NEXT GENERATION MEDIA SERVER

PIXERA one
PIXERA two

MANUAL

Table of Contents

Important Information

Identifying the product and other information

This instruction manual relates to media server systems from AV Stumpfl GmbH.

The model designation and serial number are located on the media server's serial number tag.
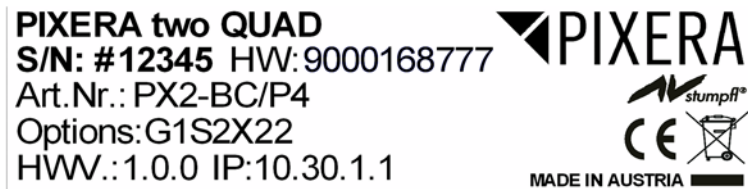
General information about this instruction manual

With this instruction manual, users of AV Stumpfl GmbH media servers are provided the necessary information for the safe use of their systems.

The safety instructions resulting from the legally prescribed risk analysis and assessment are an essential part of these instructions.

- IMPORTANT! Please read these instructions carefully before using your system! Store this instruction manual in a safe place for later reference.

- IMPORTANT! Due to the high number of possible configurations, it is not possible to provide specific instructions for all the individual components in this manual.

For specific questions and further support, please contact us at:

AV Stumpfl GmbH

Tel: +43 (7249) 42811

support@avstumpfl.com

Subject to modifications!

Safety information

The safety information in this instruction manual can be broken down into the following categories:

- WARNING is used for hazards that could result in death or serious injuries
- CAUTION is used for hazards that could result in minor injuries.
- IMPORTANT is used for all other cases where the potential for material damage exists or specific actions are recommended.

Target group/qualifications

The use of media server systems requires specialist AV and IT knowledge. For this reason, the use of media server systems should be limited to qualified personnel. Media server system owners and operators must ensure this via organizational measures.

The qualified personnel responsible for installation and maintenance must also be able to prevent any remaining risks in terms of health and safety with their understanding of the existing dangers.

Warning about electrical hazards

Electrical hazards can arise across a media server system's entire life cycle. These can arise not only from the media server system, but the electrical installation on site as well.

- WARNING! Dangerous situations can arise from the careless handling of the server system or faulty electrical installation.
  These can result in severe injury or death!
  - o Extreme care should be used when working on the media server system.
  - o Always consult the responsible specialists when working with dangerous voltages.

Intended use

The media server systems are meant exclusively for use in rooms with normal operating conditions (temperature, humidity, radiation) such as air-conditioned server rooms, offices and other rooms with similar conditions.

Warning about foreseeable misuse

- WARNING! Dangerous situations can arise from using the server systems in unsuitable environments.
  These can result in severe injury or death!
  - o Only use the media server systems in professional AV and IT environments!
  - o The use of the media server systems in special environments, such as medical facilities, potentially explosive environments or areas with unusually high EMC requirements, is not permitted!
- WARNING! Dangerous situations can arise from unauthorized modifications.
  These can result in severe injury or death!
  - o Do not attempt to modify the existing protections!

Installation on site

Checking for transport damages

Check the packaging and the media server system for possible damage that could have arisen during transport. If you find damage, please report it immediately to your vendor or AV Stumpfl GmbH.

- IMPORTANT! Add-on cards can sometimes become partially detached from their slots during transport.
  In this case please report it immediately to your vendor or AV Stumpfl GmbH.

Danger from condensation

- WARNING! A difference in temperature of 15°C between the room's temperature and the media servers can result in the formation of condensation. This can lead to short circuits and other damage. These can lead to the risk of electrocution. Electrocution can result in severe injury or death!
  - o Please ensure that the server system is not subject to quick changes in temperature!
  - o Give the system time to acclimate to its environment.
  - o Do not operate the server system if condensation has formed!

Danger from incorrect posture and overexertion

- WARNING! Due to the weight and dimensions of the server system, physical danger can arise during set up and installation.
  - o Avoid incorrect posture and overexertion (e.g. from lifting heavy objects)!

Danger from tipping

- WARNING! The server system can tip over from improper transport or installation. This is particularly true for rack systems that have a high center of gravity due to their construction. This can result in severe injury or death!
  - o Transport the system with the necessary care!
  - o Ensure secure installation on a flat and level surface.
  - o Rack systems must be anchored to a suitable firm surface!
  - o When installing devices into the rack, start at the lowest slot and work upwards. Install the heaviest devices at the bottom of the rack!
  - o Only remove one device at a time from a rack!

<u>Installation on site</u>

AV Stumpfl GmbH recommends installing the server in an air-conditioned server room. Select a site that is:

- Clean, dry and free of particles in the air (except for normal dust).
- Not near sources that cause vibrations or shaking.
- Protected from strong electro-magnetic fields that arise from electrical devices.
- Provides access to a properly grounded wall socket.
- Able to be equipped with surge protection, particularly in areas subject to thunderstorms.
- Provides sufficient space for access to the power cables, as these are the primary way to disconnect the server from the power supply.
- Provides sufficient space to ensure air circulation (for cooling).

<u>Danger from noise</u>

- WARNING! Some server systems emit noise. Generally, this noise is produced by the system fans. In certain situations, this can lead to hearing damage. Communication near such server systems can also be impaired.
  - o Use care when selecting an installation site for such servers!
  - o There must be no permanent impairment!

Initial installation

Notes for rack system installations

Install a line disconnector for the entire rack system.

This line disconnector must be easily accessible and have a label that states that it controls the power supply to the entire unit and not just the servers.

Danger from improper voltage supply

- WARNING! Dangerous situations can arise from improper voltages. These can lead to the risk of electrocution.
  Electrocution can result in severe injury or death!
  - o Only operate the server system using the voltage specified in this manual!

The server system can be operated in combination with an uninterruptible power supply (UPS). In this case, please follow the instruction manual for the UPS system!

Danger from improper grounding

- WARNING! Dangerous situations can arise from improper grounding. These can lead to the risk of electrocution.
  Electrocution can result in severe injury or death!
  - o Please ensure that the server system and/or the rack itself and all incorporated devices are properly grounded!
  - o For such work, always consult the responsible specialists.

Proper grounding is also very important for protection against EMC interference.

Danger from fire

- WARNING! Dangerous situations can arise from improper electrical installations. These can lead to the risk of fire.
  Fires can result in severe injury or death!
  - o Please ensure that electrical installations are properly performed!
  - o Always consult the responsible specialists for such work.

Operation, maintenance, modifications, cleaning and disassembly

Electrical hazards

Incidents arising from electrical hazards can occur during operation, maintenance, when making modifications, cleaning or disassembling the server.

Turn off all connected peripheral devices before opening the media server system.

NOTE: Opening the media server system will void its warranty!

- WARNING! Dangerous situations can arise if the server system is not turned off before opening the system.
  These can result in severe injury or death!
  - Ensure that the media server system is disconnected from the power source before opening the media server system!
  - Turn off the media server system via the power switch and unplug all power cables from the outlet!
  - Ensure that the media server system will not be plugged in unexpectedly by another person or that the system will unexpectedly restart after an interruption in the power supply.

Additional comments on the subject:

- The power button will NOT disconnect the system from the source of power. The server system must be completely disconnected from the source of power.
- To do this, all power cables must be removed from the electrical outlet.
- A system may be equipped with multiple power cables. In such cases, ensure that all power cables have been unplugged.
- Do not make any modifications to the power cable and do not use any cables except those with the correct specifications. Each power supply in the system must be connected to the power source via its own cable.
- Power supplies do not have any parts that can be serviced by the user.
- Never open a power supply. Power supplies contain dangerous voltages, currents and energy sources. Send the device back for any necessary maintenance work.
- The server system can unexpectedly restart after an interruption in the supply of power.

One exception is components that can explicitly be plugged in (hot-plug) or swapped (hot-swap) during operation. Please note the following safety instructions for hot-plug power supplies.

Electrical hazards related to hot-plug power supplies

Electrical accidents can occur when exchanging hot-plug power supplies.

- WARNING! Dangerous situations can arise from the careless handling of hot-plug power supplies. These can result in severe injury or death!
  - Unplug all power cables of a hot-plug power supply before swapping it out!

Avoiding data loss

- IMPORTANT! Remember to back-up your data before performing any maintenance or any other similar work inside your media server system.
  Check to ensure that your data restoration system works properly.

Disassembly and assembly of the housing

Should you need to remove the media server system's housing for maintenance work or any similar work inside the system, make sure to store all screws and fastenings in a safe place.

NOTE: Opening the media server system will void ins warranty!

Once you have completed your work on the media server system, reassemble the housing using the original screws and fasteners.

- IMPORTANT! Operating the system without its case can lead to damage for the system components. Reattach the case as follows:
  1. First, ensure that you have not left any tools or other parts in the system!
- 2. Check whether all cables, add-on cards and other components are correctly configured and attached.
- 3. Re-mount the panels onto the product's frame!

Danger from sharp corners and edges

- CAUTION! Despite careful selection of the components, sharp corners and edges can occur on the sheet metal housing. Plastic parts can also break during assembly or disassembly and leave sharp corners and edges.
  Injuries can be the result.
- Work with care and avoid sharp corners and edges.
- Wear protective gloves especially when working on the housing and when installing rack systems!

Danger of pinching

- CAUTION! Moving parts, such as hard drive bays and caps, can pinch fingers. Injuries can result!
  - o Work carefully and pay attention to places where pinches can occur.
  - o Wear protective gloves when working on server housing!

Danger from hot components

- WARNING! During operation, the processor and heat sink can get very hot. Burns can result.
  - o Do not open the system until it has cooled completely!
  - o Be careful when removing or installing hot-plug components to avoid contact with hot elements!

Danger from moving parts

- WARNING! Server systems contain moving parts, such as rotating fan blades.
  Contact with such components can cause injury.
  - o Never touch rotating fan blades or other moving parts!
  - o Always operate the server system with the fan cover closed (if present)!
  - o Long hair can be caught in the fan. If necessary, use a hair net.

Danger from batteries

- WARNING! A danger of explosion and corrosion can arise from improper battery replacements. Hazardous substances can be leaked.
  Improper use can result in serious injury.
    o Only use the battery types recommended by the manufacturer!
    o Never try to charge or open a battery!

Preventing damage caused by a lack of ESD measures

- IMPORTANT! Electrostatic discharge can damage hard drives, circuit boards and other components. Perform all work at an ESD workstation!

  If such a work space is not available, you can achieve a degree of protection against electrostatic discharge by wearing an anti-static wristband. You can use these to keep you grounded by attaching the clip to any unpainted metal part of your computer case.

  Always handle circuit boards with utmost caution. They are extremely sensitive to electrostatic discharge. Hold circuit boards by the edges.

  After removing the circuit board from its protective case or the server, place it right side up on a grounded, fully-discharged surface. We recommend the use of a conductive foam pad and not the board's protective case.

  Never drag the board across a surface.

  Use gloves when working with sensitive components.

Preventing damage due to improper cooling and a lack of air flow

- IMPORTANT! Make sure that the ventilation slots are not covered.

  Route all cables carefully to avoid disturbances in the air flow and avoid cooling problems.

  To ensure proper cooling and air flow, only operate the system with its case fully assembled.

Preventing damage caused by unsuitable cleaning agents

- IMPORTANT! Only use suitable cleaning agents.
  A microfiber cloth is suitable for external cleaning.

  Compressed air may be used to clean the inside of the server system. Please ensure that the air is applied gently and from a sufficient distance, as the components can otherwise be damaged.

  Vacuum cleaners are not suitable for cleaning the inside of the media server system.

Instructions for disposal

The media server system and batteries must be properly disposed of as electrical waste at the end of their use. The disposal of electrical and electronic equipment is regulated by law. Please observe all local regulations. Disposal via household waste or ordinary industrial waste is not permitted.

