

USER MANUAL

MODEL:

KT-208 / KT-208WM 8" Touch Panel





P/N: 2900-301633 Rev 8 www.kramerav.com

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KT-208 / KT-208WM – Contents

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 www.kramerav.com/downloads/KT-208 to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

Achieving 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-208 / KT-208WM away from moisture, excessive sunlight and dust.

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/quality/environment.

Safety Instructions

This unit is intended to be supplied by:

- UL / IEC 62368-1 certified PoE output power supply suitable for use at an ambient temperature of 40°C and an altitude of 2,000 m whose output meets ES1, and is rated 44-57 V DC, minimum 0.3 A.
- UL / IEC 62368-1 certified Class II power adapter suitable for use at an ambient temperature of 40°C and an altitude of 2,000 m whose output meets ES1, and is rated 12 V DC, minimum 1.0 A.



Caution

- This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.
- For products with relay terminals and GPI\O ports, please refer to the permitted rating for an external connection, located next to the terminal or in the User Manual.
- There are no operator serviceable parts inside the unit.
- Risk of explosion if the battery is replaced by an incorrect type. Wait one-half hour after switching off before handling parts.



Warning:

- If not using PoE, use only the optional power cord that is supplied for the unit.
- Do not open the unit. High voltages can cause electrical shock! Servicing by qualified personnel only.



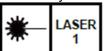
Laser Safety:

- This product complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.
- Date of manufacture: The date code at the bottom of the product label represents the manufacturing date of this laser product.



Caution: Invisible laser radiation when open. Avoid exposure to beam. Class 1 laser product. This system must be opened only by qualified technicians to prevent accidents caused by the laser beam.

Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



The ambient light sensor can automatically adjust panel brightness based on the environment. See Display Settings to enable automatic brightness.

The Laser proximity sensor will detect nearby motion to wake the panel up without requiring a touch.

Overview

Congratulations on purchasing your **Kramer KT-208 / KT-208WM 8" Touch Panel.**

KT-208 / KT-208WM is a new powerful, 8-inch, IPS, multi-touch, touch panel with 1280x800 resolution. Elegantly designed for decorative room integration, this portable touch panel can be deployed either on a tabletop or wall.

KT-208 / KT-208WM, with the latest Android 11, supports wired PoE (Power over Ethernet) and advanced Wi–Fi connectivity options. The touch panel has a built–in speaker and camera and comes either with a tabletop or a wall mount. The touch panel is easy to assemble, using elegant wiring, secured mounting, reliable operation and flexible deployment.

KT-208 / KT-208WM is a 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.

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 hi–resolution screen with ±80° horizontal and vertical wide viewing angles, built–in lighting sensor for auto–adaptable brightness, with advanced 10 multi–touch points and 2–finger gesture capabilities.
- Powerful Processing i.MX8M Plus Quad Core A53, 4GB RAM, 32GB ROM processing performance, smoothly running complicated media and graphics–rich applications, such as H.265 video, audio streams encoding and decoding, and seamless hi–resolution 5Mp FF front camera operation.
- Flexible Services Latest Android 11 operating system.

Advanced and User-friendly Operation

- Easy Installation Powering and connectivity via a single Ethernet cable.
- Flexible Mounting Including table and wall mounts.
- Optional Connectivity Simple wireless Bluetooth 5 as well as connection to USB peripheral devices for either table or wall—mount installations, using the included USB cable.
- Versatile Powering Options PoE and power adapter (sold separately).
- Auto Sensing Optimized performance and operation according to automatically detected LAN speed.
- Firmware Upgrade Define automatic updates on a predefined time of the day or update manually using USB port.

Security

- Secured Operation Highly secured operation of applications using password protection, hidden control buttons and more. Red LED alert when camera is active.
- Secured Deployment Flexible locking options to prevent unwanted panel-mount removal, elegantly designed to remain out of site.

Typical Applications

The KT-208 / KT-208WM is ideal for the following typical applications:

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

Defining KT-208 / KT-208WM 8" Touch Panel

This section defines KT-208 / KT-208WM.

