Release Notes

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	Kramer Control Brain Version 2.10.10	20 March 2024
Web	–	–
Hardware	–	–

RN Date: 20 March 2024,
Reference: 019620

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
SL-240	Any	Yes	No
SL-240C	Any	Yes	No
SL-280	Any	Yes	No
Virtual Brains	Any	Yes	No

Summary:

- A bug was fixed causing Initialization macros to not run when the brain state is changed
- Kramer Control Brain updated to 2.10.10

Codependency with Other Products and Software:

Product Name	Comments
Kramer Control	

Release Notes

	Type	Number	Date
Product Name: **Kramer Control Brain**			
Current Version:	Firmware	–	–
	Software	Kramer Control Brain Version 2.10.10	20 March 2024
	Web	–	–
	Hardware	–	–

RN Date: 20 March 2024,
Reference: 019620

Bugs Fixed:

QC ID	Deferred Bug Description
NEB-8413	Devices like Biamp and other DSP drivers use Initialization macros to subscribe to get feedback on state changes. If the brain state changes from online to offline or vice versa, the subscriptions are lost and initialization macros are not resent resulting in a new publish being required to fix it.

Preceding Version: 2.10.9

Release Notes

Product Name:	**Kramer Control Brain**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	Kramer Control Brain Version 2.10.9	November 2023
	Web	–	–
	Hardware	–	–

RN Date: November 23, 2023
Reference: 019347

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
SL-240	Any	Yes	No
SL-240C	Any	Yes	No
SL-280	Any	Yes	No
Virtual Brains	Any	Yes	No

Summary:

- Various Bugs were fixed.
- Kramer Control Brain updated to 2.10.9

Codependency with Other Products and Software:

Product Name	Comments
Kramer Control	

Product Name:	**Kramer Control Brain**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	Kramer Control Brain Version 2.10.10	20 March 2024
	Web	–	–
	Hardware	–	–

RN Date: 20 March 2024,
Reference: TBC

Release Notes

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
SL-240	Any	Yes	No
SL-240C	Any	Yes	No
SL-280	Any	Yes	No
Virtual Brains	Any	Yes	No

Summary:

- A bug was fixed causing Initialization macros to not run when the brain state is changed
- Kramer Control Brain updated to 2.10.10

Codependency with Other Products and Software:

Product Name	Comments
Kramer Control	

Release Notes

	Product Name:	**Kramer Control Brain**		

Current Version:

Type	Number	Date
Firmware	–	–
Software	Kramer Control Brain Version 2.10.10	20 March 2024
Web	–	–
Hardware	–	–

RN Date: 20 March 2024,
Reference: TBC

Bugs Fixed:

QC ID	Deferred Bug Description
NEB-8413	Devices like Biamp and other DSP drivers use Initialization macros to subscribe to get feedback on state changes. If the brain state changes from online to offline or vice versa, the subscriptions are lost and initialization macros are not resent resulting in a new publish being required to fix it.

Preceding Version: 2.10.9

Release Notes

Product Name:	**Kramer Control Brain**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	Kramer Control Brain Version 2.10.9	November 2023
	Web	–	–
	Hardware	–	–

RN Date: November 23, 2023
Reference: 019347

Bugs Fixed:

QC ID	Deferred Bug Description
NEB-8399	Tapping or clicking on a slider that is set to "drag" does not send any command, it is expected to send a single command relative to the tapped/clicked location
NEB-8337	Tapping or clicking on a slider that is set to "release" would result in the command relative to the tapped/clicked position to be sent twice Brain
NEB-8326	Tapping of clicking on a button will result in the command to be sent twice.
NEB-8308	In certain scenarios the brain process would reach 100% CPU resulting in the brain process being restarted by the watchdog.
NEB-8300	K-Agent & IOS app would display a white screen when syncing with the brain after reboot or when there is no connection to the brain
NEB-8293	The kramer logo did not correctly display footer of the Brain UI page.
NEB-8367	Slow feedback response from TCP devices compared to previous versions

Preceding Version: 2.10.5

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Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	2.10.5	May 2023
Software	–	–
Web	–	–
Hardware	–	–

RN Date: May 28, 2023
Reference: 18965

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Summary:

- Hot Fix.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
KT-107	
KT-1010	Kramer Control Brain
KT-107RB	Kramer Control Brain
KT-1010RB	Kramer Control Brain
KC-BRAINWARE-5	Kramer Control Brain
KC-BRAINWARE-25	Kramer Control Brain
KC-BRAINWARE-50	Kramer Control Brain

Release Notes History

Product Name:	**kramer Control**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	2.10.5	May 2023
	Software	–	–
	Web	–	–
	Hardware	–	–

RN Date: May 28, 2023
Reference: 18965

Hot Fix:

	New Feature Description
	This is a hotfix for Kramer Control. In this version we have corrected an issue where the Brain will not reconnect to our AMQP servers if there is a loss of connection by any means

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
NEB-2761	Brain; Telnet Device (ClearOne) does not communicate correctly with Brain (sending a large number of \x00 chars).
NEB-5669	Builder: Macros are not executed for copied interface widgets.
NEB-5813	Brain: Timed daily events do not execute when Brain is in active-offline state.
NEB-5970	Builder: Duplicating a Project or Space with Navigation Elements in User Events or Global Macros does not function properly.
NEB-6142	Brain becomes un-provisioned after power outage.
NEB-6186	Manager, Remote Access: URL is not updated with the associated `PAGE_ID`.
NEB-4301	Device Status – Model name of BrainWare type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	We found a delay in HTTP responses with this version. This affects commands, feedbacks, and Brain communication with our servers.

Preceding Version: 2.10.2

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	2.10.2	February 2023
Software	–	–
Web	–	–
Hardware	–	–

RN Date: February 28, 2023
Reference: 018781

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Summary:

In Kramer Control version 2.10.2 we focused on improvements. See below.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
KT-107	Kramer Control Brain
KT-1010	Kramer Control Brain
Kramer BrainWare	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (Android)

Release Notes History

Product Name:	**Kramer Control**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	2.10.2	February 2023
	Software	–	–
	Web	–	–
	Hardware	–	–

RN Date: February 28, 2023
Reference: 018781

Improvements:

- Improved Brain logging by adding more detailed information within the logs and removed unnecessary lines that were of no use previously.

