



Core Mix-2 USB

ORDERCODE D2302



 THE CORE **series**

Highlite International B.V.

Vestastraat 2
6468 EX Kerkrade
The Netherlands

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from DAP Audio.

The DAP Audio Core Mix-2 USB brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated show, this product provides the effect you need.

You can rely on DAP Audio, for more excellent audio products.

We design and manufacture professional audio equipment for the entertainment industry.

New products are being launched regularly. We work hard to keep you, our customer, satisfied.

For more information: iwant@dap-audio.info

You can get some of the best quality, best priced products on the market from DAP Audio.

So next time, turn to DAP Audio for more great audio equipment.

Always get the best -- with DAP Audio !

Thank you!



DAP Audio

DAP Audio Core Mix-2 USB™ Product Guide

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Warning

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a device must be returned to the factory, it is important that the device is returned in the original factory box and packing.

Your shipment includes:

- DAP Core Mix-2 USB
- power cable - 2m
- User manual



CAUTION!

Keep this system away from rain and moisture!



Safety Instructions

Every person involved with the installation, operation and maintenance of this system has to:

- be qualified
- follow the instructions of this manual



**CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!**



Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the system.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not insert objects into air vents.

- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Do not open the device and do not modify the device.
- Do not drive the inputs with a signal level bigger, than required to drive the equipment to full output.
- Do not plug Mics into the console (or stagebox) while Phantom Power is on. Also mute the monitor / Pa system when turning Phantom Power on or off. Allow the system to adjust for a couple of seconds, before setting the input gains.
- Only use system indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when system is not used. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Always operate the unit with the AC ground wire connected to the electrical system ground.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the system and the power-cord from time to time.
- Please turn off the power switch, when changing the power cord or signal cable, or select the input mode switch.
- Extreme frequency boosts in connection with a high input signal level may lead to overdriving your equipment. Should this occur, it is necessary to reduce the input signal level by using the INPUT control.
- To emphasize a frequency range, you don't necessarily have to move its respective control upward; try lowering surrounding frequency ranges instead. This way, you avoid causing the next piece of equipment in your sound path to overdrive. You also preserve valuable dynamic reserve ("headroom")
- Avoid ground loops! Always be sure to connect the power amps and the mixing console to the same electrical circuit to ensure the same phase!
- If system is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your Dap Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Dap Audio dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- For replacement use fuses of same type and rating only.
- WARRANTY: Till one year after date of purchase.

Operating Determinations

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

International	EU (including UK) From April 2004	North America	Pin
L	Brown	Black	Phase
N	Blue	White	Neutral
	Green/Yellow	Green	Protective Earth

Make sure that the device is always connected properly to earth!

Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the device. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack the device, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

The Core Mix-2 USB is a basic 2 channel analogue DJ mixer. It has 4 analogue inputs and 2 independent USB audio interfaces. This makes it easy to connect your laptop and route the output of your DJ software directly through the Mix-2 USB. The headphone output has a low tone control which makes it possible to adjust your favorite sound. Both channel and cross-faders have fader curve selections. All the pot meters are locked below the surface for extra stability and it has a separate fader print board for easy maintenance. It has a MP3 module which can record and playback your life performance directly on a USB or SD device.

Features

- 2 USB PC/MAC audio interfaces
- 60mm VCA faders
- MP3 USB/SD recorder
- LED VU meter for each channel

Overview

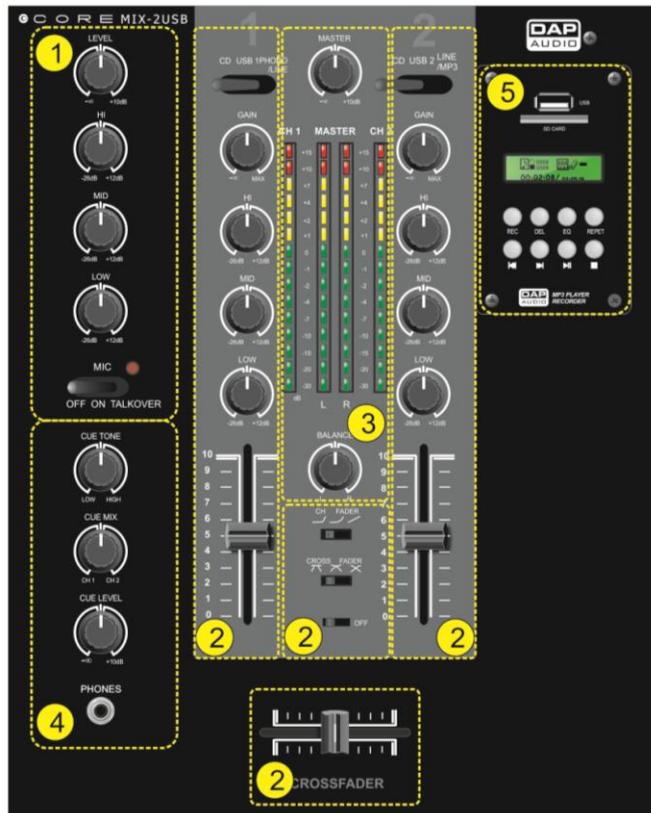
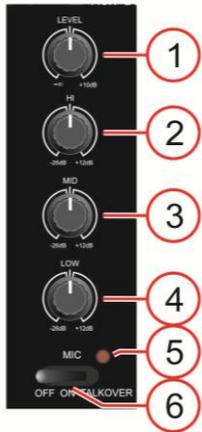