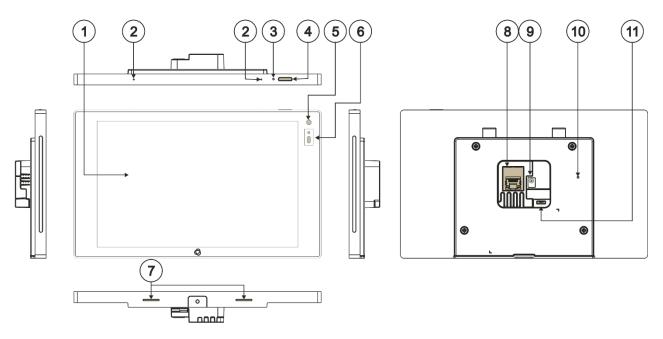


Figure 1: KT-208 / KT-208WM 8" Touch Panel

#	Feature	Function	
1	Display	Touch panel	
2	Microphone	For audio communication, recording or conferencing.	
3	Recessed Restart Button	Located on the top-side. Insert a pin and hold for a few seconds to restart.	
4	Home Button	Press to wake up / darken the screen.	
5	Camera	For remote room viewing or video conferencing.	
6	Light Sensor	Automatically adjusts the screen brightness and camera according to the room lighting conditions.	
7	Speakers	To output the sound.	
8	LAN 1G(PoE) RJ-45 Port	Connect to the LAN for network communication. KT-208 and KT-208WM are powered by PoE (power over ethernet) delivered through the LAN port. Optionally, you can connect the power adapter too (as backup).	
9	12V/1A DC Connector	Connect to the power adapter (optional, purchased separately).	
10	Restore Factory Reset Button	Insert a pin and hold for 22 seconds to reset the device to factory default values.	
11)	Micro USB Port	For connecting to an adjacent on-wall USB device and for firmware upgrade.	

KT-208 Tabletop Mount

This section defines the KT-208 / KT-208WM tabletop mount.

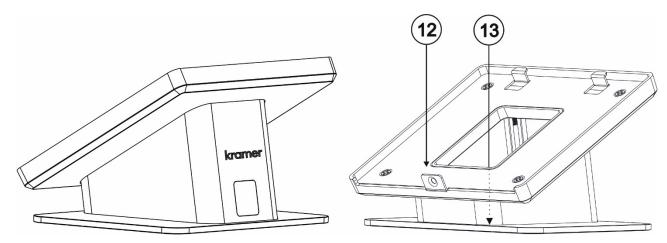


Figure 2: Tabletop Mount Front View

#	Feature	Function	
12	Screw Opening	For securing the 8" Touch Panel to the tabletop mount using the supplied M2.5 screw.	
13	2 x 5/32" Screw Opening	5/32" Screw Opening Optional: For safely securing the tabletop mount to the table from underneath.	

KT-208WM On-Wall Mount

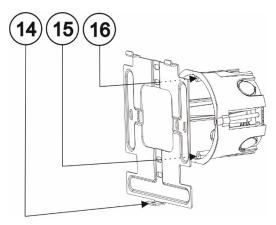


Figure 3: On Wall Mount

#	Feature	Function
14)	Screw Opening	For securing the 8" Touch Panel to the wall mount bracket using the supplied M2.5 screw.
15)	M3.2 Screw Opening	For securing the wall mount bracket to the gang box.
16)	M3.2 Screw Opening	For securing the wall mount bracket to the gang box.

Mounting the KT-208 / KT-208WM

The **KT-208** package is for mounting the touch panel on a table and the **KT-208WM** package is for mounting the touch panel on a wall.



Always be careful when attaching or removing the 8" Touch Panel from a mount.

Mounting KT-208 on a Table

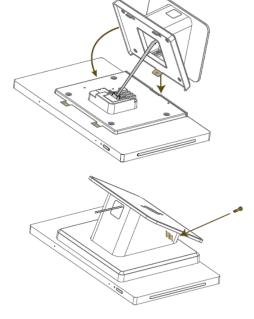
Mount KT-208 on a table using one of the following options:

- Moveable 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.

Moveable Mount

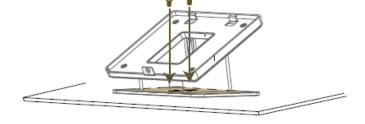
- 1. Run any cables that connect to the **KT-208** through the center of the table stand (for example the Ethernet cable).
- 2. Connect the cables to the KT-208.
- 3. Lay the KT-208 face-down and mount the table stand on it.
- 4. Insert and fasten the provided M2.5 screw that secures the bottom of the **KT-208** to the table stand.