- Updated security patch of an internal library used by the Brain.

- Improved handling of corrupted or invalid device drivers.

- Improved resource clean-up within the Brain during restarts or sync.

- Improved error handling by the Brain to prevent Brain crashes.

- Improved CPU usage by Brain for better performance.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	We found a delay in HTTP responses with this version. This affects commands, feedbacks, and Brain communication with our servers.

Preceding Version: – 18313

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.9	June 2022
Web	–	–
Hardware	–	–

RN Date: June 22, 2022
Reference: 18313

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

In Kramer Control version 2.9 of we are releasing a new feature called PWA. PWA stands for Progressive Web Application and this will be a wrapper of our <BrainIP>:8000 webpage where we show the interface for local control of the space.

Technical Notes:

- New version release

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
KT-107	Kramer Control Brain
KT-1010	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Improvements:

- Corrected an issue where Brain logs were not immediately available if logs were cleared from Brain UI or after a clear cache command is sent.

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Release Notes History

- Corrected an issue where Zoom Rooms would not connect over Remote Access.

- Updated internal code library that was out of date. This library affects multiple areas of the code including memory, device driver communication, and client interface interaction between the Brain and clients.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: 18077

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.8	January 2022
Web	–	–
Hardware	–	–

RN Date: January 20, 2022
Reference: 18077

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Kramer Control version 2.8 improves Brain stability on SL hardware and issues with the Kramer Control client applications on iOS and Android.

Technical Notes:

- New version release
- Fixed bugs - - Fix stability issues on Brain and devices

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
KT-107	Kramer Control Brain
KT-1010	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.9	June 2022
Web	–	–
Hardware	–	–

RN Date: June 22, 2022
Reference: 18313

Bugs Fixed:

QC ID	Fixed Bug Description
NEB-6280	2.6.3 - Brains stuck in Orange status (Space issue on the brain).
NEB-6860	iOS and Android Memory leak using Kramer Control.
NEB-5791	Builder-Changing alias name changes State Name portion of event field inside user interface.
NEB-6654	Manager-Image libraries are out of order.
NEB-6985	Brains while syncing try to pull the publishing file although publishing succeeded and there is no need to download it again.
NEB-5378	Builder-Re-ordering events jumps event tree to bottom of list.
NEB-7168	Colors.js "hack" fix.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: 17938

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware		
Software	2.7.0	November 2021
Web	–	–
Hardware	–	–

RN Date: November 2, 2021
Reference: 17938

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Version 2.7 of Kramer Control improves overall stability with Brains, Device Drivers, and Zoom Rooms. In addition, this release includes a new feature called *Deep Linking*. Deep Linking allows you to use a URL to open a specific interface and page inside any browser on the same network as the Brain.

Technical Notes:

- New Feature: [Deep Linking](#)
- Fixed bugs

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name:	**Kramer Control Software**		

Current Version:

Type	Number	Date
Firmware		
Software	2.7.0	November 2021
Web	–	–
Hardware	–	–

RN Date: November 2, 2021
Reference: 17938

The following changes were made in this version:

Bugs Fixed:

QC ID	Fixed Bug Description
Brain	Corrected issue where SL Brains would get stuck in a red activating state whenever the hardware or the Brain service is restarted.
	Corrected issue with Daily Events not running reliably. If the Brain ever changed state from online to offline, the Daily Events would not run, unless a new publish was made.
	Corrected issue where an AMQP outage can cause Brains to unprovisioned. This is not an unprovision on the server, but locally on the hardware.
	Corrected issue with TELNET connections not communicating with the Brain properly and sending extra \x00 characters.
Builder	Corrected issue where copying and pasting gateways would not remove the existing gateway information and stop responding when published or provisioned.
	Corrected issue where duplicating a Project or Space breaks navigation actions inside Macros and/or Events.
	Corrected issue where macros are not executed on copied interface widgets.
Client Applications	Corrected issue where the iOS and Android applications were not getting navigation actions scheduled within events if the application was put in the background.
	Corrected issue where the last page was not saved when iOS or Android applications were moved to background.
	Corrected issue where the Express Mode login screen looked cut off when using Android device.
Device Driver Editor	Added the function to use keyboard-interactive SSH communication.
	Added more information to save failed message if unnamed state references exist within a device driver.
Manager	Corrected an issue where programmers in China could create a new project due to a Google Map API that was being used.

Release Notes History

QC ID	Fixed Bug Description
Zoom Rooms	Corrected an issue where the end user could not join a calendar scheduled meeting.
	Corrected an issue where the end user could not start a calendar scheduled meeting.
	Corrected an issue where customers with a large contact list would cause a long wait time for the widget to be usable on page or overlay open.
	Corrected an issue where using Meet Now or Leave Meeting caused the widget to get stuck in a loading screen.
	Corrected an issue where the gateway would not reconnect to the Zoom Rooms controller if that controller is restarted.

Know Issues and Changes in this Version:

QC ID	Modification Description
iOS	Updating to iOS 15 will require that Kramer Control is updated to minimum 2.6.1 version.
Android	Using the Query Contact List as a User Input value while using an Android device causes the Android widget to reconnect and show blank values.
Zoom	Zoom Rooms no longer queries the phone book automatically. We have added the Query Contact List command as a command within the driver, which can be added to a macro, event, or button press. This is a parameter-based command so you will want to limit the query to the number of contacts that exists within the Zoom Rooms phonebook of the customer.
	The Zoom Rooms device requires a subscribe phonebook command before sending the Query Contact list to update the Online/Offline state of the contact. Zoom Rooms limits this subscription to the first 500 contacts.
Events	Using system navigation within Events keeps that navigation event stored until reset. If you have a Global Event that tracks a custom state to send a navigation event, the interface always loads the page last visited based on this event. If you need to always open the home page, make sure to include navigation or set custom state values within initialization or other button presses.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
NEB-2761	Brain; Telnet Device (Clearone) does not communicate correctly with Brain (sending a large number of \x00 chars).
NEB-5669	Builder: Macros are not executed for copied interface widgets.
NEB-5813	Brain: Timed daily events do not execute when Brain is in active-offline state.

