

METRONOME TECHNOLOGIE

PREMIUM INTEGRATED CD PLAYER



CD8, CD8 T, CD8 S User Manual

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1 – Important Safety Instructions

1-1 Warnings

- In order to avoid any risk of fire or electrical shock, maintain the unit in a dry place. Do not expose to humidity.
- Before connecting and operating the product, please attentively and fully read the present manual.
- The power supply generates dangerous voltages for the human body:
 - Do not introduce any metallic object by the top cover airing neither on the connectors.
 - Never dismantle the upper hood if the unit is not unplugged. For any intervention, please contact your retailer
- Install the product securely on a stable surface.
- During operation do not touch the vacuum tubes (if any): they may be hot.
- Product characteristics, specifications and conception can be subject to modifications without prior notice.

1-2 Safety Instructions

- ALWAYS disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
- A three-conductor AC mains power cable which includes an earth ground connection must be used. To prevent shock hazard, all three connections must ALWAYS be used.
- Original AC main power cable is recommended to use this product.
- NEVER use flammable or combustible chemicals for cleaning.
- NEVER operate this product with removed cover.
- NEVER wet the inside of this product with any kind of liquid.
- NEVER pour or spill liquids directly onto this unit.
- NEVER block air flow through ventilation slots or heat-sinks.
- NEVER bypass any fuse.
- NEVER replace any fuse with a value or type other than those specified.
- NEVER attempt to repair this product: contact your retailer.
- NEVER expose this product to extremely high or low temperatures.
- ALWAYS unplug sensitive electronic equipment during lightning storms.

2 – Company Profile

METRONOME TECHNOLOGIE Ltd. is a French company founded in 1987, designer and manufacturer of High-end audio systems.

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METRONOME TECHNOLOGIE has developed different ranges of products:

- CD players,
- Digital to Analog Converters,
- CD transports,
- Amplifiers/Preamplifiers/Power Amplifiers.

The company aims to achieve two main objectives:

- Get the best sound that digital and analog components can provide, by applying the most advanced technology available;
- Give a pure design to its products to combine aesthetic and technology.

Therefore, the CD8 player is the result of many months of technical research and countless hours of listening. This integrated CD player was developed to satisfy the largest number of users.

This product is available in a solid state version (CD8 Signature) or in a tube version (CD8 T Signature).

3 – Introduction



Congratulations for acquiring the METRONOME TECHNOLOGIE CD8 Integrated CD player and DAC !

METRONOME TECHNOLOGIE designs and hand manufactures audio high-end sources.

The development of a METRONOME TECHNOLOGIE product is animated by a philosophy which aims to reproduce the sound with all nuances and original emotion without altering the recorded signal.

The Top loaded CD Integrated is made of material selected for their ability to deliver the best sound. The CD8 presents an innovative design and an aesthetic way to extract digital information for the best sound from CD media.

In order to ask METRONOME TECHNOLOGIE any purchase or technical detail information, please contact the company by connecting yourself to the website:

www.metronome-technologie.com

4 – Design specificities

- Single PCB part design dedicated to the reading mechanism, servo, user control and analogue stage outputs.
- Power supply with individual power transformers and complete independent lines power, providing an inter-stage EMI/RFI radiation protection.
- Delrin clamp and stainless-steel shaft for better CD stability and low jitter.
- Continuous ground link from the disk surface to the electrical earth: no CD static charge so no ESD parasitic and better working conditions for electronic and optic components.
- Professional drive mechanism with proprietary modifications.

5- Unpacking

The CD 8 CD Integrated Player and DAC has been packed in one specially-designed box.

1. Carefully unpack the machine: be careful when lifting the unit; you may need a second person's help.
2. Please carefully preserve packages and protections, they will be useful for the unit shipment in case of maintenance. Please note that the warranty will be considered as cancelled if the units are dispatched incorrectly packed.
3. Please make sure to read the "Important Safety Instructions" chapter before continuing.

The box contains:

- CD 8 CD Integrated Player and DAC;
- Main electrical cord;
- Accessories: - A remote control;
- A DELRIN® clamp;
- 3 cones;



6- Utilization

The CD 8 Internal Power Supply is adjusted for a nominal voltage corresponding to your country's electrical network.