The table stand and touch panel are now ready for use.

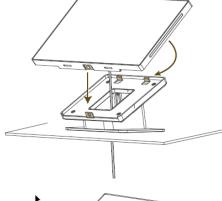


Secure Mount

- You may need to cut an opening in the table, if you need to pass cables from underneath.
- 1. Secure the stand to the table using the two 5/32" screws provided.



- 2. Connect any necessary cables to the **KT-208**.
- 3. Mount the KT-208 on the stand.



4. Secure the **KT-208** to the stand using the provided M2.5 screw.

The table stand and touch panel are now ready for use.





For optimum range and performance use the recommended Kramer cables available at www.kramerav.com/product/KT-208WM. Using third-party cables may cause damage!

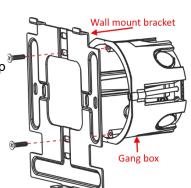
Mounting KT-208WM on a Wall

KT-208WM can be safely installed on a wall using a standard 1-Gang in-wall junction box. The cables are passed inside the wall and then connected to the rear side of the on-wall mount unit.

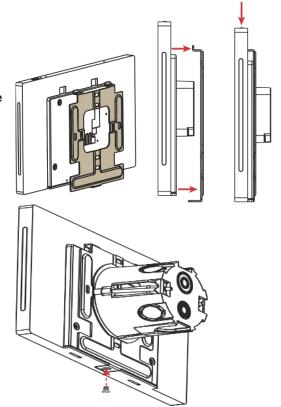
Inserting the On-Wall Mount Unit

To mount the on-wall mount unit

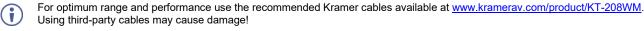
- 1. Install an in-wall one gang electrical box.
- 2. Attach the wall mount bracket to the installed gang box (top side up: see the indication arrows on the bracket), using the two M3.2 screws provided.
 - The wall mount bracket works with UK, EU and US single gang boxes. Screws are provided for all configurations.
- Connect Ethernet and/or power cables and optionally, insert the micro-USB cable (supplied) for connecting to an adjacent external USB device.



 Rest KT-208WM on the wall mount bracket, snapping the top holders into place and lining up the mounting screw hole at the bottom.



5. Insert the M2.5 screw below the touch panel and secure the touch panel to the wall mount bracket.



Connecting Options

You can power the KT-208 or KT-208WM 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 12V DC connector on the rear side. The power adapter is optional: It can be purchased separately.
- When both PoE and the power supply are connected to the Touch Panel, the unit is powered by the power supply.

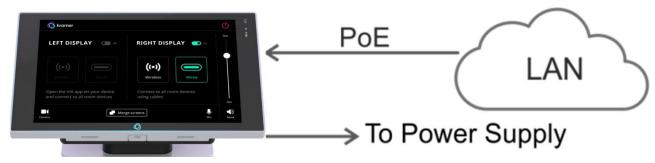


Figure 4: Powering the Touch Panel

Controlling KT-208 / KT-208WM

Using Navigation Buttons or Gestures

By default, **KT-208 / KT-208WM** run the Kramer Control agent and display its login screen at startup. If available, you can also use the navigation buttons displayed at the bottom of the screen or set up your device to use gesture-based navigation.

Using navigation buttons

Swipe a finger upwards from the line at the bottom of the screen and release to see the navigation buttons:

- Back Returns to the previous screen (or opens the home page if there is none).
- Home Opens the home page, see <u>Using the Home Page</u> on page <u>14</u>.
- Recent apps Scroll between the active apps.

Changing the navigation system

By default, navigation buttons are used, however the touch panel can be set to use gesture navigation instead. To change the navigation method:

- 1. The touch panel may be set up to run the Kramer Control agent automatically. To exit the Kramer Control agent, enter the PIN (default 9428). If the PIN button is not displayed, swipe up from the Kramer icon at the bottom of the screen to bring up the PIN entry pop-up.
- 2. On the Home page, press **Settings** The device's **Settings** menu opens.
- Select Advanced settings > System.
- 4. In the System menu, press **Gestures** and then **System navigation**.
- 5. Select **Gesture navigation** or **3-button navigation**. If you are using Gesture navigation, the sensitivity is adjustable.