Release Notes History

QC ID	Deferred Bug Description
NEB-5970	Builder: Duplicating a Project or Space with Navigation Elements in User Events or Global Macros does not function properly.
NEB-6142	Brain becomes un-provisioned after power outage.
NEB-6186	Manager, Remote Access: URL is not updated with the associated `PAGE_ID`.
NEB-4301	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: –

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.6.3	August 2021
Web	–	–
Hardware	–	–

RN Date: August 17, 2021
Reference: 17746

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Fixed bugs.

Codependency with Other Products and Software:

Product Name	Comments
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps*	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name:	**Kramer Control Software**
Current Version:	

Type	Number	Date
Firmware	–	–
Software	2.6.3	August 2021
Web	–	–
Hardware	–	–

RN Date:	August 17, 2021
Reference:	17746

Bugs Fixed:

ID	Description of Fix
NEB-6240	Publishing a Space no longer generates an offline file.
NEB-6241	API no longer generates a new publishing file for each Space Reference.
NEB-6247	**Manager, Builder**: A new offline publishing file from the Builder is now added to the files in Manager's File Management.
NEB-6250	**Manager, Brain**: Override gateways name and IP address fields for reference spaces are now saved in the brain.
NEB-6251	Clearing cache on reference brain was prompting sync without a new publish message. Fixed so that a cache clearing does not cause a change in the reference brain.
NEB-6252	Load tests for Kramer Control publishing reference spaces.

Bugs to Fix in Future Versions:

ID	Deferred Bug Description
NEB-2761	**Brain**; Telnet Device (Clearone) does not communicate correctly with Brain (sending a large number of \x00 chars).
NEB-5669	**Builder**: Macros are not executed for copied interface widgets.
NEB-5813	**Brain**: Timed daily events do not execute when Brain is in active-offline state.
NEB-5970	**Builder**: Duplicating a Project or Space with Navigation Elements in User Events or Global Macros does not function properly.
NEB-6142	Brain becomes un-provisioned after power outage.
NEB-6186	**Manager, Remote Access**: URL is not updated with the associated `PAGE_ID`.
NEB-4301	Device Status – Model name of BRAINware type is always KT-107.

Release Notes History

Known Limitations (including compatibility limitations):

ID	Limitation Description
	None listed.

Preceding Version: – 2.6.0

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.6.0	August 2021
Web	–	–
Hardware	–	–

RN Date: August 4, 2021
Reference: 17712

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Improvements and fixed bugs.

Codependency with Other Products and Software:

Product Name	Comments
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps*	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.6.0	August 2021
Web	–	–
Hardware	–	–

RN Date: August 4, 2021
Reference: 17712

Improvements and Bugs Fixed:

ID	Description
	Zoom Room Widget
NEB-5746	Long contact lists now load correctly.
	Builder
NEB-5866	Improved ability to save and publish large spaces.
NEB-5374	Improved stability of static analysis when there are more than 100 macros inside the Builder.
NEB-5894	Improved copy and paste for frames and overlays.
NEB-5866	Builder attempts to save two Initialization Events when on a poor network.
NEB-4801	Numeric values can now be used as the beginning of a State reference.
	Brain
NEB-5283	Time and date are now updated properly in the BRAINware interface after changing the language.
NEB-5652	Generating a provisioning code using the MAC address no longer generates a new Brain ID so that the Brain no longer goes unprovisioned when moved to an active network.

Bugs to Fix in Future Versions:

ID	Deferred Bug Description
	Client
NEB-4301	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

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Release Notes History

Preceding Version: – 2.5.1

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.5.1	February 2021
Web	–	–
Hardware	–	–

RN Date: February 18, 2021
Reference: 17282

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

Fixed bugs.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps*	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.5.1	February 2021
Web	–	–
Hardware	–	–

RN Date: February 18, 2021

Reference: 17282

Bugs Fixed:

	Fixed Bug Description
Brain	Images now appear on Client UI.
Android Client	Restored full app function even when Google Play Services are not installed.
	Corrected operation of Admin UI.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.
	Current Brains (version 2.5.0) clear the cache after Publishing even when Data Reset on Publish is disabled.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: – 2.5.0

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.5.0	December 2020
Web	–	–
Hardware	–	–

RN Date: December 1, 2020

Reference: 17004

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Added feature(s).
- Fixed numerous bugs.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps*	Kramer Control Clients (iOS and Android)

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Release Notes History

Product Name:	**Kramer Control Software**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	2.5.0	December 2020
	Web	–	–
	Hardware	–	–

RN Date: December 1, 2020
Reference: 17004

New Features:

	New Feature Description
	Zoom Room Widget: Enables end users to control the Zoom Room host in a very similar manner to how a Zoom Rooms controller would work.
	Online Provisioning without Clients: Provision a Brain using the Kramer embedded webpage without needing to use a Kramer Control Client application.
	Offline Provisioning & Un-provisioning: Provision and un-provision a Brain using the Kramer embedded webpage without the need for the Brain to have WAN access.

Modifications:

	Modification Description
Manager	Added a spinning widget that shows progress of Project duplication inside the Manager.

Bugs Fixed:

	Fixed Bug Description
Brains	Brains remain provisioned even after a Kramer server outage.
	Brain now sends a raw value of 16 from device drivers.
	A calendar query no longer interferes with Brain operation.
	Corrected issue with restart after a system crash.
	Corrected issue relating to uncaught exception error appearing in log files.
	Brain Watchdog now retains cache of Brains not connected to WAN.
	When using the system without WAN, if ActiveOffline is not set to ON and the KC-BRAINWARE device reboots, Brains no longer become un-provisioned.
Builder	Hardware gateway order now persists between open Builder sessions.

