

Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	1.1	August 2023
Software	_	_
Web	_	_
Hardware	_	_

RN Date: August 28, 2023

Reference: 18757

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Summary:

Fixed bugs.



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	1.1	August 2023
Software	_	_
Web	1	_
Hardware	_	_

RN Date: August 28, 2023

Reference: 18757

Other Related Products and Software:

You can upload the new firmware for each matrix card from the relevant (matrix card) product page on Kramer website.



MTX Card	Prev FW Rev	New FW Rev	Comments
UHDA-IN2-F16		02.01.0000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper inputs switching when input 1 is not connected.
UHDA-OUT2-F16		02.01.000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper inputs switching when input 1 is not connected.
UHD-IN2-F16		02.01.0000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper inputs switching when input 1 is not connected.
UHD-OUT2-F16		02.01.0000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper inputs switching when input 1 is not connected.
DT-IN4-F32		01.02.0000	Fixed issues: 1. No audio loss after long inactivity time 2. Proper noise-less audio output upon switching to unconnected input.
DT-OUT4-F32		01.01.0009	Fixed issues: 1. No audio loss after long inactivity time 2. Proper noise-less audio output upon switching to unconnected input.

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MTX Card	Prev FW Rev	New FW Rev	Comments
UHDA-IN4-F32		01.01.0003	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper noise-less audio output upon switching to unconnected input.
UHDA-OUT4-F32		01.02.0000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper noise-less audio output upon switching to unconnected input.
DTAXR-IN2-F16		01.01.0003	Fixed issues: 1. No audio loss after long inactivity time.
DTAXR-OUT2-F16		01.01.0005	Fixed issues: 1. No audio loss after long inactivity time.
DTAXR-IN4-F32		01.02.0000	Fixed issues: 1. No audio loss after long inactivity time. 2. Proper noise-less audio output upon switching to unconnected input.
DTAXR-OUT4-F32		01.01.0009	Fixed issues: 1. No audio loss after long inactivity time 2. Proper noise-less audio output upon switching to unconnected input.
UHD-IN4-F32		01.01.0001	Fixed issues: 1. No audio loss after long inactivity time

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MTX Card	Prev FW Rev	New FW Rev	Comments
			Proper noise-less audio output upon switching to unconnected input.
UHD-OUT4-F32		01.02.0000	Fixed issues: 1. No audio loss after long inactivity time 2. Proper noise-less audio output upon switching to unconnected input.



Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17126	WEB - The device copies corrupt EDID - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.
2972	Rarely, audio de-embedding ceases.
3020	Occasional no video display on HDBT-connected TV.
2989	Stable & independent HDMI input port connection.
2971	Issue fixed - DTAxr-OUT4-F32 Noise on matrix switch to inactive input.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: 06.05.0000



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Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	06.05.0000	September 2021
Software	_	_
Web	_	_
Hardware	_	_

RN Date: September 19, 2021

Reference: 17825

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Summary:

- Fixed bugs.
- Added support for UHDS-OUT2-F16 module card.

Codependency with Other Products and Software:

Product Name	Comments
Modules	See ACCESSORIES & RELATED PRODUCTS tab at
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	06.05.0000	September 2021
Software	_	_
Web	_	_
Hardware	_	_

RN Date: September 19, 2021

Reference: 17825

New Features:

	New Feature Description
	Added support for UHDS-OUT2-F16 module card.

Bugs Fixed:

QC ID	Fixed Bug Description	
	Store and Recall functions are now working properly.	
KMR-64014	UHDS-OUT2-F16: AV signal on power up is now stable.	
KMR-64044	UHDS-OUT2-F16: Fixed occasional communication issue between the card and the matrix.	

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17126	WEB - The device copies corrupt EDID - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.



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Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 6.3_0003



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management / Keyboard: 6.3_0003	February 2021
Software	Test Card: 2.3.0000	July 2019
Web	_	ı
Hardware	_	

RN Date: March 14, 2021

Reference: 17326

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

- New FW for F676-OUT2-F16 modular card (version 1.1_0000). No change in the VS-1616DN-EM, VS-3232DN-EM chassis FW.
- · Fixed a bug.