If it fails to operate:

- A. Turn off the CD 8 Signature.
- B. Check fuses.
- C. If there is no difference, please contact METRONOME TECHNOLOGIE factory.

The front panel display indicates the unit state: when the display is alight, the power supply is operational.

This power supply can be switched on during a long period. However, for a prolonged absence, it is advised to switch it off, with the switch on the machine rear panel.

This power supply is protected by internal electronic circuits and by a general fuse situated in the block near the main chord, beside the switch. To change the fuse, it is imperative to firstly unplug the main cable, then open the fuse compartment with a screwdriver and replace the fuse by an identical model: 1 Ampere slow blow. The product is delivered with a second fuse.

WARNING: Never modify the value of the fuse.

Nota: after a long period without functioning, the fuse may burn out when the power supply is switched on. Indeed, when the power supply is completely discharged while it is switched on, there is a very important current consumption during a brief instant.

7 – CD8 Signature CD Integrated Player and DAC

7-1 Installation

- Install the CD 8 on the hi-fi unit or on a stable and strong support.
- Do not install directly on a carpet or an inflammable material.
- Do not put any object on the top.

7-2 Front view



- ① Display & IR: to show various information – such as the CD track number being played, its state of advance in playing, the repeat functions (1 or all) and pauses; Infrared Receptor for remote control.
- ② Previous track: to select the CD previous track.
- ③ Stop: to stop the CD8 from playing the CD currently in the machine.
- ④ Play: to start playing the CD currently in the machine.
- ⑤ Pause: to stop playing the CD during a few seconds.
- ⑥ Next track: to select the CD next track.
- ⑦ Drawer: must be opened to introduce the CD.
- ⑧ Main switch: push up to power the device ON, and push down to power the device off.
- ⑨ USB/CD switch (or INPUTS selection on CD8 S): this switch allows to choose the signal to send to the DAC.

On CD8 and CD8 Tube : if the switch is up (USB), the internal DAC is able to convert digital signal provided through the USB module. In downposition (CD), the internal DAC decodes signal coming from CDM12Pro mechanism.

On CD8 S : CD --> S/PDIF --> USB

7-3 Back view



- ⑩ Power connector
- ⑪ RCA S/PDIF: S/PDIF digital : is an OUTPUT on CD8 and CD8 Tube / is an INPUT on CD8 S
- ⑫ USB INPUT: must be directly connected with a personal computer (drivers required).
It is also possible to read digital tracks encoded up to 32 Bits/ 384 KHz.
- ⑬ BALANCED RIGHT: Right balanced output
- ⑭ UNBALANCED RIGHT: Right unbalanced output
- ⑮ UNBALANCED LEFT: Left unbalanced output
- ⑯ BALANCED LEFT: Left balanced output.

7-4 Utilization

7-4-1 Power on

Now you can switch on the CD 8 . In order to do so, push switch [8] on upper position. If the CD8 's drawer is open, the display reads "OPEN".

The CD8 can be switched on during a long period. However, for a prolonged absence, it is advised to switch it off, with the switch [8] on the machinefront panel.

7-4-2 Listening

Put a CD into the top load player, be careful not to forget the clamp. Once the drawer is closed, the CD initializes. Indeed, the CD8 reads the CD T.O.C, so it indicates tracks number and total time. Then the CD player stops

waiting for a user's order. You can begin to listen to the music by pressing on your CD8 Signature board the switch [4]. For other functions, please refer to 7-2 section.

Nota: the CD8 Signature can be driven with the remote control (please see 9th section).

7-4-3 USB Input

The CD8 has a high resolution USB Input. Now this input is able to read digital tracks up to 32 bits/384 kHz. Based on asynchronous communication protocol and very high-quality oscillators, this module provides an excellent quality digital signal to the DAC, with very low jitter (compared to the synchronous protocol).

This module is compatible with all formats from 16 to 32 bit and from 44.1 KHz to 384 KHz.

7-4-4 S/P DIF Input (CD8 S only)

The CD8 S model has a S/PDIF digital input, to be used as a DAC with other audio sources.