Release Notes History

	Fixed Bug Description
	Newly created Overlays can now be selected on a frame without saving the Builder and the reloading the page.
	Improved functioning of grouped overlays.
	Enabled copying and pasting an interface from one open Builder webpage to another Builder webpage. Note: Copying and pasting interfaces between projects includes the images but does not add images to an image library within the project. To use the pasted images elsewhere in the UI, the images must be added to an image library.
	Programmer can now import more than 100 reference devices into a single space.
	Initialization events can now longer be removed from the Builder.
	You no longer need to shut down the application to update iOS and Android application imaging following Offline Publish.
Device Driver Editor	New and existing device drivers now enable LUA editing: Added static analysis to check for LUA content within device drivers.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: – SW: 2.4.3

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.4.3	August 2020
Web	–	–
Hardware	–	–

RN Date: August 9, 2020

Reference: 16664

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Several bugs were fixed.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps*	Kramer Control Clients (iOS and Android)

*Note – This update does not include updates to the Kramer Control Mobile Apps. The Brains in the Kramer Control Apps will not be updated at this time.

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Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.4.3	August 2020
Web	–	–
Hardware	–	–

RN Date: August 9, 2020
Reference: 16664

Bugs Fixed:

	Fixed Bug Description
Brain	Improved Brain memory usage during Publishing: Brain memory would continue to increase after a publish event even if little to no programming changes were being made.
	Offline publish now works correctly.
	Corrected issue where KC-BRAINware would become un-provisioned if the Brain was restarted while Brain state was ActiveOffline (see Known Issues).
	Improved the Sync on WAN restore function so that the Brain no longer attempts a full sync if no changes were made to programming. This includes a removal of the attempt to download new devices and new images
	Improved Offline publishing by blocking attempts to upload a publishing file from a different Brain installation.
	Brain state no longer attempts API server access when the Brain is set to ActiveOffline state.
	Brain logs no longer show error message of "Attempting to access state value without a valid state".

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	If using the system without WAN, if ActiveOffline is not set to ON and the KC-BRAINWARE device reboots, then the Brains become un-provisioned. Workaround: Anytime a KC-BRAINWARE device is being used without WAN, it is recommended that ActiveOffline is set to ON

Release Notes History

Preceding Version: – S: 2.4.1

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Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.4.1	June 2020
Web	–	–
Hardware	–	–

RN Date: June 1, 2020

Reference: 16470

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- New features.
- Bug fixes.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.4.1	June 2020
Web	–	–
Hardware	–	–

RN Date: June 1, 2020
Reference: 16470

The following changes were made in this version:

New Features:

	New Feature Description
	KNX HVAC Support – Added support for HVAC functionality of KNX hardware.

Modifications:

	Modification Description
Brain	Brain Webpage Improvements Watchdog Control Enable/Disable Watchdog (Default = On). Enable/Disable checking if Brain is repeatedly crashing (Default = On). Enable/Disable Brain RAM verification (Default = On). Enable/Disable/Set Watchdog Trigger Phrases (Default = On) – User can set specific phrases with which to trigger the Watchdog. Enable/Disable Log storage verification (Default = On). Multi Brain View View/access/set multiple Brains from one webpage. Perform Bulk Actions to Brain Actions & Brain Watchdog settings on multiple Brains at one time. Access specific Brains from one location.

Bugs Fixed:

QC ID	Fixed Bug Description
Builder	False error messages no longer appear when attempting to save or publish existing spaces.
Brain	Controlled devices now properly connect to the Brain after an Offline Publish is finished.
	New and existing images now appear in the UI after an offline publish.

Release Notes History

QC ID	Fixed Bug Description
	User can no longer clear the cache on Brains not connected to WAN, which would cause Brains to become un-provisioned.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: –

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.4	March 2020
Web	–	–
Hardware	–	–

RN Date: March 5, 2020
Reference: 16291

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- New features.
- Bug fixes.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain Software
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name:	**Kramer Control Software**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	2.4	March 2020
	Web	–	–
	Hardware	–	–

RN Date: March 5, 2020
Reference: 16291

The following changes were made in this version:

New Features:

	New Feature Description
Builder and Brain	Offline Publishing – Enables publishing changes to Brains that are not connected to a WAN. Using only a LAN connection, a Kramer Control Programmer can upload a file to the Kramer-UI page of the Brain (<brain_ip>:8000/kramer-ui/index.html).
	KC-BRAINware-5/25/50 – Enables running 5, 25, or 50 instances of BRAINware on a machine. These devices create Docker containers for each Brain with unique IP addresses and function as a separate Brain.
	Forced Active Offline – Enables forcing offline mode so that when the Brain becomes active it does not attempt to reach Kramer Control servers.
	Kramer-UI webpage now includes additional API commands to clear cache, clear logs, enable/disable options for different Brain settings and the upload area for the Offline Publishing file.

Modifications:

QC ID	**Modification Description**
Builder and Brain	The order of Macros and Events is now maintained after refreshing the Builder page.
	Device name edits are now saved without requiring a Builder webpage refresh.
	Brains now maintain connections with KNX and other devices after the Brains restart.
	"Forced_Active_Offline" state persists after a hardware reset.

Release Notes History

QC ID	Modification Description
Manager	Image libraries now automatically save.
	Improved remote Brain update process.
	Editing device names are now being saved without the need to refresh the Builder webpage

Bugs Fixed:

QC ID	Fixed Bug Description
Manager	Corrected the process of importing a new theme image library.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: – 2.2.9

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.2.9	November 2019
Web	–	–
Hardware	–	–

RN Date: November 7, 2019
Reference: 16017

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- New features.
- Bug fixes.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.2.9	November 2019
Web	–	–
Hardware	–	–

RN Date: November 7, 2019
Reference: 16017

The following changes were made in this version:

New Features:

	New Feature Description
Brain	Brain "Watchdog": Monitoring function that runs in the background and improves stability for new and existing Kramer Control installations.
	New Brain API Commands: Clear cache Clear logs Data reset on publish Forced active offline
Builder	Preview Mode: With Preview mode enabled, the programmer can now preview the UI when making changes using Frames and Overlays.
Client Applications	Support for KT-1010 hardware.

Modifications:

QC ID	Modification Description
Brain	Improved Offline mode stability.
	Improved Brain stability when publishing large spaces.