Codependency with Other Products and Software:

Product Name	Comments
Modules	See ACCESSORIES & RELATED PRODUCTS tab at
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management / Keyboard: 6.3_0003	February 2021
Software	Test Card: 2.3.0000	July 2019
Web	_	_
Hardware	_	_

RN Date: March 14, 2021

Reference: 17326

Bugs Fixed:

QC ID	Fixed Bug Description
19153	F676-OUT2-F16 Modular Card – Improved switching stability.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17126	WEB - The device copies corrupt EDID - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	



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QC ID	Limitation Description
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 6.3_0003



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management / Keyboard: 6.3_0003	February 2021
Software	Test Card: 2.3.0000	July 2019
Web	_	_
Hardware	_	_

RN Date: February 2, 2021

Reference: 16770

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

- Fixed bugs.
- Added improvement.

Codependency with Other Products and Software:

Product Name	Comments	
Modules	See ACCESSORIES & RELATED PRODUCTS tab at	
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM	



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management / Keyboard: 6.3_0003	February 2021
Software	Test Card: 2.3.0000	July 2019
Web	_	_
Hardware	_	_

RN Date: February 2, 2021

Reference: 16770

Modifications:

QC ID	Modification Description
	Improved switching speed.

Bugs Fixed:

QC ID	Fixed Bug Description
14220	LCD screen FW version information view now provides Keyboard FW version.
14228	Protection layer added in case of accidental power down during FW upgrade procedure.
16136	Kramer Network Auto Scan and Support is available on TCP port 5000 and UDP 50000. Changing the TCP/UDP ports no longer limits Kramer Network management tool support.
16137	TCP and UDP Port number range was from 0 to 65534.
16143	WEB - "Start upgrade" button is now disabled after the first click and progress is now displayed.
16184, 17363	WEB – Correct HDCP status now shows.
16200	WEB - A name with an underscore at the beginning or end of a name is now accepted.
17057	WEB - Chassis: Webpage timeout was too short for Repower or Upgrade process.
17112	WEB – Fixed inconsistency between action response and terminal commands in bass/treble
17369	WEB - EDID - Although the message appears - "Input X copy success", when pressing the SDI INPUT, the EDID does not copy.
17385	WEB - VGAA IN - The default of the Save timing and Recall Timing is correct.
17403	WEB - Settings - Configuration file can now be uploaded.



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QC ID	Fixed Bug Description
17426	WEB - Port information - Outputs – There is now correct response when clicking the out link.
17447	WEB - Upgrade - When a card is not upgradable and the upgrade stops, there is now a notification which slot is problematic.
17484	WEB - Microsoft EDGE browser - Upgrade works properly.
17486	WEB - IE 64 browser is now supported.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17126	WEB - The device copies corrupt edid - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 6.2.0007



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Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version:

Туре	Number	Date
Firmware	Management / Keyboard: 6.2.0007	August 2020
Software	Test Card: 2.3.0000	July 2019
Web	_	_
Hardware	_	_

November 4, 2020 **RN Date:**

Reference: 16841

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

- New firmware for VGAA-OUT2-F16 card: version 1.2_0001.
- Fixed a bug in the VGAA-OUT2-F16 card.

Codependency with Other Products and Software:

Product Name	Comments	
Modules	See ACCESSORIES & RELATED PRODUCTS tab at	
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM	



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management / Keyboard: 6.2.0007	August 2020
Software	Test Card: 2.3.0000	July 2019
Web	_	_
Hardware	_	_

RN Date: November 4, 2020

Reference: 16841

Bugs Fixed:

QC ID	Fixed Bug Description
18623	VGAA-OUT2-F34: Issue with reading the EDID of a connected display.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
14220	LCD screen FW version information view provides Chassis FW version and Keyboard HW version. Keyboard FW version will be added in next release.
14228	Make sure not to power down the matrix during Chassis FW upgrade procedure.
16136	Kramer Network Auto Scan and Support is available on TCP port 5000 and UDP 50000. Changing the TCP/UDP ports limits Kramer Network management tool support.
16137	TCP and UDP Port number range is from 0 to 65534.
16143	WEB - "Start upgrade" button is not disabled after the first click and progress is not displayed.
16184	WEB - According to the webpage HDCP is ON, but on the monitor, the video is flickering and in the device the port is defined as HDCP OFF, Work Around: Clear cache.
16200	WEB - A name with an underscore at the beginning or end of a name is invalid, yet a message appears stating that the name was successfully saved.



