Guide to computer based music playback using Weiss (and other) products

Weiss offers several products suited for music playback via computer. This article is a guide for potential customers on the various possibilities offered via our products.

Links to the products mentioned see item **6.)** of this document.

From the scenarios depicted below chose the one which best fits your use case:

1.) You would like to use your existing D/A Converter (DAC) and hook it up to the computer, the DAC you own is not a Weiss product

Some computers offer an S/PDIF output via RCA (electrical) or Toslink (optical) connectors. You may use that output to connect the DAC. The drawback may be that the sampling frequency supported is limited to a maximum of e.g. 48 kHz or 96kHz. And also the quality of the output (jitter figure) may be inferior. As an alternative we offer three products suited as an interface between the computer and your DAC:

- the INT202, a Firewire to AES/EBU and S/PDIF interface
- the INT203, a Firewire to/from AES/EBU and S/PDIF interface
- the INT204, a USB to AES/EBU and S/PDIF interface with DSD support

Common to all three interfaces is the capability to transfer audio from your computer to a DAC with sampling frequencies up to 192kHz. And all three of them are the master clock for the audio sampling frequency for the best jitter performance.

The INT204 in addition supports DSD to PCM conversion, thus you can play back DSD files (DSD is the format on SACDs) via your standard PCM DAC.

The INT203 also offers a path AES/EBU (or S/PDIF) **to** Firewire, i.e. you can use it to record audio on the computer via the INT203.

The INT202 is a unidirectional interface but offers dual wire capability for sampling rates of 176.4 or 192kHz, i.e. it allows to connect older DACs which may support high sampling frequencies via the dual wire scheme only.

Both INT202 and INT203 offer volume control / absolute phase control via an optional IR remote control. And also the possibility to check the player program on your computer for bit transparent playback (i.e. no manipulation of the audio data going on within the player program or operating system).

2.) You would like to use your existing D/A Converter (DAC) and hook it up to the computer, the DAC you own is a Weiss product

Here is a list of all our DAC models with the appropriate measures to be taken to use them with a computer. The INT202, 203, 204 interfaces are described above.

Minerva – has a Firewire interface built in, optionally an INT204 USB/DSD interface can be installed.
DAC202 – has a Firewire interface built in, optionally an INT204 USB/DSD interface can be installed.

MEDEA – a INT202 Firewire or a INT204 USB/DSD interface can be installed.

MEDEA+ – a INT202 Firewire or a INT204 USB/DSD interface can be installed. An IR remote option to control the volume can also be installed.

MEDUS – a INT204 USB/DSD interface is built in already, optionally a INT202 interface can be installed.

DAC2 – has a Firewire interface built in, optionally an INT204 USB/DSD interface can be installed.

DAC1-MK2 – a INT202 Firewire or a INT204 USB/DSD interface can be installed.

DAC1-MK3 – a INT202 Firewire or a INT204 USB/DSD interface can be installed. An IR remote option to control the volume can also be installed.

3.) You would like to buy a Weiss D/A Converter (DAC) and use it with your computer or network player

Currently we offer the following DAC models:

- The **MEDUS**, our flagship DAC from our high-end audio range, with a newly designed analog stage using a new DAC chip and our discrete Operational Amplifiers. Extensive jitter reduction technology, XLR and RCA I/O connectors, USB/DSD interface, IR remote control. A Firewire interface is optional. *The non-compromise DAC solution.*

- The **MEDEA+**, the predecessor of the MEDUS, with a newly designed analog stage using a new DAC chip and our discrete Operational Amplifiers. Extensive jitter reduction technology, XLR and RCA I/O connectors. Options are: USB/DSD interface, Firewire interface, IR remote control. (Sold as long as stock lasts). *Top notch performance at a more affordable price than the MEDUS.*

- The **DAC202**, our best selling unit with Firewire interface, IR remote control, headphone output, XLR and RCA I/O. USB/DSD interface optional (DAC202DSD). *The incredibly good sounding and versatile DAC at an affordable price.*