Many of the materials are reusable. By following this notice, you make an important contribution to protecting the environment.

Specifications

To ensure proper operation, make sure that the following operating conditions are met for the media server.

- **IMPORTANT!** When you receive your media server, place it in the environment where you will install it. Leave the server in its shipping crate at its final destination for 12 hours and do not connect it to the power supply! This resting period prevents thermal shock and condensation.

Ambient temperature

An ambient temperature range of 21°C to 23°C is optimal for server reliability. This temperature range allows the recommended relative humidity level to be maintained quite easily. The maximum admissible temperature range is between 10°C and 30°C. Please bear in mind that high temperatures have a negative effect on the components' life cycle.

Relative Humidity

Ambient relative humidity levels between 45% and 50% are the most suitable for data processing operations.

- Prevent corrosion
- Provide an operating time buffer in the event of environmental control system failure.
- Help avoid failures caused by the intermittent interference from static discharges that occur when relative humidity is too low.

The maximum admissible relative humidity range is between 20% and 80% (noncondensing).

Airflow Considerations

- Ensure unobstructed airflow through the chassis
- Ensure that air enters at the front of the server housing and exits at the back.
- Ensure that ventilation openings, such as cabinet doors, for both the inlet and exhaust of the server provide a minimum open area equal to the server's open areas.
- Take care to prevent recirculation of exhaust air within a rack or cabinet.
- Manage cables to minimize interfering with the server exhaust vent.

Scope of Delivery

- 19" Rail Kit
- Power Cable
- 4x DP to DVI-D(SL) adapter

Warranty

We offer 2 years warranty on PIXERA media servers.
An additional warranty of total 3, 4 or 5 years is available on request. Please contact us.

- **IMPORTANT!** Please note that opening or modifying the media server voids its warranty.

Environmental Specifications – Operating

Temperature (altitude less than 1000m, no direct sunlight)	10°C to 30°C
Maximum Temperature Gradation	10°C per hour
Temperature De-Rating (altitude more than 1000m)	Reduce max. temp. by 1°C per 300m
Maximum Altitude	3000m
Relative Humidity (noncondensing)	20%RH to 80%RH
Maximum Humidity Gradation	10%RH per hour

Environmental Specifications – Storage

Temperature (no direct sunlight)	-30°C to 55°C
Maximum Temperature Gradation	20°C per hour
Relative Humidity (noncondensing)	5%RH to 95%RH
Maximum Humidity Gradation	10%RH per hour

Power Supply

	PX1	PX2
Power Supply	100-240VAC, 50-60Hz	100-240VAC, 50-60Hz
Power Consumption Peak	500W	800W
Power Consumption Average with High Load * (X13 Base Config)	350W	450W
Power Consumption Average with High Load * (X22 Config)	400W	500W
Power Consumption Average with High Load * (X31 Config)	450W	550W
Power Consumption Average with High Load * (X54 Config)	Not possible	650W
Redundant Power Supply Hot-Plug	-	Yes

* Power Consumption Average with High Load = Tested with very high CPU, GPU and SSD/NVMe workload

Heat Dissipation

	PX1	PX2
Heat Dissipation Peak	1710BTU/h	2730BTU/h
Heat Dissipation Average with High Load * (X13 Base Config)	1200BTU/h	1540BTU/h
Heat Dissipation Average with High Load * (X22 Config)	1370BTU/h	1710BTU/h
Heat Dissipation Average with High Load * (X31 Config)	1540BTU/h	1880BTU/h
Heat Dissipation Average with High Load * (X54 Config)	Not possible	2220BTU/h

* Heat Dissipation Average with High Load = Tested with very high CPU, GPU and SSD/NVMe workload

Physical

|	PX1	PX2
Case Dimension (WxDxH)	447 x 441 x 44,4mm	445 x 468 x 88,9mm
Max. Product Dimension (WxDxH)*	484 x 489 x 44,4mm	484 x 493 x 88,9mm
Product Weight	8,3kg	13,1kg
Shipping Dimension	660 x 580 x 160mm	790 x 560 x 220mm
Shipping Weight	11,75kg	21,15kg

Dimensions

IMPORTANT! Please note that due to the production process there may be deviations in the dimensions.
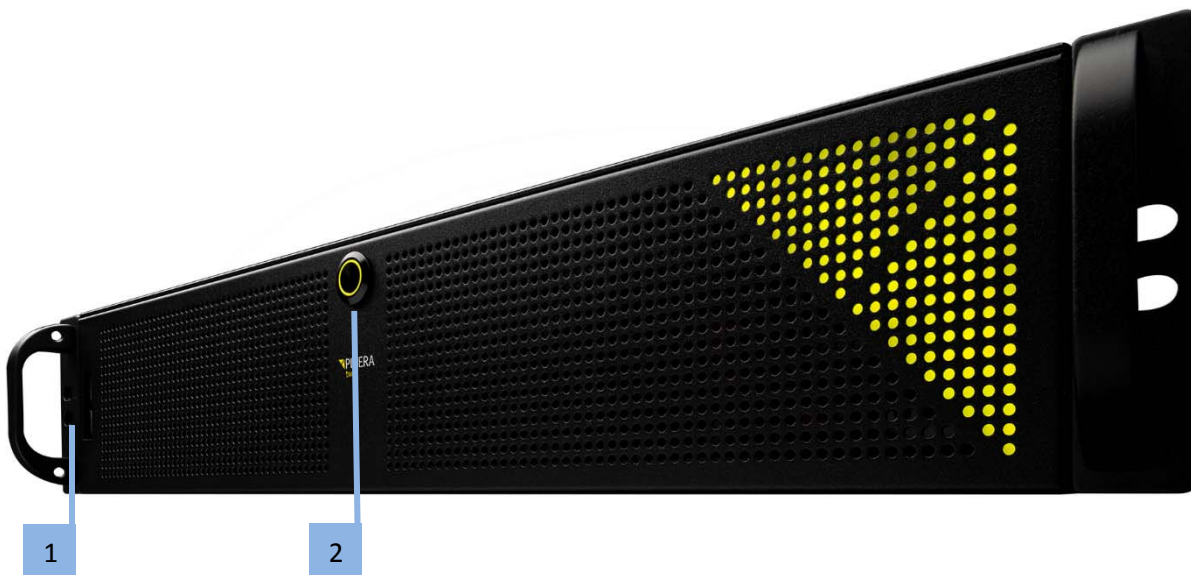
Dimensions PIXERA one
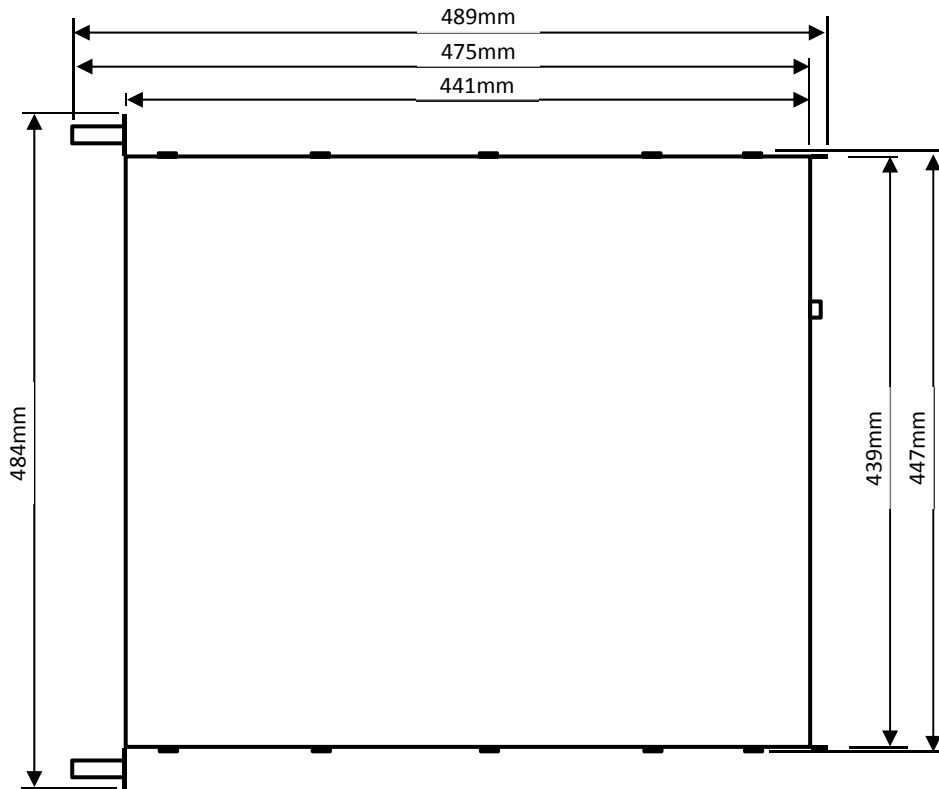
Dimensions PIXERA two
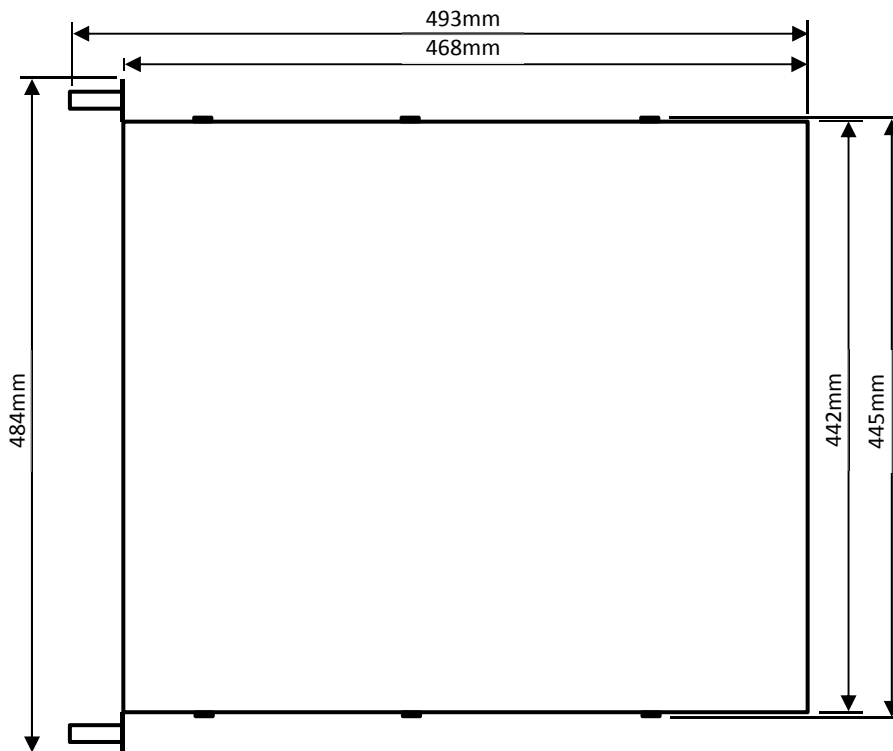
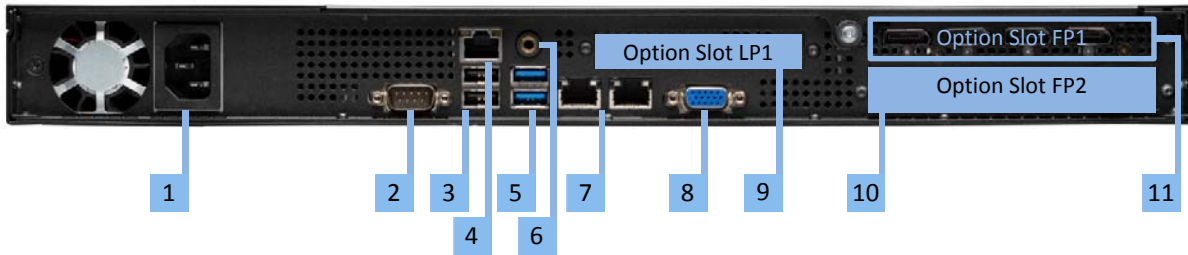# Front Views

