angle OTG USB port if you need to connect the **KT-107** to an external USB device.

Connecting the flat Cable

The flat cable passes power and PoE-enabled Ethernet to the **Touch Panel**.

To connect the flat cable:

1. On the rear side of the **KT-107**, unscrew the cover and remove (by slightly pressing downwards and then pulling out), and set the cover and screw aside.

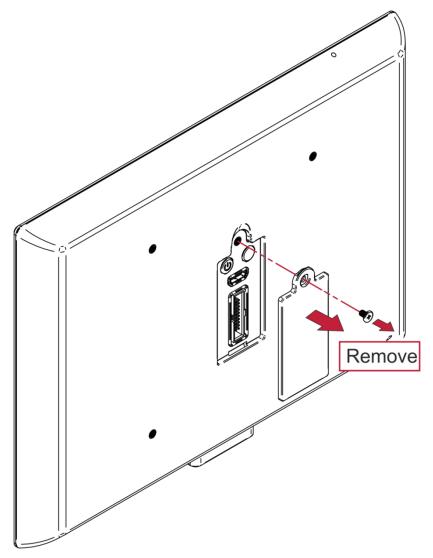


Figure 12: Removing the Cover on the KT-107 Rear Side

- 2. Attach the panel mount plate, top side up (see arrows), to the rear of the KT-107.
- 3. Fit the connecting holes (14) on the **KT-107** to the screw holes on the panel mount (33).

4. Insert the 4 M2x4 screws (supplied) and tighten.

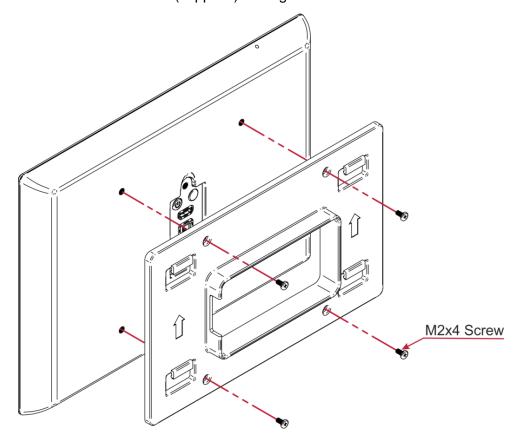


Figure 13: Attaching the Panel Mount Plate to the Rear Side of the KT-107

5. Connect the flat cable between the on-wall mount and the KT-107.

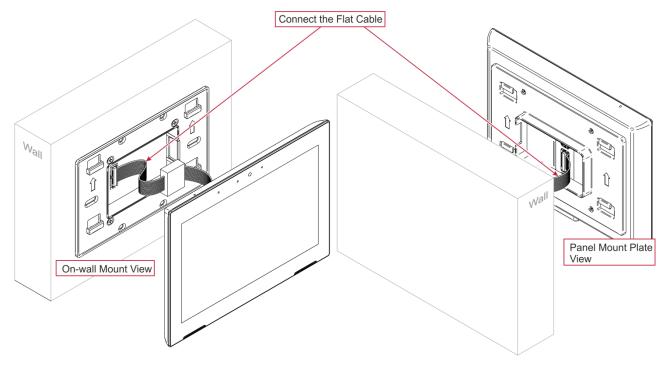


Figure 14: Connecting the On-wall Mount Flat Cable

(i)

If you need to secure the **KT-107** to the wall, use the Kramer **KT-107-OWLK** (purchased separately).

For installation instructions, see <u>Installing the On-Wall Secure Lock</u> on page <u>19</u>.

6. Hang the **KT-107** on the wall by sliding the tabs (35) on the attached panel mount plate over the grooves (25) on the on-wall mount unit.

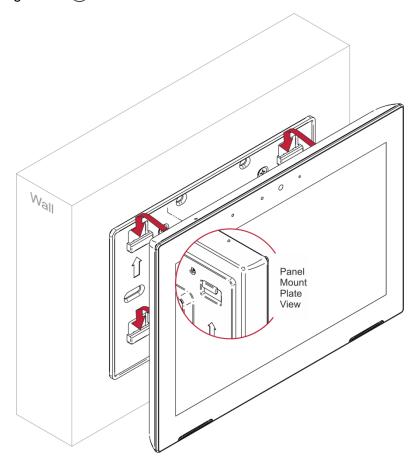


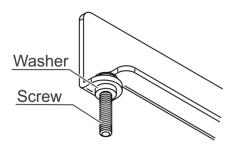
Figure 15: Hanging KT-107 on the Wall

Installing the On-Wall Secure Lock

The **KT-107-OWLK** (supplied with the unit) secures **KT-107** safely to the on-wall mount. The On-Wall Lock includes a 2-part frame (short and long part), 2 screws and 2 washers.

To secure KT-107 to the on-wall mount:

1. Insert the 2 screws (supplied) into the screw openings and insert the washers from below.



- This example shows the short part on top and the long part below. You can attach it with the long part on top and the short part below.
 - 2. Place the short part (together with the screws) over the installed on-wall mount unit.
 - 3. From below, slide the long frame part towards the short frame part.