Bugs Fixed:

QC ID	Fixed Bug Description
Brain	Brain now maintains connection with KNX and other devices after restarting the Brain device.
Builder	A multi parameter state can now be adjusted after the initial setup.

Release Notes History

QC ID	Fixed Bug Description
Client Applications	Fixed issue with listbox title area.
	Fixed support for Sony Bravia displays with Android 8.
Dashboard	Selecting an alert from the Alerts section now displays properly.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: S- 2.2.7

Release Notes History

Product Name: **Kramer Control Brain**
Current Version:

Type	Number	Date
Firmware	–	–
Software	2.2.7	August 2019
Web	–	–
Hardware	–	–

RN Date: August 13, 2019
Reference: 15797

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- This version includes improvements and bug fixes.

Known Issues with Kramer Control Android app due to Google Chrome bug #991107:

The below issues are ONLY for Android devices running the Chrome Version – 76.0.3809.111. The fix for this version of Chrome is already in Beta and is scheduled to roll out at the end of August. If you have not upgraded Chrome on your devices, please refrain from doing so until the next version of Chrome is released.

- BRAINware Activation Issue – When navigating to the BRAINware page, you are directed to the BRAINware Activation sign-in page. This prevents the BRAINware activation process until the tablet is rebooted.

- Failure to connect to a provisioned space – When you attempt to control a provisioned space, the app does not connect to the brain.

The work-around for the below use cases is to restart the device. This fixes the issue and resumes normal operation.

Codependency with Other Products and Software:

Product Name	Comments

Release Notes History

SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control Software**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.2.7	August 2019
Web	–	–
Hardware	–	–

RN Date: August 13, 2019
Reference: 15797

The following changes were made in this version:

Modifications:

QC ID	Modification Description
Builder	Changed slider default setting for commands to be sent on release instead of on drag.
Manager, Dashboard, Client	Decreased Project List loading time.
Brain	Provided new setting for Brain when WAN connection is lost and a sync occurs after WAN is restored. See Kramer Control Knowledgebase for more information.
Client	Added re-connecting screen to iOS and Android applications and removed the Sign-in and Express mode buttons. See Kramer Control Knowledgebase for more information.

Bugs Fixed:

QC ID	Fixed Bug Description
Builder	You can now use your mouse to resize multiple selected widgets.
	Button navigation elements can now be published or saved.
	A space system device now receives a different name than the referenced system device.
	The list of available global macros now appears when you drag and drop a macro into a button action.
	The Overlay update property on the selected frame is now saved.
	New overlay options now appear even before the Builder is saved.
	Undefined Brain text now appears on new spaces.
	Overwritten locale is now reflected on the Builder.
	Gateway images are no longer missing.

Release Notes History

	Fixed issue with entering 'Hardware Name' when 'Add a Calendar Gateway' option was selected.
Manager	Multiple calendar icons no longer overlay each other when more than one calendar is added.
	Reduced time for Calendar Credential to become selectable when you click Manage Credential Sources.
	Project settings checkbox now stays enabled.
	Refreshing the Manager is no longer required to remotely update Brains.
	The Delete button is now enabled when you edit a Calendar Credential and disabled after you delete the credential.
Brain	Brain now connects to cloud services even when log storage is full.
	Log files are now able to download even when log storage is full.
	When devices are connected to multiple GPI/O or relay ports, they now can be executed properly on Kramer SL-280, SL-240C, SL-240.
	Triggering of Timed Events is no longer affected when you overwrite project settings in a space.
Client	Protocol now appears for serial settings of Brain device.
	BRAINware remains enabled upon a reboot of the Kramer touch panel.
Dashboard	Space Usage and System Activity charts now render when a space is selected.
	Improved dashboard speed.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.
	Provisioning is allowed with hardware mismatch type on Express mode provisioning.
	Gateway info panel – Protocol type is not returned.
	Device Status – Incorrect Brain version value displayed for BRAINware and VIA Brains.
	All – UI State does not change to default when tapping button with pressed state.
	Android App – Unable to leave control mode when brain is offline.
	iOS App – App does not sync when Brain is offline and powered On.
Brain	BRAINware sign-in required after period of usage.
	Drivers with two or more categories with the same name cause the brain to crash.
	Device Drivers update inside the Brain without Publishing.
	Brain Web-UI – Unable to access information and perform actions on a brain with port number different than 8000.

Release Notes History

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: S – 2.2.5

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.2.5	June 2019
Web	–	–
Hardware	–	–

RN Date: June 16, 2019

Reference: 15573

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Fixed bugs.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name:	**Kramer Control**		
Current Version:	**Type**	**Number**	**Date**
	Firmware	–	–
	Software	2.2.5	June 2019
	Web	–	–
	Hardware	–	–
RN Date:	June 16, 2019		
Reference:	15573		

The following changes were made in this version:

Bugs Fixed:

QC ID	Fixed Bug Description
Builder	Saving and deleting timers was improved.
	New interfaces now appear without save and refresh.
	Fixed issue where builder showed errors which did not exist.
Brain	Express Mode control now also works with different Brain and Client app versions.
	Updating properties of the Web URL widget was improved.
Client	Decreased load time for the control interface when the client apps are loaded from the background.
	Express Mode control now also works with different Brain and Client app versions.
	Fixed issue that was preventing user from controlling spaces with project passcode.
	Android Client – Properties of URL widget can be properly updated.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	Device Status – Model name of BRAINware type is always KT-107.
	Provisioning is allowed with hardware mismatch type on Express mode provisioning.
	Gateway info panel – Protocol type is not returned.
	Device Status – Incorrect Brain version value displayed for BRAINware and VIA Brains.
	All – UI State does not change to default when tapping button with pressed state.
	Android App – Unable to leave control mode when brain is offline.
	iOS App – App does not sync when Brain is offline and powered On.

Release Notes History

QC ID	Deferred Bug Description
Brain	BRAINware sign-in required after period of usage.
	Drivers with two or more categories with the same name cause the brain to crash.
	Device Drivers update inside the Brain without Publishing.
	Brain Web-UI – Unable to access information and perform actions on a brain with port number different than 8000.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: S – 2.0.11

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.11	May 2019
Web	–	–
Hardware	–	–

RN Date: May 17, 2019

Reference: 15438

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Added a pop-up warning.
- Fixed bugs in the Brain and Client applications.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.11	May 2019
Web	–	–
Hardware	–	–

RN Date: May 17, 2019
Reference: 15438

The following changes were made in this version:

New Features:

	New Feature Description
Client	A pop-up warning, indicating that the Brain version and the client version of the application do not match.