Fig. 1

1. Microphone channel
2. Main channels
3. Master section
4. Monitor section
5. Record module

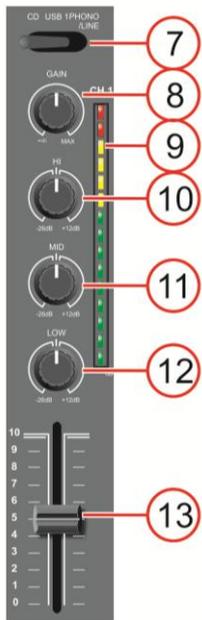
Microphone Channels



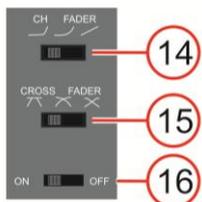
1. Level control
2. Hi control
3. Mid control
4. Low control
5. Mic LED
6. Mic off/on/talkover switch

Fig. 2

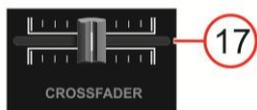
Main Channels



7. Input selection switch
8. Gain control
9. VU-meter
10. Hi control
11. Mid control
12. Low control
13. Channel fader



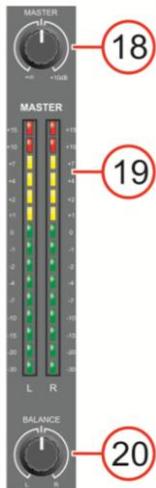
14. Channel fader curve switch
15. Crossfader slope switch
16. Crossfader on/off switch



17. Crossfader

Fig. 3

Master section



- 18. Master volume control
- 19. Output L/R signal VU meter
- 20. Balance control

Fig. 4

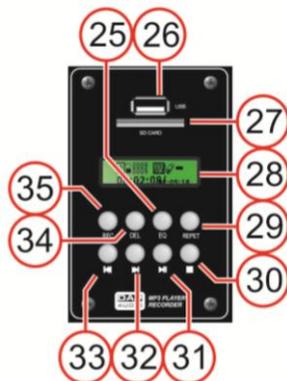
Monitor section



- 21. Cue low control
- 22. Cue mix control
- 23. Cue level
- 24. Phones output

Fig. 5

Record Module



- 25. EQ button
- 26. USB slot
- 27. SD card slot
- 28. Display
- 29. Repeat button
- 30. Stop button
- 31. Play/pause button
- 32. Fast forward button
- 33. Fast reverse button
- 34. Del(ete) button
- 35. Rec(ord) button

Fig. 6

Rear

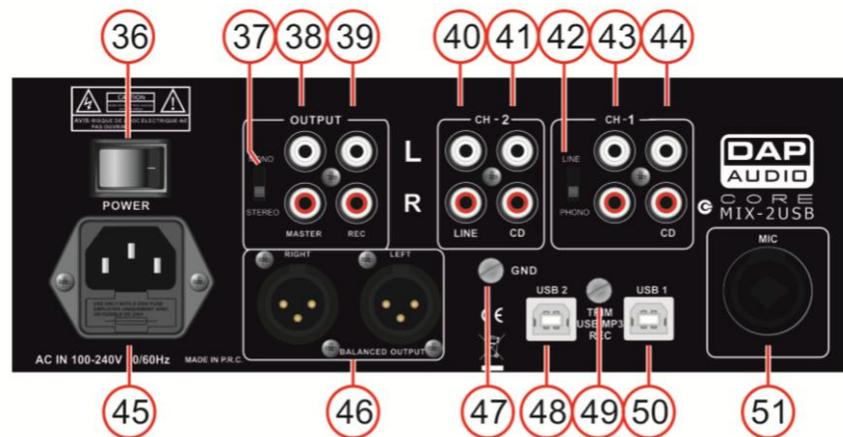


Fig. 7

- 36. Power switch
- 37. Stereo/mono switch
- 38. Master RCA unbalanced output
- 39. Record RCA unbalanced output
- 40. Channel 2 line RCA input
- 41. Channel 2 CD RCA input
- 42. Line/phono switch
- 43. Channel 1 line/phono RCA input
- 44. Channel 1 CD RCA input
- 45. AC inlet with integrated fuse holder
- 46. Master XLR balanced output
- 47. GND screw
- 48. USB 2 input
- 49. USB/MP3 level control
- 50. USB 1 input
- 51. Mic input