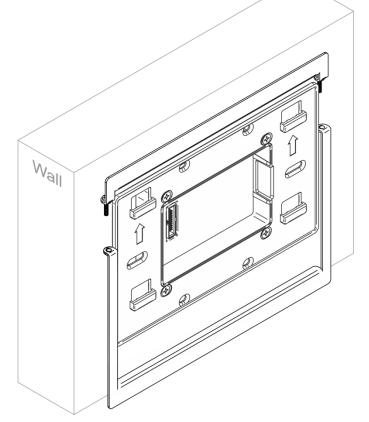


Figure 16: Placing the Frame Parts

4. Loosely screw the top frame part to the lower frame part (do not tighten the screws).

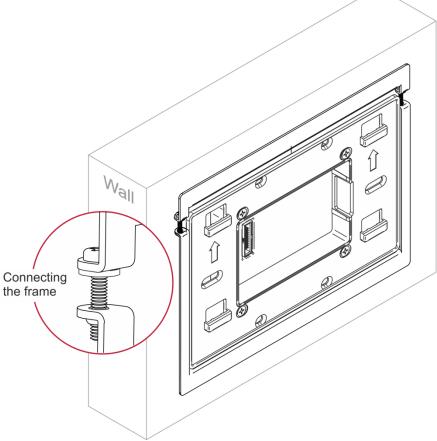


Figure 17: Screws Loose

5. After hanging the **KT-107** on the wall (<u>Figure 14</u>), tighten the two screws until the **KT-107** is securely fixed in place.

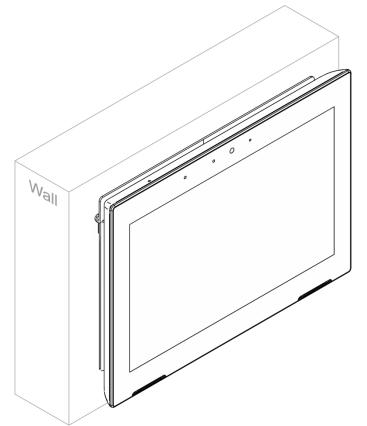


Figure 18: Screws Tightened

Connecting Options

You can power the **KT-107** using any or all of the following options:

- Connect the PoE-enabled LAN RJ-45 connector to your local area PoE-enabled network.
- Connect the power adapter to the 2-pin terminal block connector on the mount rear side.



When both PoE and the power supply are connected to the **Touch Panel**, the unit is powered by the power supply.

Use the internal battery (after initially charging the battery for 8 hours).

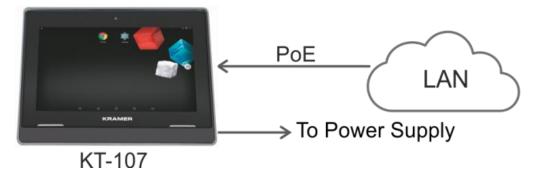


Figure 19: Powering the KT-107 Touch Panel

Connect to the local area Ethernet network:

- Via Ethernet cable connection to the LAN RJ-45 connector.
- Use Wi-Fi if no wired Ethernet connection is available, or as a fall-back option.



KT-107 features auto-sensing. It detects the speed of LAN devices (such as the LAN (Ethernet) switch, the router and so on) connected to **KT-107** and automatically sets the **KT-107** LAN port speed, accordingly.

For example:

- If the LAN switch supports 100Mbps Fast Ethernet, the **KT-107** LAN port is automatically set to work at 100Mbps.
- If the LAN switch supports 1000Mbps Gigabit Ethernet, the KT-107 LAN port is automatically set to work at 1000Mbps.

Setting up the KT-107, KT-107RB

Once the tabletop mount or On-wall installation is complete and power is connected, you can slide the **KT-107** in place and wait for the default opening page to appear (to change the default opening page, see <u>Setting the Boot Start App Upon Power Up</u> on page <u>27</u>):

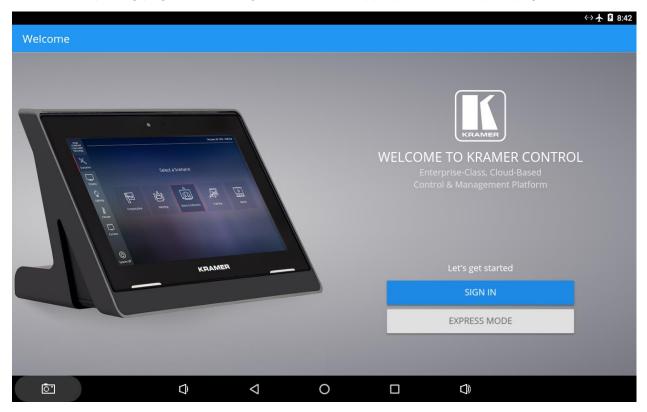


Figure 20: KT-107 Default Opening Page

Initial Setup

Following installation, use the Home-page Settings application to perform the following initial setup tasks:

- Accessing the Home-Page on page 23.
- Connecting to Wi-Fi or the Ethernet on page 24.
- Setting the Date and Time on page 26.
- <u>Setting the Boot Start App Upon Power Up</u> on page <u>27</u>.
- Modifying the Display Settings on page 28.
- Setting the Control Button on page 30.
- Defining Control Button Password Protection on page 31.