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QC ID	Deferred Bug Description
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17057	Webpage timeout is too short for repower or upgrade procedure.
17057	Web - Chassis: Webpage timeout is too short for Repower or Upgrade process
17112	WEB - Inconsistency between action response and terminal commands in bass/treble
17126	WEB - The device copies corrupt edid - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17363	WEB - HDCP status - In order to see the correct HDCP status, need to press "input" again (refresh).
17368	WEB - EDID fails to copy to the input 33 (test) – but a message appears: "In 33 copy success".
17369	WEB - EDID - Although the message appears - "Input X copy success", when pressing the SDI INPUT, the EDID does not copy.
17385	WEB - VGAA IN - The default of the Save timing and Recall Timing shoud be 1 or empty,actual 0
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.
17403	WEB - Settings - There is no way to upload a configuration file
17426	WEB - Port information - Outputs – Occasionally, there is no response when clicking the out link.
17447	WEB - Upgrade - When a card is not upgradable and the upgrade stops, there is no notification which slot is problematic.
17484	WEB - Microsoft EDGE browser - Upgrade - An error appears when loading the FW file
17486	WEB - IE 64 browser is not supported.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	



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QC ID	Limitation Description
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 6.2.0007



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date	
Firmware	Management / Keyboard: 6.2.0007	August 2020	
	Test Card: 2.3.0000	July 2019	
Software	_	_	
Web	_	_	

RN Date: August 4, 2020

Reference: 15342

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

- Added new features and modifications.
- Fixed several bugs.

Codependency with Other Products and Software:

Product Name	Comments
Modules	See ACCESSORIES & RELATED PRODUCTS tab at
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date	
Firmware	Management / Keyboard: 6.2.0007	August 2020 007	
	Test Card: 2.3.0000	July 2019	
Software	_	_	
Web	_	_	

RN Date: August 4, 2020

Reference: 15342

New Features:

New Feature Description
Added embedded web pages via the Ethernet for chassis management, modular cards configuration and matrices multi-deployment.

Modifications:

QC ID	Modification Description	
	Updated metadata.json file.	
	Updated the menu string for the front panel keyboard.	

Bugs Fixed:

QC ID	Fixed Bug Description
11129	P3K command HDCP-STAT? always returns "0", even if the connected screen supports HDCP.
11347	Protocol echoes are partly reported.
12316	K-Upload Application: Chassis control & management FW upgrade may result in "upload Error" message. Workaround: Retry upgrade until a successful upgrade is completed.
13829	VS-1616DN-EM & VS-3232DN-EM: EDID copy operation from the test card to H-IN, HH-IN, HAA-IN or HAD-IN cards may result in loss on the input port that EDID is copied to. Workaround: Power cycle the matrix.
15077	Cards FW upgrade is not support through K-upload UDP connection. Use TCP connection only
15192	Keyboard menu setup may cause "No Return" reply on the LCD display. Workaround: Press "Back" and try again.
15211	Conf file does not include the EDID info about outputs.