Installation

Remove all packing materials from the Core Mix-2 USB. Check that all foam and plastic padding is removed. Connect all cables.

**Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.**

Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Functions

Microphone Channel

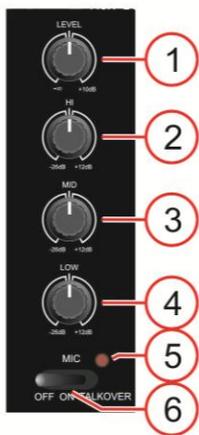


Fig. 8

1. Level control

Use this control to adjust the level of the microphone channel.

2/3/4. Channel EQ Treble/Mid/Low controls

Each channel is fitted with 3-band EQ. The **Hi (3)**, **Mid (4)** and **Bass (5)** bands have their center frequencies fixed at 5 KHz, 800 Hz and 70 Hz respectively. All three bands have up to 26dB cut and up to 12 dB boost and have a centre detent for "Off". Turning the equalizer level control to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the equalizer control usually produce the best results. Try to avoid excessive enhancement of the Mid band.

5. Mic LED

Indicates that the Mic channel is active.

6. Mic On/Off/ Talkover switch

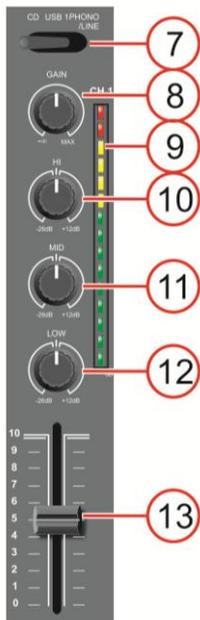
This switch has three modes:

On: With the switch in this position the microphone channel is always active.

Off: With the switch in this position, the microphone channel is not active.

Talkover: In this position the channels 1 and 2 are automatically attenuated by 12dB while speaking in the DJ-microphone.

Main Channels



7. Input selection switch

For **channel 1**, this switch allows you to assign the **CD (43)**, the **USB 1 (51)** input or the **phono/line (42)** input. Make sure the **line/phono (48)** selector is set at phono position if you want to connect a turntable.

For **channel 2**, this switch allows you to assign the **CD (41)**, the **USB 2 (50)** input or the **line (42)** input/ built in **Record** module.

8. Gain control

Use this control to match the connected devices optimally to your Core Mix-2 USB. With the fader and Master fader set to $\frac{3}{4}$ stroke, Adjust the gain with a loud input signal in such a way that the red LED's on the **Channel VU-meters (9)** do not light up.

9. LED VU-meter

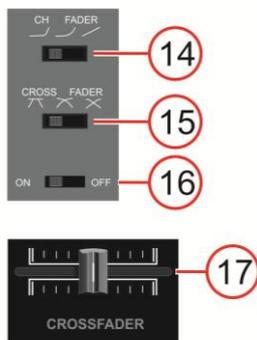
This meter is a multi-step LED; respectively the green LEDs show -30, -20, -15, -10, -7, -4, -2, -1 and 0dB. The yellow LEDs show +1, +2, +4 and +6dB. The red LEDs show +10dB and +15. The accurate level indication allows you to monitor the output of the corresponding channel at anytime. The red LEDs should only blink occasionally during loud passages. If the red LEDs light up frequently you have to lower the **Gain (8)** control.

Fig. 9 10/11/12. Channel EQ Hi/Mid/Low controls

Each channel is fitted with 3-band EQ. The **Hi (10)**, **Mid (11)** and **Bass (12)** bands have their center frequencies fixed at 12 KHz, 1kHz and 80 Hz respectively. All three bands have up to 26dB cut and up to 12 dB boost and have a centre detent for "Off". Turning the Equalizer level control to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the equalizer control usually produce the best results. Try to avoid excessive enhancement of the Mid band.

13. Channel fader

Use the faders to control the levels of channel 1 and 2 in the mastermix.



14. Channel fader curve switch

Use this switch to select the curve for all channel faders.