Accessing the Home-Page

By Default, the Home-page is password protected. Once **KT-107** it is powered, the Kramer Control app is uploaded (by-default).

To initially access the Home-page:

1. Press the Control button 7. The following screen appears:

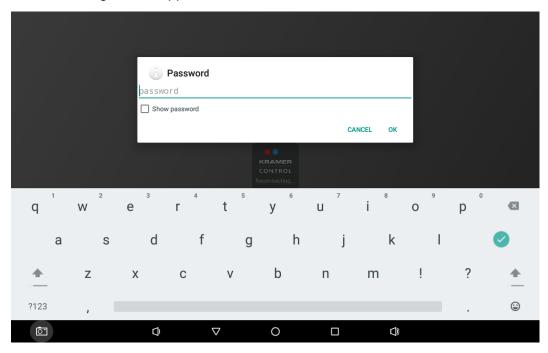


Figure 21: Initial Access to Home Page

2. Type the **Password** (**Kramer** by-default) and click **OK**. The Following pop-up menu appears:

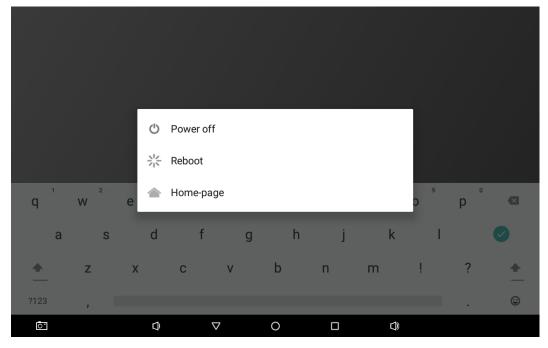


Figure 22: Pop-up Page for Home-Page

3. Select Home-page.

Connecting to Wi-Fi or the Ethernet

To Connect to Wi-Fi:

1. In the Home-page, click **Settings**. The Settings page appears:

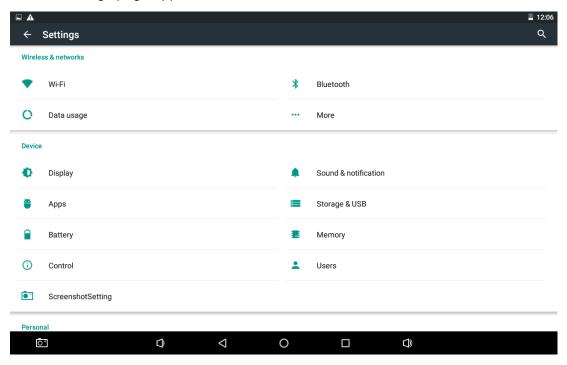


Figure 23: Connecting to Wi-Fi – Settings Page

2. Select Wi-Fi and set to enable.

The system searches for available Wi-Fi networks.



Figure 24: Connecting to WI-Fi – Searching for Available Networks

3. Select the desired network, enter the password, if required, and click **Connect**.

To connect via the Ethernet:

- 1. Connect **KT-107** to the network via an RJ-45 cable on the tabletop mount (22) to the Network.
- 2. In the Home-page, click Settings.
- 3. Click More and select Ethernet.



Figure 25: Connecting to Ethernet – Enabling Ethernet

4. If Ethernet is disabled, enable it and wait a few seconds for Ethernet to connect. You can view all the Ethernet settings:



Figure 26: Connecting to the Ethernet – Viewing Device Settings

Setting the Date and Time

To set the date and time:

1. In the Home-page, click Settings.

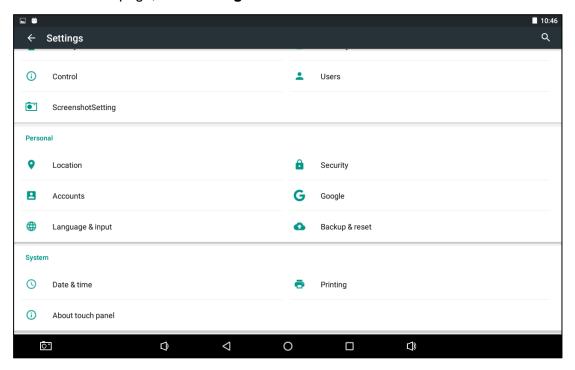


Figure 27: Settings - Date & Time

2. Scroll down to the System area and click Date & time.

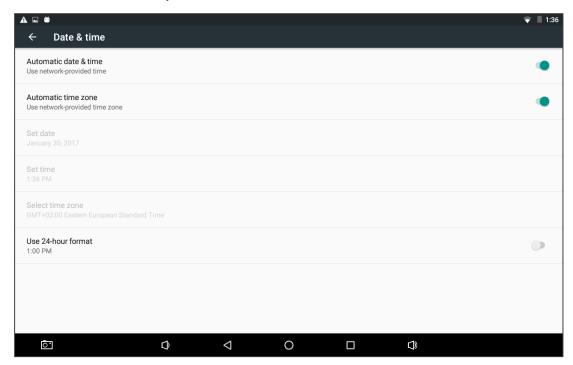


Figure 28: Settings - Automatic Date & Time

- 3. Enable **Automatic date & time** to derive the date and time from the network. If disabled, set the date and time manually.
- 4. Select the time format.

