



# USER MANUAL MODEL:

KT-107S Touch Panel



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# 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!

## **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 <u>www.kramerav.com/downloads/KT-107S</u> 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 neighboring electrical appliances that may adversely influence signal quality.
- Position your Kramer KT-107S 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 unitWarning: Use only the Kramer Electronics power supply that is provided with the unitWarning: 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 <a href="http://www.kramerav.com/support/recycling">www.kramerav.com/support/recycling</a>.

## **Overview**

Congratulations on purchasing your Kramer KT-107S Touch Panel.

**KT-107S** 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. The **KT-107S** supports wired Power over Ethernet (PoE).

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-107S** 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-107S** 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.
- 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 marketavailable 2-Gang in-wall junction boxes.
- Connectivity –Connection to USB peripheral devices for either table or wall-mount installations using the included USB cable.
- 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.

## **Typical Applications**

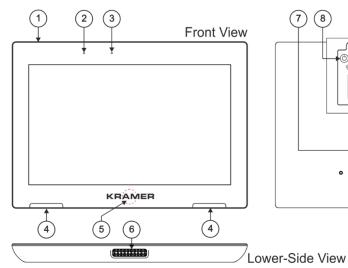
The **KT-107S** is ideal for the following typical applications:

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

# **Defining the KT-107S**

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

# **KT-107S Touch Panel**



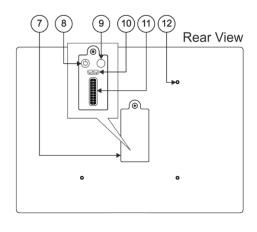


Figure 1: KT-107S Touch Panel Front, Rear, and Lower Side view

#	Feature	Function
1	Hidden Reset Button	Located on top-side. Insert a pin and hold for a few seconds to reset <b>KT-107S</b> .
2	Light Sensor	Automatically adjusts the screen brightness according to the room lighting conditions.
3	Activity RGB LED	Flashes green when charging the battery and lights green when powered on.
4	Speakers	To output the sound.
5	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.
6	Tabletop Mount Connector	For connecting to the tabletop mount.
7	Cover	Covers the wall mount connections and power button.
8	Power Button	Press to power on the <b>KT-107S</b> . 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 can also be used for firmware upgrade.
9	Firmware- Upgrade Button	Used for firmware upgrade (also can be used to increase <b>KT-107S</b> speaker volume).
(10)	Micro USB Port	For connecting to an adjacent on-wall USB device and for firmware upgrade.
(11)	Flat Cable Connector	For connecting to the on-wall mount unit.
(12)	Connecting Holes	<ul> <li>For connecting to the tabletop mount or the panel mount plate.</li> <li>To prevent potential damage to the Touch Panel, use only Kramer supplied screws and mounts.</li> </ul>

# **KT-107S Tabletop Mount**

This section defines the KT-107S tabletop mount.

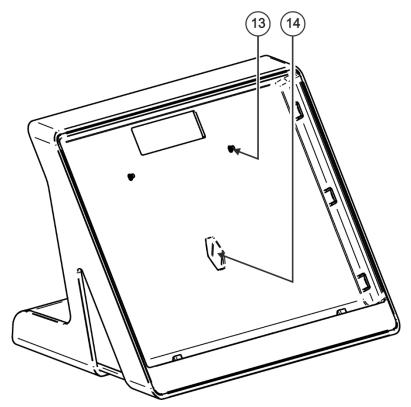


Figure 2: Tabletop Mount Front View

#	Feature	Function
(13)	Screw Openings (x2)	For attaching the <b>Touch Panel</b> to the tabletop mount using the supplied M2x4 screws (see <u>Mounting the KT-107S on a Table on page 8</u> ).
14	M5x60 Secure Screw Opening	For safely securing the tabletop mount to the table from underneath (see Figure 7).