15. Crossfader slope switch

This switch allows the user to select from three types of crossfader curve response.

- At the left setting, the curve produces a rapid signal rise. (As soon as the cross fader lever leaves the **A** side, the **B** channel sound is produced.)

- At the right setting, the curve operates to produce an even, neutral rise throughout the cross fader's movement.

- At the middle setting, an intermediate curve is produced, midway between the two curves noted above.

Fig. 10 16. Crossfader on/off switch

Use this switch to assign the crossfader to channel 1 and channel 2.

17. Crossfader

The crossfader allows you to mix evenly from one channel to another channel.

Master section

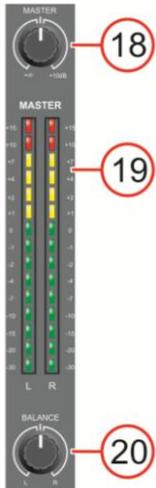


Fig. 11

18. Master volume control

Use to adjust the volume level of the **master RCA (38)** or the **master XLR (46)** outputs.

19. Output L/R signal VU meter

This meter is a multi-step LED; respectively the green LEDs show -30, -20, -15, -10, -7, -4, -2, -1 and 0dB. The yellow LEDs show +1, +2, +4 and +6dB. The red LEDs show +10dB and +15dB. The accurate level indication allows you to monitor the output signal level at anytime, and match with other devices. Lower the **Master (18)** control if the red LEDs light up frequently.

20. Balance control

Use to set the balance between the Left and right master output.

Monitor section



Fig. 12

21. Cue low control

Is used to boost or cut the low frequencies for the **phones (24)** output with up to 15dB.

22. Cue mix control

Allows the user to hear mixed audio of the monitor (cue) audio and the program (master) audio in the headphones. When the knob is rotated to the left only channel will be heard, when in the right position only channel 2 will be heard.

23. Cue level control

Is used to adjust volume level of the **phones (24)** output.

24. Phones output

You can connect a pair of headphones with an impedance of 32 - 600 Ohm to the headphones connector. It is a 6,3mm/ 1/4" TRS socket, wired as Tip=left, Ring=right and sleeve = ground.

Caution:

Depending on the type of headphones connected to the Headphones jack, the Core Mix 2 USB is capable of producing high output levels via the phones output. Therefore, make sure to turn the control all the way to the left (minimum setting) before connecting the headphones. Be aware of the fact that listening to loud sound pressure levels over a longer period of time leads to hearing- damage!

Record Module

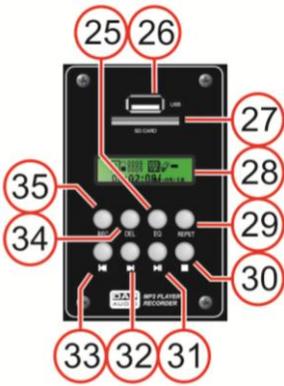


Fig. 13

25. EQ button

Pushing the EQ button allows you to select a preset EQ curve. You can choose between: None - Pop - Rock - Bass - Jazz - Classic.

26. USB slot

Slot for inserting an USB stick.

27. SD card slot

Slot for inserting a SD/MMC card. The contacts of the card must point downwards.

28. Display

29. Repeat button

Tap the repeat button to select between: Repeat single track, Repeat USB- stick/SD- card or repeat off.

30. Stop ■ button

Push the stop button to stop playback/recording.

31. Play/Pause ►/|| button

Use this button to start playback. Press once to start playback, twice to set the pause mode, and again to resume playback.

32. ►►/►► button

Tapping this button allows you to skip to the next track.

Pushing and holding this button allows you to play a track fast forward.

33. ◀◀/◀◀ button

Tap this button to go back to the beginning of the current track or select a previous track for playing.

Pushing and holding this button allows you to play a track fast backwards.

34. Delete button

Push the delete button during playback. In the display appears: "Del One?". Pushing the delete button again will delete the current track. "Success" will appear in the display.

35. Record button

Pushing this button will start recording the master mix independent of the **Master (25)** control.

Note:

Depending on the USB stick/ SD card you use, it can take a couple of seconds before the actual recording will start.