7-4-5 Digital & Analog outputs

The CD 8 includes 1 digital output (CD8 Signature and CD8 Tube Signature) & 4 analog outputs:

- Output [11] is S/PDIF format output (excepted on CD8 S)
- Output [14] & [15] are right and left unbalanced
- Output [13] & [16] are right and left balanced

7-4-6 Cleaning

To clean the CD 8 Signature CD Integrated, use a SOFT CLOTH with non-abrasive cleaning product.

7-4-7 Technology

- **Power supply:** the power supply is integrated into the drive and has separated and independent regulations for the different sections of the drive. With CD8, all transformers were replaced by high-quality toroidal transformers, in order to decrease vibrations and increase fast power transitions.
- **CD 8 CD Integrated player and DAC:**
 - The CD8 Signature and CD8 Tube Signature have two internal DACs (24 Bit/192kHz). Converter chips were selected for their high audio quality. These chips are one of the most precise DAC available today.
 - The CD8 S has one internal DAC (32 Bit/384 kHz). Converter chips are one of the few available for decoding native DSD signal with high requirement of musicality.
 - The digital output is totally independent and the user does not have the possibility to choose the Sampling Frequency fixed to 44.1 KHz (digital signal from CD source only).
 - The analog stage :
 - The CD8 is developed with 4 OPA 604 using a Class A polarization diagram, the best to obtain a high bandwidth. The output impedance is low, so there is no loss in high frequency. The user has the possibility to drive unbalanced or balanced pre-amp.

- The CD8 Tube Signature is developed with 2 JAN6922 using a Class A polarization diagram, the best to obtain a high bandwidth. The output impedance is low so there is no lose in high frequency. The user has the possibility to drive unbalanced or balanced pre-amp.

- Once you know your MAC OS version, please install the correct driver version as explained below:
 - For MAC OS version 10.4.XX: (TIGER)
 - For MAC OS version 10.5.XX: (LEOPARD)
 - For MAC OS version 10.6.XX and 10.7.XX: (Snow Leopard & Lion)
 - For MAC OS version 10.8.XX (Mountain Lion)
 - For MAC OS version 10.9.XX (Mavericks)
 - For MAC OS version 10.10.XX (Yosemite)

Use the drivers included into the corresponding directory *X:\MAC\OS 10.X.XX

*X:\ the letter could be different on your system, corresponding to your local CDROM reader.

- If you installed wrong drivers, please uninstall them by following instructions below:
 - Open a console, and then type the following commands – the console is located into Finder/Applications/Utilities:
 - `sudo mv /System/Library/Extensions/Hiface.kext /tmp`
 - `sudo touch /System/Library/Extensions`
 - `sudo pkgutil --forget com.m2tech.driver`

Then, restart the Mac.

To obtain your Windows version, please read below:

Click on “start”, then “control panel” and finally on “system” icon.

- With Windows 7/8 , you should be able to see a similar window as below :

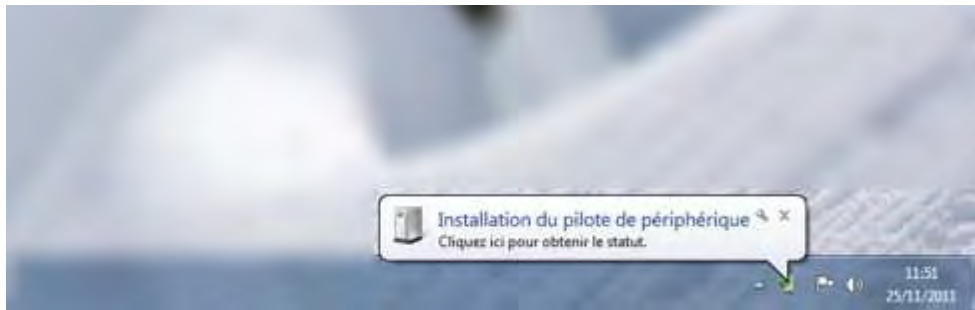


To install your Metronome Async USB 24 bit/192 kHz interface, please use drivers called “metronome_249c_9002_windows_7/8” provided into the CDROM attached on the last page of you user manual.

On Windows XP, you should be able to see a similar window as shown in the opposite picture. To install your Metronome Async USB 24/192 interface please use drivers called “metronome_249c_9002_windows_XP” provided into the CDROM attached to the last page of your user manual.