Using Gesture navigation

- Back Drag a finger inwards from the left or right edge of the screen.
- Home Swipe a finger upwards from the line at the bottom of the screen and release.
- Recent apps Swipe a finger upwards from the line at the bottom of the screen and hold.

Hiding the Navigation Bar

To hide/unhide the navigation bar:

- 1. On the Home page, press the **Settings** button . The device's **Settings** menu opens.
- 2. In the Settings menu, open Player settings and enable Fullscreen mode.

Using the Home Page

Swipe a finger upwards from the line at the bottom of the screen and release to see the navigation buttons:

- Home – Opens the home page.

The Home page contains the following icons:



Chromium browser



- Touch panel settings



Kramer Control agent

Exiting or Starting the Kramer Control agent

KT-208 / KT-208WM come with a Kramer Control agent (icon) pre-installed app. The role of this app is to display an interface that you defined in Kramer Control.

When the touch panel starts, the Kramer Control agent runs automatically. To exit the Kramer Control agent, enter the PIN (default 9428). If the PIN button is not displayed, swipe up from the Kramer icon at the bottom of the screen to bring up the PIN entry pop-up.

To re-open the Control Agent click the icon on the Home page.

During initial installation the k-agent app may need to be started manually the first time.

Basic Settings of KT-208 / KT-208WM

Essential First Steps

To exit the Kramer Control agent, enter the PIN (default 9428). If the PIN button is not displayed, swipe up from the bottom of the screen to bring up the PIN entry pop-up.

To re-open the Control Agent click the oicon on the Home page.

The following are essential first steps in using the touch panel:

- 1. Set the device date and time; Setting the Date and Time on page 15.
- 2. Setup the Ethernet and/or Wi-Fi connections; Connecting to Wi-Fi or Ethernet on page 16.
- 3. Consider changing the time that the system checks for firmware (OS) updates; Changing the Automated Firmware Update on page 18. By default, this is set to midnight, change it if you have no internet access at midnight or prefer another time.
- 4. Consider changing the time that the system checks for Kramer Control (APK) updates; Changing the Automated Kramer Control update on page 20. By default, this is set to midnight, change it if you have no internet access at midnight or prefer another time.
- 5. **Setup the Kramer Control agent's Launch URL;** See <u>Using the Kramer Control agent</u> (connecting to Brain) on page 22.
- 6. Change the display language (if necessary); Setting the Display and Keyboard Language on page 21.

Setting the Date and Time

The device arrives preset to New York time and you will need to set the correct time region.

To adjust the date and time settings:

- 1. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. On the Home page, press the **Settings** button . The device's **Settings** menu opens.
- 3. Select Date & Time > Time zone.
- 4. Set the correct **Region**. The time will display correctly.

Connecting to Wi-Fi or Ethernet

Connect an Ethernet cable to the device or activate Wi-Fi and setup a connection to your Wi-Fi. If multiple network connections are used, Ethernet will be prioritized over any others.

If you are using 802.1X authentication, do <u>Installing an 802.1X Certificate</u> on page <u>17</u>, before you connect to the internet.

Connecting Ethernet

Ethernet connections must be plugged into the back of the device, see (§) in <u>Defining KT-208 / KT-208WM 8" Touch Panel</u> on page <u>7</u>. By default, the IP address of the device is set automatically by a DHCP server.

Enabling 802.1X authentication

- 1. Do Installing an 802.1X Certificate on page 17.
- 2. In the Settings screen , select **Network & Internet > Ethernet**.
- 3. Make sure the Ethernet is disabled and then enable Security.
 - 802.1X authentication cannot be applied to active Ethernet connections
- 4. Select 802.1X settings and input the EAP (Extensible Authentication Protocol) information.

Using a static IP address

- 1. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen 🔯
- 3. In the Settings screen, select **Network & Internet > Ethernet**.
- 4. Press **Ethernet IP mode** and select **Static**.
- 5. Enter the IP information and press Connect.

The static IP address is setup.

Connecting Wi-Fi

Enabling 802.1X authentication

- 1. Do Installing an 802.1X Certificate on page 17.
- 2. From the Home page, open the **Settings** screen ...
- 3. In the Settings screen, select **Network & Internet > Wi-Fi**.
- 4. Make sure **Use Wi-Fi** is enabled. The device will scan and list the Wi-Fi networks.
- 5. Select a Wi-Fi SSID, check **Advanced options** and enter the Wi-Fi information in the fields that appear, then press **Connect**.
- 6. If you are using 802.1X authentication, then add the certificate information.

