AVX17

INSTRUCTIONS

User Manual

Version 1.4

SAFETY

1. Read this user manual.
2. Keep these operating instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Only clean with a dry cloth.
7. Do not block any ventilation openings. Only operate the device in accordance with the manufacturer's instructions.
8. Do not place the device near any heat sources such as radiators, heaters, stoves, or other devices (including amplifiers) that generate heat.
9. Make sure that the power cord is not pinched, especially at power outlets and where it emerges from the device.
10. Use only accessories specified by the manufacturer.
11. Only to be used in combination with the stand, tripod, bracket or table specified by the manufacturer or sold with the device. If a caster is used, use caution when moving the cart / equipment combination to avoid injury from tipping over.
12. Pull out the power plug during lightning storms or when unused for long periods.
13. Leave all maintenance work to qualified service personnel. Service is required when the device has been damaged in any way, e.g. For example, if the power cord or plug has been damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Information on the power supply can be found in the manufacturer's operating instructions. Note that different operating voltages may require the use of different power cables and / or mounting plugs.

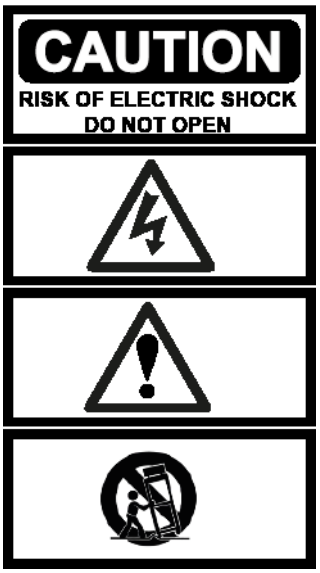
15. Do not install the device in an unventilated rack.

16. The user should not attempt to service the device beyond what is described in the operating instructions. All other maintenance work should be referred to qualified service personnel.

RECYCLING IN COUNTRIES OF THE EUROPEAN UNION

This symbol on the product or on the packaging means that your electrical and electronic equipment at the end of its life should be disposed of separately from your household waste. There are separate collection systems for recycling in the EU. For more information, please contact the local government agency or the retailer where you purchased the product.

WARNING



WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

NOTICE: To reduce the risk of electric shock, never remove the cover (or back cover). There are no user serviceable parts inside. Contact qualified service personnel.

THE LIGHTNING SYMBOLalert with an arrow symbol is intended tothe user to the presence of an uninsulated “dangerous voltage” within the product housing which may be of sufficient strength to represent the risk of electric shock to persons.

IMPORTANT: Software update

Please perform a software update before using the device for the first time.

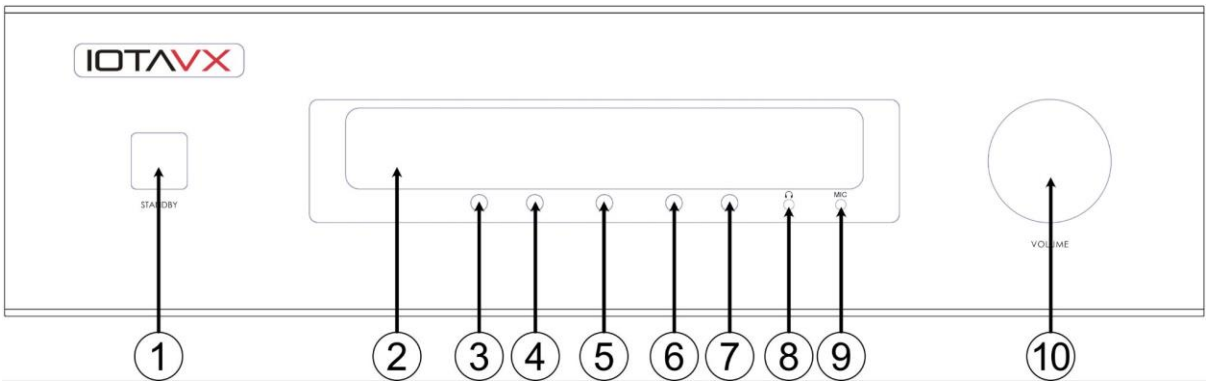
To do this, follow the steps below:

1. Download the latest software version here: Firmware Update
2. Copy the downloaded file onto a USB stick. The USB stick has to be formatted to FAT32. The file must not be renamed.
3. Check that the main power switch on the back of the AVX17 is off.
4. Insert the USB stick into the USB port on the back.
5. Switch the AVX17 on using the main power switch on the back.
6. The AVX17 recognizes the USB stick and automatically starts the software update. You will be informed about the progress of the update in the VFD display.
   Note: If the update does not start automatically, switch the device on with the standby button on the front and start the update manually in the menu under Setup -> About -> Software update.
7. The update is complete as soon as the AVX17 switches to standby mode.
8. Turn off the AVX17 using the main power switch on the back.
9. Remove the USB stick.

