# THE MANHATTAN

DAC · HEADPHONE · PREAMPLIFIER

MYTEK

OWNER'S MANUAL

Owner's Manual ver. 1.4 / June 2015
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There are  periodic updates to this manual.

To download the latest version, technical support, and for setup tips

please visit:

http://www.mytekdigital.com


or at:

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**Contents**

General

# 1. Introduction

Thank you for choosing the new Mytek Manhattan DAC Headphone Preamplifier, the best sounding Mytek DAC to date. Pristine sonics and beatiful contemporary industrial design allows the Manhattan to easily challenge $10,000+ products from other brands. The Manhattan has been designed as a digital and analog playback preamplifier and audio hub. It features a high fidelity, high current headphone amplifier with single ended and balanced outputs designed to drive most demanding high end headphones, analog remotely controllable volume control, a choice of analog inputs for external sources such as vinyl and options for internal phono preamplier and SACD DSD optical digital input. The DAC is capable of converting high resolution PCM audio up to 384 kHz, and DSD audio (up to 256xDSD on USB2 and FW) , through high-speed USB 2.0, FireWire, AES/EBU, SPDIF, or TOSLINK. Driverless "plug and play" is provided via USB 1.1 port (for PCM audio up to 96 kHz).

# 2. Package Contents

- Manhattan DAC
- USB 2.0 Cable
- FireWire Cable
- Apple remote
- Spiked Feet
- Rubber Feet
- Power cord
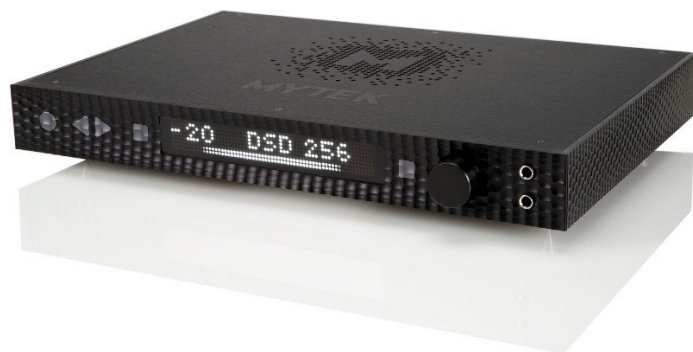
# 3. Brief Description

- Dynamic Range: 130dB (32 bit ESS Sabre chipset in 8 mono to 2 double balanced stereo config.)
- Native 32bit PCM up to 384k, DXD, DXD32, DSD, DSD128, DSD256 (11.2 MHz)
- Digital inputs: AES/EBU, S/PDIF, Toslink, SDIF DSD
- Word Clock: IN/OUT for ext clock, and to stack up more units for surround playback
- Analog inputs: XLR , RCA 1 , RCA 2
- Analog outputs: XLR , RCA
- FireWire400/800, USB 2.0, USB 1.1 computer interface
- Femto Clock Technology - jitter below 1ps (1/1000 000 000 000 of a sec)
- Internal Hardware Upsampling to DSD256: Any digital signal can be upsampled to DSD256 for superior DAC chipset performance
- Internal PCM Hardware Upsampling: 16bit 44.1k etc. can be optionally upsampled

prior to conversion to 192k/24bit

- Choice of Transparent Analog or Digital stepped volume control with "Bypass" option for the purest signal path.

- Independent control of Main Outs and Headphones section

- Dual mono design, ultra low distortion headphone amp with single ended or balanced driver and dedicated headphone gain switch. Optional single ended to balanced connector is available from Mytek to accomodate specialty balanced headphones.

# 4. Quick Start

## 4.1 Front Panel



1. On / Off Switch. Powers the unit on or off

2. "Goto Menu" button. Press this button to enter the main menu, or to come out of it

3. "Move in the menu" button. Pressing the knob does the same.

4. Function 1 Button. This button is user assignable (via the main menu.)

5. Function 2 Button. A second user programmable switch (also via the main menu.) Default is Mute.

6. Rotary Encoder Knob. This encoder is both a knob and a button. It's primary function is to control the volume level of both the main outputs and headphones. It also functions as MENU navigation for configuring playback options. Pressing the knob engages the button function of the encoder.

7. Headphone Output Section: High-Fidelity, high-current headphone amplifier capable of driving the most demanding heaphones. Top and bottom 1/4 inch jacks are driven independently. The top jack is in phase, while the bottom jack is out of phase (absolute signal phase can be controlled on the front panel). Single ended headphones can be just plugged in, while balanced headphones require 2 x 1/4 " to 4 pin XLR adapter which can be ordered from Mytek.