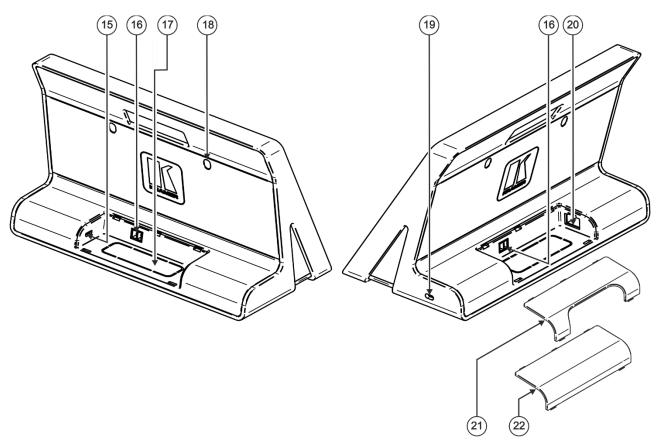


Figure 3: Tabletop Mount Rear View

#	Feature	Function
(15)	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).
(16)	Power 2-pin Terminal Block Connector	Connect to a power adapter and to the mains.
17	Cable Opening Knock-out area	Cable pass-through area.
(18)	Screw Openings with Rubber Covers (x2)	For covering the M2x4 screws that are used for attaching the <b>KT-107S</b> to the tabletop mount (see <u>Mounting the KT-107S on a Table</u> on page <u>8</u> ).
(19)	Kensington Locker Port	For securely connecting the tabletop mount to a table with a Kensington-compatible locker.
20	PoE Ethernet RJ-45 Port	Connect to the PoE-enabled Ethernet cable.
21	Cable Cover with Opening	Hides the ports and includes an opening for passing connected cables over the table.
22	Solid Cable Cover	Hides the ports when passing connected cables under the table.

# **KT-107S On-Wall Mount**

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

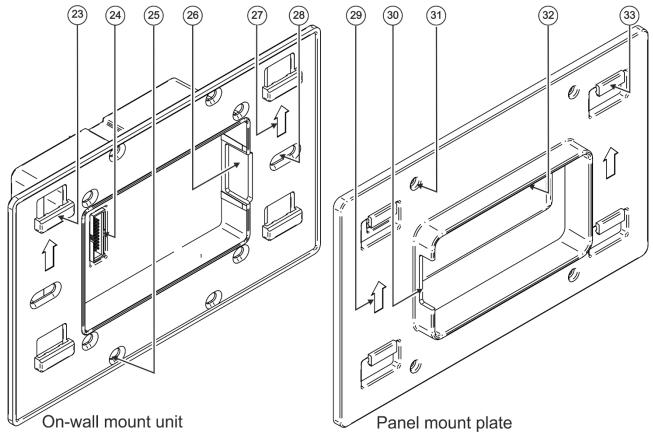


Figure 4: KT-107S Touch Panel Front Panel

#	Feature	Function
23	Groove (x4)	For hanging the panel mount plate (attached to <b>KT-107S</b> ) on a wall.
24	Flat Cable Connector	Connect to the rear side of the <b>KT-107S</b> using the supplied flat cable. Passes the Ethernet signal and power to the <b>KT-107S</b> .
25	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 <u>Mounting the KT-107S on a Wall</u> on page <u>12</u> .
26	Unit Cable Opening	Pass the supplied right-angle OTG USB cable through the opening to connect to the rear side of the <b>KT-107S</b> .
27)	Indication Arrows	Top side up; shows the correct direction for mounting the on-wall mount unit and for hanging the <b>Touch Panel</b> .
28	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.
29	Indication Arrows	Top side up; shows the correct direction for hanging the panel mount plate.
30	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 <b>KT-107S.</b>
31	Screw Opening (x4)	Attach the <b>KT-107S</b> to the panel mount plate using the supplied screws.
32	Cable Opening	Pass the cables through the opening to connect to the rear side of the <b>KT-107S.</b>
33	Tab (x4)	For hanging the <b>KT-107S</b> with the attached panel mount plate on the on-wall mount unit.

# Mounting the KT-107S

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



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

# Mounting the KT-107S on a Table

- Mount on a table using one of the following options:
- **Portable Mount**: Place the tabletop mount on the table. Connected cables remain visible and the table remains intact.
- **Secure Mount**: Bolt the tabletop mount into the table. Connected cables are hidden through a hole in the table.

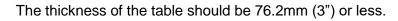
## **Preparing the Table for a Secure Mount**



To install the **KT-107S** on a secure mount, go to <u>Installing KT-107S on the Tabletop Mount</u> on page <u>11</u>.

To mount KT-107S securely on a table, 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.



Correctly measure the location of the M5x60 screw holes and the cable pass-through opening using the cut-out template available on the Kramer website at <a href="http://www.kramerav.com/downloads/KT-107S">www.kramerav.com/downloads/KT-107S</a>.