Bugs Fixed:

QC ID	Fixed Bug Description
Brain	Weather States were not being updated.
	Large spaces would crash the Brain and start a synchronizing loop after the crash.
	Brain was not able to access the cloud server for the Space after a period of time. This issue caused spaces to show an unpublished state when api/vtest/general was checked and caused an error in the log monitor showing the Brain was not connected to the server.
Client	Issue when the Client tried to provision a Referenced space when the Master space has not been published to all references yet.
	No gateway information was being shown when using a Brain gateway as a Kramer gateway.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
Client	iOS & Android – Load time is slow when opening the app or bringing up from the background.
	Mobile Client – Device Status – Model name of BRAINware type is always KT-107.
	Mobile Client – Provisioning is allowed with hardware mismatch type on Express mode provisioning.
	Mobile Client – Gateway info panel – Protocol type is not returned.

Release Notes History

QC ID	Deferred Bug Description
	Mobile Client – Device Status – Incorrect Brain version value displayed for BRAINware and VIA Brains.
	Client – All – UI State does not change to default when tapping button with pressed state.
	Android App – Unable to leave control mode when brain is offline.
	iOS App – App does not sync when Brain is offline and powered On.
Brain	BRAINware sign-in required after period of usage.
	Drivers with two or more categories with the same name cause the brain to crash.
	Device Drivers update inside the Brain without Publishing.
	Brain Web-UI – Unable to access information and perform actions on a brain with port number different than 8000.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: – S: 2.0.7

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.7	March 2019
Web	–	–
Hardware	–	–

RN Date: March 6, 2019

Reference: 15218

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Added modifications.
- Fixed bugs.

Codependency with Other Products and Software:

 Kramer Control 2.0 can work only with Brain and App version 2.0 and higher.

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control**
Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.7	March 2019
Web	–	–
Hardware	–	–

RN Date: March 6, 2019
Reference: 15218

The following changes were made in this version:

Modifications:

QC ID	Modification Description
Manager	Calendar gateways can now be overridden within reference spaces.
Brain	KDS gateway now controls KDS devices.
Client	Brain information is now displayed when using SL Brains.

Bugs Fixed:

QC ID	Fixed Bug Description
Builder	Adding an extra space to Manufacturer name no longer returns no results when searching devices.
	Editing devices in a duplicated project no longer affects the devices that exist in the original project.
Manager	The Brain version update is no longer performed to a version higher than the selected one.
Brain	The last synced date no longer returns an empty value.
Client	The BRAINware option in a KT-107 is no longer disabled after updating the application.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	None listed.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Release Notes History

Preceding Version: – SW: 2.0.5

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.5	January 2019
Web	–	–
Hardware	–	–

RN Date: January 30, 2019
Reference: 15030

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Fixed several bugs.

Codependency with Other Products and Software:

Kramer Control 2.0 can work only with Brain and App version 2.0 and higher.

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.5	January 2019
Web	–	–
Hardware	–	–

RN Date: March 6, 2019
Reference: 15218

The following changes were made in this version:

Bugs Fixed:

QC ID	Fixed Bug Description
Brain	Feedback was not being processed when using RS232, GPIO, and Relay devices connected to a Brain.
	Improved synchronizing time and client interface loading times when application is moved to background.
	Brain would hang while trying to leave Active state if device commands queue was full.
Builder	Widget could not be made the same size as the full page or overlay.
	Re-sizing a full background kept the full background box checked in the properties window.
	A state could not be added to a page that included a full background.
Client	Device connection status was not updated when selecting a different space.
	Contractor users were able to provision a Brain when using Express mode provisioning.
	Users were able to access the Brain and control devices when Express mode was disabled.
	Android application would crash after long periods of use.
	Android application Control button was greyed out after a maximum of 5 seconds of staying on a page in Admin mode.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	None listed.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

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Release Notes History

Preceding Version: FW – 2.0.3

Release Notes History

Product Name: **Kramer Control Brain**
Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.3	January 2019
Web	–	–
Hardware	–	–

RN Date: January 20, 2019
Reference: 15000

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- New features and modification were added.
- Several bugs were fixed.

Codependency with Other Products and Software:

Kramer Control 2.0 can work only with Brain and App version 2.0 and higher.

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control**

Current Version:

Type	Number	Date
Firmware	–	–
Software	2.0.3	January 2019
Web	–	–
Hardware	–	–

RN Date: March 6, 2019
Reference: 15218

The following changes were made in this version:

New Features:

	New Feature Description
Builder	Calendar Integration: Connect to calendar gateway and configure events to be triggered by meeting start and end time.
	Timer: Built-in capability to set timers and configure events to be triggered by the timer.
	Global Navigation: Navigate within global macros and events.
	RS-232 Control via KDS 6 Gateway: Control a device connected to the RS-232 port of KDS-6.
	Move actions up and down in the list using arrows in addition to drag and drop.
Brain	Brain Info Web Page: Display generic brain info on web page. Use the following URL to view the Brain Info Web Page: http://<brainIP>:8000/kramer-ui/index.html
Brain & Builder	Docker BRAINware: Multiple virtual brains running on a single hardware platform. (For future use.)
	VIA Connect Plus BRAINware: Run a single brain on the VIA Connect Plus collaboration device. (For future use.)
Client	Gateway Status: Display connectivity status for connected gateways and devices.
Manager & Client	Express Provisioning: Provision a space from the app without having to sign in.

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Release Notes History

Modifications:

Component	Modification Description
Overall	Improved support of Offline/Express Mode.