802.1X is enabled.

Installing an 802.1X Certificate

802.1X certificates enhance the security of network authentication. **KT-208 / KT-208WM** support .pem, .pfx and .p12 certificate formats.

Installing a certificate is a two-stage process: First import the certificate and then set it up.

Importing an 802.1X certificate

- 1. Copy the certificate file to an empty USB flash drive.
- 2. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 3. From the Home page, open the **Settings** screen ...
- 4. Select Advanced settings > Security > Encryption & credentials.



Figure 5: The path to Install from storage

- 5. In the Encryption & credentials screen, select **Install from storage**: The **Install a certificate** screen opens.
- 6. Select the **Wi-Fi certificate**: The **Recent** files screen opens.

 To browse to the file location, press the 3 lines ≡ at the top left of the screen.
- 7. Select the credentials file and install it, some certificates require you to know a password.

Setting up an 802.1X certificate

- 8. In the Settings screen, select **Network & Internet > Wi-Fi**.
- 9. Select **Install from storage**: The **Install a certificate** screen opens.
- 10. Select **Wi-Fi certificate** (also for Ethernet connections): The **Recent** files screen opens. To browse to the file location, press the 3 lines ≡ at the top left of the screen.

After installing the certificates, see <u>Connecting to Wi-Fi or Ethernet</u> on page <u>16</u> for instructions on using the certificates. Ethernet must be disabled before setting-up Ethernet certificates.

Changing the Automated Firmware Update

KT-208 / KT-208WM arrive preset to check for firmware (touch panel OS) updates at midnight every day. If an update is found, the device will download the update file and install it. If you prefer to run manual updates, you must manually download the update file and then install it in the touch panel.

Changing the time of the automated firmware check

- 1. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen
- 3. Select Firmware update and then select Remote firmware upgrade URL.

Remote firmware upgrade URL is the site from which the firmware is downloaded.

The upgrade URL (case sensitive):

https://cdn.kramerav.com/web/apk/transformer-Kramer-AndroidR.xml



Figure 6: The Firmware update page

4. A pop-up opens, inviting you to set the check time:

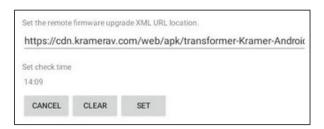


Figure 7: The Remote firmware upgrade URL page

- 5. To change the time that the system checks for updates, press **Set check time** and select a new time.
- 6. Press **OK** to close the window and then press **SET**.



Changing (or clearing) the URL will disable the updates.

Manually updating the firmware

Manual firmware updates require a downloaded firmware file from Kramer.

The firmware upgrade process requires:

- An empty USB flash drive to store the firmware file.
- A micro-USB OTG (on the go) cable to connect the USB flash drive to the touch panel.
- Access to the back of the touch panel.
 You may need to remove the touch panel from its mount for this purpose. The touch panel should remain connected to a power source such as PoE or the optional power adapter (see 8) in Defining KT-208 / KT-208WM 8" Touch Panel on page 7).

To upgrade the firmware

- 1. Download the firmware update file from the Kramer website at https://www.kramerav.com/product/KT-208#Tab Resources.
 - Verify that you are using the correct KT-208 / KT-208WM firmware file as there maybe more than one firmware file available.
 - Do not unzip the firmware update file.
- 2. Copy the firmware file to an empty USB flash drive.
- 3. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 4. On the touch panel, open the **Settings** screen
- 5. Select Firmware update and then select Firmware update (again).
- 6. Plug the USB flash drive into a micro-USB OTG cable and connect the cable to the back of the touch panel.
- 7. Click START FIRMWARE UPDATE.

The firmware update will then begin.

Changing the Automated Kramer Control update

KT-208 / KT-208WM arrive preset to check for Kramer APK (Android Application Package) updates at midnight every day. If an update is found, the device will download the update file and install it.

Changing the time of the automated APK update check

- 1. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen ...
- 3. Select Remote APP upgrade URL.

Remote APP upgrade URL is the site from which the APK is downloaded.