Setting the Boot Start App Upon Power Up

By-default **KT-107** includes the following apps:

- Kramer Control (set as the default)
- K-touch

To set which of these will appear upon start up:

- 1. In the Home-page, click **Settings**.
- 2. Select Control.
- 3. Click **Select Boot Start App**. The following window appears:

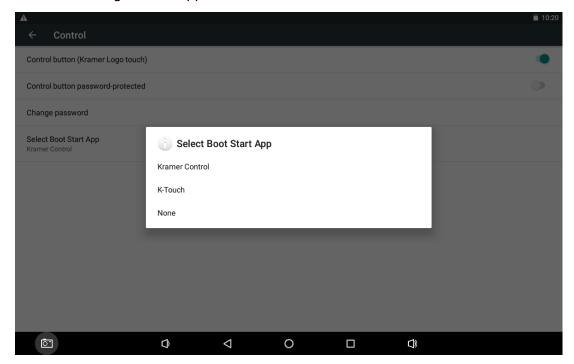


Figure 29: Control Button Activation

4. Select one of the Apps to appear upon startup, or select **None**.

For example, when selecting **None**, no app is uploaded upon start up:



Figure 30: KT-107 Home-Page when no App is Selected

Modifying the Display Settings

To modify Display Settings:

1. In the Home-page, click **Settings**.

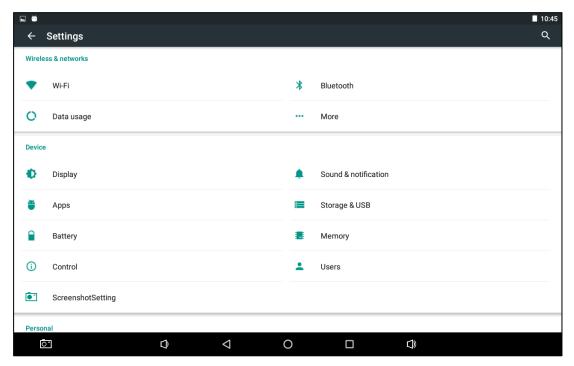


Figure 31: Settings - Display

2. Click Display.

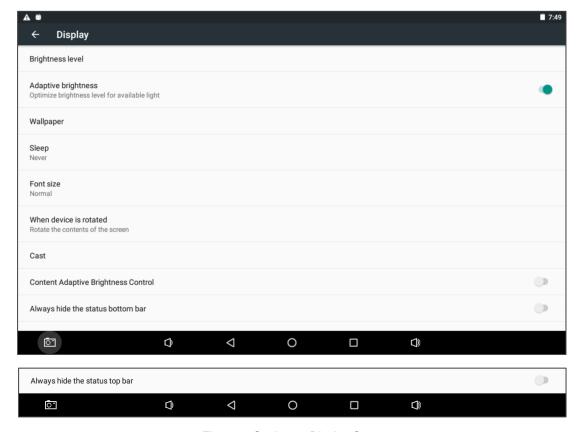


Figure 9: Settings - Display Setup

- 3. Define the following (as required):
 - Set the Brightness:
 - Brightness level.
 - Adaptive brightness automatically adjusts the brightness level based on room ambient room lighting.
 - Content Adaptive Brightness Control automatically adjusts the brightness level based on the displayed content.
 - Enable the following status bars to show the bars (default is Hide, to prevent tampering with the **Touch Panel**):
 - Always hide the bottom status bar.
 - Always hide the top status bar.

The following table defines how to access the Home-page when the bars are hidden, under the following conditions: the Control button is enabled or disabled and the **Touch Panel** is or is not password protected (default password is Kramer).

C	Control Button Enabled	Control Button Disabled
	ress the Control button 7. The Power/reset op-up screen appears (see Figure 32):	Press rear-side power button 10. Power/reset pop-up screen appears (see Figure 32). Go to Home-page.
•	If Home-page Exit is not password protected , switch to Home-page.	Or:
•	If Home-page Exit is password protected (see <u>Defining Control Button Password Protection</u> on page <u>31</u>), enter the correct password and switch to Home-page.	Click power-off and wait for system shut-down. Press rear-side power button to power on. The Touch Panel powers up. Go to Home-page.

Setting the Control Button

The **KT-107** Control button is located under the Kramer logo (7). Use the **Settings** > **Control** to:

- Enable/disable the Control button.
- Set the button as password protected (when enabled) or not.
- Change the password if required.

Use the Control button as follows:

 Press for 2 seconds for the pop-up menu to appear and select Power off, Reboot or Home-page (see Defining Control Button Password Protection on page 31).