Bugs Fixed:

QC ID	Fixed Bug Description
Manager	Locale selected in the Manager prevented the programmer from creating time-based events in the Builder.
	Incorrect URL directed users to a non-existent document page.
	Styling issues with Update Brain Message and coloring of Provisioned Space icons.
Builder	Multiple events were added to a widget without adding a scrollbar to navigate the list of events.
	Referenced devices were not appearing as connected to gateways.
	The delete icon was not appearing when sub-conditional was selected. Icon would only appear when the entire conditional was selected.
	The font type inside the builder was not properly showing the selected font.
	Undo button did not work after a button has been manually resized.
Client	List box imaging shifted if a key was not used in the Builder.
	Slider states were not updating if multiple client types were used.
	Web Client was not automatically refreshed after publishing.
	Release commands were being sent twice when used in Web Client.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	None listed.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: S – 1.5.1

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	1.5.1	August 2018
Web	–	–
Hardware	–	–

RN Date: July 2018
Reference: 151

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	Yes

Technical Notes:

- Various new features and modification were added.
- Several bugs were fixed.

Codependency with Other Products and Software:

Product Name	Comments
SL-240	Kramer Control Brain
SL-240C	Kramer Control Brain
SL-280	Kramer Control Brain
Kramer BRAINware	Kramer Control Brain
Kramer Control Mobile Apps	Kramer Control Clients (iOS and Android)

Release Notes History

Product Name: **Kramer Control**

Current Version:

Type	Number	Date
Firmware	–	–
Software	1.5.1	August 2018
Web	–	–
Hardware	–	–

RN Date: March 6, 2019
Reference: 15218

The following changes were made in this version:

New Features:

Component	New Feature Description
Brain	Added to Brain API to prepare for integration with Kramer Network: Ability to get Space information including name and status. Executing All On and All Off macros. GET request to identify Device information.
Manager	Added IT Manager user access. An IT Manager user does not require Full Certification to use the Kramer Control product. This user can : Change Project/Space settings Troubleshoot Access applications (Clients) Access the Dashboard. The user cannot create or publish to the Project/Space he is assigned to.
Builder	Initialize Event Create a macro that executes during the initializing state of the Brain. Each time the Brain State changes to **Active** after a restart or successful sync, this initialization macro will execute.
Builder	Idle Event Create an Event that tracks the idle state of the User Interface. Prior to this release, a Programmer had to add specific actions to every widget in the User Interface and then create conditional statements that checked for a value to determine a period of non-usage.

Modifications:

Component	Modification Description
Manager/ Brain/	If your Brain does not match the Builder version, a popup appears notifying you that the Brain may not Publish until an update is performed.

Release Notes History

Component	Modification Description
Builder/ Client	The Kramer Control application also includes this notification letting the end user know that the application and/or Brain is not up to date.
Builder	Widget States When you create a multi-state image and upload that image group to your Project, you can now define which image will appear by adding an Update Property to any action field.
Builder	Added VS-622DT Gateway to supported devices.

Bugs Fixed:

Component	Fixed Bug Description
Brain	SL-280 Brain: Required a manual reboot after the unprovision request was sent from the Manager.
Brain	BRAINware was constantly polling the API when in an unprovisioned state.
Manager	The Save button did not turn inactive when overriding project settings.
Manager	Project/Space information screen was not repositioning when scrolling vertically.
Manager	The description label was not shown when loading the Dashboard.
Builder	Aliasing wizard could not import the same device more than once.
Client	Changing orientation of UI in the Builder using an Android client did not change the orientation of the UI in the Client after publishing.
Client	The Boolean value returned from the web client did not match the mobile (iOS/Android) clients.
Client	BRAINware option was not selectable when Express Mode was selected.
Client	BRAINware was constantly polling the Brain API when in an unprovisioned state.
Client	iOS: The contain image option was not appearing correctly.
Client	iOS: Listbox imaging was not appearing correctly.
Client	Web Client: The user could not use sliders while using Fire.
Dashboard	The Device Info description overflowed in the window.
Dashboard	Custom State data, if set, was not showing full content.

Release Notes History

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	None listed.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: S – 1.3.3

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	V1.3.3	April 2018
Web	–	–
Hardware	–	–

RN Date: April 2018
Reference: 133

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	Yes	N/A

Technical Notes:

- Fixed several bugs.

Codependency with Other Products and Software:

- There is no codependency with other products or software.

Release Notes History

Product Name: **Kramer Control Brain**
Current Version:

Type	Number	Date
Firmware	–	–
Software	V1.3.3	April 2018
Web	–	–
Hardware	–	–

RN Date: April 2018
Reference: 133

The following changes were made in this version:

Bugs Fixed:

Component	Fixed Bug Description
Brain	Lost UDP connections create a scenario where new socket connections cannot be properly made on the Network.
Brain	UDP multicast and broadcast connection not being made properly.
Brain	System Device Custom States could not be used as a Reference device in another Space.
Manager	Launch Builder option appearing at the Project Information screen.
Manager	Icon appearing in the Brain Update menu showing the wrong icon and incorrect color identifier.
Manager	Brain Update menu not showing a version without first opening the dropdown selection.
Builder	System Device Custom States could not be used as Reference device in another Space.
Builder	Update Properties using the incorrect image, if the new image had been removed from the Builder.
Builder	A widget that is greater than the width/height of a page could be moved outside the boundaries of that page.
Client	iOS Clients: The First image was repeated when the button was set to a toggle button.
Client	KT-107: Application crashes upon syncing an Unpublished Space using BRAINware.
Client	Application shows 'Connection to Brain Failed' after being connected to a Brain that is no longer on the Network. This error would appear on any new project or space that was selected.
Client	KT-107 showing the incorrect Brain status when using BRAINware.
Client	A Space could not be Un-provisioned until first leaving that space in the Application.
Dashboard	Previously un-selectable tabs are able to be selected after the User chooses a Provisioned Space.

Release Notes History

Component	Fixed Bug Description
Dashboard	Devices appear as duplicates when used as Reference Devices from a space that has not yet been provisioned.
Dashboard	Power State icon not appearing as On when the Device state is On.
Dashboard	Web Client: Slider knob not working properly.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	None listed.

Known Limitations (including compatibility limitations):

Component	Limitation Description
	None listed.