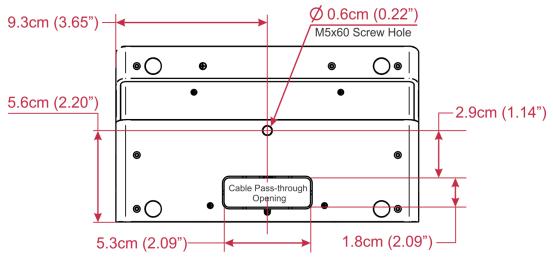


Figure 5: Cut-Out Dimensions (image not to scale)



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The cut-out dimensions in <u>Figure 5</u> are **not to scale**. 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-107S**.
- 2. Drill a hole in the table and cut the cable pass-through opening with a saw according to the dimensions shown in Figure 5 (not to scale).

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-107S tabletop mount:

- 1. Remove the rubber covers Screw Openings with Rubber Covers (x2) (18) from the rear tabletop mount.
- 2. Remove the cable cover 21.

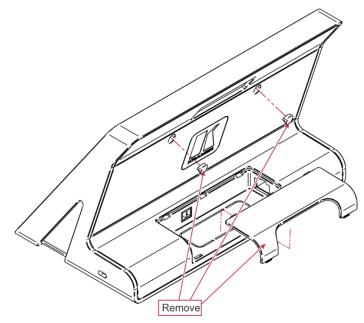


Figure 6: Removing Cable Cover and Rubber Screw Cover

- 3. Place the tabletop mount on the table.
- 4. Insert the M5x60 screw through the M5x60 screw opening (14) 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.

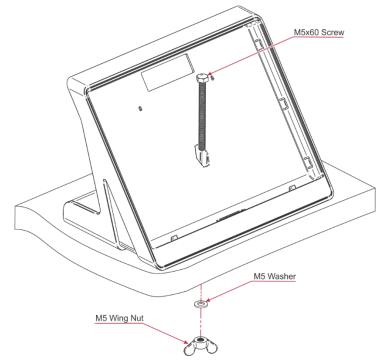


Figure 7: Securing Tabletop Mount

## **Installing KT-107S on the Tabletop Mount**

Before you begin, verify that the cable cover (21) is removed.

To connect the cables and set the KT-107S 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 (16) on the tabletop mount and to the mains power.
- Place the KT-107S 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-107S in place.
- 4. Wait for the Home-page to load.

We recommend that you complete **KT-107S** setup (see <u>Setting up the KT-107S</u>, on page <u>17</u>) before securing the **KT-107S** to the tabletop mount. Once setup is complete, carry on with the installation process.

- 5. Secure the **KT-107S** to the tabletop mount using the two M2x4 screws (supplied) that are inserted via the openings (13) on the rear side of the tabletop mount.
- 6. Replace the rubber covers to hide the screws.

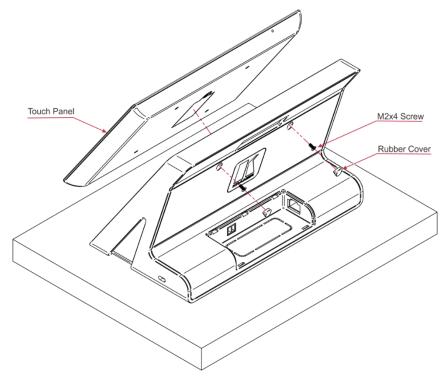


Figure 8: Connecting to the KT-107S Rear Panel

- Connect the Ethernet and micro-USB cables by either passing the cables from underneath the table via the cable opening (see <u>Preparing the Table for a Secure Mount</u> on page <u>8</u>), or by placing them over the table.
- 8. Replace the appropriate cover (for under-the-table or over-the-table installation).

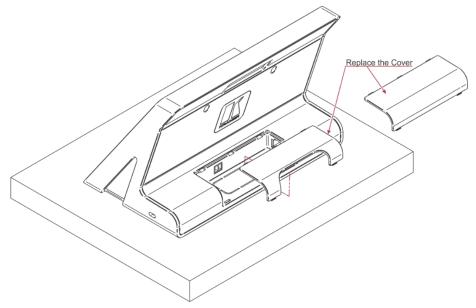


Figure 9: Replace the Cover

9. Optionally, lock the tabletop mount (19) with a Kensington locker (not supplied).

## Mounting the KT-107S on a Wall

**KT-107S** 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.

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 (27)).
- Screw the 4 wall-mounting screws (supplied) through the screw openings <sup>(25)</sup>. The on-wall mount screw openings are set in different locations to fit various types of in-wall junction boxes.