Note: You will find the current software version of your device in the menu under Setup -> About -> MCU Version.

Product description

Front side



1. **Standby button**
   Button for switching the device on and off and displaying the operating status.

2. **VFD display**
   Shows the selected source, volume and menu.

3. **Back button**
   For navigation in the menu.

4. **Next button**
   For navigation in the menu.

5. **Menu button**
   For calling up and exiting the menu.

6. **Down button**
   For navigation in the menu.

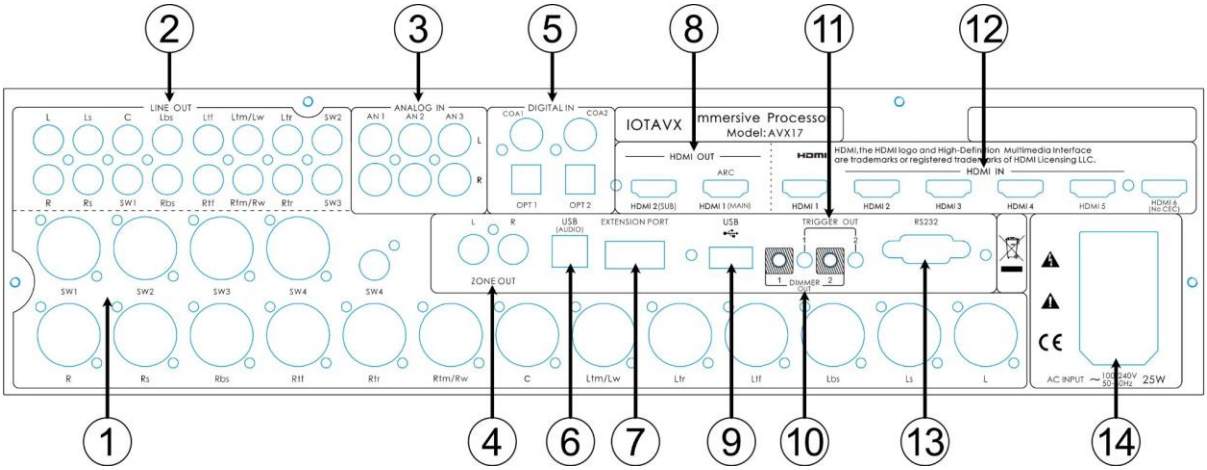
7. **Up button**
   For navigation in the menu.

8. **Headphone output**
   For connecting headphones with a 3.5mm jack.

9. **Microphone connector**
   For connecting the microphone to perform the automatic calibration system of the device.

10. **Volume control**
    To regulate the volume.

Rear side



1. **Analog XLR audio outputs**
   For analog connection to an external power amplifier.

   SW1-4: Subwoofer 1-4
   R: Right front speaker
   Rs: Right surround speaker
   Rbs: Right surround back speaker
   Rtf: Right top front speaker
   Rtr: Right top rear speaker
   Rtm/Rw: Right top middle speaker / Right front wide speaker
   C: Center speaker
   Ltm/Lw: Left top middle speaker / Left front wide speaker
   Ltr: Left top rear speaker
   Ltf: Left top front speaker
   Lbs: Left surround back speaker
   Ls: Left surround speaker
   L: Left front speaker

Note: If you are using two ceiling/top speakers, connect them to Rtm/Rw and Ltm/Lw. If you are using four ceiling/top speakers, connect them to Rtf, Rtr, Ltf and Ltr.

2. **Analog cinch audio outputs**
   For analog connection to an external power amplifier.