Rear

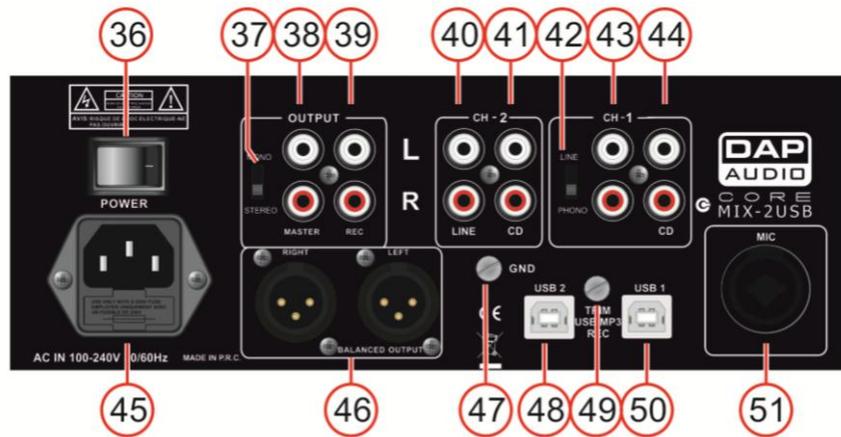


Fig. 14

36. Power switch

Do not supply power before the whole system is set up and connected properly.

37. Stereo/mono switch

When set to mono, the master output becomes a monaural combination of L+R.

38. Master RCA unbalanced out

Use these outputs to connect an amplifier with unbalanced inputs.

39. Record RCA unbalanced out

Use these to connect a recording device.

40. Channel 2 line RCA input

Use to connect a line level device.

41. Channel 2 CD RCA input

Use to connect CD player.

42. Line/phono switch

Allows you to switch the channel 1 **line/phono (43)** input to either line or phono level.

43. Channel 1 line/phono RCA input

Use to connect a line level or a phono level device. Make sure the **line/phono (42)** switch is set in the according position.

44. Channel 1 CD RCA input

Use to connect CD player.

45. AC inlet with integrated fuse holder

This connector is meant for the connection of the supplied main cord. Connect one end of the power cord to the connector, the other end to the mains, then turn on the power switch to operate the unit.

Note:

Please make sure that the supply voltage matches the operation voltage before connecting the unit to mains. Replace the fuse only with a fuse of same specification (T1A).

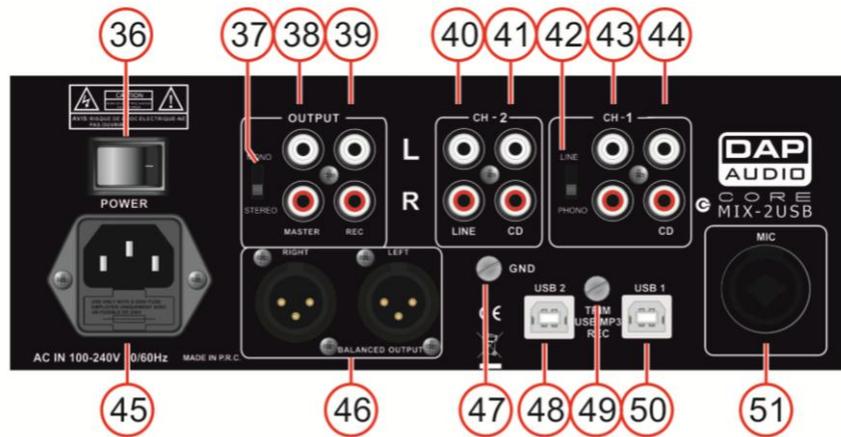


Fig. 15

46. Master XLR balanced out

Use these outputs to connect an amplifier with balanced inputs.

47. GND screw

To connect the ground wire of your turntable.

48. USB 2 input

To connect to a PC/Mac with DJ software.

49. USB/MP3 level control

Use to adjust the level for the USB inputs.

50. USB 1 input

To connect to a PC/Mac with DJ software.

51. Mic input

Electronically balanced XLR-type input for connecting low impedance microphones. The input has extremely low noise hum. When connecting a microphone make sure that the pin assignment is correct. Always make sure to read the manual of the microphone you want to connect. The XLR- input is not suitable for connecting an additional mixing console, FX- unit, etc. You have to use the LINE-inputs, when connecting this kind of equipment.

Note: When connecting signal sources, please make sure that the corresponding Channel's level control and the master faders are at their minimum settings. Otherwise, unpleasant plug-in noise can occur.

Operations

Using the Core Mix-2 USB with PC software which can only access a single soundcard

If the PC software you plan on using with the two **USB1 (68)** and **USB2 (66)** ports can only be set up with a single soundcard, You need to install the freeware ASIO4ALL software which can be downloaded from <http://www.asio4all.com/> .

After installing the ASIO4ALL software, make sure the settings are the same as in figure 15.