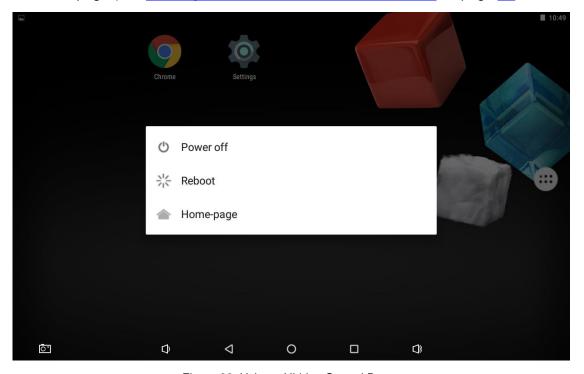


Figure 32: Using a Hidden Control Button

When the **Touch Panel** is off, turn it on again via the power button (10) on the rear side of the **Touch Panel**.

To enable/disable the control button:

- 1. In the Home-page, click **Settings**.
- 2. Select Control.

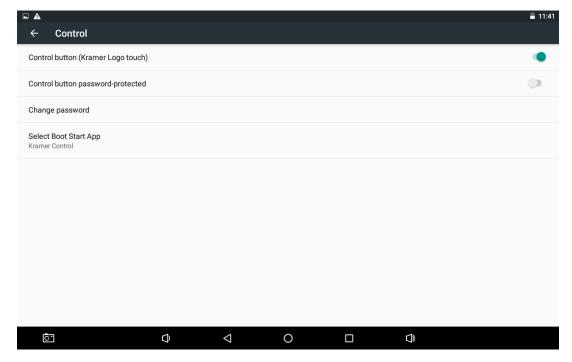


Figure 33: Control Button Activation

3. Enable or disable the control button.

Defining Control Button Password Protection

Password protection is used to prevent an unauthorized person from exiting an application program.



When the Control button is disabled, this option is disabled too.

To enable/disable password protection:

- 1. In the Home-page, click **Settings**.
- 2. Select Control.
- 3. Click **Control button password protected** to enable or disable this feature (see Figure 33).
- The protected exit password is "Kramer".

To change the password:

- 1. In the Home-page, click Settings.
- 2. Select Control.

3. Click Change password:

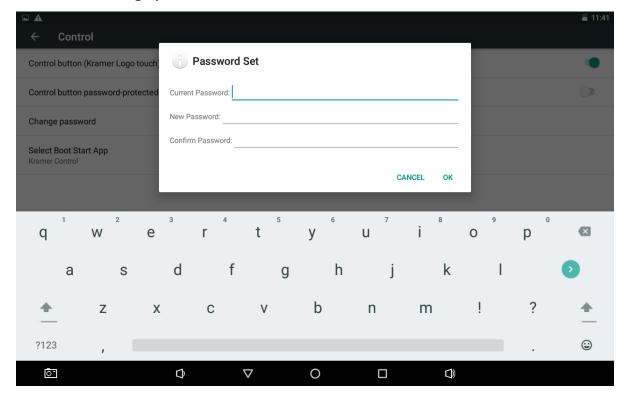


Figure 34: Changing the Password

- 4. Enter the current password and then the new password (and Confirm Password).
- 5. Click OK.

Additional KT-107 Important Functions

This section describes the following additional KT-107 functions:

- About Touch Panel Page on page 33
- Top Bar Functions on page 34
- Lower Bar Functions on page 34

About Touch Panel Page

The About page summarizes all the **Touch Panel** information, such as system updates.

To view Touch Panel information:

- 1. In the Home-page, click **Settings**.
- 2. Scroll down and select **About touch panel**. The About touch panel screen appears:

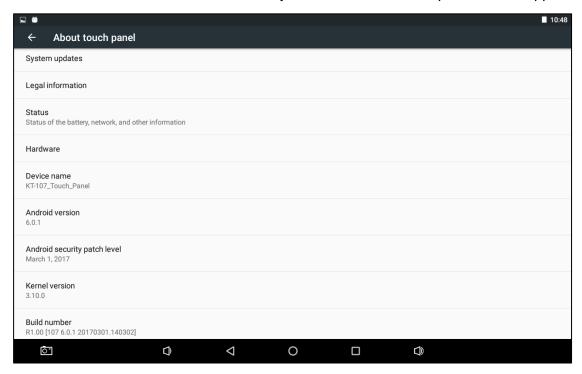


Figure 35: About the KT-107 Touch Panel

Top Bar Functions

The top bar displays various messages such as time and date, battery status and so on.