The upgrade URL (case sensitive) is: https://cdn.kramerav.com/web/apk/remote_app_update.xml

4. A pop-up opens, inviting you to set the check time:



Figure 8: The Remote APP upgrade URL page

- 5. Press **Set check time** to select a new time.
- 6. Press **OK** to close the window and then press **SET**.



Changing (or clearing) the URL will disable the updates.

Setting the Display and Keyboard Language

To set your preferred interface language:

- 1. If necessary, swipe up from the bottom of the screen to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen .
- 3. Select Language & input.
- 4. Press Add a language to select a language.
- 5. If you are using multiple languages, the order in which they are listed represents the priority assigned to them, change the order by dragging languages.
- 6. Press **On-screen keyboard** to select keyboard languages.

The keyboard language has been set.

Using the Kramer Control agent (connecting to Brain)

K-Agent, Kramer's next-generation touch panel management software for Kramer Control & Session Manger providing enhanced remote administration capabilities for KT-20x Series Touch Panels.

For the full UM, click here.

Advanced Settings

Scheduling a Daily Reboot

A daily reboot is recommended to improve product performance and stability. The daily reboot option causes the device to reset itself every day at the set time (or within 30 minutes of the set time if it is in use).

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen
- 3. Select Schedule Reboot and set the reboot time.
- 4. Enable **Optimize Server Performance** to have the device reboot at a random time within 30 minutes of the scheduled time. If you are using multiple devices, then this prevents them from all rebooting at the same time.

The daily reboot is complete.

Password Protecting Device Settings

Device settings can be protected with a password to prevent users from making any changes.

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen ...
- 3. Select **Security Password** to enable and enter the password.

Factory Reset & Reboot

The **Settings > Reset** options menu enables you to perform a factory reset or to reboot the device, reset Wi-Fi or Bluetooth or reset app preferences.

To reset to factory settings

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen ...
- 3. Select Erase all data (factory reset).

Other options available: Reboot device, Reset Wi-Fi, mobile & Bluetooth and Reset app preferences.

Resetting with the external reset button

Insert a pin into the pinhole on the back 10 (see <u>Defining KT-208 / KT-208WM 8" Touch Panel</u> on page 7) and hold for 22 seconds to reset the device to factory default values.

A second pinhole on the top, ③ can be used to restart the device by inserting a pin for a few seconds.

Logging Activity

By default, the device does not log activity. Logging can be useful for debugging or monitoring use.

Activating logging

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen ...
- 3. Select Log and set the Log Location.

Logging is activated.

Accessing an internally stored log file

A USB flash drive and OTG cable are required to copy an internally stored log file:

- 1. In the root directory of the flash drive, create a folder called "_dump_debug_log".
- 2. Connect the OTG cable to the micro-USB connection on the back of the device.
- 3. Connect the flash drive to the OTG cable.
- 4. The device will automatically download the log file to the USB device and issue a confirmation message "Saved log file to USB storage".

The log is accessed.

Modifying Display Settings

The screen orientation can be customized, and the navigation bar can be hidden.

Changing the screen orientation

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen
- 3. Select Display and then press Screen Orientation.

Choose between 0 degrees (default), 90 degrees, 180 degrees and 270 degrees.

Hiding the navigation bar

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen
- 3. In the Settings menu, open **Player settings** and enable **Fullscreen mode**.

The Navigation bar is no longer accessible.

Defining an auto-start playlist

The device can be set to automatically play the contents of a predefined folder. The folder can be internally defined or read from a flash device connected to the micro USB port or a Micro SD card inserted into the card reader (see <u>Defining KT-208 / KT-208WM 8" Touch Panel</u> on page <u>7</u>).

To setup a playlist:

- 1. Load the media you want to play onto an SD card or USB flash drive. Play order is set by the alphabetic order of the item's names.
- 2. Connect the drive or card (for a flash drive connect an OTG cable to the micro-USB drive).
- 3. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 4. On the touch panel, open the **Settings** screen
- 5. Select Player Settings and then select Instant Play.
- 6. Enable **Instant play**. If you check **Copy and play as internal storage**, the device will load the (external) folder contents into internal storage.
- 7. Press SELECT FOLDER.
- 8. If you copied external content to internal storage, then you can remove the external device.

The Content field in the Home page will be changed to the storage location of your content.



The home page's Content field defines the auto-start link to Kramer Control.

Changing the value in this field is not recommended as it will disable Kramer Control.