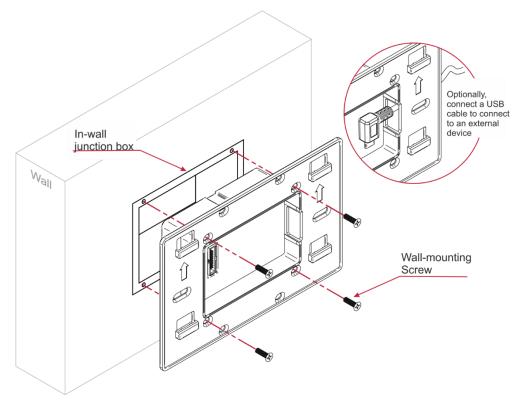


Figure 10: Installing the On-Wall Mount Unit

3. Optionally, insert the supplied right-angle OTG USB port if you need to connect the **KT-107S** 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-107S**, unscrew the cover and remove (by slightly pressing downwards and then pulling out), and set the cover and screw aside.

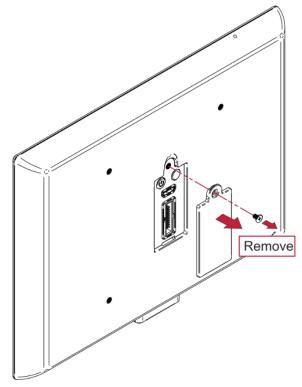


Figure 11: Removing the Cover on the KT-107S Rear Side

- 2. Attach the panel mount plate, top side up (see arrows), to the rear of the KT-107S.
- 3. Fit the connecting holes (12) on the **KT-107S** to the screw holes on the panel mount (31).
- 4. Insert the 4 M2x4 screws (supplied) and tighten.

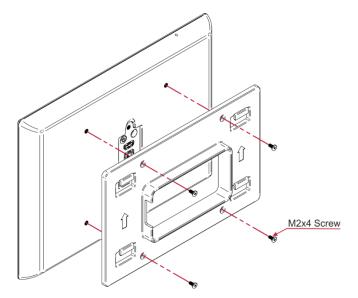


Figure 12: Attaching the Panel Mount Plate to the Rear Side of the KT-107S

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

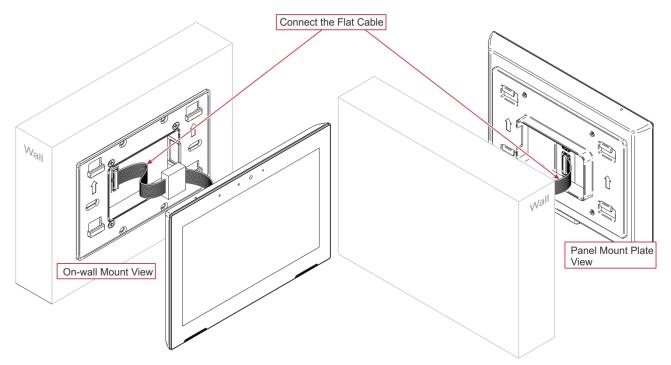


Figure 13: Connecting the On-wall Mount Flat Cable

6. Hang the **KT-107S** on the wall by sliding the tabs (33) on the attached panel mount plate over the grooves (23) on the on-wall mount unit.

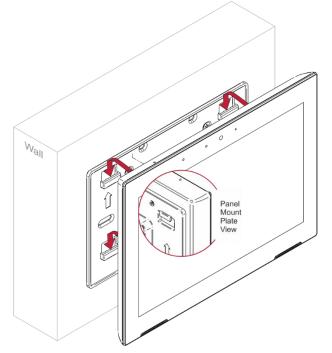


Figure 14: Hanging KT-107S on the Wall

## **Connecting Options**

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

- 1. Connect the PoE-enabled LAN RJ-45 connector to your local area PoE-enabled network.
- 2. 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.

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

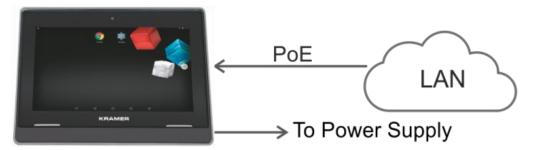


Figure 15: Powering the KT-107S Touch Panel

4. Connect to the local area Ethernet network Via Ethernet cable connection to the LAN RJ-45 connector.

**KT-107S** features auto-sensing. It detects the speed of LAN devices connected to it, and automatically sets the **KT-107S** LAN port speed, accordingly.