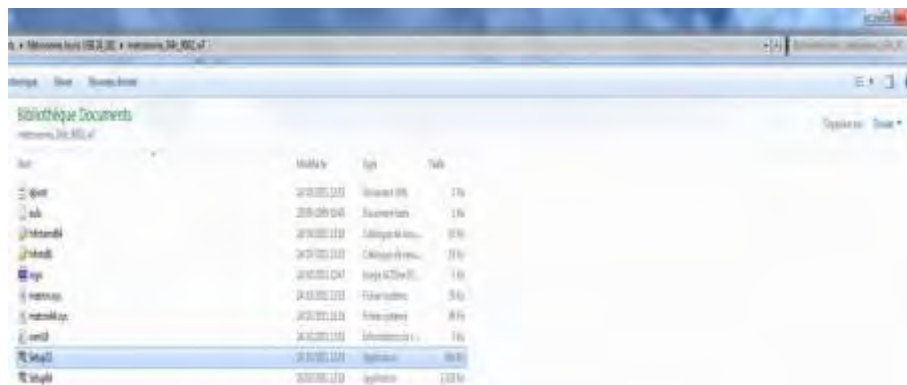
- Step 1: Connection with USB module ...



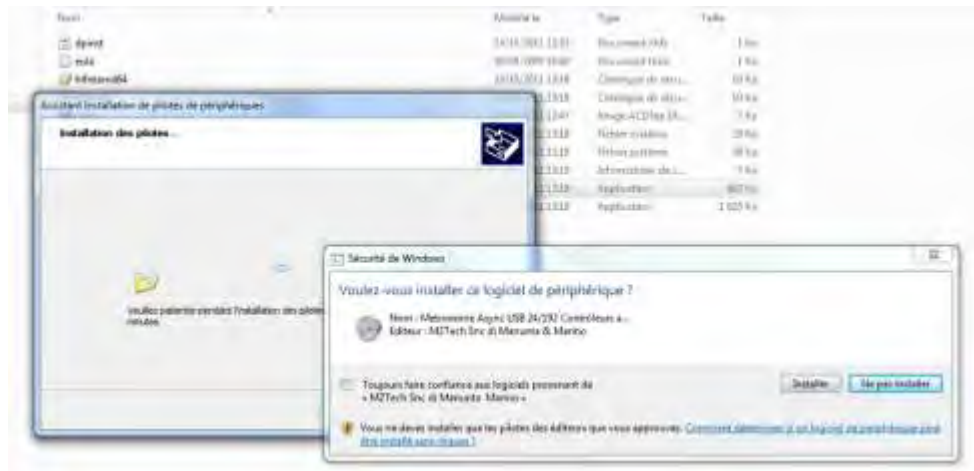
- Step 2: Search the driver on the CD Rom provided ...



- Step 3: Click on the application file corresponding with your OS ... (Windows 32/64 bits or Mac OS)



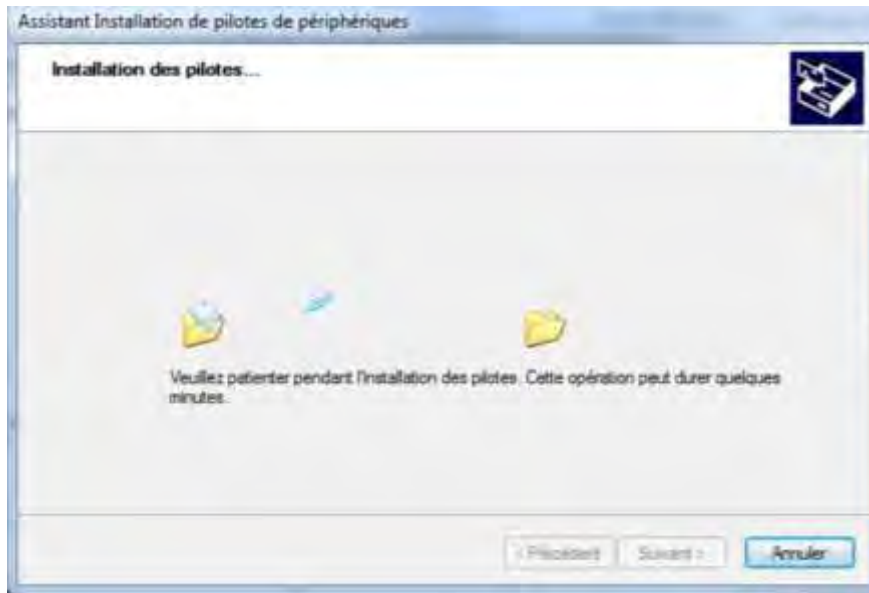
- Step 4: Check the box and click on "install".