Defining auto-start HTML or SMIL content

The device home page can be set to automatically run an HTML page or SMIL content.

- Place your HTML content in a folder called HTML in the root of an SD card or flash drive and attach them to the device (for a flash drive use an OTG cable connected to the micro USB drive).
- 2. When the USB drive is connected to the device, an automatic pop-up message will notify you that the copy is about to start.

The Content field in the Home page will be changed to the storage location of your content.



The home page's Content field defines the auto-start link to Kramer Control.

Changing the value in this field is not recommended as it will disable Kramer Control.

Switching to Native Android Mode

Switching to native Android mode turns the device into a regular android device, allowing you full control of its content.



Changing to native Android will disable Kramer Control.

To make the switch:

- 1. If the screen is locked, swipe up from the bottom to bring up the PIN entry pop-up and enter the PIN (default 9428).
- 2. From the Home page, open the **Settings** screen ...
- 3. Select Player Settings and then press Native Android Mode.



Figure 9: The Player settings page

Native Android mode is restored.

Technical Specifications

1 Ethernet	Ports	1 Micro USB	On a female USB type C (ADB) connector
Platform		1 Ethernet	
CPU	Platform	Operating System	
Internal 32GB eMMC (flash)			ARM Quad Core Cortex-A53 up to 1.8Ghz (64 bit)
Internal 32GB eMMC (flash)	Memory	RAM	LPDDR4 4GB
Size	•	Internal	32GB eMMC (flash)
Size	Display	Touch Panel Type	10.1 point capacitive multi-touch
Wireless Connectivity Wi-Fi Wi-Fi 6, 802.11 a/b/g/n/ax/ax Connectivity Buteooth BT 5.0 Video Camera 5MP FF Video Formats H.264, H.265, VC-1, MPEG-4, VP8, VP9 Image Codecs JPEG, BMP, GIF, PNG Audio Speakers 2x 1W Codecs MPEG, OGG, AAC Microphone 2 built-in. Power PoE 44 to 57V DC 0.3A Complies with IEEE802.3af and IEEE802.3at PoE standards 20 complies with IEEE802.3af and IEEE802.3at PoE standards Controls Function Button On top Reset Button On top, recessed Factory Reset Button On back, recessed LED Side-light Can indicate room status (requires 3rd party integration). Environmental conditions Operating Temperature 0~40°C (32~104°F) Storage Temperature 0~40°C (32~104°F) Storage Humidity 5% to 85% Storage Humidity 5% to 85% Storage Humidity 5% to 90% Regulatory Environmental Environmental RoHs, WEEE Dimensions			8"
Connectivity Bluetooth BT 5.0 Video Camera 5MP FF Video Formats H.264, H.265, VC-1, MPEG-4, VP8, VP9 Image Codecs JPEG, BMP, GIF, PNG Audio Speakers 2x 1W Codecs MPEG, OGG, AAC Microphone 2 built-in. Power PoE 44 to 57V DC 0.3A Complies with IEEE802.3af and IEEE802.3at PoE standards Complies with IEEE802.3af and IEEE802.3at PoE standards Controls Function Button On top Reset Button On top, recessed Factory Reset Button On back, recessed LED Side-light Can indicate room status (requires 3rd party integration). Conditions Side-light Can indicate room status (requires 3rd party integration). Storage Temperature 0-0+0°C (32~104°F) Storage Temperature 2-0+0°C Operating Temperature 2-0+0°C Operating Humidity 5% to 85% Storage Humidity 5% to 90% Regulatory Environmental Compliance Environmental RoHs, WEEE<		Resolution	
Video Camera Video Formats SMP FF Video Formats H.264, H.265, VC-1, MPEG-4, VP8, VP9 Audio Speakers 2x 1W Codecs MPEG, OGG, AAC Microphone 2 built-in. Power PoE 44 to 57V DC 0.3A Complies with IEEE802.3af and IEEE802.3at PoE standards Controls Function Button On top Reset Button On top, recessed Factory Reset Button On back, recessed Environmental conditions Side-light Can indicate room status (requires 3rd party integration). Environmental conditions Operating Temperature 0~40°C (32~104°F) Storage Temperature -20~60°C Operating Humidity 5% to 85% Storage Humidity 5% to 90% Storage Humidity 5% to 90% Regulatory CE, FCC, UL, UKCA Dimensions Touch Panel 212 x 25 x 127mm (W,D,H) Touch Panel 212 x 25 x 127mm (W,D,H) Touch Panel 131 x 120 x 98mm (max height) KT-208 only (W,D,H). Weight KT-208WM in the control of	Wireless	Wi-Fi	Wi-Fi 6, 802.11 a/b/g/n/ax/ax