- The **DAC1-MK3**, the flagship DAC in our professional audio range of products, with a newly designed analog stage using a new DAC chip and our discrete Operational Amplifiers. Extensive jitter reduction technology, XLR I/O connectors only, Firewire or USB/DSD interfaces are optional. *The DAC trusted by our pro audio clients – Mastering Engineers all over the world.*

- The **DAC1-MK2**, the predecessor model of the DAC1-MK2 from our professional audio range of products. An elaborate design with discrete Class A output stage and extensive jitter reduction technology, XLR I/O connectors only, Firewire or USB/DSD interfaces are optional. *A more affordable version of the DAC1-MK3 with a different analog section.*

- The **DAC2**, also a DAC from our pro audio range, simpler design but very good
sonics nonetheless, XLR and RCA I/O connectors, Firewire standard, USB/DSD interface optional. *A simple, straightforward but incredibly good sounding DAC.*

4.) Considerations regarding OSX based computers

Depending on the type and/or age of the computer, the following interfaces suited for audio are available:

- USB 2.0: Use with the INT204 interface or with our USB equipped DACs. No special driver is required.

- Thunderbolt: Purchase the Apple Thunderbolt to Firewire adapter:
http://store.apple.com/us/product/MD464ZM/A/apple-thunderbolt-to-firewire-adapter
And use a cable with one side a 800 type connector (9 pin) and the other side a 400 type connector (6 pin) for connecting our Firewire capable devices. Our Firewire driver is required.

- Firewire 800 (1394b type): Use a cable with one side a 800 type connector (9 pin) and the other side a 400 type connector (6 pin) for connecting our Firewire capable devices. Our Firewire driver is required.

- Firewire 400 (1394a type): Use a cable with both sides a 400 type connector (6 pin) for connecting our Firewire capable devices. Our Firewire driver is required.

Generally make sure to have the cable length not (much) longer than really needed. Do not invest in exotic cables, but also do not buy cheap ones. We recommend the Oyaide brand.

5.) Considerations regarding Windows based computers

Depending on the type and/or age of the computer, the following interfaces suited for audio are available:

- USB 2.0 or 3.0: Use with the INT204 interface or with our USB equipped DACs. A USB driver supplied with our units is required.

- Firewire 800 (1394b type): Use a cable with one side a 800 type connector (9 pin) and the other side a 400 type connector (6 pin) for connecting our Firewire capable devices. Our Firewire driver is required.

- Firewire 400 (1394a type): Use a cable with both sides a 400 type connector (6 pin) for connecting our Firewire capable devices. Our Firewire driver is required.

Regarding Firewire interfaces on PCs: Some **Laptops** have a Firewire interface built in. If that is not the case you may add a PCMCIA or Express card with a Firewire interface. This can be a Firewire 400 (1394a) or a Firewire 800 (1394b) type as you prefer. If possible check the brand of the Firewire chipset used in the card, TI (Texas Instruments) or VIA or LSI chipsets are preferred.
Some **Desktop PCs** have built-in Firewire interfaces, others need e.g. a PCI card with an appropriate interface. This can be a Firewire 400 (1394a) or a Firewire 800 (1394b) type as you prefer. If possible check the brand of the Firewire chipset used in the card, TI (Texas Instruments) or VIA or LSI chipsets are preferred.
For connecting the PC you need a cable as follows:
PC with Firewire 400 (6 pin or 4 pin) to Weiss device (6 pin)
PC with Firewire 800 (9 pin) to Weiss device (6 pin)

Generally make sure to have the cable length not (much) longer than really needed. Do not invest in exotic cables, but also do not buy cheap ones. We recommend the Oyaide brand.

6.) Links

INT202, INT203: http://www.weiss.ch/products/int202-int203

I**NT204:** http://www.weiss.ch/products/int204

MEDUS, MEDEA+: http://www.weiss.ch/products/medus

DAC202, DAC202DSD:
http://www.weiss.ch/products/dac202

DAC1-MK3, DAC1-MK2: http://www.weiss.ch/products/dac1

DAC2: http://www.weiss.ch/products/dac2