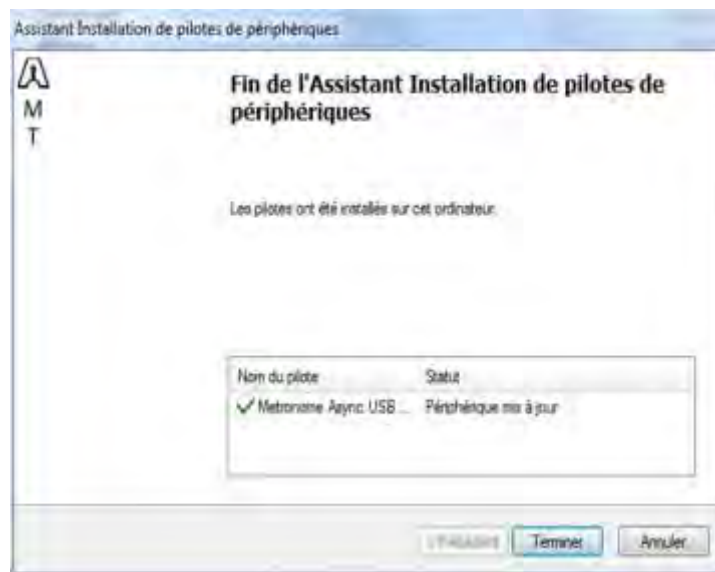
- Step 5: Click on "next".



- Step 6: Installing...



- Step 7: Congratulations, the installation is completed...



9 – USB Drivers Installation for CD8 S

WARNINGS

Before installing drivers , Please Check your system version !
CD8 S doesn't need drivers for Apple systems

Getting DSD to work on a PC with Foobar2000 requires the installation of three drivers—your DAC Manufacturer's custom driver, the ASIO output driver, and the SACD driver. The following guide is a generic step-by-step approach for installing all three drivers.

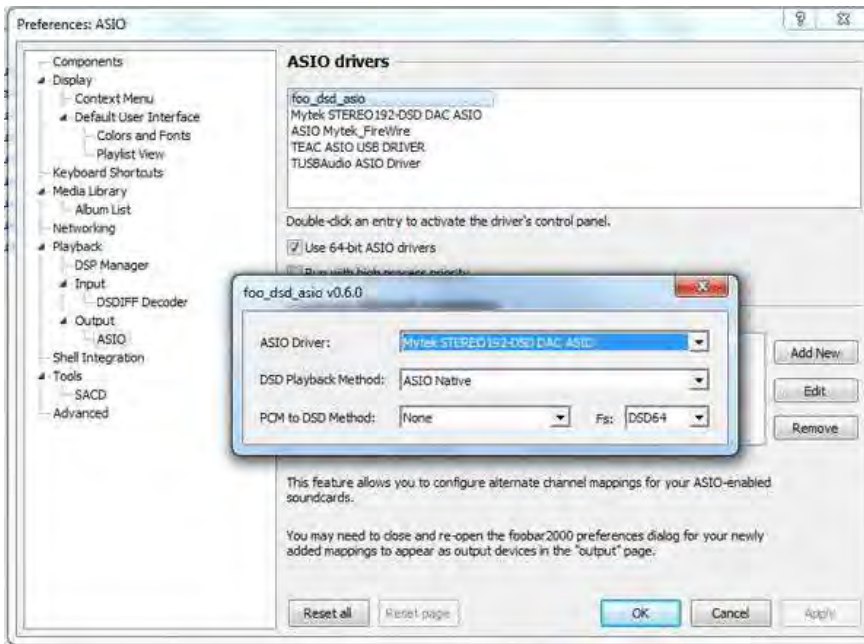
Setting up Foobar2000 for DSD Playback

Installing your DAC's drivers:

1. The first thing you'll need to do is install the custom drivers provided by your DAC manufacturer. These drivers will come on disc or in most cases you can also download them from your DAC manufacturer's website.
2. Once you've downloaded and run the install for your DAC manufacturer's drivers, open Foobar2000.
3. Go to *File > Preferences > Playback > Output* and select "Add New".
4. Select your DAC manufacturer's driver under "Drivers" and click "OK". Once this is complete, close Foobar2000.