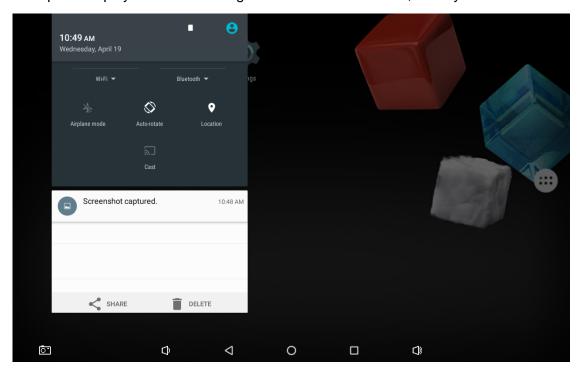


Figure 36: Top Bar Functions

Lower Bar Functions

Use the lower bar functions as follows:

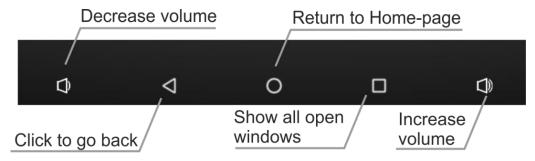


Figure 37: KT-107 Lower Bar Functions

Upgrading the Firmware

To upgrade the firmware:

- Setup your PC for Firmware Upgrade, on page 35.
- Install the RockChip Driver Assistant, on page 35.
- Prepare the KT-107 for Firmware Upgrade, on page 37.
- Upgrade the Firmware via PC, on page 37.



The latest firmware version can be downloaded from the Kramer web site at www.kramerav.com/downloads/KT-107.

Setup your PC for Firmware Upgrade

To prepare the PC for upgrading the KT-107 or KT-107RB:

- 1. Download the firmware and FW-upgrade-tools zip files from the Kramer website at www.kramerav.com/downloads/KT-107.
 - Verify that you are using the correct KT-107 or KT-107RB firmware file (according to your device type).
 - The FW-upgrade-tools zip file includes both 'Rockchip_DriverAssitant' and 'KT FW Upgrade Tool' upgrade tools.
- 2. Copy the 'KT-107 Firmware Release xx' (or 'KT-107RB Firmware Release xx'), 'FW Upgrade Tool' and 'Rockchip_driverAssistant' files and unzip them to local folders on your PC.
 - Verify that the 'KT-107 Firmware Release xx' (or 'KT-107RB Firmware Release xx') folder includes the 'Update.img' file for KT-107 or KT-107RB upgrade.



DO NOT change the 'Update.img' file name.

Install the RockChip Driver Assistant



If the 'Rockchip_driverAssistant' driver is already installed on your PC, skip this section and proceed to Prepare the KT-107 for Firmware Upgrade on page 37.

If it is not installed or if you are unsure, complete the installation steps in this section.

To install the driver:

- 1. In the 'Rockchip_driverAssistant' folder, open 'Driver Assistant'.
- 2. Double click 'DriverInstall.exe'

3. Click **Run** to install the 'DriverInstall' tool on your PC.

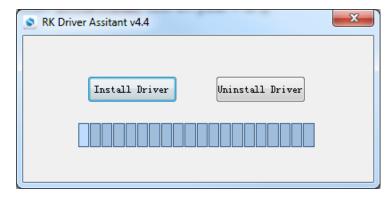


Figure 38: Installing the Driver

4. Click Install Driver.

The following window appears:

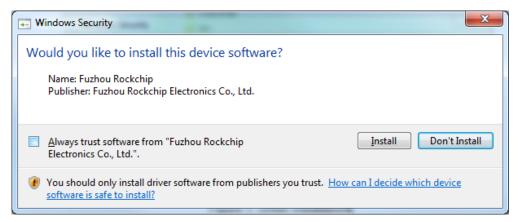


Figure 39: Driver Installation Security Note

5. Click **Install** repeatedly on the next few screens until the driver is successfully installed.



Figure 40: Successful Installation

6. Click OK.

Prepare the KT-107 for Firmware Upgrade

To prepare the KT-107:

- 1. Verify that the battery is at least 70% charged.
- 2. Disconnect the panel from its mount (see Mounting the KT-107, KT-107RB on page 9).
- 3. Power-off the panel (from behind 10 or via the Kramer control button 7 on the front of the **Touch Panel**).
- 4. Connect the PC USB port directly to the micro-USB port 11 on the rear of the **KT-107** (do not use the port on the mount) via a USB cable with data-transfer-capabilities (supplied with the unit).



You can connect up to 8 **Touch Panel** devices to upgrade simultaneously.



Carefully place the KT-107 in a way that does not cause damage to the USB cable or port.

Upgrade the Firmware via PC

To upgrade the firmware:

1. In the 'KT FW Upgrade Tool' folder, double-click 'Kramer Touch Panel FW Upgrade Tool.exe'.

The FW Upgrade Tool window appears:

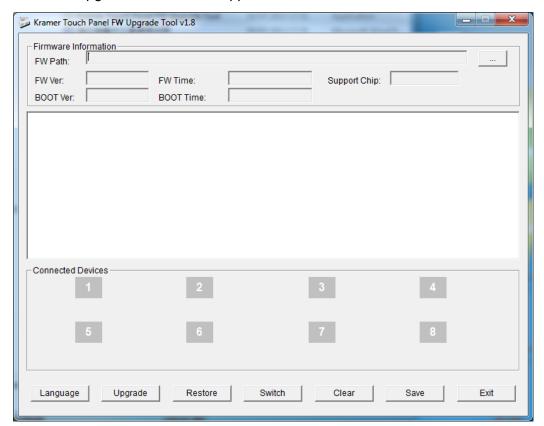


Figure 41: Firmware Upgrade Tool

2. Click the ... button next to the FW Path text box to select the path to the Update.img file in the unzipped 'KT-107 Firmware Release xx' folder.

