

To update via USB (recommended):

The USB stick should be empty and freshly formatted

Unzip the file AVR_1v20_0v457.zip & put the unzipped file AVRx0_system1v20.fw onto a memory stick (so it is the only file on the stick)

Turn on the AVR & wait until fully started (approx. 30 seconds for network module to fully start).

Insert the stick into the USB socket on the rear of the AVR.

Simultaneously press INFO & DISPLAY on the front panel until the front display shows UPDATE... (it will alert that there is no network file)

Wait for the USB stick to be searched

Wait around 20 minutes, do NOT power off during this time.

Once the Update has finished perform a Factory Reset*

Put the unzipped file image.swu onto a memory stick (so it is the only file on the stick)

If not already, turn on the AVR & wait until fully started (from power on wait at least 30 seconds for the network module to fully start)

Simultaneously press INFO & DISPLAY on the front panel until the front display shows UPDATE ...

Wait for the USB stick to be searched

Wait around 20 minutes, do NOT power off during this time.

Once the Update has finished perform a second Factory Reset*

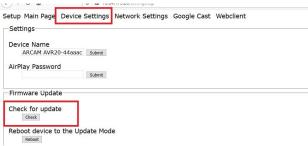
To update via the internet:

Use a browser and navigate to the IP address of the unit (located in Menu > Network > IP Address)

On the Main Page, check "Device version" if this shows "0.100.457" then skip to "To update the main unit..."

Device version: 0.100.457.0x48fa9c7

If the Device version is not "0.100.457", then click "Device Settings" Click "Check for update"



Accept the update – this will take around 20 minutes.

To update the main unit, press and hold the menu key on the unit for five seconds to enter the engineering menu.

Select "Check for Update".

If an update of the main unit is available, the update will begin.

Wait around 90 minutes, do NOT power off during this time.

The AVR will restart after completing the upgrade.

Once the Update has finished perform a Factory Reset*

To check your software version, press INFO & DIRECT simultaneously, the front display will show:

MCU Ver 1v20/09

*The unit MUST be restored to factory defaults and any setup changes made again after an update. To do this, press and hold the MENU key on the unit for approximately 5 seconds (until the front panel display shows the engineering menu), release the MENU key, then press OK, then press DIRECT. The unit should then power cycle to standby.

Due to the EEPROM contents changing between software versions, restoring settings from a secure backup is NOT recommended.

AVR10/AVR20/AVR30/AV40 Software Release Notes

Host Version 1v20/09

LCD/IAP 0.53/0.04

DSP1 02.02 / 01.20

DSP2 00.01 / 00.17

DTS 3.90.50.1

OSD 0.03

DAB 303 / 561

NET 0.100.457

BT 0.7 (or higher, depending on build)

Fix list:

IMS21126: 192kHz/96kHz stream played over Qobuz has artefacts

IMS21199: Test tones do not work from web GUI.

IMS21300: Audio artefacts when switching from 192kHZ to 96kHz on Tidal/Qobuz

IMS21314: Input > Mode > Sub stereo has no effect.

IMS21324: Applying stereo downmix to DD+ stream results in breif noise

IMS21335: With front display off, Sub trim and Dolby Volume do not appear with 2nd change.

IMS21346: RS232/IP command 01B returned incorrect detail for some results

IMS21348: RS232/IP command 0x37 returned 0x02 instead of 0x04 when not calculated.

IMS21349: RS232/IP command 0x39 was off by one.

IMS21368: Direct IR mode commands did not work

IMS21380: Audio takes 30seconds to restore after Dirac calibration – notification applied.

IMS21381: Lip sync out if setting via web GUI and then power cycle.

IMS21391: User adjustments to Dirac delays lost if filter toggled off/on.

IMS21408: RS232/IP Engineering menu send invalid response.

IMS21420: Cannot select Dirac EQ from web GUI.

IMS21421: If an input is renamed on the unit, the name was not updated on web GUI.

IMS21429: RS232/IP Command 0x04 Version reports incorrect version

IMS21430: RS232/IP Command 0x06 Save/Restore settings fixed

IMS21432: RS232/IP Command 0x1F corrected.

IMS21446: Requesting Zone1 OSD (0x4E) returns inverted data.

IMS21448: RS232/IP Command 0x24 DAB scan corrected.

IMS21451: Audio compression command 0x41 fixed.

IMS21454: Add response 0x02 to command 0x2B to allow mS in speaker distances.

IMS21455: Command 0x2D did not send ack.

IMS21456: Setup menu commands did not send ack.

IMS21440: RS232/IP command 0x3A range was invalid.

IMS21441: RS232/IP command 0x40 unable to set lipsync.