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QC ID	Fixed Bug Description
15231, 15237	VS-1616DN-EM & VS-3232DN-EM: DL-IN/OUT cards: Kramer Network shows even number of ports although only odd numbers exist. Even ports will be grayed out in next version.
15244	Changeable parameters are grayed out on Kramer Network.
15491	VGAA-IN2-F16 factory default operation using CTRL FW 6.1_0009 may not bring the Even (lower) port of the card to factory default settings. Workaround: Set the parameters to default values manually through Kramer Network or Keyboard.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
14220	LCD screen FW version information view provides Chassis FW version and Keyboard HW version. Keyboard FW version will be added in next release.
14228	Make sure not to power down the matrix during Chassis FW upgrade procedure.
16136	Kramer Network Auto Scan and Support is available on TCP port 5000 and UDP 50000. Changing the TCP/UDP ports limits Kramer Network management tool support.
16137	TCP and UDP Port number range is from 0 to 65534.
16143	WEB - "Start upgrade" button is not disabled after the first click and progress is not displayed.
16184	WEB - According to the webpage HDCP is ON, but on the monitor, the video is flickering and in the device the port is defined as HDCP OFF, Work Around: Clear cache.
16200	WEB - A name with an underscore at the beginning or end of a name is invalid, yet a message appears stating that the name was successfully saved.
16244	WEB - Copying an EDID (Input or Output) to All fails, Network Error is displayed, and the process is halted
17057	Webpage timeout is too short for repower or upgrade procedure.
17057	Web - Chassis: Webpage timeout is too short for Repower or Upgrade process
17112	WEB - Inconsistency between action response and terminal commands in bass/treble



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QC ID	Deferred Bug Description
17126	WEB - The device copies corrupt edid - epson-eb- 1000u_2_Blocks_Zeroes_In_Block_1
17363	WEB - HDCP status - In order to see the correct HDCP status, need to press "input" again (refresh).
17368	WEB - EDID fails to copy to the input 33 (test) – but a message appears: "In 33 copy success".
17369	WEB - EDID - Although the message appears - "Input X copy success", when pressing the SDI INPUT, the EDID does not copy.
17385	WEB - VGAA IN - The default of the Save timing and Recall Timing shoud be 1 or empty,actual 0
17396	WEB - DHCP ON - There is no redirection and the message is missing.
17401	WEB - UDP - There is no response from the device when UDP port of the device is defined differently than default, for example: 50003.
17403	WEB - Settings - There is no way to upload a configuration file
17426	WEB - Port information - Outputs – Occasionally, there is no response when clicking the out link.
17447	WEB - Upgrade - When a card is not upgradable and the upgrade stops, there is no notification which slot is problematic.
17484	WEB - Microsoft EDGE browser - Upgrade - An error appears when loading the FW file
17486	WEB - IE 64 browser is not supported.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 06.01.0009, Test Card: 2.3.0000



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Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management / Keyboard: 06.01.0009	March 2019
	Test Card: 2.3.0000	July 2019
Software	_	_
Web	_	_
Hardware	_	

RN Date: July 17, 2019

Reference: 15353

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

• Fixed several bugs.

Codependency with Other Products and Software:

Product Name	Comments	
Modules	See ACCESSORIES & RELATED PRODUCTS tab at	
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM	



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management / Keyboard: 06.01.0009	March 2019
	Test Card: 2.3.0000	July 2019
Software	_	_
Web	_	_
Hardware	_	_

RN Date: July 17, 2019

Reference: 15353

The following changes were made in the **VS-1616DN-EM Test Card FW version** (no change in the Management/Keyboard version)::

Bugs Fixed:

QC ID	Fixed Bug Description	
15385	The Test Card video patterns of the Test Card can now be changed.	

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs even though they are not connected to monitors.
11113	On DL-OUT4-F32 card P3K command HDCP-STAT? always returns "0". Even if the connected screen supports HDCP.
11117	On F610-OUT4-F32 card P3K command HDCP-STAT? always returns "0". Should return Error.
11129	P3K command HDCP-STAT? always returns "0", even if the connected screen supports HDCP.
11347	Protocol echoes are partly reported.
12316	K-Upload Application: Chassis control & management FW upgrade may result in "upload Error" message. Workaround: Retry upgrade until a successful upgrade is completed.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
13829	EDID copy operation from the test card to H-IN, HH-IN, HAA-IN or HAD-IN cards may result in loss on the input port that EDID is copied to. Workaround: Power cycle the matrix.
14219	Rarely, Factory Default command may result in Keyboard operation freeze.