For example:

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

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

# **Setting up the KT-107S**

Once the tabletop mount or On-wall installation is complete and power is connected, you can slide the **KT-107S** 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>21</u>):

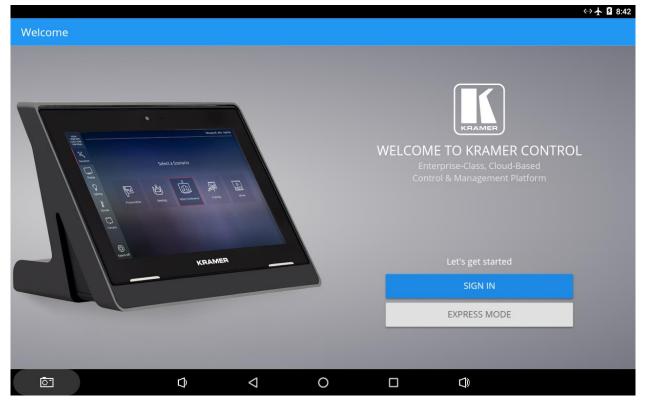


Figure 16: KT-107S Default Opening Page

# **Initial Setup**

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

- <u>Accessing the Home-Page</u> on page <u>18</u>.
- <u>Connecting to the Ethernet</u> on page <u>19</u>.
- <u>Setting the Date and Time</u> on page <u>20</u>.
- <u>Setting the Boot Start App Upon Power Up</u> on page <u>21</u>.
- <u>Modifying the Display Settings</u> on page <u>22</u>.
- <u>Setting the Control Button</u> on page <u>24</u>.
- <u>Defining Control Button Password Protection</u> on page <u>26</u>.

## **Accessing the Home-Page**

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

To initially access the Home-page:

Press the Control button 5.
 The following screen appears:

		as swo	Password							
		Show	v password			CA	NCEL OK			
		67			CONTROL Reconnecting					
q	2 W	е <sup>3</sup>	r r	t s	у 6	<sup>7</sup> U	8 İ	9 O	р	×
а	S	d	f	g	h	j	k	I		0
+	Z	х	С	V	b	n	m	ļ	?	*
?123	,									٢
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Figure 17: Initial Access to Home Page

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

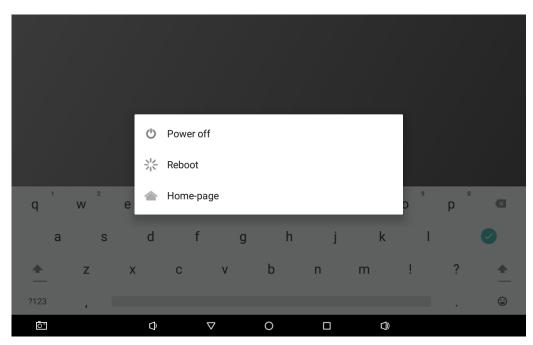


Figure 18: Pop-up Page for Home-Page

3. Select Home-page.

## **Connecting to the Ethernet**

To connect via the Ethernet:

- 1. Connect KT-107S to the network.
- 2. In the Home-page, click **Settings**.
- 3. Click More and select Ethernet.

□ ▲					11:42
← Ethernet					
Ethernet Ethernet is disabled					•
IP address 0.0.0.0					
Netmask 0.0.0.0					
Gateway 0.0.0.0					
DNS 1 0.0.0.0					
DNS 2 0.0.0.0					
Ethernet IP mode DHCP					
Ō-	Ð	$\bigtriangledown$	0	$\square$	

Figure 19: 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:

<b>■ ▲</b> ← Ethernet					4 🚽 🕹 🚽 🔶 🛶 🔶
Ethernet Ethernet is enabled					۲
IP address 192.168.110.52					
Netmask 255.255.255.0					
Gateway 192.168.110.1					
DNS 1 192.168.110.1					
DNS 2 0.0.0.0					
Ethernet IP mode DHCP					
Ō-	Ô	$\bigtriangledown$	0		

Figure 20: 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.