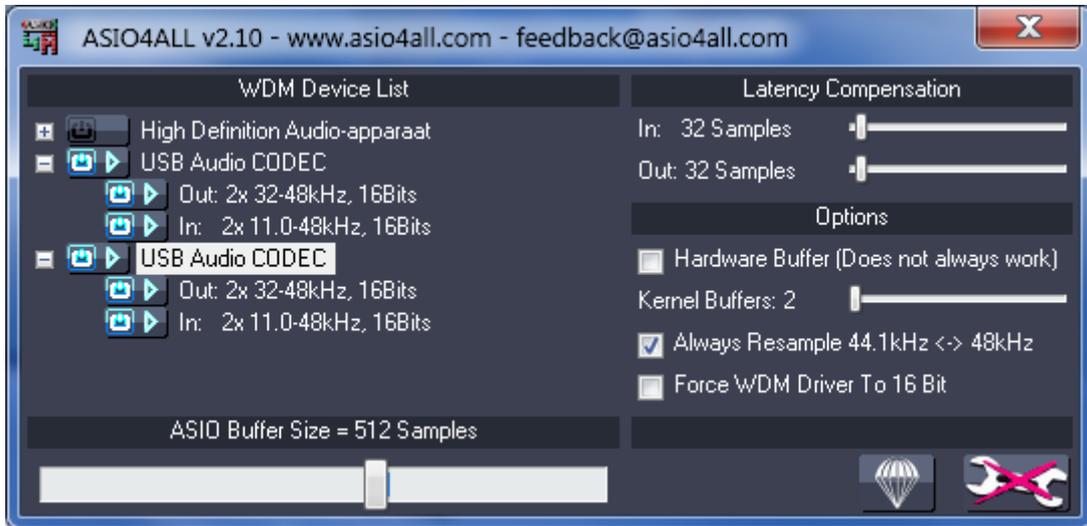


Fig. 16

If you own a Mac, you can use the Audio Midi setup for this purpose.