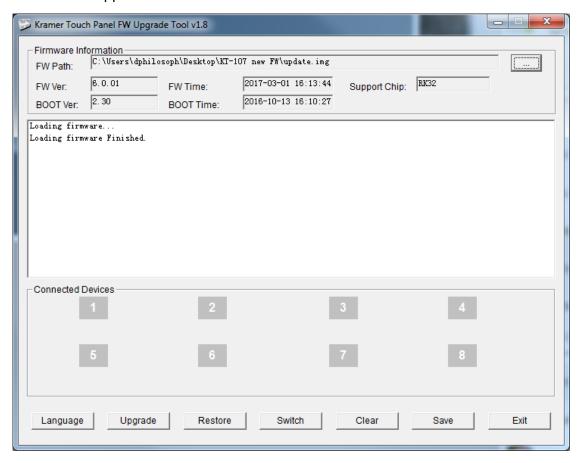


Figure 42: Update File Loaded

- 3. On the rear side of the **Touch Panel**, press the Volume-up button 11 together with the Power button 10 for a few seconds until the ON 2 front panel LED dimly lights green and the 11 indication (or more, depending of the number of devices that are connected for firmware upgrade) in the **Connected Devices** area of the FW Upgrade Tool window shows that the device is connected to the PC (turns green).
- If you have connected more than one device, repeat steps 3 and 4 above for each USB connected **Touch Panel**.



If the connection process fails, press and hold the Power button (10) until the unit powers down and then restart the FW upgrade process.

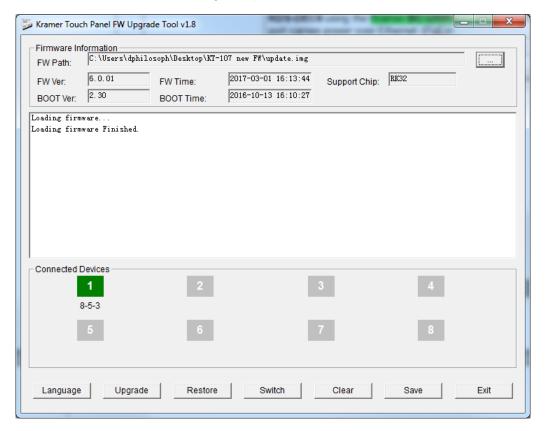


Figure 43: Touch Panel Connected to PC

4. Click **Upgrade** (after all the Connected Devices icons turn green). The upgrade progress is displayed:

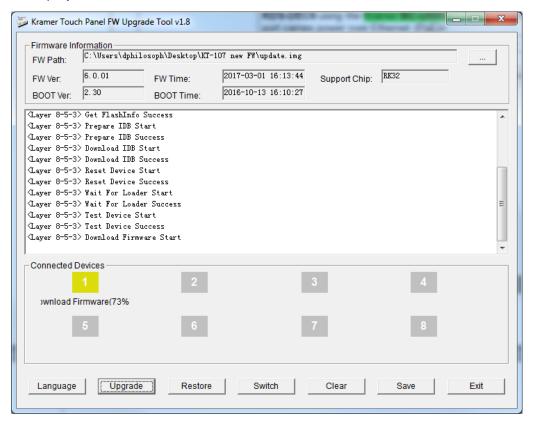


Figure 44: Firmware Upgrade Progress

5. Wait for the green "Success" message to appear:

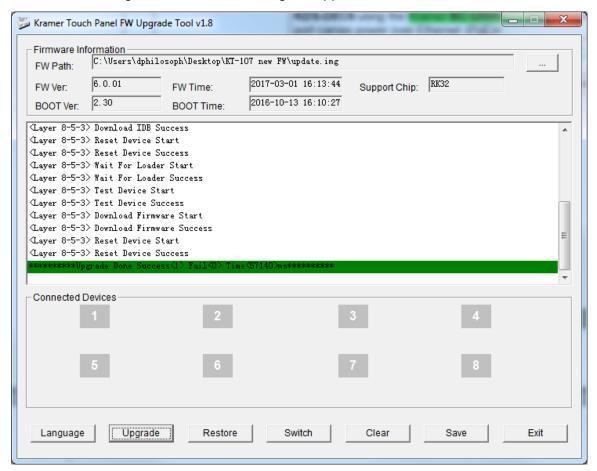


Figure 45: Firmware Upgrade Complete

Following successful firmware installation, wait for the **Touch Panel** to power up. This process may take a few minutes.