   SW1-4: Subwoofer 1-4
   L: Left front speaker
   Ls: Left surround speaker
   C: Center speaker
   Lbs: Left surround back speaker
   Ltf: Left top front speaker
   Ltm/Lw: Left top middle speaker / Left front wide speaker
   Ltr: Left top rear speaker
   R: Right front speaker
   Rs: Right surround speaker
   Rbs: Right surround back speaker
   Rtf: Right top front speaker
   Rtm/Rw: Right top middle speaker / Right front wide speaker
   Rtr: Right top rear speaker

Note: If you are using two ceiling/top speakers, connect them to Rtm/Rw and Ltm/Lw. If you are using four ceiling/top speakers, connect them to Rtf, Rtr, Ltf and Ltr.

3. **Analog audio inputs**
   For analog connection of source devices to the AVX17.

4. **Zone 2 outputs**
   For connecting an external power amplifier via Zone 2.

5. **Digital audio inputs**
   For digital connection of source devices to the AVX17.

6. **USB audio input**
   For the transmission of audio via USB from a source device (e.g. PC).

7. **Extension port**
   For connecting the optional IOTAVX Bluetooth adapter.

8. **HDMI outputs**
   For connecting an external picture display device (e.g. television) via HDMI 2.0b.

9. **USB Software Update**
   For updating the software of the device.

10. **Dimmer outputs**
    Connection to other devices to synchronize their lighting.

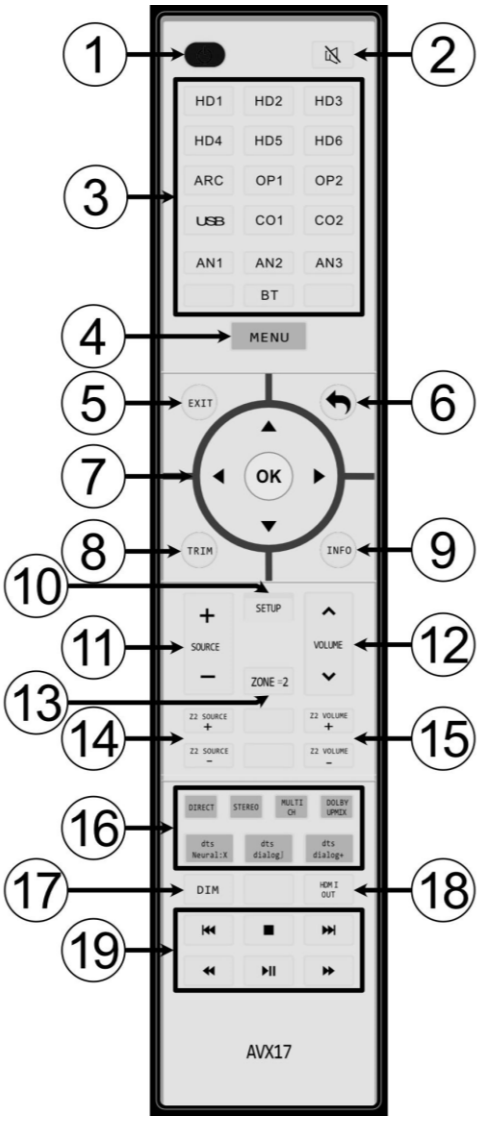
11. **Trigger outputs**
    Connection to other devices to synchronize switch-on and switch-off processes.

12. **HDMI inputs**
    For connecting digital sources (e.g. Bluray player) via HDMI 2.0b.

13. **RS232C**
    RS232C input for control via an external control system.

14. **IEC power connector**
    The IEC power connector accepts any standard IEC power cord.

Remote Control



1. **Power**
   Turns the device on and off.

2. **Mute**
   Mutes the device.

3. **Input selection**

HD1-6:	HDMI 1-6
ARC:	HDMI ARC
OP1-2:	Optical inputs 1-2
USB:	USB audio input
CO1-2:	Coaxial inputs 1-2
AN1-3:	Analog inputs 1-3
BT:	Bluetooth adapter (optional)

4. **Menu**
   Calling up the menu.

5. **EXIT**
   Exit the menu.

6. **Back**
   Jump back to the higher menu level.

7. **D-pad**
   navigation in the menu.

8. **TRIM**
   Call up the short-term sound settings.

9. **MENU button**
   Calling up the playback information.

10. **SETUP**
    Calling up the setup in the menu.

11. **Source selection**
    Jump between the sources.

12. **Volume**
    Adjustment of the desired volume.

13. **Zone 2**
    Activates or deactivates the Zone 2 output.