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÷	Settings					Q
	,				,	
(i)	Control			<b>±</b>	Users	
•	ScreenshotSetting					
Perso	nal					
•	Location			ê	Security	
	Accounts			G	Google	
•	Language & input			0	Backup & reset	
Syster	n					
0	Date & time			ē	Printing	
(i)	About touch panel					
C		þ	d (	С		

Figure 21: Settings – Date & Time

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

A	マ 🗎 1:36
← Date & time	
Automatic date & time Use network-provided time	۲
Automatic time zone Use network-provided time zone	۲
Set date January 30, 2017	
Set time 1:36 PM	
Select time zone GMT+02:00 Eastern European Standard Time	
Use 24-hour format 1:00 PM	•

Figure 22: 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-107S 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:

A						10:20
÷	Control					
Cor	ntrol button (Kramer Logo touch)	)				
Cor	ntrol button password-protected					
Cha	ange password					
Sel	ect Boot Start App mer Control	G Select E Kramer Control K-Touch None	3oot Start App			
	Ō	Ø	$\triangleleft$	0		

Figure 23: 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 24: KT-107S Home-Page when no App is Selected

# **Modifying the Display Settings**

To modify Display Settings:

1. In the Home-page, click Settings.

∎ ë			10:46
÷	Settings		۹
	,		·
<b>(</b> )	Control	÷	Users
•	ScreenshotSetting		
Perso	nal		
•	Location	â	Security
8	Accounts	G	Google
۲	Language & input	٥	Backup & reset
Syster	n		
Q	Date & time	ē	Printing
0	About touch panel		
C		С	

Figure 25: Settings - Display

2. Click Display.

← Display					
Brightness level					
Adaptive brightness Optimize brightness level for	available light				۰
Wallpaper					
Sleep Never					
Font size Normal					
When device is rotated Rotate the contents of the sc	reen				
Cast					
Content Adaptive Brightn	ess Control				
Always hide bottom navig	ation bar				
Always hide top status ba	r				
0	Ø	$\bigtriangledown$	0		

Figure 26: 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).

Control Button Enabled	Control Button Disabled
Press the Control button (5). The Power/reset	Press rear-side power button <sup>(8)</sup> .
pop-up screen appears (see Figure 27):	Power/reset pop-up screen appears (see <u>Figure 27</u> ).
If Home-page Exit <b>is not password protected</b> ,	Go to Home-page.
switch to Home-page.	Or:
If Home-page Exit <b>is password protected</b> (see	Click power-off and wait for system shut-down.
<u>Defining Control Button Password Protection</u> on	Press rear-side power button to power on. The
page <u>26</u> ), enter the correct password and switch	<b>Touch Panel</b> powers up.
to Home-page.	Go to Home-page.

## **Setting the Control Button**

The **KT-107S** Control button is located under the Kramer logo (5). 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 <u>Defining Control Button Password Protection</u> on page <u>26</u>).

	Chrome	Settings			10:49
	🖒 Pow	er off			
	兴는 Reb	oot			
	👚 Hom	ne-page			
0	Ø	$\bigtriangledown$	0	$\square )$	

Figure 27: Using a Hidden Control Button

When the **Touch Panel** is off, turn it on again via the power button (8) on the rear side of the **Touch Panel**.

To enable/disable the control button:

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

					📕 11:41
← Control					
Control button (Kramer Logo touch)					۰
Control button password-protected					
Change password					
Select Boot Start App Kramer Control					
Ō	¢	$\bigtriangledown$	0		

Figure 28: 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.
- Click Control button password protected to enable or disable this feature (see <u>Figure 28</u>).



The protected exit password is "Kramer".

To change the password:

- 1. In the Home-page, click Settings.
- 2. Select Control.
- 3. Click Change password:

								11:41
← Control	_							
Control button (Kramer Logo touc	h) 🕕 Passw	ord Set						
Control button password-protecte	d Current Password	d:						
Change password	New Password:							
Select Boot Start App Kramer Control	Confirm Passwor	rd:						
		_	-	CANC	CEL OK			
q w e		ء ب t	<sup>6</sup> У	<sup>7</sup> U	8 İ	9 O	p	×
a s	d	f g	h	j	k	I		>
★ Z	х с	V	b	n	m	ļ	?	*
?123 ,								٢
Ō	Ĵ	$\bigtriangledown$	0		٩			

- Figure 29: Changing the Password
- 4. Enter the current password and then the new password (and Confirm Password).
- 5. Click OK.