IMS21448: RS232/IP command 0x24 DAB scan could not be restarted after 1st completion.

IMS21442: RS232/IP command 0x42 could not request incoming video parameters.



IMS21443: RS232/IP command 0x43 could not request incoming audio format.

IMS21444: RS232/IP command 0x44 could not request incoming audio sample rate.

IMS21445: RS232/IP command 0x45 could not set/request sub stereo trim.

IMS21456: RS232/IP menu commands did not send ack.

IMS21457: RS232/IP setting input name did not send unsolicited message.

IMS21458: Unable to select Dirac filter from command 0x28

IMS21460: If no sub, when L/R set to small, sub is not added.

IMS21472: When using NET there is a brief noise when changing mode to DTS Neural:X

IMS21473: Add startup progress bar to allow DSP/Net time to boot

IMS21476: RS232/IP command 0x2B not sent for mS unit.

IMS21487: Add INFO+MODE host reset (does not reset Network settings).

IMS21488: Setting speaker types with web GUI isn't reflected in the Dirac calibration tool.

IMS21499: Lipsync out if going from DTS5.1 to Dolby Atmos.

IMS21505: Erroneous fail messages, e.g CS3318 corrected.

AVR10/AVR20/AVR30/AV40 Software Release Notes

Host Version 1v10/09

LCD/IAP 0.50/0.04

DSP1 02.01 / 01.19

DSP2 00.01 / 00.17

DTS 3.90.50.1

OSD 0.03

DAB 303 / 561

NET 0.100.406

BT 0.7 (or higher, depending on build)

Fix list:

IMS20890: IMAX fixes applied.

IMS20955: Show streaming service logo & MQA logo when using Cast.

IMS21115: PS4 2 channel PCM using Virtual:X could cause audio artefacts

IMS21118: Sampling frequency incorrectly shown for analogue processing modes.

IMS21136: Sub trim does not show on OSD

IMS21208: When in standby, control commands for input switching should respond with 0x85

IMS21310: Bi-amp L/R speakers not recognised by Dirac calibration tool.

IMS21363: Cannot set display brightness over RS232/IP

IMS21369: When Dirac is enabled, speaker distance should show "mS".

IMS21371: Audio button toggles filter1, filter2, filter3, off.

IMS21372: Menu > Speaker Distance Sub shows as "Channel 12"

IMS21375: No OSD popup when Dirac EQ selected.

IMS21378: Dirac filters optimisation.

IMS21383: Start Dirac, unit would occasionally not got into Dirac measurement mode

IMS21384: Report Subwoofers as "sub" not LFE in Dirac calibration tool.

IMS21390: OSD shows "centre" and "analogue" when region set to US/Canada.

IMS21396: Start Dirac if on the NET input, test tones only come out of FL0

IMS21409: Audio button recalls current state on first press, then changes.

IMS21437: Cannot set IMAX Enhanced mode over RS232/IP

IMS21447: Editing name on unit after setting with web GUI causes crash

IMS21453: Dirac master volume level starts at incorrect level



Host Version 1v04/09

LCD/IAP 0.46/0.04

DSP1 02.01 / 01.18

DSP2 00.01 / 00.17

DTS 3.90.35.00

OSD 0.03

DAB 303 / 561

NET 0.100.375

BT 0.7 (or higher, depending on build)

Fix list:

20895: Enable Dirac room EQ.

21133: MQA files played from USB do not show as MQA.

21200: Could not turn on unit with RS232 unless HDMI & IP was set to on.

21233: Audio lost if playing DTS Virtual:X and then add height speakers.

21244: European character support, e.g. 'á'.

21301: Turning Z2 off from IP when Z1 is in standby stops IP control.

21315: Menu > Input Config > Room EQ, OSD shows "Room EQ", remove the " "



Host Version 0v99/09

LCD/IAP 0.43/0.04

DSP1 02.01 / 01.14

DSP2 00.01 / 00.17

DTS 3.90.35.00

OSD 0.03

DAB 303 / 561

NET 0.100.335

BT 0.5 (or 0.7 depending on build)

Fix list:

20810: Network playback source not paused if switching away from the input.

20890: IMAX Enhanced enabled.

21188: Audio lost with ChromeCast Ultra on some Atmos streams.

21198: Apple TV 4k/Netflix/Atmos stream – audio takes 30 seconds if exiting to menu and going back.