Front View PX1

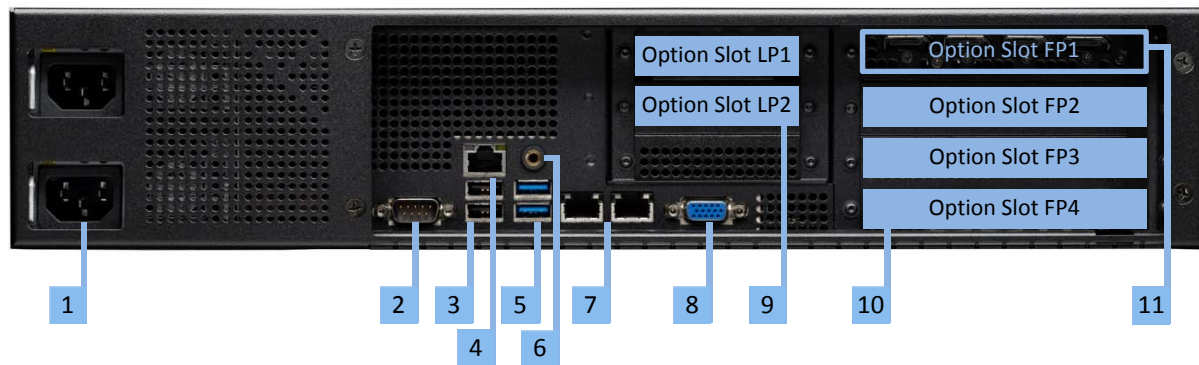## Front View PX2

Description Front Views

1. 2x USB3.0 port
2. Power button

Rear Views

Rear View PX1

Rear View PX2

Description Rear Views

1. Socket for mains connection: In case of PX2 there are two connectors, as PX2 is equipped with redundant power supplies. Both connections must be made.
2. Not used (Do not connect!)
3. 2x USB2.0
4. IPMI LAN: The IP address of the IPMI LAN port is similar to the IP address of LAN1 (see [6] below), but instead of 10.30.x.x. the address is 10.40.x.x. For example, if LAN1 has the address 10.30.1.1, the IPMI LAN port has the address 10.40.1.1.
5. 2x USB3.0
6. Stereo Audio Output
7. 2x 10Gbps LAN: 1Gbps and 10Gbps speeds are supported, 10Mbps and 100Mbps speeds are not supported!
   Left Port = LAN1: The fixed IP address of this LAN socket can be found on the serial number label.
   Right Port = LAN2: The IP address of this socket is 1 higher than LAN1. For example, if LAN1 has the address 10.30.1.1. then LAN2 has the address 10.30.1.2.
   Please note that these are the IP addresses of the delivery state of the media server. All IP addresses can of course be changed individually. Please see the network settings of the operating system for the currently set IP address.
8. Not used (Do not connect! For servicing purposes only!)
9. Option Slots LPx
10. Option Slots FPx
11. Always located in Option Slot FP1:
    4x Video Output DP1.4. See details under "Options" – "Video Outputs".
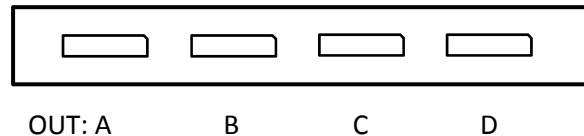
Options

Video Outputs

Video Outputs are always supplied with the Server and are always located in Option Slot FP1.

- Option Code: P4

Option Slot PX1: FP1 (standard, cannot be changed)

Option Slot PX2: FP1 (standard, cannot be changed)

OUT: A   B   C   D

Port Description

OUT A, …, OUT D: Video Output A, …, Video Output D

- Video output standard: DP1.4
- Video output resolution (max.): 4096x2160 @60Hz
- EDID management: Yes

IMPORTANT! Please note that due to space reasons DisplayPort cables need to be used where the plug does not exceed a maximum thickness of approx. 14mm!
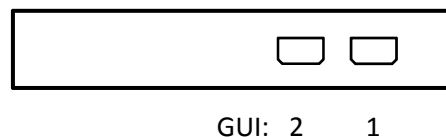
Output Option: GUI Output

Dual channel GUI output.

- Option Code: G1

Option Slot PX1: LP1

Option Slot PX2: LP1

GUI: 2   1

Port Description

GUI 1, 2: GUI Output 1, 2

- GUI Output Standard: mDP1.4
- Max GUI Output Resolution: 4096x2160 @60Hz
- Please note that the Nvidia control panel displays four outputs. For performance reasons, only the first two of these four outputs are accessible.
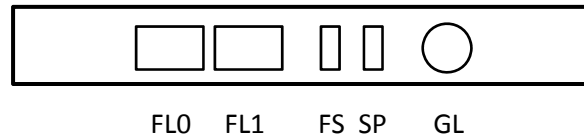
Output Option: Framelock and Genlock

Framelock and genlock input and outputs.

- Option Code: S2

Option Slot PX1: FP2

Option Slot PX2: FP4

FL0   FL1   FS SP   GL

Port Description

FL0, FL1: Framelock 0/1 Input/Output

IMPORTANT! Do not connect to LAN! This will damage the sync card and the LAN equipment!

- LED yellow: Port is an output, but no signal is present
- LED green: Port is an input, but no signal detected
- LED yellow flashing: Port is an output and sending a signal, the frequency of the blinking is the refresh rate of the signal
- LED green flashing: Port is an input and receiving a signal, the frequency of the blinking is the refresh rate of the signal

FS: Framelock Sync Status LEDs
Shows the synchronization status of the connected video output card. The topmost LED is dedicated to video output card 1 (installed in all servers) and the second LED to video output card 2 (if installed).

- LED off: Video output card not connected. This indicates a technical problem – please contact us.
- LED yellow: Video output card not synchronized.
- LED green: Video output card synchronized.
- LED yellow flashing: Video output card synchronized, but within 5% of the threshold of losing sync.
- LED green flashing: Video output card is synchronizing.

SP: Stereo Phase Status LEDs
Shows the active stereo status of the connected video output card. The topmost LED is dedicated to video output card 1 (installed in all servers) and the second LED to video output card 2 (if installed).

- LED off: Stereo not active.
- LED green: Stereo locked.
- LED green flashing: Stereo in process of locking.

GL: Genlock Input/Output

Performance Option

The Performance Options consist of a faster CPU and more RAM. More RAM also uses more RAM channels and the data throughput increases.

- Option Code: X22, X31, X54

Option Slot PX1: no slot needed

Option Slot PX2: no slot needed

There are three Performance Options available:

Available for	Standard for PX1, PX2	PX1, PX2	PX1, PX2	PX2
Option Name	Xeon 13, 24GB RAM	Xeon 22, 32GB RAM	Xeon 31, 48GB RAM	Xeon 54, 96GB RAM
Code	X13	X22	X31	X54
Server Grade Hardware Components	Yes	Yes	Yes	Yes
CPU Type	Intel Xeon SP	Intel Xeon SP	Intel Xeon SP	Intel Xeon SP
CPU Performance Index	13	22	31	54
CPU # of Cores / # of Threads	8/16	10/20	14/28	18/36
CPU Min/Max Frequency	1,7/1,7GHz	2,2/3,0GHz	2,2/3,2GHz	3,0/3,7GHz
RAM	24GB	32GB	48GB	96GB
RAM Channels used	3	4	6	6
ECC RAM	Yes	Yes	Yes	Yes

Data Storage Option

Optional SSD with higher capacity for data. Code D960, D1T9, D3T8

Option Slot PX1: no slot needed

Option Slot PX2: no slot needed

There are three Data Storage Options available

Available for	Standard for PX1, PX2	PX1, PX2	PX1, PX2	PX1, PX2
Data SSD Capacity (Net)	SSD 480GB	SDD 960GB	SSD 1,92TB	SDD 3,84TB
Data SSD Max. Read Rate	500MB/s	500MB/s	500MB/s	500MB/s

Please note that the Operating System is stored on a separate SSD (240GB), so the capacity of the data SSD is fully available.

Uncompressed Option: NVMe 1TB

NVMe storage for high data rate applications.

- Option Code: U1T0

Option Slot PX1: no slot needed

Option Slot PX2: no slot needed

Using the NVME 1TB, no option slot will be occupied. There are no connectors or operating controls available.

In the operating system you will see an additional drive. The drive letter can either be D:, E: or F:, depending on the configuration of the system.

The maximum datarate of this drive will be 2,5GB/s max.

Uncompressed Option: NVMe 2TB

NVMe storage for high data rate applications.

- Option Code: U2T0

Option Slot PX1: LP1

Option Slot PX2: FP3

Using the NVME 2TB, one option slot will be occupied. There are no connectors or operating controls available.

In the operating system you will see an additional drive. The drive letter can either be D:, E: or F:, depending on the configuration of the system.

The maximum datarate of this drive will be 4,5GB/s max.

Live Input Option: DVI-I1, DVI-I2

Single/dual channel DVI/RGB/YUV (HDMI) input.

- Option Code: ID1, ID2

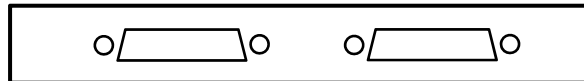Option Slot PX1: not possible

Option Slot PX2: FP2, FP3

DVI-I1:

DVI-IN 1

DVI-I2:

DVI-IN 2   DVI-IN 1

Port Description

DVI-IN 1, DVI-IN 2: DVI Input 1, DVI Input 2

- Standard: DVI-I (DL)
- Analog RGB: up to 1600x1200@60Hz, 1920x1080@60Hz.
- Analog Component Video: SD and HD video up to 1920x1080@60Hz.
- DVI/HDMI: up to 1600x1200@60Hz, 1920x1080@60Hz (Single-Link DVI),
  up to 2560x1600@60Hz, 1920x1080@120Hz (Dual-link DVI)
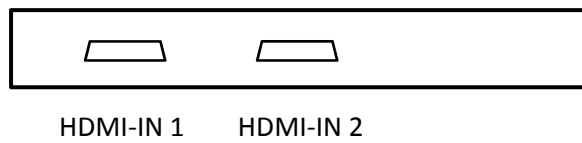
Live Input Option: HDMI2.0-I2

Dual channel HDMI 2.0b input.

- Option Code: IH2

Option Slot PX1: LP1

HDMI-IN 2   HDMI-IN 1
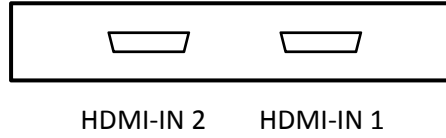
Option Slot PX2: FP2, FP3

HDMI-IN 1   HDMI-IN 2

Port Description

HDMI-IN 1, HDMI-IN 2: HDMI Input 1, HDMI Input 2

- Video formats: PAL, NTSC, 720p, 1080i, 1080p, 2160p (4K-DCI or UHDTV)
- Graphic formats: VGA, SVGA, XVGA, WXGA, WXGA+, UXGA, WUXGA, WSXGA
- RGB 4:4:4, YUV 4:4:4, YUV 4:2:2, YUV 4:2:0
- 8-bit, 10-bit, 12-bit, 16-bit
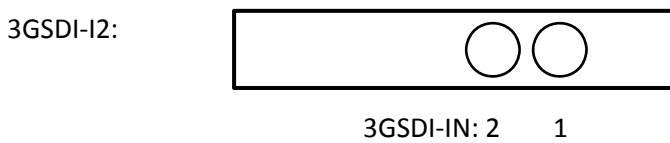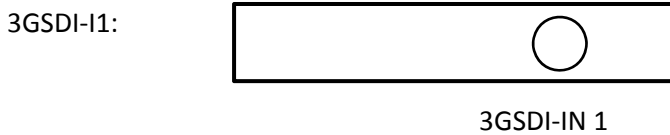- Frame rates from 23.98Hz to 120Hz depending on formats

Live Input Option: 3GSDI-I1, 3GSDI-I2, 3GSDI-I4
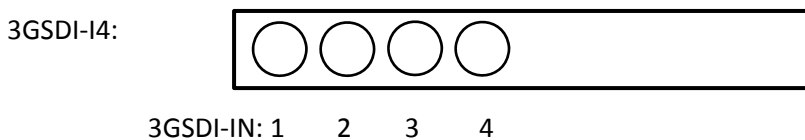
Single/dual/quad channel 3G-SDI input.