Preceding Version: S – V1.3

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	-	-
Software	V1.3	March 2018
Web	–	–
Hardware	–	–

RN Date: **March 2018**
Reference: **13865**

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	N/A	N/A

Technical Notes:

- Various new features and modification were added.
- Several bugs were fixed.

Codependency with Other Products and Software:

There is no codependency with other products or software

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Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	-	-
Software	V1.3	March 2018
Web	–	–
Hardware	–	–

RN Date: **March 2018**

Reference: **13865**

The following changes were made in this version:

New Features:

	New Feature Description
	BRAINware – Integrated Kramer Control Brain software for KT−107 Touch Panels that enables controlling a room without the need for a hardware Brain such as SL-240C.
	Reference Spaces: Create reference spaces that are linked to a master space in the Manager to simplify deployment and maintenance of identical spaces. Changes to the master space are synced to all linked reference spaces. Override gateway name and IP address fields for reference spaces, in order to avoid duplicating master space when only these gateway fields differ from the master.
	Space Overrides – Ability to override project settings in its child spaces, so that specific settings like passcode, business hours location and locale can be adjusted for individual spaces.
	Remote Brain Version Updates – Ability to view and remotely update Brain software versions on SL-XXX brains.
	Custom Aspect Ratios – Specify custom aspect ratio for newly created or existing user interfaces.

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Release Notes History

Modifications:

Component	Modification Description
Manager / App	Un-provision Space in the Manager – Ability to un-provision a space for a project owner directly from the manager/app.
Brain	External brains now receive the initial state of a reference device.
Brain	HTTPS is now supported for device communication on LAN.
Client	Unlimited spaces can now be displayed for a project.

Bugs Fixed:

Component	Fixed Bug Description
Brain	Macros issue when device is connected to multiple communication types.
Brain	Images that are only referenced in global macros/events are not sent to mobile clients to be displayed in the interface.
Builder	Pasted images or image library do not load until the pasted page is selected.
Builder	In the Custom State Create Wizards, the Create button is sometimes disabled.
Builder	Drag Image Off-Centered (Firefox)
Builder	Issue with the clock pop up showing the wrong time.
Client	List boxes don't alphabetically or logically arrange the keys in the list.
Client	Android app crashes when bringing up into foreground in orientation different from the one defined in the builder for that layout.
Client	Android app stops responding when trying to toggle overlays.
Client	If no pressed image state is defined on a button, the button does not perform transition from default to pressed state.
Client	Android – App crashes if left unused for a while.
Client	Change Project list item is available on projects page.
Client	Admin mode tree arrows for child spaces are not showing.
Client	Some icons do not appear in Admin mode on clients.
Manager / Builder	No option to sign in after authentication token has expired, have to reload the page to get in again.
Manager	Login issue on Firefox.
Manager	Issue with creating a Project
Manager	When changing a space type, the Space icon doesn't change immediately.
Manager	Spaces are not listed in order.
Manager	Copying a shared project does not give you OWNER role.

Release Notes History

Component	Fixed Bug Description
Manager	Not able to search for a Space.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
	Bug (on iOS client only): Images on Toggle are not displayed properly. **Workaround**: Adjust image using "Update Property".

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: S – 1.25

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	V1.2.5	December 2017
Web	–	–
Hardware	–	–

RN Date: **December 2017**
Reference: **1.2.5**

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
Kramer Control Brain	Any	N/A	N/A

Technical Notes:

- Several bugs were fixed.

Codependency with Other Products and Software:

- There is no codependency with other products or software.

Release Notes History

Product Name: **Kramer Control Brain**

Current Version:

Type	Number	Date
Firmware	–	–
Software	1.2.5	December 2017
Web	–	–
Hardware	–	–

RN Date: **December 2017**
Reference: **1.2.5**

The following changes were made in this version:

Bugs Fixed:

Component	Fixed Bug Description
DDE	Macros reset the value of trigger commands when saved.
DDE	Single backslashes in data field not being sent.
Builder	Failed to Publish when a single device is assigned to multiple gateways
Builder	Builder – When selecting UI layout and adding an overlay, it is added to the pages section instead of overlay section
Builder	If a view item is greater than or equal to the width of the page, you can move it outside the boundaries of the page.
Builder	Replacing Brain with Connected Devices causes error when adding device to the new Brain.
Builder	Saving top level items that were changed.
Builder	When clicking add page while selecting an overlay group, page will be added to a group.
Builder	Saving project local drivers can cause state events/conditionals to be deleted.
Builder	Crash on Toggle Button.
Builder	Adding AND or OR to Conditional misaligns items in builder.
Builder	Grouped overlays do not load in client interface
Builder	Conditional popup doesn't appear in Firefox.
Brain	Doesn't support float to integer comparisons in conditional comparison expressions.
Brain	Dynamic parameters not sent correctly when sending a command to a device reference.
Brain	Crashing with POST commands.
Brain	Daylight savings time not factored correctly in brain
Brain	Delays blocking the parallel execution of the functions/macros triggered from different buttons.
Brain	Scheduled Events are not triggered even though the time condition is met.

Release Notes History

Component	Fixed Bug Description
Brain	Unable to connect to brain after closing a session that started long running macros.
Brain	Macro reference actions only work once.
Brain	Publishing while receiving many feedbacks prevents future publish events to come through and data sent to dashboard.
Brain	Layouts are not sorted as they are listed in the Builder.
Brain	Toggle property array isn't updating when items it is referencing are modified.
iOS & Android Clients	Crash due to multiple navigations from one page to another.
iOS Client	Communication with the brain stops when putting the app in sleep mode.
iOS client	App returning to foreground causes crash when logging in.
iOS Client	Crashes when bringing up into foreground in orientation different from the one defined in the builder for that layout.
Android client	Crash when hitting back from layout.
Android client	Transitions on page navigation are showing elements temporarily.
Android client	Resized images use only the first size requested.
Manager	The order of spaces is not preserved on reload.
Manager	Customers in China cannot create a project.
Manager	"Last Synced Date" and "Provisioned On" in brain info are reported in different time zones.
Dashboard	Raw codes do not properly show multiple spaces or have overflow tooltip.
Hardware	Slightly slow GPI/O response time to commands.

Preceding Version: S – N/A