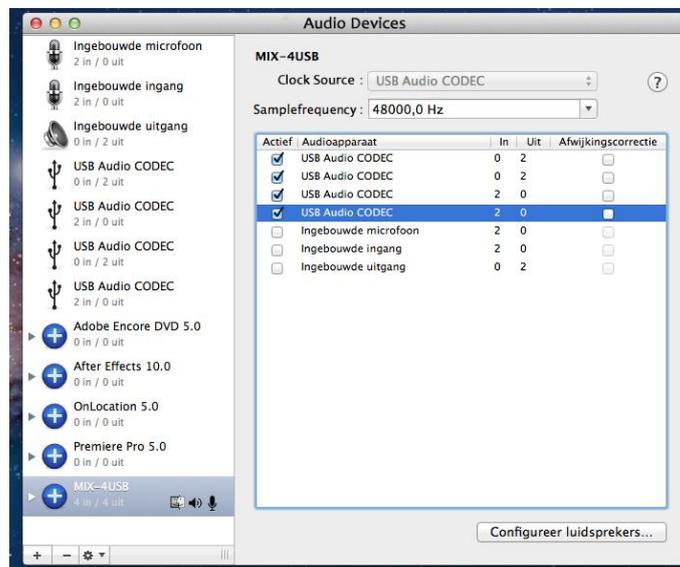
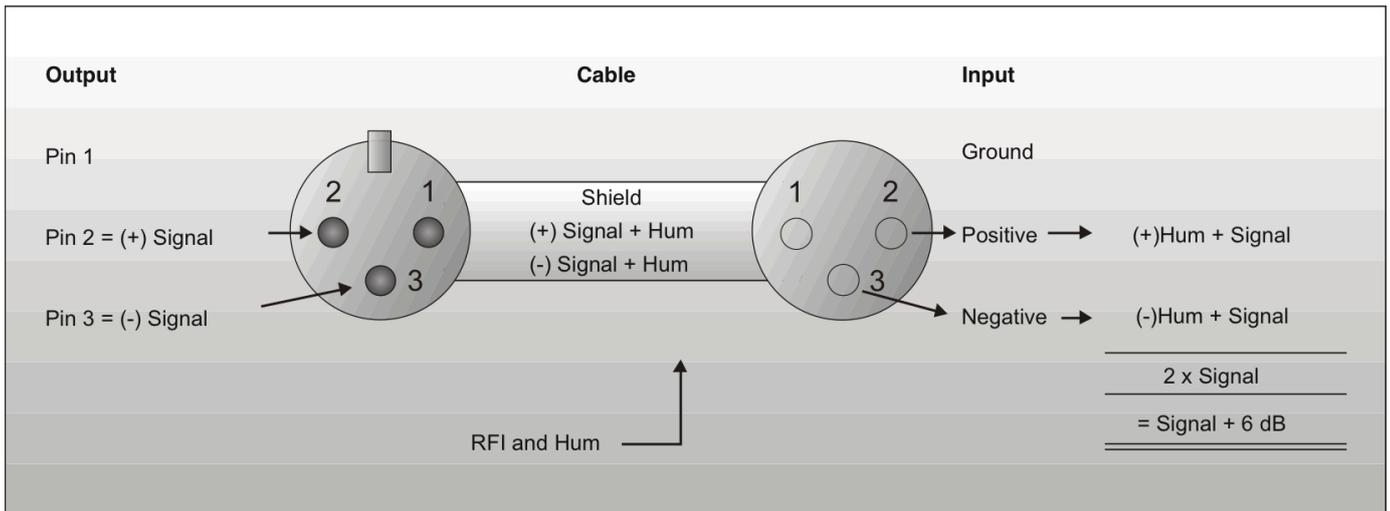
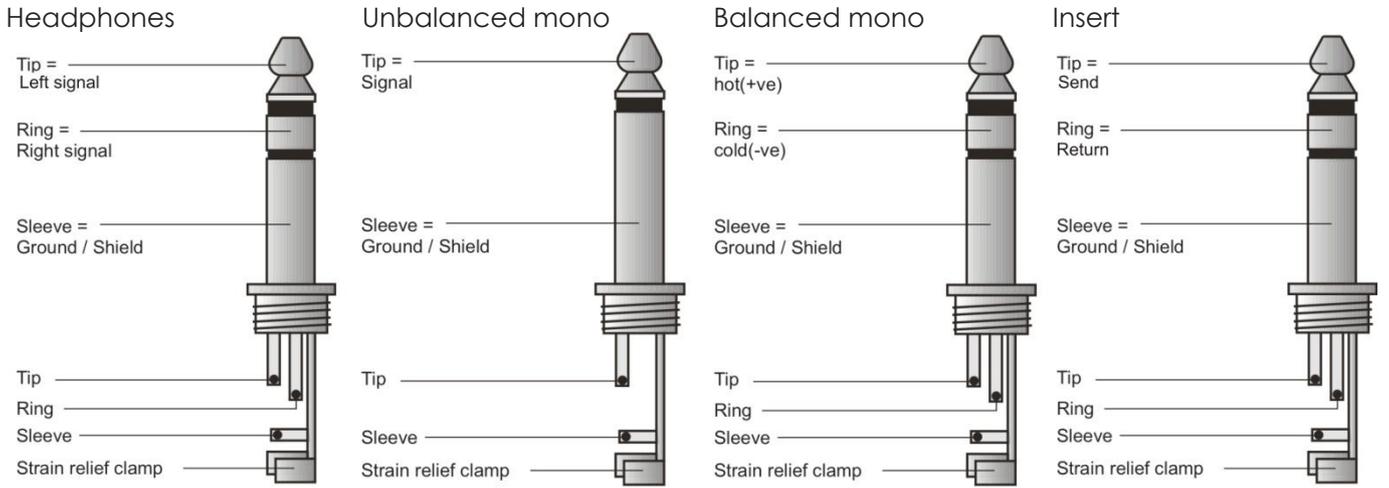