- Option Code: IS1, IS2, IS4

Option Slot PX1: LP1

Option Slot PX2: LP2

3GSDI-I1:

3GSDI-IN 1

3GSDI-I2:

3GSDI-IN: 2   1

3GSDI-I4:

3GSDI-IN: 4   3   2   1

Option Slot PX2: FP2, FP3

3GSDI-I1:

3GSDI-IN 1

3GSDI-I2:

3GSDI-IN: 1   2

3GSDI-I4:
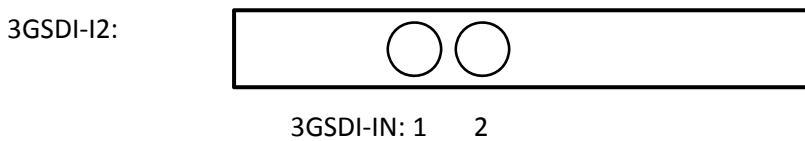
3GSDI-IN: 1   2   3   4

Port Description

3GSDI-IN 1, …, 3GSDI-IN 4: 3G-SDI input 1, …, 3G-SDI input 4

- Video Interfaces and Formats:
    - HD_292_1: S296M_720p_50Hz, S296M_720p_60Hz, S274M_1080p_24Hz, S274M_1080p_25Hz, S274M_1080i_50Hz, S274M_1080i_60Hz
    - HD_DUAL_372: S274M_1080p_50Hz, S274M_1080p_60Hz

- o 3G_A_425_1: S274M_1080p_50Hz, S274M_1080p_60Hz
- o 4XHD_QUADRANT: 3840x2160p_24Hz, 3840x2160p_25Hz, 3840x2160p_30Hz
- o 4X3G_A_QUADRANT: 3840x2160p_50Hz, 3840x2160p_60Hz
- o 3G_B_DL_425_1: S274M_1080p_50Hz, S274M_1080p_60Hz
- o 4X3G_B_DL_QUADRANT: 3840x2160p_50Hz, 3840x2160p_60Hz
- o 2X3G_B_DS_425_3: 3840x2160p_24Hz, 3840x2160p_25Hz, 3840x2160p_30Hz
- o 4X3G_A_425_5: 3840x2160p_50Hz, 3840x2160p_60Hz
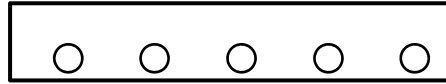- o 4X3G_B_DL_425_5: 3840x2160p_50Hz, 3840x2160p_60Hz

Live Input Option: 3GSDI-C4, 3GSDI-C8

Quad/octo channel 3G-SDI configurable input and output.

- Option Code: CS4, CS8

Option Slot PX1: LP1
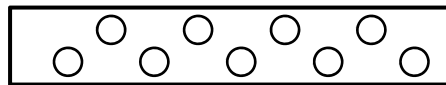
3GSDI-C4:

GL

3GSDI-IN: 4   3   2   1
3GSDI-OUT: 1   2   3   4
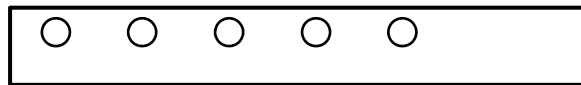
3GSDI-C8:

GL

3GSDI-IN: 4 8 3 7 2 6 1 5
3GSDI-OUT: 5 1 6 2 7 3 8 4

Option Slot PX2: FP2, FP3
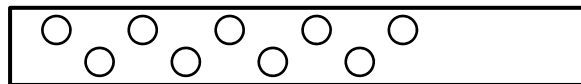
3GSDI-C4:

GL
3GSDI-IN: 1   2   3   4
3GSDI-OUT: 4   3   2   1

3GSDI-C8:

GL
3GSDI-IN: 5 1 6 2 7 3 8 4
3GSDI-OUT: 4 8 3 7 2 6 1 5

Port Description

IMPORTANT! As this option does not have BNC connectors for space reasons, DIN-BNC adapters are required for operation with BNC cables.

GL: Genlock input

- Blackburst or tri-level sync reference input

3GSDI-IN 1, …, 3GSDI-IN 8: 3G-SDI input 1, …, 3G-SDI input 8

- Video Interfaces and Formats:
  - HD_292_1: S296M_720p_50Hz, S296M_720p_60Hz, S274M_1080p_24Hz, S274M_1080p_25Hz, S274M_1080i_50Hz, S274M_1080i_60Hz
  - HD_DUAL_372: S274M_1080p_50Hz, S274M_1080p_60Hz

- 3G_A_425_1: S274M_1080p_50Hz, S274M_1080p_60Hz
- 4XHD_QUADRANT: 3840x2160p_24Hz, 3840x2160p_25Hz, 3840x2160p_30Hz
- 4X3G_A_QUADRANT: 3840x2160p_50Hz, 3840x2160p_60Hz
- 3G_B_DL_425_1: S274M_1080p_50Hz, S274M_1080p_60Hz
- 4X3G_B_DL_QUADRANT: 3840x2160p_50Hz, 3840x2160p_60Hz
- 2X3G_B_DS_425_3: 3840x2160p_24Hz, 3840x2160p_25Hz, 3840x2160p_30Hz
- 4X3G_A_425_5: 3840x2160p_50Hz, 3840x2160p_60Hz
- 4X3G_B_DL_425_5: 3840x2160p_50Hz, 3840x2160p_60Hz

3GSDI-OUT 1, …, 3GSDI-OUT 8: 3G-SDI output 1, …, 3G-SDI output 8

- Please note that the outputs are numbered in the reverse order of the inputs.
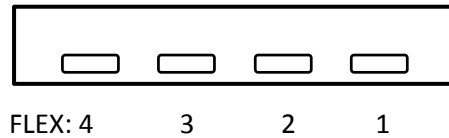
Live Input Option: FLEX-C4

Quad interface for FLEX modules.
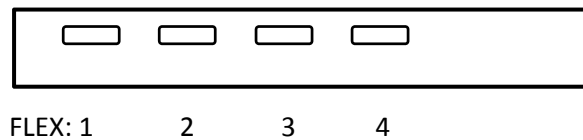
- Option Code: F4

Option Slot PX1: LP1

(For special configurations: Option Slot PX2: LP2. In this configuration, only ports 1 and 2 are functional. Ports 3 and 4 do not work!

FLEX: 4   3   2   1

Option Slot PX2: FP2, FP3

3GSDI-C4:

FLEX: 1   2   3   4

Port Description

FLEX 1, …, FLEX 4: FLEX module connector 1, …, FLEX module connector 4

IMPORTANT! Do not connect to any USB-C device! This will damage the FLEX card and the USB-C device!

- Connectors for FLEX modules:
  - FLEX Module DP1.2-I1: 1x DisplayPort 1.2 input (up to 4K60)
  - FLEX Module HDMI2.0-I1: 1x HDMI 2.0 input (up to 4K60)
  - FLEX Module 3GSDI-I4: 4x 3G-SDI inputs (up to 4x 1080p60 or 1x 4K60)
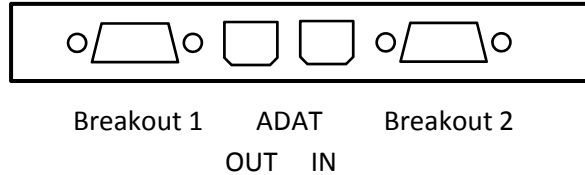- Please use only the supplied cables.

Audio Output Option: HDSPe AIO

RME HDSPe AIO sound interface.

- Option Code: A1

Option Slot PX1: FP2

Option Slot PX2: FP2, FP3

Breakout 1   ADAT   Breakout 2
OUT   IN

Port Description

Breakout 1: Breakout cable for Analog input/output and MIDI input/output

- The 15-pin analog breakout cable has four RCA connectors (stereo analog I/O), a 1/4" TRS jack (headphones), and two 5-pin DIN connectors (MIDI I/O).
- Using the optional balanced analog XLR breakout cable, the card offers balanced Line inputs and outputs via female and male XLR connectors.

Breakout 2: Breakout cable for SPDIF input/output and AES input/output

- The 9-pin digital breakout cable has two RCA connectors as coaxial SPDIF input/output (the red phono socket is the output), and an XLR AES/EBU input and output.

ADAT IN, ADAT OUT: Optical ADAT input and output

IMPORTANT! Due to the limited space at PX1 it can be possible that special cables for some connectors have to be used!

(More details see RME manual: http://www.rme-audio.de/download/hdspeaio_e.pdf)

Audio Output Option: HDSPe AO4S
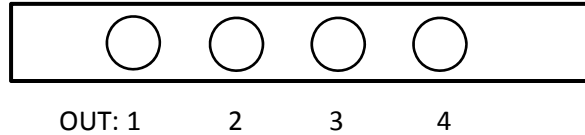
RME HDSPe AO4S 4 channel balanced output

- Option Code: A2

Option Slot PX1: not possible

Option Slot PX2: FP2, FP3

Port Description

OUT 1, … OUT 4: Audio out 1, …, Audio out 4

- The short circuit protected, low impedance and balanced line outputs are accessible through stereo 6,35mm TRS jacks.

(More details see RME manual: http://www.rme-audio.de/download/ao4s192_e.pdf)

Audio Output Option: HDSPe MADI
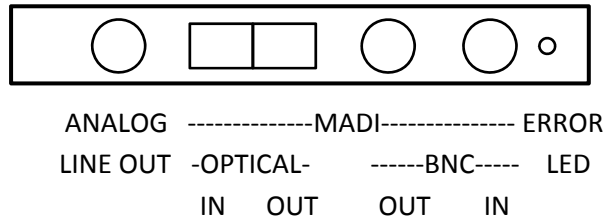
RME HDSPe MADI sound interface

- Option Code: A3

Option Slot PX1: FP2 (Only main card can be installed! WORD CLOCK, MIDI are therefore not available!)
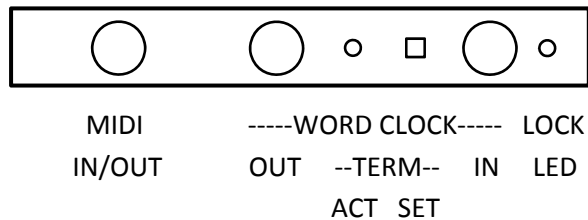
Option Slot PX2: FP2 and FP3

[!] Both slots are required for full functionality! (Note: If neither WORD CLOCK nor MIDI is required, it is not necessary to have the expansion card installed.)

Main Card:

```
        ANALOG   -------------MADI--------------- ERROR
        LINE OUT  -OPTICAL-       ------BNC-----  LED
                  IN     OUT      OUT     IN
```

Expansion Card:

```
          MIDI        -----WORD CLOCK-----  LOCK
          IN/OUT      OUT   --TERM--   IN   LED
                            ACT   SET
```

Port Description

ANALOG LINE OUT

- Stereo monitor output (Phones)

MADI OPTICAL/BNC IN/OUT

- Identical signals are available at both the optical and the coaxial output.