## **Additional KT-107S Important Functions**

This section describes the following additional **KT-107S** functions:

- <u>About Touch Panel Page</u> on page <u>27</u>.
- <u>Top Bar Functions</u> on page <u>27</u>.
- Lower Bar Functions on page 27.s

### **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:

<b>— —</b>					■ 10:48
← About touch p	anel				
System updates					
Legal information					
Status Status of the battery, network,	and other information				
Hardware					
Device name KT-107_Touch_Panel					
Android version 6.0.1					
Android security patch leve March 1, 2017	el				
Kernel version 3.10.0					
Build number R1.00 [107 6.0.1 20170301.14	40302]				
Ō	Ď	$\bigtriangledown$	0		

Figure 30: About the KT-107S Touch Panel

### **Top Bar Functions**

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

### **Lower Bar Functions**

Use the lower bar functions as follows:

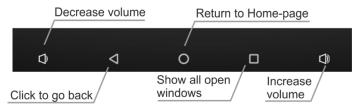


Figure 31: KT-107S Lower Bar Functions

# **Upgrading the Firmware**

To upgrade the firmware:

- <u>Setup your PC for Firmware Upgrade</u>, on page <u>28</u>.
- Install the RockChip Driver Assistant, on page <u>29</u>.
- Prepare the KT-107S for Firmware Upgrade, on page <u>30</u>.
- <u>Upgrade the Firmware via PC</u>, on page <u>30</u>.

**(i** 

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

## **Setup your PC for Firmware Upgrade**

To prepare the PC for upgrading the KT-107S:

- 1. Download the firmware and FW-upgrade-tools zip files from the Kramer website at <a href="http://www.kramerav.com/downloads/KT-107S">www.kramerav.com/downloads/KT-107S</a>.
  - Verify that you are using the correct KT-107S firmware file (according to your device type).
  - The FW-upgrade-tools zip file includes both 'Rockchip\_DriverAssitant' and 'KT FW Upgrade Tool'.
- Copy the 'KT-107S Firmware Release xx', 'FW Upgrade Tool' and 'Rockchip\_driverAssistant' files and unzip them to local folders on your PC.
  - Verify that the 'KT-107S Firmware Release xx' folder includes the 'Update.img' file for KT-107S 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 <u>Prepare the KT-107S for Firmware Upgrade</u> on page <u>30</u>.

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.

RK Driver Assitant v4.4	×
Install Driver	Uninstall Driver

Figure 32: Installing the Driver

### 4. Click Install Driver.

The following window appears:

Windows Security	×
Would you like to install this device software?	
Name: Fuzhou Rockchip Publisher: Fuzhou Rockchip Electronics Co., Ltd.	
<u>A</u> lways trust software from "Fuzhou Rockchip Electronics Co., Ltd.".	Install Don't Install
You should only install driver software from publishers you trust. software is safe to install?	How can I decide which device

Figure 33: Driver Installation Security Note

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

DriverInstall
Install driver ok.
ОК

Figure 34: Successful Installation

6. Click OK.

# **Prepare the KT-107S for Firmware Upgrade**

To prepare the KT-107S:

- 1. Verify that the battery is at least 70% charged.
- 2. Disconnect the panel from its mount (see Mounting the KT-107S on page 8).
- 3. Power-off the panel (from the Power button <sup>(8)</sup> or via the Kramer control button <sup>(5)</sup> on the front of the **Touch Panel**).
- 4. Connect the PC USB port directly to the micro-USB port (10) on the rear of the **KT-107S** (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-107S** 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:

莎 Kramer Touch Panel FW Upgrad	de Tool v1.8		
Firmware Information FW Path:			
FW Ver:	FW Time:	Support Chip:	
Connected Devices			
1	2	3	4
5	6	7	8
	_		
Language Upgrade	Restore Switch	Clear	Save Exit

Figure 35: 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.

S Kramer Touc	h Panel FW Upgra	de Tool v1.8				
Firmware Inf FW Path:		soph\Desktop\KT-1	07 new FW\update.img			
FW Ver:	6.0.01	FW Time:	2017-03-01 16:13:44	Support Chip:	RK32	
BOOT Ver:	2.30	BOOT Time:	2016-10-13 16:10:27			
Loading firm	ware ware Finished.					
Connected I	Devices	2		3	4	
	5	6		7	8	
Language	Upgrade	Restore	Switch	Clear	Save	Exit

Figure 36: Update File Loaded

3. On the rear side of the Touch Panel, press the Firmware-upgrade button (9) together with the Power button (8) for a few seconds until the ON (2) front panel LED dimly lights green and the '1' 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  $(\ensuremath{\$})$  until the unit powers down and then restart the FW upgrade process.