Video Formats	Connectivity	Bluetooth	BT 5.0
Image Codecs	Video	Camera	5MP FF
Audio Speakers 2x 1W Codecs MPEG, OGG, AAC Microphone 2 built-in. Power PoE 44 to 57V DC 0.3A Complies with IEEE802.3af and IEEE802.3at PoE standards Optional Power Adapter 12V 2.0 A Note: Operating temperature: 0~40°C Controls Function Button On top. Reset Button On top. recessed Factory Reset Button On back, recessed LED Side-light Can indicate room status (requires 3rd party integration). Environmental conditions Storage Temperature -20~60°C Operating Humidity 5% to 85% Storage Humidity 5% to 85% Storage Humidity 5% to 90% Regulatory Compliance Safety CE, FCC, UL, UKCA Environmental Environmental ROHs, WEEE Dimensions Touch Panel 212 x 25 x 127mm (W,D,H) Touch Panel Stand 131 x 120 x 98mm (max height) KT-208 only (W,D,H). Weight Touch Panel 482g Tabletop Stand 300g Shipping carton (4 pcs) Minumental Stand Minumental Stand		Video Formats	H.264, H.265, VC-1, MPEG-4, VP8, VP9
Codecs MPEG, OGG, AAC		Image Codecs	JPEG, BMP, GIF, PNG
Microphone 2 built-in.	Audio	Speakers	2x 1W
Power PoE 44 to 57V DC 0.3A Complies with IEEE802.3af and IEEE802.3at PoE standards Optional Power Adapter 12V 2.0 A Note: Operating temperature: 0~40°C Controls Function Button On top Reset Button On top, recessed Factory Reset Button On back, recessed LED Side-light Can indicate room status (requires 3rd party integration). Environmental conditions Operating Temperature 0~40°C (32~104°F) Storage Temperature -20~60°C Operating Humidity 5% to 85% Storage Humidity 5% to 90% Regulatory Safety CE, FCC, UL, UKCA Compliance Environmental RoHs, WEEE Dimensions Touch Panel 212 x 25 x 127mm (W,D,H) Touch Panel 131 x 120 x 98mm (max height) KT-208 only (W,D,H). Weight Touch Panel 482g Tabletop Stand 300g Shipping carton (4 pcs) Dimensions (W,D,H) 290 x 206 x 164mm KT-208 Will it KT-208 Will it kg Accessories Optional Power adapter. KT-208WM <td></td> <td>Codecs</td> <td>MPEG, OGG, AAC</td>		Codecs	MPEG, OGG, AAC
Complies with IEEE802.3af and IEEE802.3at PoE standards Optional Power Adapter 12V 2.0 A Note: Operating temperature: 0~40°C Controls Function Button On top. Reset Button On top, recessed Factory Reset Button On back, recessed LED Side-light Can indicate room status (requires 3rd party integration). Environmental conditions Operating Temperature 0~40°C (32~104°F) Storage Temperature -20~60°C Operating Humidity 5% to 85% Storage Humidity 5% to 90% Regulatory Compliance Safety CE, FCC, UL, UKCA Environmental RoHs, WEEE Dimensions Touch Panel 212 x 25 x 127mm (W,D,H) Touch Panel 131 x 120 x 98mm (max height) KT-208 only (W,D,H). Weight Tabletop Stand 300g Shipping cartor (4 pcs) Dimensions (W,D,H) 290 x 206 x 164mm KT-208WM: 1kg KT-208WM: 1kg Accessories Optional Power adapter. KT-208WM: 1kg Tabletop mount unit. KT-208WM: 1kg On-wall mount unit and panel mount plate		Microphone	2 built-in.
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KT-208 Tabletop mount unit. KT-208WM On-wall mount unit and panel mount plate	Accessories	Optional	
KT-208WM On-wall mount unit and panel mount plate		<u> </u>	·
	Specifications are		·









P/N:



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 website where updates to this user manual may be found.

We welcome your questions, comments, and feedback.

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