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QC ID	Deferred Bug Description
	Workaround: Power cycle the device.
14220	LCD screen FW version information view provides Chassis FW version and Keyboard HW version. Keyboard FW version will be added in next release.
14228	Make sure not to power down the matrix during Chassis FW upgrade procedure.
15077	Cards FW upgrade is not support through K-upload UDP connection. Use TCP connection only
15192	Keyboard menu setup may cause "No Return" reply on the LCD display. Workaround: Press "Back" and try again.
15211	Conf file does not include the EDID info about outputs.
15231, 15237	DL-IN/OUT cards: Kramer Network shows even number of ports although only odd numbers exist. Even ports will be grayed out in next version.
15244	Changeable parameters are grayed out on Kramer Network.
15491	VGAA-IN2-F16 factory default operation using CTRL FW 6.1_0009 may not bring the Even (lower) port of the card to factory default settings. Workaround: Set the parameters to default values manually through Kramer Network or Keyboard.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to
11107,	source i.e. MAC mode active. At the same time, Protocol 3000 command
11108,	HDCP-MOD? returns "ON".
11119,	
11122,	
11124,	
15177,	
15194,	
15207,	
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version: Management / Keyboard: 06.01.0009, Test Card: 2.2.0000



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Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management / Keyboard: 06.01.0009	March 2019
	Test Card: 2.2.0000	July 2018
Software	_	-
Web	_	_
Hardware	_	_

RN Date: March 5, 2019

Reference: 14428

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	NA



This version can be applied ONLY to a unit running FW version 05.02.0000.

If you are running a lower version, please install the 05.02.0000 release before updating your device to 06.01.0009

Technical Notes:

- Added new features.
- Fixed several bugs.



The Management and Keyboard firmware have been combined into one file.

Codependency with Other Products and Software:

Product Name	Comments	
Modules	See ACCESSORIES & RELATED PRODUCTS tab at	
	www.kramerav.com/product/VS-1616DN-EM, VS-3232DN-EM	



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Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management / Keyboard: 06.01.0009	March 2019
	Test Card: 2.2.0000	July 2018
Software	_	_
Web	_	_
Hardware	_	_

RN Date: March 5, 2019

Reference: 14428

The following changes were made in this version:

New Features:

New Feature Description
Modular Matrices are supported by Kramer Network 2.1 to include:
Chassis and cards remote settings
Chassis multi deployment
Added Protocol 3000 IP remote commands: "#NET-CONFIG? 0" and "#NET-
CONFIG 0,ip,mask,gate";

Bugs Fixed:

QC ID	Fixed Bug Description
10759	Protocol Command echo for AUD-LVL is missing and to be added in next FW release.
11232	IR doesn't work with the tested control and KB versions.
11349	Test and Control card: IP reset test through commands FACTORY and RESET commands doesn't work.
12393	Missing FW version info for test card.
13689	EDID designer application cannot make use of the Internal Default EDID that is available in the matrix cards.
13699	P3K echo fixed to Support EDID designer. Broadcast "~01@display portID, 1" for "display connected". And broadcast "~01@display portID,2" for valid EDID



Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
5216	OUT-LOAD menu: a circle is displayed at VGA Cards and SDI Cards outputs
0210	even though they are not connected to monitors.
11113	P3K command HDCP-STAT? always returns "0". Even if the connected screen supports HDCP.
11117	On F610-OUT4-F32 card P3K command HDCP-STAT? always returns "0". Should return Error.
11129	P3K command HDCP-STAT? always returns "0", even if the connected screen supports HDCP.
11347	Protocol echoes are partly reported.
12316	K-Upload Application: Chassis control & management FW upgrade may result in "upload Error" message. Workaround: Retry upgrade until a successful upgrade is completed.
12344	Configuring Default Setup via the front panel button requires two presses in order to proceed to Take button press.
13829	EDID copy operation from the test card to H-IN, HH-IN, HAA-IN or HAD-IN cards may result in loss on the input port that EDID is copied to. Workaround: Power cycle the matrix.
14219	Rarely, Factory Default command may result in Keyboard operation freeze. Workaround: Power cycle the device.
14220	LCD screen FW version information view provides Chassis FW version and Keyboard HW version. Keyboard FW version will be added in next release.
14228	Make sure not to power down the matrix during Chassis FW upgrade procedure.
15077	Cards FW upgrade is not support through K-upload UDP connection. Use TCP connection only
15192	Keyboard menu setup may cause "No Return" reply on the LCD display. Workaround: Press "Back" and try again.
15211	Conf file does not include the EDID info about outputs.
15231,	DL-IN/OUT cards: Kramer Network shows even number of ports although
15237	only odd numbers exist. Even ports will be grayed out in next version.
15244	Changeable parameters are grayed out on Kramer Network.
15491	VGAA-IN2-F16 factory default operation using CTRL FW 6.1_0009 may not bring the Even (lower) port of the card to factory default settings. Workaround: Set the parameters to default values manually through Kramer Network or Keyboard.