Installing the ASIO Output and SACD Plug-in:

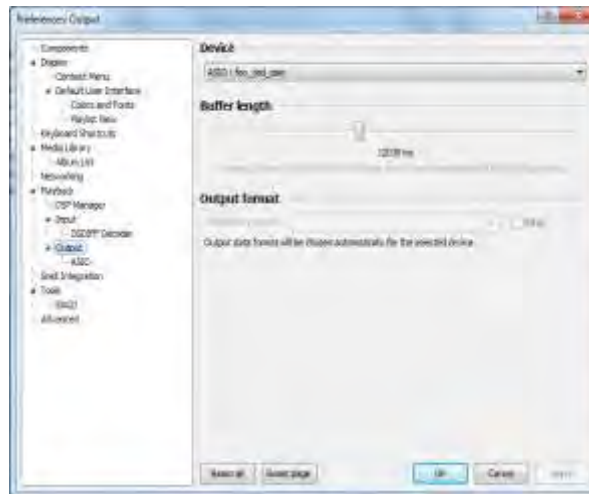
5. Download the ASIO output plug-in for Foobar2000 from www.foobar2000.org/components/view/foo_out_asio.
6. When the download is complete, save the file **foo_out_asio.fb2k-component** to the Foobar2000 Components folder.
7. Download the SACD Decoder plug-in for Foobar2000 from sourceforge.net/projects/sacddecoder/files. This is a zip file so you'll need to unpack it.
8. Open the new zip folder and double-click **ASIOProxyInstall.exe**. Follow the onscreen instructions using the default install.
9. After the installation is finished, copy the **foo_input_sacd.dll** file into Foobar2000's Components folder.
10. Open Foobar2000
11. Select *Components*.
12. Select *Playback > Output > ASIO*.



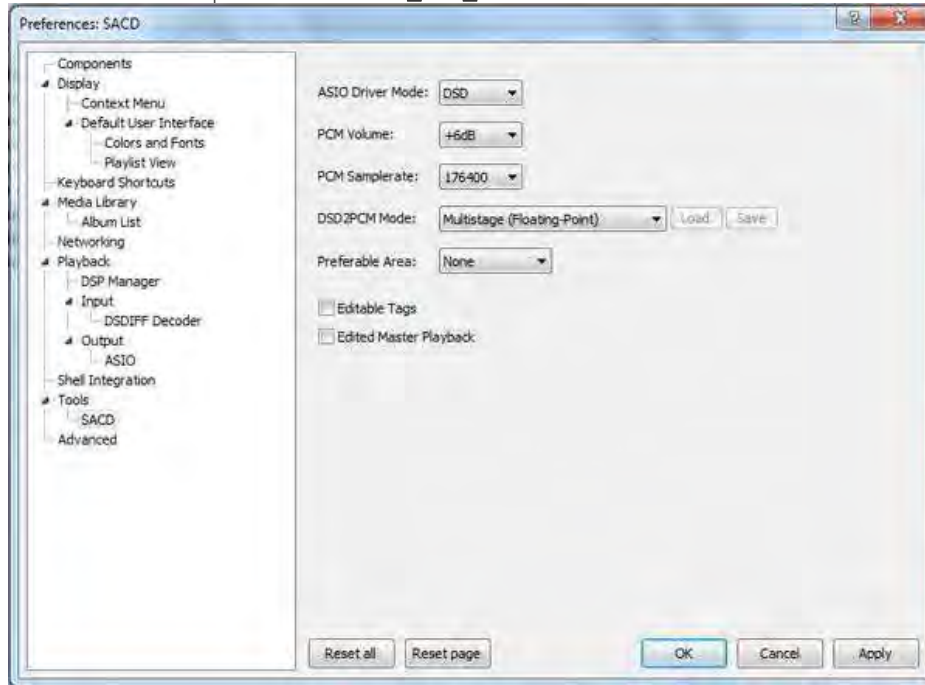
13. You will see a list of your ASIO drivers. Double click **foo_dsd_asio**.