ERROR LED

- MADI error LED

MIDI IN/OUT

- The included breakout cable is connected to the 9-pin Mini-DIN connector and provides two MIDI inputs and outputs via four 5-pin DIN connectors.

WORD CLOCK IN/OUT

- Word clock input and output

WORD CLOCK TERM SET/ACT

- Between the BNC sockets, 75 Ohm word clock termination can be activated and verified by a yellow LED.

LOCK LED

- A green LED displays the word clock input's LOCK state.

(More details see RME manual: http://www.rme-audio.de/download/hdspemadi_e.pdf)

Audio Output Option: HDSPe RayDAT
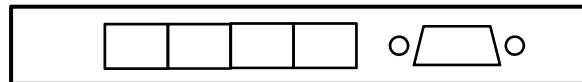
RME HDSPe RayDAT sound interface

Option Code: A4

Option Slot PX1: FP2 (Only main card can be installed! MIDI, ADAT3, ADAT4 are therefore not available!)
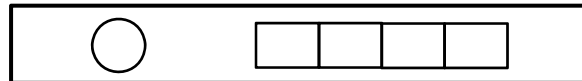
Option Slot PX2: FP2 and FP3

[!] Both slots are required for full functionality! (Note: If neither MIDI nor ADAT3 and ADAT4 are required, it is not necessary to have the expansion card installed.)

Main Card:

--ADAT1-- --ADAT2--   Breakout 2
OUT   IN OUT IN

Expansion Card:

MIDI   --ADAT3-- --ADAT4--

IN/OUT   OUT   IN OUT IN

Port Description

ADAT1 IN/OUT, …, ADAT4 IN/OUT

- 4 channels optical ADAT input and output

Breakout 2: Breakout cable for SPDIF input/output and AES input/output

- The 9-pin digital breakout cable has two RCA connectors as coaxial SPDIF input/output (the red phono socket is the output), and an XLR AES/EBU input and output.

MIDI IN/OUT

- The included breakout cable is connected to the 9-pin Mini-DIN connector and provides two MIDI inputs and outputs via four 5-pin DIN connectors.

IMPORTANT! Due to the limited space at PX1 it can be possible that special cables for some connectors have to be used!

(More details see RME manual: http://www.rme-audio.de/download/raydat_e.pdf)

Audio Output Option: HDSPe AES
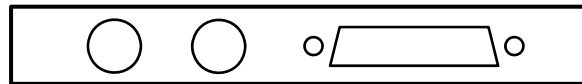
RME HDSPe AES sound interface

Option Code: A5

Option Slot PX1: FP2 (Only main card can be installed! AES/EBU 5-8, MIDI are therefore not available!)

Option Slot PX2: FP2 and FP3
[!] Both slots are required for full functionality! (Note: If neither AES/EBU 5-8 nor MIDI is required, it is not necessary to have the expansion card installed.)

Main Card:

WORD CLOCK   AES/EBU 1-4
OUT   IN   OUT/IN

Expansion Card:
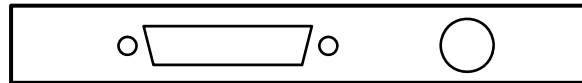
AES/EBU 5-8   MIDI
OUT/IN   IN/OUT

Port Description
AES/EBU 4-8, AES/EBU 5-8 IN/OUT

- 2x 4 channel AES/EBU input and output.
- Note: Breakout and connection cables with this pinout are standard widely available.

WORD CLOCK IN/OUT

- Word clock input and output

MIDI IN/OUT

- The included breakout cable is connected to the 9-pin Mini-DIN connector and provides two MIDI inputs and outputs via four 5-pin DIN connectors.

IMPORTANT! Due to the limited space at PX1 it can be possible that special cables for some connectors have to be used!

(More details see RME manual: http://www.rme-audio.de/download/hdspeaes_e.pdf)

Rack Installation

This section provides information on installing the media server into a rack unit with the rails provided. There are a variety of rack units on the market, which may mean that the assembly procedure will differ slightly from the instructions provided. You should also refer to the installation instructions that came with the rack unit you are using.

- CAUTION! Never mount the media server solely on the 19" mounting bracket attached to the server. This will break the 19" mounting bracket and damage the server, the rack and may cause injury.
  - o Always use the 19" rails
  - o Or ensure that the media server rests on an appropriate base plate.

- CAUTION! Do not pick up the server with the front handles. They are designed to pull the chassis from a rack only. This may damage the server and may cause injury.

Precautions

- Ensure that the leveling jacks on the underside of the rack are fully extended to the floor, with the entire weight of the rack resting on them.
- For single rack mounting, stabilizers must be attached to the rack.
- For multiple racking systems, the racks must be coupled together.
- Always make sure that the rack is stable before pulling a component out of the rack.
- You may only extend one component at a time - the simultaneous extension of two or more components can cause the rack to become unstable.
- The units must be installed in a rack in such a way that no dangerous condition arises due to uneven mechanical loading.
- Install the heaviest server components on the bottom of the rack first, and then work your way up.
- Use an uninterruptible power supply (UPS) to protect the server from power surges and voltage spikes and keep your system up and running in the event of a power failure.

Mounting the Rail Kit on PIXERA one

The package contains two rack rail assemblies in the rack mounting kit.

Each assembly consists of two parts: an inner fixed chassis rail attached directly to the server chassis and an outer fixed chassis rail attached directly to the rack itself.

Note: These rails fit into a rack with a depth between 675mm and850 mm.

Inner Rack Rails
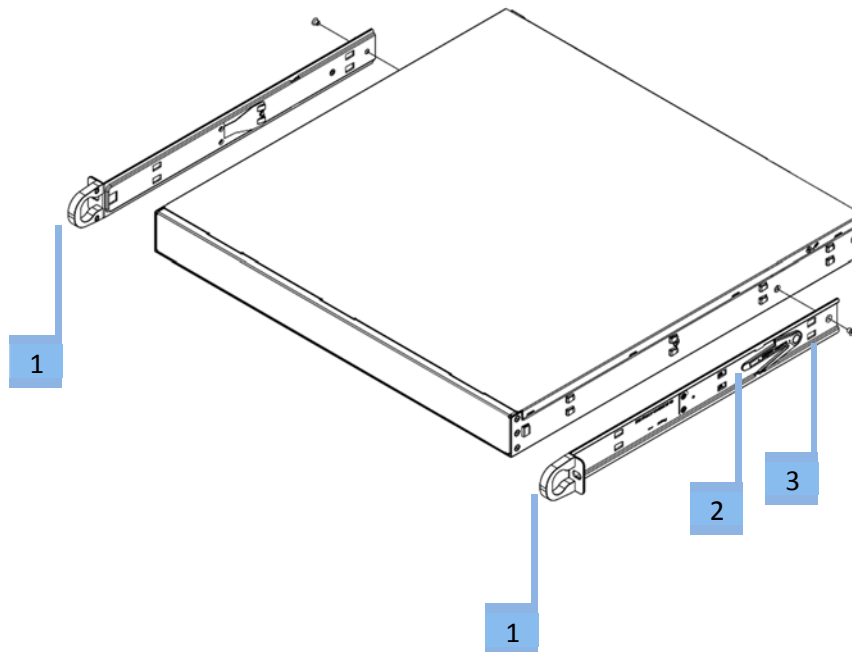
- Both chassis rails have a locking tab [2]. The tabs lock the server into place when installed and pushed fully into the rack. These tabs also lock the server in place when fully extended from the rack. This prevents the server from coming completely out of the rack when you pull it out for servicing.
- Replace both original inner rails [1] supplied with the server (black rails) with the inner rails from the rail kit (silver rails)
    - o Remove the locking screw [3].
    - o Push the black 19" rail [1] back until the hooks of the chassis disengage from the rails.
    - o Place the new silver rail [1] on the side of the chassis and align the hooks of the chassis with the inner rail holes.
    - o Slide the rail to the front of the chassis until it clicks into place.
   - o Fix the rail again with the screw.

Outer Rack Rails

The outer rails are attached to the server rack and hold the server in place.
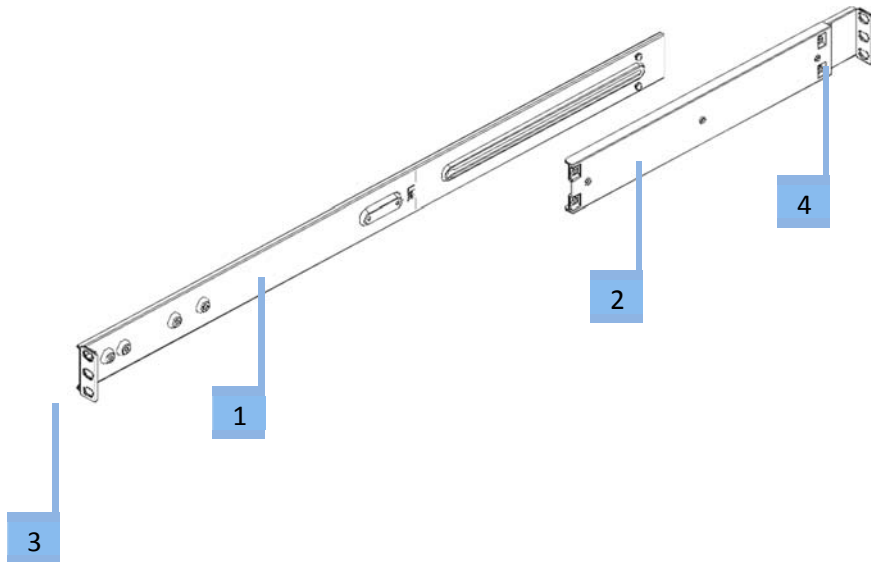
- Attach the short bracket [2] to the outside of the long bracket [1]. Align the pins of the rail with the slides. The ends of each bracket must be inclined in the same direction.
- Adjust both the short and long brackets to the correct distance so that the rail fits firmly into the rack.
- Attach the long bracket of the outer rail [3] to the front of the rack with two M5 screws and the short bracket [4] to the rear of the rack with three M5 screws.

Installing the Media Server into the Rack
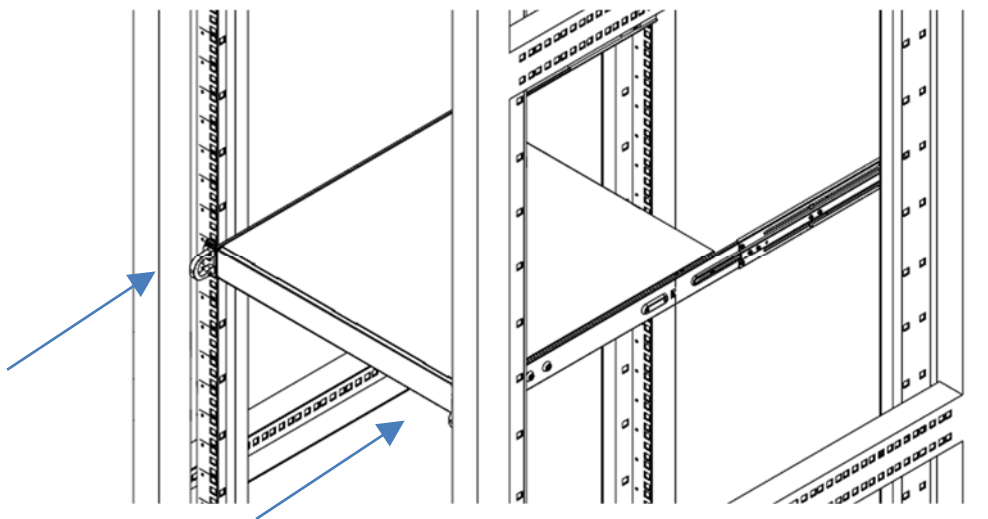
- Align the inner rails with the front of the outer rails.
- Slide the inner rails into the outer rails, keeping the pressure even on both sides (It may be necessary to depress the locking tabs when inserting). When the media server has been pushed completely into the rack, the locking tabs will "click" into the locked position.
- Insert and tighten the screws that hold the front of the server to the rack.