14. **Zone 2 source selection**
    Selection of a source for playback via the Zone 2 output.

15. **Zone 2 volume**
    Adjustment of the desired volume of the Zone 2 output.

16. **Playback mode**
    Selection of the desired playback mode.

17. **Dimmer**
    Adjustment of the brightness of the logo lighting and the display.

18. **HDMI output selection**
    Selection of the desired HDMI output.

Basic Operations

Before making any connections between the AVX17 and other equipment, read the manuals that came with your other components. Do not connect the power cord to the AVX17 until you have completed and checked all connections.

Switching on the device:

Press the POWER button to switch on the AVX17. As soon as the power LED lights up white, the device is ready for use. Press the POWER button again to put the AVX17 into standby mode. As soon as the power LED lights up red, the device is in standby mode.

Menu

You call up the menu by pressing the MENU button. You navigate in the menu using the directional pad, the back button or the buttons on the front of the device. You will find the following options in the AVX17 menu:

SOURCE

Here you will find an overview of all sources. To select a source for playback, navigate to the desired source and press “OK” or the right arrow on the control pad.

MODE

Here you can choose from the following playback modes:

- **Pure**
  The source signal is passed on to the corresponding channels unprocessed. All equalizers are deactivated. The distance and volume settings of the individual channels are also deactivated.

- **Direct**
  The source signal is forwarded to the corresponding channels according to the selected settings (speaker layout, subwoofer, speaker crossover). Equalizers are active if desired. The distance and volume settings of the individual channels are active.

- **Stereo**
  The source signal is converted into stereo and forwarded according to the selected settings (speaker layout, subwoofer, speaker crossover). Equalizers are active if desired. The distance and volume settings of the individual channels are active.

- **Multi CH**
  The source signal is converted into multi-channel playback. Equalizers are active if desired. The distance and volume settings of the individual channels are active.

- **Dolby Upmix**
  The source signal is converted into 3D sound using the Dolby Upmix algorithm. Equalizers are active if

desired. The distance and volume settings of the individual channels are active.

- **DTS Neural: X**
  The source signal is converted into 3D sound by the DTS Neural: X algorithm. Equalizers are active if desired. The distance and volume settings of the individual channels are active.

- **Remember**
  Here you can choose whether the selected playback mode is saved and should be stored after the device is restarted.

PARAMETERS

Here you can make short-term volume settings for each speaker and adjust the lip synchronization. These settings are not saved and are no longer saved after restarting the device.

ZONE 2

Here you can make settings for playback in Zone 2:

- **Enable**
  Here you can activate playback via the Zone 2 output on the back.

- **Source**
  Here you can select the desired source that is to be output via Zone 2.

- **Volume**
  Here you can select the desired volume for zone 2.

SETUP

Here you configure your system and make basic settings:

Source setup
Here you can configure the sources. The following options are available:

- Enable - Here you can activate or deactivate the source.
- Rename - Here you can rename the source.
- Video source - Here you can select a different video source.
- Audio source - Here you can select a different audio source.
- EQ select - Here you can select the desired equalizer preset.
- Volume mode - Here you can set the volume of the source individually.
- Trigger out - Here you can set whether a trigger signal is output when the source is selected.
- Default - Here you can reset all selected settings of the source.

Audio mode
Here you can assign individual playback modes for all source signals so that the assigned playback mode is automatically selected when a certain source signal is present.

Speaker setup
Here you can configure your speaker setup. The following options are available:

- Speaker layout - Enter your speaker configuration here.
- Center speaker - Here you specify whether you are using a center speaker.
- Top speaker type - Here you specify whether you are using top speakers or ceiling speakers.
- Level test / adjust - Here you can set the volume of the individual speaker channels individually.
- Speaker distance - Here you can set the distance of the individual speakers individually.
- Subwoofer - Here you can specify how many subwoofers you are using.
- Speaker crossover - Here you can set the crossover frequency of the speaker channels individually.
    - SW Highpass: Here you can relieve the subwoofer of low frequencies. “Not used” should be selected by default.
    - SW LowPass: Here you can set the upper crossover frequency of the subwoofer.
- Filter slope - Here you can set the slope of the crossover frequency for each speaker and subwoofer individually.

Room Calibration

Note: The calibration is carried out at a very high volume level in order to ensure a high quality of the measurements.