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Known Limitations (including compatibility limitations):

QC ID	Limitation Description
11103, 11107, 11108, 11119, 11122, 11124, 15177, 15194, 15207,	LCD menu for input cards: HDCP menu "=1" means No HDCP reply back to source i.e. MAC mode active. At the same time, Protocol 3000 command HDCP-MOD? returns "ON".
15235	
14224	Matrix and Cards FWs downgrade is not supported

Preceding Version:

Management: 05.04.0000_0 Keyboard: 5.02.0001_201

Test Card: 2.2.0000



Product Name: VS-1616DN-EM

Current Version: Type

Туре	Number	Date
Firmware	Management: 05.04.0000_0	July 2018
	Keyboard: 5.02.0001_201	
	Test Card: 2.2.0000	
Software	_	_
Web	_	_
Hardware	_	_

RN Date: July 2018 Reference: 14323

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	Yes

Technical Notes:

- This firmware upgrade fixes a critical issue in Management firmware 5.02.0000

 sometimes after power cycling the MAC address of the matrix is reset to AA-BB-CC-DD-EE-FF
- This firmware upgrade includes two changes in the chassis frame:
 - Management FW: 05.04.0000_0 update using K-Upload app
 - Keyboard FW: 5.02.0001_201 update using K-Upload app

Codependency with Other Products and Software:

Product Name	Comments
Modules	See ACCESSORIES & RELATED PRODUCTS tab at
	https://www.kramerav.com/il/product/VS-1616DN-EM





Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management: 05.04.0000_0 Keyboard: 5.02.0001_201 Test Card: 2.2.0000	July 2018
Software	-	_
Web	_	_
Hardware	_	_

RN Date: July 2018 Reference: 14323

The following changes were made in these two FW versions:

Bugs Fixed:

QC ID	Fixed Bug Description
14174	Using Management firmware 5.02.0000 sometimes after power cycling the MAC address of the matrix is reset to AA-BB-CC-DD-EE-FF (fixed by Management FW upgrade)
14196	Following Management firmware 5.02.0000 update the Front panel IP MENU show a MAC address that does not match the actual product MAC (fixed by Keyboard FW upgrade)

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
10759	Protocol Command echo for AUD-LVL is missing and to be added in next FW release.
11347	Protocol echoes are partly reported.
12316	K-Upload Application: Chassis control & management FW upgrade may result in "upload Error" message. Workaround: Retry upgrade until a successful upgrade is completed.
12344	Configuring "Default Setup" through the front panel button requires two presses in order to proceed to 'Take' button press
13163	DTAxr-IN2-F16: Default EDID model name is 'HDBTA'.
13689	EDID designer application cannot make use of the Internal Default EDID that is available in the matrix cards.
13829	EDID copy operation from the test card to H-IN, HH-IN, HAA-IN or HAD-IN cards may result in loss on the input port that EDID is copied to. Workaround: Power cycle the matrix.
	EDID Designer application: No support for default EDID.



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Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed

Preceding Version: F - Management: 5.02.0000, Keyboard App: 5.01.0000, Test

Card: 2.2.0000



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management: 5.02.0000	May 2018
	Keyboard App: 5.01.0000	
	Test Card: 2.2.0000	
Software	_	_
Web	_	_
Hardware	_	_

RN Date: May 2018 Reference: 13941

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	Any	Yes	N/A

Technical Notes:

- Added several new features.
- Fixed several bugs.