Technical Specifications

Tabletop Mount Ports:	1 1000/100/10RasaT Ethornat on P I 45 connector		
rabletop Mount Ports.	1 1000/100/10BaseT Ethernet on RJ-45 connector 1 micro USB 2.0		
	1 2-pin terminal block for DC power supply		
On-wall Mount Ports:	1 1000/100/10BaseT Ethernet on RJ-45 connector		
on wan mount rotto.	1 2-pin terminal block for DC power supply		
Speakers:	2x1 W, 8 ohm		
Microphone:	-42dB ±3dB @ 1kHz sensitivity		
CPU Performance:	1.6GHz Quad Core, GPU, 2GB RAM, 16GB Flash		
OS Software:	Android 6.0.1		
Multi Touch:	10 points, 2-finger gesture		
	7" IPS, 1280x800 RGB pixels, 16:10 aspect ratio, ±85° horizontal/vertical		
Display:	viewing angles, 400cd/m2 brightness, 800:1 contrast ratio		
Video Format:	Decoding: H.265/HEVC; H.264/AVC; MPEG-1/2/4; DivX 3/4/5/6; MVC; GOOGLE VP8; VC-1; H.263; SORENSON SPARK; ON2 VP6; MOTION JPEG Encoding:H.264/AVC		
Ethernet Port:	Auto-sensing 10/100/1000Mbps PoE LAN		
Wireless Communication:	Wi-Fi 802.11 b/g/n/ac, Bluetooth 4.0		
	For KT-107RB, Wi-Fi 802.11 ac, 5GHz frequency band range is restricted to up to 5.35GHz		
Camera:	Front, 2M pixels, HD 720p		
Battery:	Rechargeable, supports up to 3 hours of Wi-Fi operation		
Controls:	Hidden reset button, power button, volume-up button		
Touch panel status LED: flashes green during charging, steady green fully charged, red for camera on			
Power Inputs:	Power over Ethernet (complies with IEEE802.3af and IEEE802.3at PoE standards), power supply unit		
Power Consumption:	5V DC, 3A		
Operating Temperature:	0° to +40°C (32° to 104°F)		
Storage Temperature:	-10° to +55°C (14° to 131°F)		
Humidity:	10% to 90%, RHL non-condensing		
Case Design:	Black body and cover		
Certifications:	CE/CB, FCC, ROHS, REACH		
Dimensions:	Shipping dimensions:22.4cm x 13cm x 20.6cm (8.8" x 5.12" x 8.1"), W, D, H Touch panel: 17.8cm x 1.3cm x 13cm (7" x 0.51" x 5.12"), W, D, H Tabletop mount: 18.5cm x 10.7cm x 12.4cm (7.28" x 4.2" x 4.88"), W, D, H Panel mount plate: 14.6cm x 3.7cm x 9.2cm (5.75" x 1.46" x 3.62"), W, D, H On-wall mount unit: 14.6cm x 1.1cm x 9.1cm (5.75" x 0.43" x 3.58"), W, D, H		
Weight:	Shipping weight: 1.8kg (3.97lbs) approx.		
Manustin a O. C	Touch panel: 0.37kg (0.8lbs) approx.		
Mounting Options:	Table top (with mount unit), on-wall (with mount unit and panel mount plate)		
Included Accessories:	Power supply unit adapter (5V, 4.0A AC/DC), tabletop mount, on-wall mount unit, panel-mount plate, right-angle OTG USB cable, C-USB/MicroB-6, installation screws, On-wall security lock (KT-107-OWLK)		
Specifications are subject to change without notice at www.kramerav.com			

The warranty obligations of Kramer Electronics Inc. ("Kramer Electronics") for this product are limited to the terms set forth below:

What is Covered

This limited warranty covers defects in materials and workmanship in this product.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product. Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long this Coverage Lasts

The standard limited warranty for Kramer products is seven (7) years from the date of original purchase, with the following exceptions:

- 1. All Kramer VIA hardware products are covered by a standard three (3) year warranty for the VIA hardware and a standard three (3) year warranty for firmware and software updates.
- 2. All Kramer fiber optic cables and adapters, active cables, cable retractors, all Kramer speakers and Kramer touch panels are covered by a standard one (1) year warranty.
- 3. All Kramer Cobra products, all Kramer Calibre products, all Kramer Minicom digital signage products, all HighSecLabs products, all streaming, and all wireless products are covered by a standard three (3) year warranty.
- 4. All Sierra Video MultiViewers are covered by a standard five (5) year warranty.
- 5. Sierra switchers & control panels are covered by a standard seven (7) year warranty (excluding power supplies and fans that are covered for three (3) years).
- 6. K-Touch software is covered by a standard one (1) year warranty for software updates.
- 7. All Kramer passive cables are covered by a ten (10) year warranty.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What Kramer Electronics Will Do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty.

- Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
- Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
- Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

What Kramer Electronics Will Not Do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or reinstallation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

How to Obtain a Remedy Under This Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, visit our web site at www.kramerav.com or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required (RMA number). You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

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THE MAXIMUM LIABILITY OF KRAMER ELECTRONICS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

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Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Kramer Electronics or (iii) this product is not purchased from an authorized Kramer Electronics reseller. If you are unsure whether a reseller is an authorized Kramer Electronics reseller, visit our web site at www.kramerav.com or contact a Kramer Electronics office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. Kramer Electronics thanks you for purchasing a Kramer Electronics product. We hope it will give you years of satisfaction.

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SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

For the latest information on our products and a list of Kramer distributors, visit our Web site where updates to this user manual may be found.

We welcome your questions, comments, and feedback.