Mounting the Rail Kit on PIXERA two

The package contains two rack rail assemblies in the rack mounting kit.

Each assembly consists of three sections: An inner chassis rail which secures directly to the chassis, an outer rail that secures to the rack, and a middle rail which extends from the outer rail. These assemblies are specifically designed for the left and right

Note: These rails fit into a rack with a depth between 675mm and 920mm.
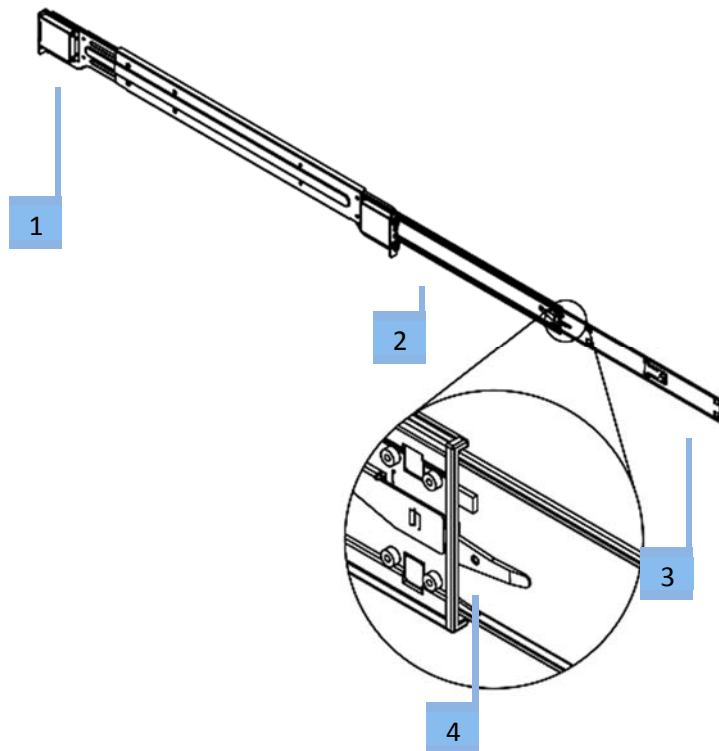
1. Outer rail
2. Middle rail
3. Inner rail
4. Locking Tab:
    Each inner rail has a locking tab. This tab locks the chassis into place when installed and pushed fully into the rack. These tabs also lock the chassis when it is fully pulled out of the rack. This prevents the server from fully coming out of the rack when the chassis is pulled out.

Releasing the Inner Rack Rails
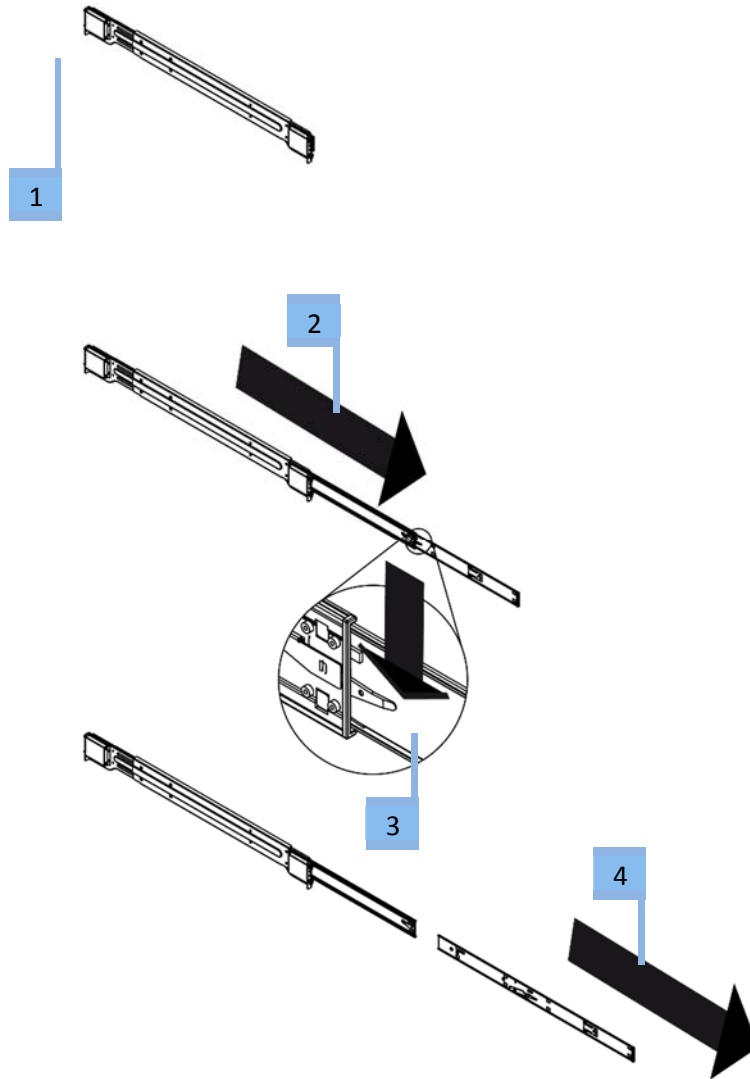
1. Identify the left and right outer rail assemblies as described previously.
2. Pull the inner rail out of the outer rail until it is fully extended as illustrated below.
3. Press the locking tab down to release the inner rail.
4. Pull the inner rail all the way out.

Installing the Inner Rails on the Chassis
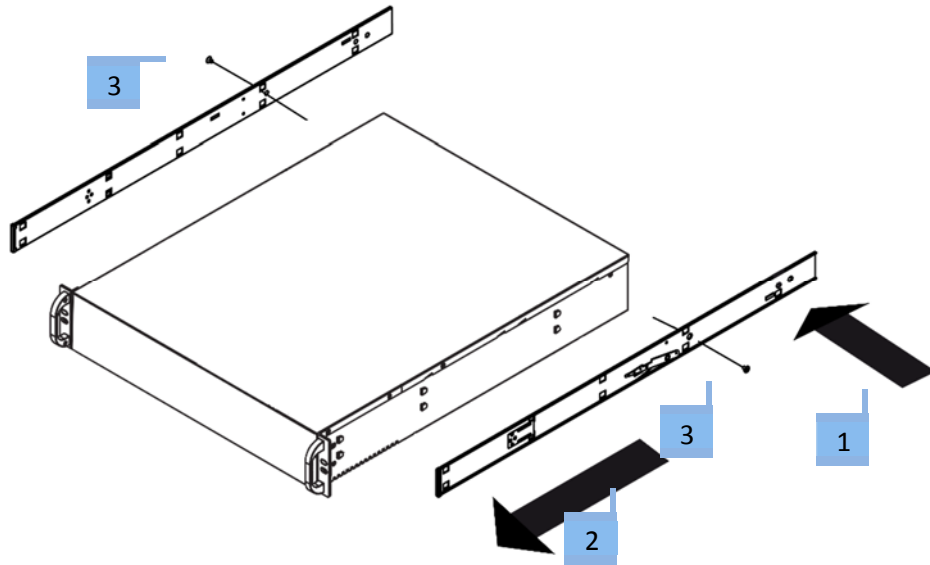
Confirm that the left and right inner rails have been correctly identified.

1. Place the inner rail against the side of the chassis and align the hooks on the side of the chassis with the holes in the inner rail.
2. Slide the inner rail forward to the front of the chassis until the rail snaps into the locked position that secures the inner rail to the chassis.
3. Attach the inner rail to the chassis with the screw.

Installing the Outer Rails on the Rack
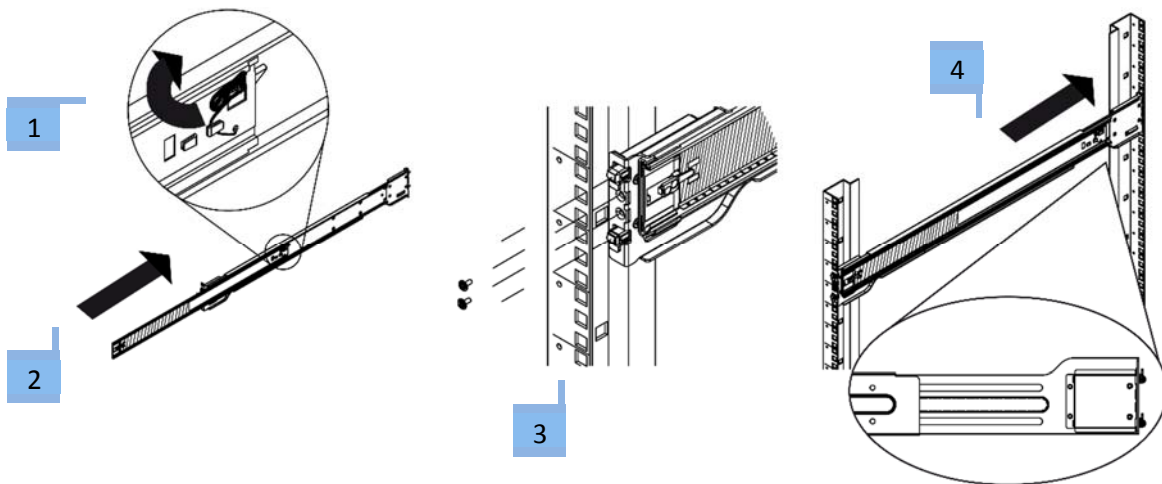
1. Press the locking tab at the rear end of the middle rail upwards.
2. Push the middle rail back into the outer rail.
3. Hang the hooks on the front of the outer rail in the slots on the front of the rack. Additionally, fasten the outer rails to the rack with screws as shown above.
4. Pull out the back of the outer rail and adjust the length to the rack.
5. Hang the hooks of the rear part of the outer rail in the slots on the back of the rack. Additionally, fasten the rail to the rack with screws.

Installing the Chassis into the Rack
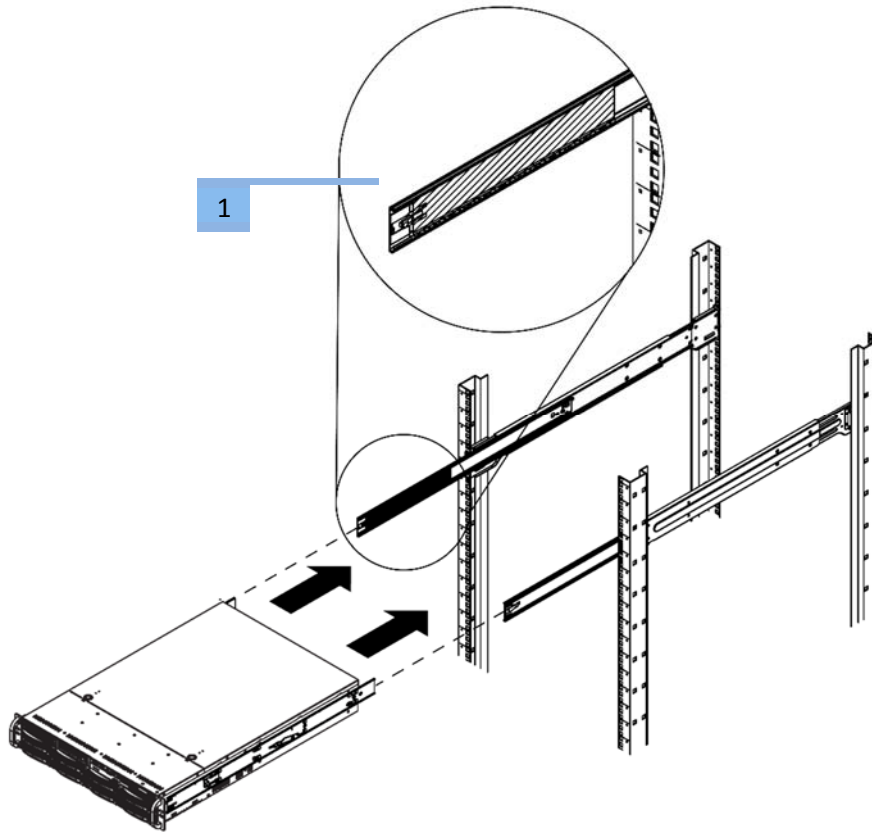
1. Extend the outer rails as shown above.
2. Align the inner rails of the chassis with the outer rails.
3. Slide the inner rails into the outer rails, keeping the pressure even on both sides. When the media server has been pushed completely into the rack, the locking tabs will "click" into the locked position.
4. Insert and tighten the screws that hold the front of the server to the rack.