AVR10/AVR20/AVR30/AV40 Software Release Notes

Host Version 0v95/09

LCD/IAP 0.41/0.04

DSP1 02.01 / 01.12

DSP2 00.01 / 00.10

DTS 3.90.35.00

OSD 0.03

DAB 303 / 561

NET 0.100.307

BT 0.5 (or 0.7 depending on build)

Fix list:

- 21069: Some DD+/True HD/Atmos streams cause audio artefacts with stereo downmix.
- 21098: Test tones may not start if there is no incoming audio after playing an Atmos stream.
- 21100: Audio can be lost if test tones started while playing Atmos stream.
- 21101: Audio can be lost while adding/removing speakers while playing audio.
- 21122: DTS ES Discrete 3/3.1 displayed as 3/2.1.
- 21123: If playing from USB, display USB instead of NET.
- 21124: Speaker types cannot be set to "none" over RS232.
- 21125: Audio can be lost if switching stream between DTS HD MA & Atmos.
- 21127: NET input incorrectly showed incoming stream as analogue.
- 21128: Channels 13-16 could give no output if set to sub out with some speaker configs.
- 21129: When using analogue inputs, channel count incorrectly shown.
- 21130: Unit could go into auto-standby while playing Airplay streams.
- 21135: Dolby volume (pop up key on remote) leave blank grey banner on OSD.
- 21181: No output from surround back if changing to zone 2 and back to surround back in channel 6/7.
- 21182: No audio after adjusting surround back speaker.
- 21189: Unit could go into auto-standby while playing UPnP streams.

AVR10/AVR20/AVR30/AV40 Software Release Notes

Host Version 0v89/09

LCD/IAP 0.39/0.04

DSP1 00.01 / 01.10

DSP2 00.01 / 00.10

DTS 3.90.35.00

OSD 0.03

DAB 303 / 561

NET 0.100.278

BT 0.5 (or 0.7 depending on build)

Fix list:

20860: Confirmation sound not played during Google Home setup.

20878: Display could show higher sample rates as 48kHz incorrectly.

20912: DAC parameters optimised for max. SNR performance.

21032: Higher sampling rate incoming streams could have artefacts.

21066: Could lose audio when switching to Atmos stream from another stream type.

21074: Optimise USB update of network module.

21076: Improve ARC compatibility with some displays.

21077: Correct typo in display of kHz on incoming sample frequency in Input Config menu.

21081: No audio from NET input if powered on the NET input.

21088: Fix typo in speaker types menu when set to US region.

21090: HDMI Bypass in standby may not work with some displays.

21091: No zone2 audio if incoming audio stream is hi bit rate.

21099: No RS232 message to indicate no menu after sub trim times out.

21102: Dolby Digital 3.0 streams not correctly rendered.

21103: OSD shows wrong surround format if switching to an input with stream already playing.

21104: Legacy DTS in some speaker setups has audio artefacts.

21116: Analogue input shows PCM 2/0.0

21117: Correct typo in the display of stereo direct in menu > general setup > incoming format.

AVR10/AVR20/AVR30/AV40 Software Release Notes

Host Version 0v82/09

LCD/IAP 0.36/0.04

DSP1 02.01 / 01.07

DSP2 00.01 / 00.10

DTS 3.90.35.00

OSD 0.03

DAB 303 / 561

NET 0.100.239

BT 0.5 (or 0.7 depending on build)

Fix list:

20828: PCM 2.0 @ 96kHz/192kHz sometimes not recognized correctly.

20893: OSD with Dolby Vision content shifted on some displays.

20903: Play Atmos, play internal test tones, audio does not return.

20904: Test tones did not work after playing Atmos stream.

20914: Analogue input trim optimised.

20939: Zone 2 audio out "follow zone 1" no output.

20950: Zone 2 inputs not changing with simulated IR over RS232/IP.

20954: DTS:X to DTS HD MA 2.0 exchange causes audio artefact.

20972: Dolby digital incoming format display changed with different speaker setups.

20982: Correct MQA Studio icon text size.

21004: IP/RS232 command supports 4 digit PIN for secure backup.

21018: Restore backup to USB could cause lockup with some USB sticks.

21019: Store backup to USB could cause lockup with some USB sticks.

21025: IP/RS232 requesting input config too soon after input change should return 0x85 until ready.

21044: PCM > MCH > Dolby Surround causes audio artefact.

21047: Input trim could not be selected if source changed from digital to analogue.

21048: Volume setting for zone 2 could not be adjusted if selecting zone 2 with AMP+OK on remote.

21061: Turn on Zone1, then Zone2, turn off Zone1 & Zone2, turn on just Zone2, HDMI may not start.

21063: Network may not function if both Zone1 & Zone2 select network input.

21065: Startup OSD not centered on some displays at turn on.

21072: Implement DTS Virtual:X



Host Version 0v75/09

LCD/IAP 0.31/0.04

DSP1 00.01 / 01.00

DSP2 00.01 / 00.05

DTS 3.90.50.00

OSD 0.03

NET 0.100.178

BT 0.5

Fix list:

Initial release.