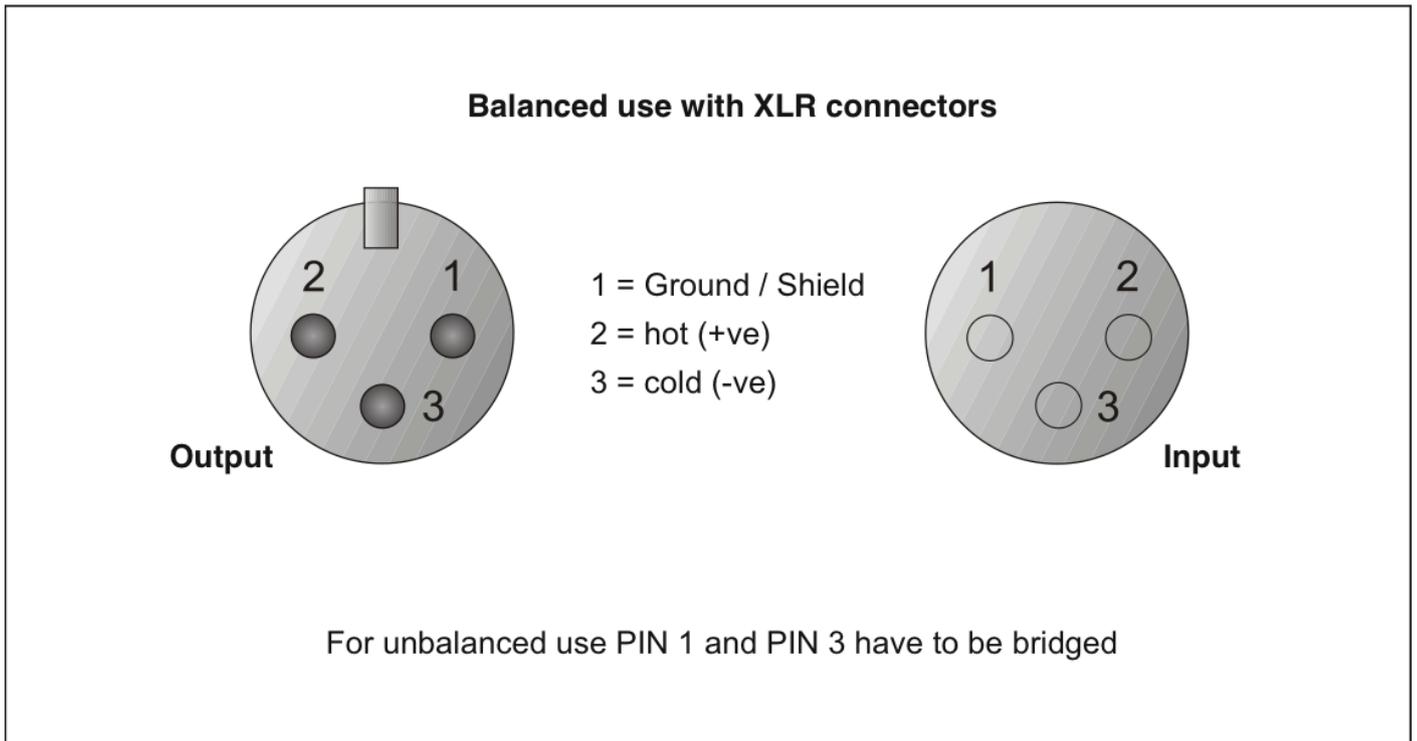
Fig. 17

Connection Cables

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability. Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.



Compensation of interference with balanced connections



Maintenance

The DAP Audio Core Mix-2 USB requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Troubleshooting

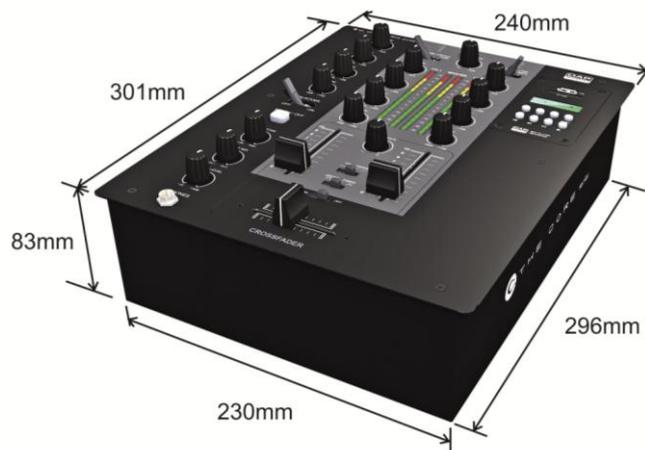
DAP Audio Core Mix-2 USB

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, connections, etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your DAP Audio dealer.

Product Specifications

- Input channels: 1 x Microphone, combo XLR/Jack
4 x Line, RCA
1 x Phono, RCA
2 x USB, Type B
- Output channels: 1 x Record, RCA
1 x Master unbalanced, RCA
1 x Master balanced, XLR
1 x Headphones, TRS 6.3mm Jack
2 x USB, Type B
- USB Port: Audio in- & output interface for PC & Mac, 48 KHz, 16 bit
- Channel EQ
High frequency: 13 kHz
High range: -26dB / +12dB
Mid frequency: 1 kHz
Mid range: -26dB / +12dB
Low frequency: 70 Hz
Low range: -26dB / +12dB
- Microphone EQ
High frequency: 5 kHz
High range: -12dB / +12dB
Mid frequency: 800 kHz
Mid range: -12dB / +12dB
Low frequency: 120 Hz
Low range: -12dB / +12dB
- Frequency response: 20Hz -20Khz
- T.H.D: <0.1%
- Dimensions: 240 x 301 x 88 (WxDxH)
- Power supply: 100-240Vac, 50/60Hz
- Power consumption: 8 Watt
- Fuse: T1A
- Weight: 3,4 Kg



Design and product specifications are subject to change without prior notice.



Website: www.Dap-audio.info
Email: service@highlite.nl



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