Software

AV Stumpfl Media Server Operating System

The AV Stumpfl Media Server Operating System is based on Windows 7 Embedded. Is has been modified and optimized by AV Stumpfl for media server applications. Therefore, many standard components, which will be available on a standard Windows Operating system, are missing –to save performance and to increase stability.

For the same reason the Windows Update Service is not available in the AV Stumpfl Media Server OS. Bringing in Microsoft updates into the OS can cause instability and a loss in performance. The system must remain in the condition in which it was delivered!

IMPORTANT! For security reasons, the media servers must be operated in an absolutely separate network, from which you have no access to other networks (e.g. operational company networks, etc.). AV Stumpfl GmbH cannot accept any liability for damage (e.g. virus attack, loss of data, etc.) resulting from disregard of this guideline.

IMPORTANT! The media server runs on an operating system optimized for performance and stability. Any changes to the system can have a negative effect on performance and stability. It is therefore not permitted to install any kind of software on the media server. This also includes the installation of virus scanners, drivers, updates, etc. If an installation or any other manipulation is nevertheless carried out, it is no longer possible to guarantee a faultless function. Any changes to the system will also void the warranty. Exceptions are installations that have been approved by AV Stumpfl.

PIXERA UI
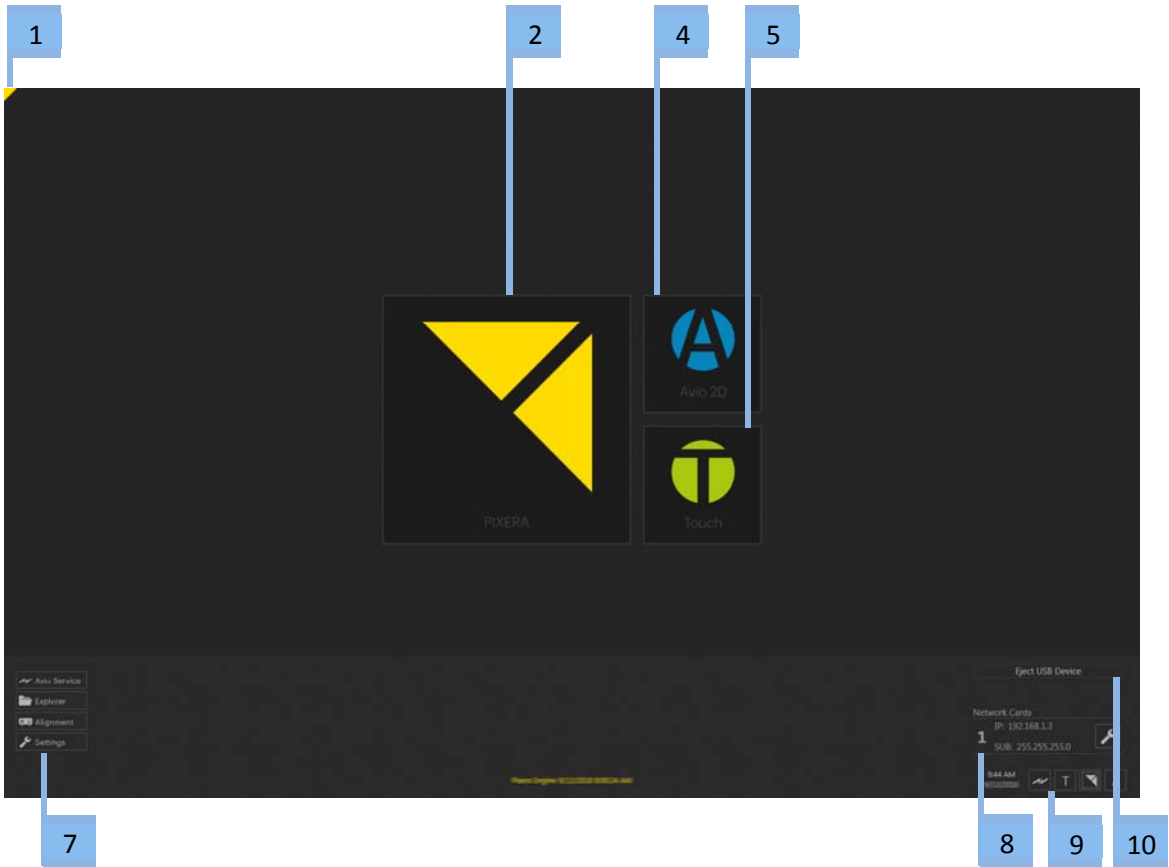
Wings RX Compatibility UI
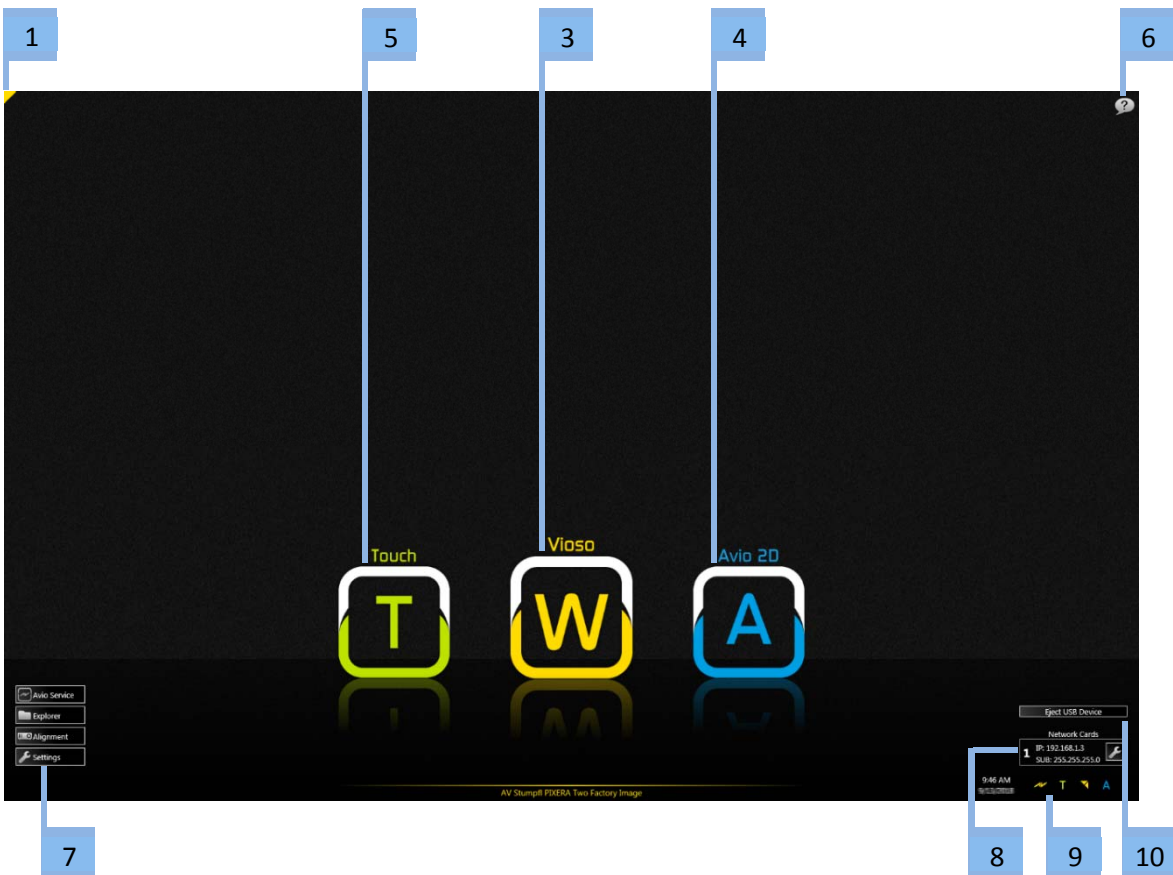
1. Use the yellow triangle in the upper left corner to switch between the PIXERA UI and the Wings RX Compatibility UI.
2. Start PIXERA
3. Start Wings
4. Start Avio Manager
5. Start Wings Touch
6. Open the help. Move the mouse over the button to display keyboard shortcuts.
7. Buttons to open:
   a. Avio Service: Opens the Avio Service menu
   b. Explorer: start the File Explorer
   c. Alignment: Basic alignment of the video outputs is possible via a test image generator.
   d. Settings: Offers shortcuts for all the most important settings and for Task manager, Restart and Shutdown.
8. Shows IP address and open network settings
9. Button to start the corresponding application
10. Eject USB Devices: For safely removing USB devices. After clicking the button, a list of external drives is displayed that can be removed by clicking Eject.

UI Shortcuts

Win + T   Opens Wings Touch

Win + M   Opens Avio Manager

Win + S   Opens the Avio Service Menu

Win + T   Wings Touch

Win + W   Wings Vioso

Win + Ctrl   Opens Wings Engine Settings

Win + A   Opens the Audio Settings

Win + C   Opens the Calculator

Win + D   Opens the Wings Engine Desktop

Win + O   Positions the mouse pointer in the desktop center

Win + P   Definition of the primary monitor (click P again while holding the Windows key to select the next display).

Win + E   Opens the Explorer

Win + N   Opens the NVidia Manager

Win + G   Opens the Graphics/Display Settings

Win + A   Opens the Audio settings

Using a uEye camera

If you want to use a uEye camera for Vioso calibration proceed as follows:

- Connect your uEye camera to the network and the Wings Engine.
- Click Settings on the desktop, followed by clicking on Settings and open the uEye Camera Manager.
- At the top of the field the camera is displayed with an exclamation mark. This indicates that its address is in a different address range.

- Click Automatic ETH configuration and the IP address is adjusted to the address range used. If you want to define a fixed IP address yourself, enable Expert Mode and enter the desired IP address in the bottom right corner.
- In the completion message click OK and close the uEye Camera Manager.

The camera is now ready for use. Before you start the Vioso calibration you should adjust sharpness and portion using the uEye Cockpit as the large-size window allows easier and more accurate settings.

- Click shortcut uEye-Cockpit and button Live video in the dialog box popping up.
- At the top left corner click Open camera for the camera image to be displayed. With a new camera or new software, you may have some firmware update loaded onto the camera.
- If the image does not show the required resolution and size, click Camera properties and select tab Size.
- At Profile choose the required resolution. Bear in mind that a higher resolution causes a lower frame rate and makes the calibration take longer.
- Click tab AWB and select Off to disable automatic white balance. Close the properties dialog by clicking Close.
- Now you can adjust sharpness and portion.

You can now continue with a Vioso calibration. See Camera-based calibration.