莎 Kramer Touch Pa	nel FW Upgrade	e Tool v1.8	ADD OR			_ <b>D</b> X
Firmware Inform FW Path:		oph\Desktop\KT-1	07 new FW\update.img			
FW Ver: 6.0 BOOT Ver: 2.3	0.01	FW Time: BOOT Time:	2017-03-01 16:13:44	Support Chip:	RK32	
Loading firmware		BOOT Time.	J			
Loading firmware						
Connected Devic	ces					
8-5-3		2		3	4	
	5					
5		6		1	8	
Language	Upgrade	Restore	Switch	Clear	Save	Exit

Figure 37: Touch Panel Connected to PC

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

🃁 Kramer Touc	ch Panel FW Upgrad	de Tool v1.8	100.00	and party		- <b>D</b> X
Firmware In FW Path:		soph\Desktop\KT-:	107 new FW\update.img			
FW Ver: BOOT Ver:	6. 0. 01 2. 30	FW Time: BOOT Time:	2017-03-01 16:13:44 2016-10-13 16:10:27	Support Chip:	RK32	
(Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3 (Layer 8-5-3)	<ul> <li>Get FlashInfo S</li> <li>Prepare IDB State</li> <li>Prepare IDB Suctor</li> <li>Download IDB State</li> <li>Download IDB State</li> <li>Reset Device State</li> <li>Wait For Loader</li> <li>Wait For Loader</li> <li>Test Device State</li> <li>Test Device State</li> <li>Dest Device State</li> <li>Dest Device State</li> <li>Download Firmwat</li> </ul>	rt cess art ccess art ccess Start Success rt cess				E
	1	2	1	3	4	
)wnioad F	Firmware(73%) 5	6	1	7	8	
Language	Upgrade	Restore	Switch	Clear	Save	Exit

Figure 38: Firmware Upgrade Progress

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

Kramer Touch Panel FV	V Upgrade Tool v1.8	101.00	a serie for	Same Fight	X	
Firmware Information FW Path: C:\Users\dphilosoph\Desktop\KT-107 new FW\update.img						
FW Ver: 6.0.01	FW Time:	2017-03-01 16:13:44	Support Chip:	RK32		
BOOT Ver.	BOOT Time:	2010-10-13 10.10.21				
(Layer 8-5-3) Reset D	(Layer 8-5-3) Download IDB Success (Layer 8-5-3) Reset Device Start					
	(Layer 8-5-3) Reset Device Success (Layer 8-5-3) Wait For Loader Start					
(Layer 8-5-3) Wait Fo						
(Layer 8-5-3) Test De	CLayer 8-5-3> Test Device Start CLayer 8-5-3> Test Device Success					
· · ·	(Layer 8-5-3) Download Firmware Start (Layer 8-5-3) Download Firmware Success					
	CLayer 8-5-3> Reset Device Start (Layer 8-5-3> Reset Device Start					
	Clayer 0-5-5/ neset Device Success ##########Upgrade Done Success(1) Fail(0) Time(57140)ms####################################					
Connected Devices —						
1	2		3	4		
			_			
5	6		7	8		
Language	Ipgrade Restore	Switch	Clear	Save	Exit	

Figure 39: 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 1000/100/10BaseT 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				
	1 2-pin terminal block for DC power supply				
Speakers	2x1-W, 8 ohm				
CPU Performance	1.6GHz Quad Core, GPU, 2GB RAM, 16GB Flash				
OS Software	Android 6.0.1				
Multi Touch	10 points, 2-finger gesture				
Display	7" IPS, 1280x800 RGB pixels, 16:10 aspect ratio, ±85° horizontal/vertical viewing angles, 400cd/m2 brightness, 800:1 contrast ratio				
Video Decoding Format	HEVC/H.265, H.264, H.263, MPEG–1/2/4, VC–1, VP6/8, RV8/9/10, AVS, MVC, Sorenson Spark, M–JPEG				
Video Encoding Format	H.264/AVC				
Ethernet Port	Auto-sensing 10/100/1000Mbps PoE LAN				
Battery	Rechargeable, supports up to 3 hours of Wi-Fi operation				
Controls	Hidden reset button, power button, firmware-upgrade button				
Touch Panel Status LED	Flashes green during charging, steady green for fully charged				
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. 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, and installation screws				
Specifications are subject	o change without notice at <u>www.kramerav.com</u>				

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 any damage, deterioration 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, adapter-size fiber optic extenders, 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:

- 1. 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.
- 2. 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.
- 3. 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.

#### Limitation of Liability

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.

#### **Exclusive Remedy**

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF KRAMER ELECTRONICS CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN ALL IMPLIED WARRANTIES COVERING THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THIS PRODUCT AS PROVIDED UNDER APPLICABLE LAW. IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

#### **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.













Rev:



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.

www.KramerAV.com info@KramerAV.com