Codependency with Other Products and Software:

Product Name	Comments	
Modules	See ACCESSORIES & RELATED PRODUCTS tab at	
	https://www.kramerav.com/il/product/VS-1616DN-EM	



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management: 5.02.0000 Keyboard App: 5.01.0000	May 2018
	Test Card: 2.2.0000	
Software	_	_
Web	_	_
Hardware	_	_

RN Date: May 2018 Reference: 13941

The following changes were made in this version:

New Features:

New Feature Description
Support for KPTW file upgrade (Using K-Upload and Kramer Network apps).
Added support for EDID Designer application and support for EDID management using Kramer Network.
Added HW-TEMP Protocol 3000 command for temperature read from supporting cards.
Added network info on LCD. (IP, IP Mask, IP gateway and DHCP on/off status).

Bugs Fixed:

QC ID	Fixed Bug Description
12467	IR remote control is not supported
12229, 12405, 12406	K-Upload application: A successful chassis control & management fw upgrade may result with Error massage 006. Though the upgrade process is completed successfully with no issues
12391	Protocol echo is not reporting Keyboard Lock operation
12393	Protocol commands MODULE-VER and MODUL-INFO sometimes return wrong '00.00.0000' instead of the actual burnt FW version.
12458	Keyboard command ALL-OFF does not function.

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
11347	Protocol echoes are partly reported.



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QC ID	Deferred Bug Description
12316	K-Upload Application: Chassis control & management FW upgrade may result in "upload Error" message. Workaround: Retry upgrade until a successful upgrade is completed.
13163	DTAxr-IN2-F16: Default EDID model name is 'HDBTA'.
13689	EDID designer application cannot make use of the Internal Default EDID that is available in the matrix cards.
13829	EDID copy operation from the test card to H-IN, HH-IN, HAA-IN or HAD-IN cards may result in loss on the input port that EDID is copied to. Workaround: Power cycle the matrix.
	EDID Designer application: No support for default EDID.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Versions: F - Management: 5.0.0013, Keyboard App: 5.0.0001, Test

Card: 2.2.0000





Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management: 5.0.0013	March 2018
	Keyboard App: 5.0.0001	
	Test Card: 2.2.0000	
Software	_	_
Web	_	
Hardware	_	_

RN Date: March 2018 Reference: 12001

Kramer Product Affected:

Product Name	Minimum FW Version for Upgrade	Recommended for All Units	Only if Added Features are Required
VS-1616DN-EM, VS-3232DN-EM	N/A	N/A	N/A

Technical Notes:

• This is a release note for a new product.

Codependency with Other Products and Software:

Product Name	Comments
Modules	See ACCESSORIES & RELATED PRODUCTS tab at
	https://www.kramerav.com/il/product/VS-1616DN-EM.



Product Name: VS-1616DN-EM, VS-3232DN-EM

Current Version: Type Number

Туре	Number	Date
Firmware	Management: 5.0.0013	March 2018
	Keyboard: 5.0.0000	
	Test Card: 2.2.0000	
Software		
Web	_	_
Hardware	_	_

RN Date: March 2018 Reference: 12001

This is a release note for a new product. For a list of new product features see:

www.kramerav.com/manual/VS-1616DN-EM, VS-3232DN-EM

Bugs to Fix in Future Versions:

QC ID	Deferred Bug Description
11347, 12391	Protocol echos are partly reported, for example Keyboard Lock command.
12393	Test Card: Protocol commands MODULE-VER and MODUL-INFO sometimes return '00.00.0000' instead of the actual burnt FW version.
12458	Keyboard command ALL-OFF does not function. Workaround: Use Protocol 3000 command ##VID 0>* <cr>.</cr>
12467	IR remote control not supported.

Known Limitations (including compatibility limitations):

QC ID	Limitation Description
	None listed.

Preceding Version: N/A