14. In the *ASIO Driver* dropdown, select your DAC's ASIO driver.

15. The next step will vary based on your DAC. Some DACs provide Native ASIO playback while others use DoP. Check your DACs user manual for the correct setting and under *DSD Playback Method* select either "ASIO Native" or "dcs marker 0x05/0xFA".



16. Select *Output*. In the "Device" dropdown select `foo_dsd_asio`.



17. Click on *Tools* and select *SACD*.

18. Click on the *ASIO Driver Mode* dropdown and select "DSD". That does it. N

ow just load up some DSD files and play away. [Foobar2000](#) (free).

10 – Remote control



- Please carefully unpack the remote control.
- Please carefully preserve packages and protections, they will be useful for the unit shipment in case of maintenance.
- To clean the remote control, please use a soft and non-abrasive cloth. Never use any solvent or chemical products. For finger prints, only use a window-pane cleaning product.
- This remote operates with 2 batteries LR03 AAA (included).

- Direct access to the disk tracks by pressing on [0] to [9] keys.
- **PLAY TRACK** function by pressing on the key: ▷
- **NEXT TRACK** function by pressing on key: ▷▷
- **PREVIOUS TRACK** function by pressing on key: ◁◁
- **PAUSE** function by pressing on key: ||
- **STOP** function by pressing on key: □
- **REPEAT** function by pressing on key [REP]:
 - Press one time for defining point A and one more time to define point B
- **DISC** function by pressing on key [DISC]: the tray opens. This function is only available on electric tray drives.

Note: for a correct function of the remote, we recommend a 40° max angle of incidence with the receptor.

11 – Technical specifications

- **PICKUP MECHANISM:**
 - CDM 12 PRO II V6.8
- **DIGITAL INPUTS:**
 - 1 USB Input, USB Type B connector, Sampling Frequency : From 32 to 384 KHz
 - 1 S/PDIF Input, RCA connector 75 Ohms
- **DIGITAL OUTPUT: 1 output***
 - RCA S/PDIF 75 OHMS, Output sampling Frequency: 44.1 KHz (CD signal only)
- **ANALOG OUTPUT:**
 - Unbalanced: 2.5 V RMS @ 0dB - 600 Ohms - Connector RCA
 - Balanced: 2.5 V RMS @ 0 dB - 600 Ohms -Connector XLR
 - Total Harmonic Distortion: -95dB Max
- Gain Error: 0.12dB Max
- Frequency bandwidth: 10 Hz 50 KHz +/- 0.1 dB
- Signal/Noise Ratio: more than 95 dB
- Phase rotation: +/- 1°
- **INTERNAL POWER SUPPLY:**
 - Voltage: 100 VAC +/- 10% - 50/60 Hz - Japan
 - Voltage: 120 / 240 VAC +/- 10% - 50/60 Hz - Other countries
 - Consumption: 60 VA Max
- **OTHER CHARACTERISTICS:**
 - Dimensions: W x H x D : 450 x 120 x 420 (mm)
 - Weight: 15 Kg

*** Only on CD8 Signature and CD8 Tube Signature**

12 – Warranty

METRONOME TECHNOLOGIE Ltd. guarantees the components of your METRONOME TECHNOLOGIE product for two years from the purchase date.

In the event of a product failure, METRONOME TECHNOLOGIE will repair, readjust and should the occasion arise, replace the units providing that all the clauses contained in the warranty are met.

In order to initiate service of any kind, it is necessary to firstly obtain distributor or dealer authorization and then, ship the prepaid unit.

Any of the following conditions shall avoid the warranty:

1. Operations not in accordance with this manual.
2. Abuse, accident or unauthorized modifications as determined by METRONOME TECHNOLOGIE Ltd. exclusively
3. Serial numbers removal, defacing or falsifying.
4. Shipping without the complete factory cartons.

METRONOME TECHNOLOGIE Ltd. shall not be liable for any accidental damages regarding operation, failure, trouble- shooting or repair of your CD8.