Before you start the “Room Calibration” automatic calibration system, first make the following settings in the **speaker setup** :

1. Speaker layout
2. Center speaker
3. Top speaker type
4. Subwoofer
5. Speaker crossover
6. Filter slope

Now put the device into standby mode and then connect the included microphone to the MIC input on the front of the device. Place the microphone at ear level at your listening position facing towards the ceiling. Start the device.

- **Level / Distance**
  Here the device automatically determines the distance and individual volume level of all loudspeakers.

- **EQ**
  Here the device determines an individual equalizer for room correction for each loudspeaker.

Manual EQ
Here you can select the desired equalizer preset and make settings for the equalizer presets.

- EQ 1, EQ 2, EQ 3: Three equalizer presets are available here. In these presets you can set 11 or 7 individual parametric equalizers for each speaker channel group and each subwoofer.
- Auto test EQ: The results of the automatic calibration are saved in this equalizer preset. You can adapt the results of the measurement individually. However, the preset can also be edited freely without automatic calibration and offers 11 or 7 individual loudspeaker channels and 5 individual parametric equalizers for each subwoofer.
- EQBypass: Select this setting if you want to deactivate all equalizers.

You can set the equalizers (EQ's) for the equalizer presets as follows:

- Fc - Here you can select the desired frequency of the parametric EQ.
- Gain - Here you can select the level of the parametric EQ. **Note:** Increasing the level too much can damage your speakers or subwoofer.
- Q - Here you can set the quality or breadth of the effect of the parametric EQ.
- Generator - Here you can output the selected frequency as a sine tone in different volumes or pink or white noise.
- Reset - Resets all parametric EQ's of the selected channel.

- Load - Here you can copy the parametric EQs of another channel (also from another equalizer preset) into the selected channel.

Option
Here you can make the following basic device settings:

- Startup state: Here you can choose whether the device goes into standby mode when the main switch on the back is switched on or whether it switches itself on completely.
- Volume options: Here you can make the following volume settings:
    - Power ON Volume: Defines the standard volume when the device is switched on.
    - Max Volume: Defines the maximum adjustable volume level.
    - Volume Step: Defines the size of the volume steps for volume control.
    - Vol Disp Mode: Defines the display format for the volume level.
- HDMI option: Here you can make the following HDMI settings:
    - HDMI OUT Select: Here you can select the desired HDMI output.
    - Standby Video: Here you can choose whether the AVX17 should loop video through in standby mode.
    - CEC Source Control: Allows the AVX17 to control playback via a source device
    - CEC Control: Allows cross-component control options
    - HDMI Format: Here you can select one of the following formats for the HDMI inputs:
        - Auto: The video format is adopted from the source.
        - Standard: Video is output in 1080p.
        - Enhanced: Video is output in 4K.
- Information disp: Here you can make the following settings for the VFD display of the AVX17 and for the on-screen display (OSD) on your:
    - picture display deviceDisplay DIM: Here you can dim the VFD display of the AVX17 in 10 steps.
    - OSD information: Here you can set which information should be output via the OSD.
    - OSD info position: Here you can set where the OSD should be displayed on your image display device.
    - OSD Transparency: Here you can set the transparency of the OSD.
- No signal standby: Here you can set whether and after what time the AVX17 switches to standby mode if there is no signal.
- Trigger output: Here you can make the following settings for the trigger outputs:
    - Always OFF: Deactivates the trigger outputs
    - Always On: Activates the trigger outputs always
    - By Source: Activates the trigger output when a source is selected where the “Trigger out ”is set to“ On ”.
- Unit: Here you can set the unit of measurement for the settings.
- U Driver log: This function is only used for internal purposes.

Save and Recall
Here you can save, load or reset device settings:

- Save to backup: Saves your device settings in an internal backup.
- Load from Backup: Loads your device settings from a previously saved backup.
- Load from default: Resets the device to the factory settings.

About
Here you will find information about the current firmware version as well as the names of the connected devices and you can make the following settings:

- Software update: Here you can install the software from a USB stick connected to the rear.
- Bluetooth name: Here you can rename the connected optional Bluetooth adapter.

Dear customer,

If you have technical difficulties setting up or using your new product, please contact our customer service.

Customer service e-mail address: support@iotaenterprises.co.uk

We wish you many years of pure audiovisual enjoyment with your new **IOTAVX** equipment