Defining EDID for live video inputs

Any desired EDID can be saved for DVI inputs. This ensures that the source supplies the defined resolution, provided it is able to do so.

- Connect the display or projector whose EDID you want to read out to the video input card.
- Click Settings on the Desktop, followed by clicking on Shortcuts and open the EDID Editor.
- Click Read EDID to read the EDID information of the display unit.
- This is the opportunity to check and, if applicable, modify the EDID. If the source is to supply only one particular resolution, you should remove all other resolutions from the EDID. Click Save to save the modified EDID. You can get back to it again any time later.
- Now click Write EDID to DELTA-dvi to load the EDID of the video input card. If the card features two inputs, you need to enter the corresponding input in the following dialog.
- Now disconnect your display unit from the video input card and connect your video source. If this is a computer, all the resolutions contained in the EDID should now be selectable provided the computer is able to handle them all. Otherwise, the intersection of resolutions is used.

Backup Manager

In Backup Manager various system conditions, so-called "snapshots" can be saved. This means that you can make your system settings and then create a backup version. You can create various snapshots with different settings and quickly change over between the snapshots. It is also possible to "freeze" a system condition to ensure that any modifications are undone at the next system start and the settings correspond to the "frozen" condition.

Starting the Backup Manager

During the booting process and after displaying the bios info for three seconds, the list for selecting the Backup Manager appears. Please select the backup manager here.

Please note that wireless keyboards or mice may not work in combination with the Backup Manager. You'd better use cable-operated input equipment connected to a USB port.

The system initially comes with two snapshots. A First Child which cannot be edited and corresponds to the factory setting. Derived from the First Child is the Factory Image, which is the first editable snapshot.

Creating a new snapshot

Use Create New Snapshot to create a new snapshot. The new snapshot must refer to an existing snapshot which can be selected at Parent Snapshot.

Selecting a snapshot

By selecting the Use buttons, you can choose the snapshot to be used. At the system start a Boot Manager showing the selected entry and the Backup Manager are displayed. Should you have selected a snapshot with child snapshots you are asked whether you want to create a copy of the selected snapshot or whether you want to delete all child snapshots.

Changing the snapshot name or description

By right-clicking the snapshot description or name you can change the description or name.

Freezing a snapshot (disallowing modifications)

Snapshots can be frozen by clicking the Freeze checkbox. This means that any modifications in the frozen snapshot are made undone at a restart. During a media server restart the Backup Manager is started first to resume the frozen condition and only then is the system frozen again. To quit this condition, you need to abort the restart in the Backup Manager and then "defreeze" the snapshot (by unchecking the box Freeze). For permanent installation this Freeze function may be quite useful to ensure that the system always starts with the same settings.

Locking a snapshot

By selecting the Lock button, you can lock a snapshot. After entering a password this snapshot can no longer be selected or deleted. The snapshot can only be unlocked again by clicking the Lock button and entering the password. A locked snapshot can be recognized by the red button.

IMPORTANT! The snapshot can also be unlocked by entering the administrator password, which is "AVStumpfl" by default. It is therefore advisable to change the administrator password as described below.

Use Delete to delete snapshots that are no longer needed. If there are any snapshots that refer to the snapshot to be deleted the child snapshots will be deleted as well.

Backup Manager Administration

Click Manage System Images to open the administration view. Click Import New System Image to import new system images delivered by AV Stumpfl. Also, the GUID of the Backup Manager and the operating system can be changed here. Attention: Changing the GUID may prevent the system from starting correctly.

The administration view is password-protected. By default the password is "AVStumpfl". The password can be changed after clicking the settings button.

Servicing

Removing the PX2 Back Panel for Servicing Purposes

The rear panel protects the redundant power supplies and the SSDs from damage and accidental removal.

To replace the redundant power supplies and the SSDs during service, the back panel must be removed.

IMPORTANT! Servicing activities on the server may only be carried out in consultation with AV Stumpfl GmbH. Unauthorized servicing activities will void the warranty.

(Standard configuration shown, your system may be different)
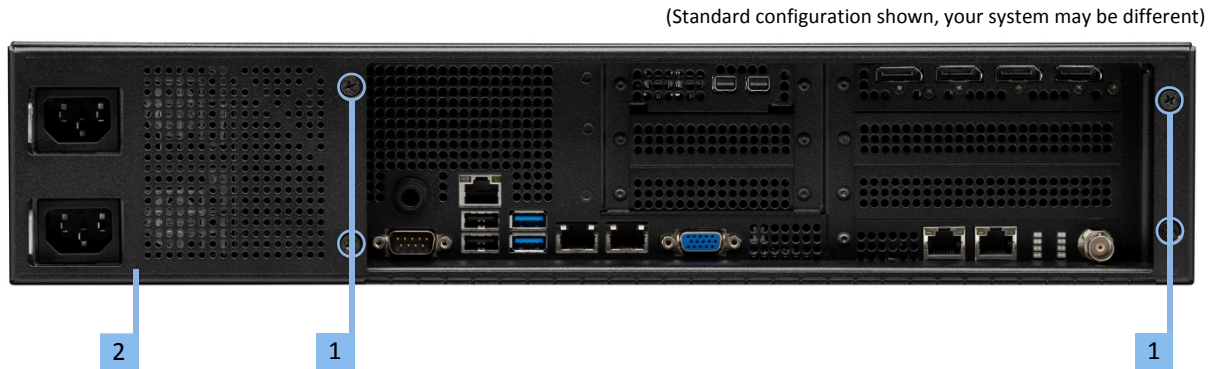
1. Remove the 4 screws
2. Remove the back panel

Now you have access to the power supply modules and the SSDs. Replacing the power supplies and the SSDs see the following points.

IMPORTANT! After completion of the servicing activities, the back side must be re-attached to the server! Operating the server without back panel will void the warranty.

Replacing the Power Supply

The PIXERA two media server has a redundant power supply. They automatically sense and operate at a 100V to 240V input voltage and are autoswiching. Power supplies can be replaced without powering down the system.

A yellow lamp on the power supply unit illuminates when the unit is switched off. A green light indicates that the power is on.
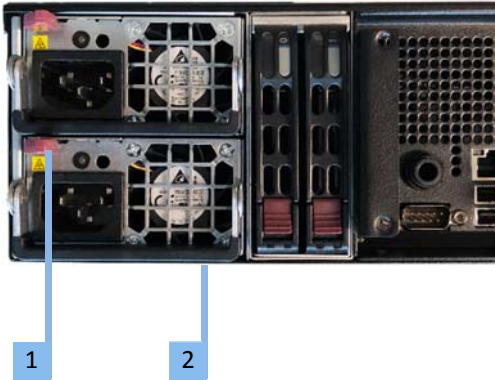
1. Push the release tab on the back of the power supply.
2. Pull the power supply out using the handle provided.
3. Replace the failed power module with a new unit. To do this, push the new power supply module into the power bay until you hear a click.
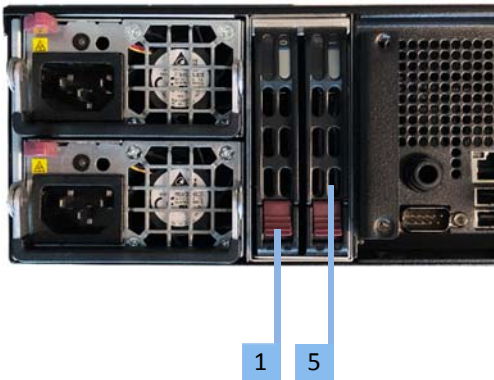4. Plug the AC power cord back into the module.

IMPORTANT! Please be aware that removing these parts without proper protection can be dangerous and can destroy the parts and the media server!

Replacing the SSDs

The operating System is stored on the left SSD. The right SSD is the data SSD.

IMPORTANT! The exchange of the SSDs may only be carried out in consultation with AV Stumpfl GmbH! Unauthorized replacement of the SSDs will void the warranty.

After exchanging the SSDs, all data is lost. No data is stored redundantly. If you have exchanged the OS-SSDs, you must request a corresponding image of the operating system from AV Stumpfl. If you have exchanged the data SSD, you must reinstall the data.

1. Press the red button to release the SSD.
2. Pull out the SSD carefully.
3. Replace the SSD in the carrier with exactly the same type.
4. Slide the SSD back in.
5. Lock the SSD again.

IMPORTANT! Please be aware that removing these parts without proper protection can be dangerous and can destroy the parts and the media server!

AV Stumpfl Contact

If you encounter any problems using our products, please contact our Support. If you have any questions or would like to make any suggestions, you can reach us on the phone from Monday to Thursday from 8.00 to 12.00 and from 13.00 to 16.30 and on Fridays from 8.00 to 12.00 (UTC+1).

Outside these hours we can offer fee-based emergency support:
Our emergency hotline is available every day between 8 am and 10 pm (UTC+1) at +43(7249)42811-900. However, we would like to point out that we charge EUR 30,00 net for every 15-minutes. Please bear in mind that we may not be able to answer your call immediately. In order to ensure that we can return your call as soon as possible and offer best-possible support we are asking you to leave a message with your

- Company name
- Name
- Telephone number
- Dongle or customer number

on the answering machine and we will call you back.

Imprint

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Declaration of Conformity

C E

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	AVStumpfl@AVStumpfl.com
	www.AVStumpfl.com

Products:

- PIXERA one
- PIXERA two

We hereby declare that the server described above complies with all relevant regulations. It meets the requirements of the following guidelines and standards.

Applied Guidelines:

- Low Voltage Directive 2014/35/EU
- Electromagnetic Compatibility Directive 2014/30/EU
- Restriction of Hazardous Substances Directive 2011/65/EU
- Energy Related Products Directive 2009/125/EC.

Applied harmonized Standards:

Low Voltage Directive:

- EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
  Information technology equipment - Safety - Part 1: General requirements

Electromagnetic Compatibility Directive:

- EN 55032:2016-02
  Electromagnetic compatibility of multimedia devices and equipment - Emission requirements
- EN 55024:2010
  Information technology equipment Immunity characteristics - Limits and methods of measurement

Restriction of Hazardous Substances Directive:

- EN 50581:2012
  Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Wallern, 2018-09-04   Tobias Stumpfl, CEO

Version History

Date	Document Version	Hardware Version	Changes
	-	V1.0.0	First hardware release version
2018-09-20	V10	V1.0.0	First manual release version
2018-10-22	V11	V1.0.0	Note added at Port Description at "Live Input Option: 3GSDI-C4, 3GSDI-C8": DIN-BNC adapters are required. Rear View - #2 - changed to "Not used".
2018-12-07	V12	V1.0.0	Note added at "Rear View" – "10Gbps LAN": 10Mbps and 100Mbps speeds are not supported for LAN1 and LAN2.
2018-12-13	V13	V1.0.1	Stereo Audio Output changed from 6,3mm to 3,5mm. Description and images at "Rear Views" adapted. Note added at "Options" – "Video Outputs": For space reasons DisplayPort cables need to be used where the plug does not exceed a maximum thickness of approx. 12mm! Note added at "Audio Output Option" – "HDSPe AIO", "HDSPe AES" and "HDSPe RayDAT": Due to the limited space at PX1 it can be possible that special cables for some connectors have to be used!
2019-01-07	V14	V1.0.2	Note changed at "Options" – "Video Outputs": Due to a mechanical change DisplayPort cables up to a maximum thickness of approx. 14mm can now be used.
2019-01-26	V14	V1.0.2	"Audio Output Option - HDSPe MADI, RayDAT, AES": "Option Slot PX1" changed from "not possible" to "FP2 (Only main card can be installed! …)" "Audio Output Option - HDSPe AES": Expansion Card had the wrong orientation -> rotated 180°. Important note added at "AV Stumpfl Media Server Operating System", that any installation of software, etc. is not permitted.