8. LED Display. This is the main display. Volume in dB's is shown on the left and the current sample rate on the right. It's also used to display the menu selections.

## 4.2 Rear Panel
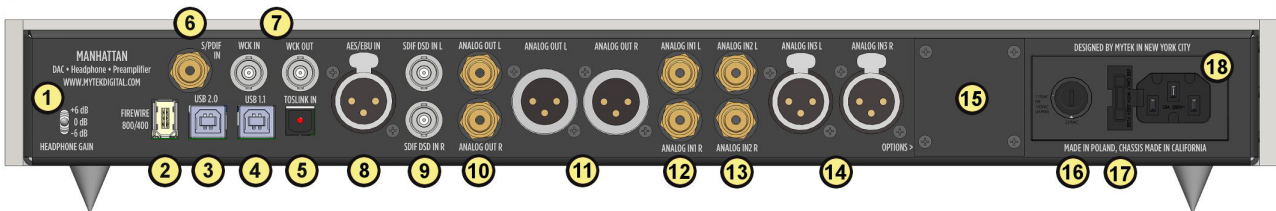


1.  Headphone Gain Switch. User should arbitrarily set this switch for an optimum loudness of a particular headphone type. Some headphones are louder than other, this switch will compensate for differences.

2.  6-pin FireWire socket for connection to the computer, offering playback up to 192kHz and up to DSD128 (DSD 128 with Audirvana or Jriver only). Can be used with FireWire 400 > FireWire 800 cable or Firewire 400> 800 > Thunderbolt with Mac Thunderbolt adapter (included)

3.  USB 2.0 socket, up to 384KHz/DSD256 capable.

4.  USB 1.1 socket for connection to the computer, 96kHz capable

5.  Optical Input (Toslink). Consumer digital input that accepts up to 192kHz PCM and DSD DOP standard via optical S/PDIF. This input can also be used to transmit digital audio into computer via FW connection.

6.  S/PDIF Coaxial Input. Consumer digital input that accepts up to 192kHz sampling rate. This input can also be used to transmit digital data to computer via FW connection.

7.  Wordclock BNC Input and Output. Used for professional clock distribution. 192KHz and DSD reference clock.

8.  AES/EBU Input. Professional digital input that accepts up to 192kHz. Accepts DSD DOP standard input. This input can also be used to transmit digital data to computer via FW connection.

9.  SDIF DSD input – This is Sony standard open DSD input. Can be used with some professional grade equipment.

10.  RCA Stereo Analog Output

11.  Balanced XLR Stereo Analog Output

12.  RCA Stereo Analog Input

13.  RCA Stereo Analog Input

14.  Balanced XLR Stereo Analog Input

15.  Expansion slot / additional options (SACD transport optical interface can be installed here)

16. Power switch: Linear power supply 115 and 230V AC 50/60 Hz. There is a special Japanese version of 100V/230V available through distributor in Japan.

17. Fuse, 20mm 2 Amp T (slow blow) can be replaced here. There is a spare inside fuse assembly

18. IEC Power socket. Standard 115/230V receptacle. (100V/230V for Japanese Models).

## Quick Start – Immediate Playback:

### AES/EBU, SPDIF and Toslink:

Connect the analog outputs to your powered speakers, power amplifier or preamplifier. Alternatively use headphones. Connect the digital source (CD player) to the DAC. Power up the player, power amplifier and the Manhattan DAC. Upon power up, the DAC will default to its default settings hand picked by our team to produces the optimal sound quality. The unit will also begin scanning active digital inputs, "SCANNING" is displayed until an active input is detected. Upon detection of active input the DAC will start accepting audio at this input. Display will show both volume and received signal sample rate and will begin playing sound which will be visible on the display audio meter.

### Computer with USB1.1:

Connect the analog outputs to your powered speakers, power amplifier or preamplifier. Alternatively use headphones. Connect the computer (audio source) to the DAC USB1.1 port with USB cable. Power up the computer, power amplifier and the Manhattan DAC. Upon power up, the DAC will default to its default settings hand picked by our team to produces the optimal sound quality. The unit will also begin scanning active digital inputs, "SCANNING" is displayed until an active input is detected. In Windows System or Mac Preferences select "Manhattan DAC" as digital audio output. Play audio in the computer software of your choice. Upon detection of active USB1.1 input DAC will start accepting audio at this input. Display will show both volume and received signal sample rate and will begin playing sound which will be visible on the display audio meter.

*"Breaking-in" the DAC for best sound quality:* *This unit, similarly to other hi-fi equipment will benefit from "breaking-in", when the music is played for extended period of time (even few days), before it achieves its ultimate sound quality. "Break-in" typically reduces distortion caused by "too new" capacitors and other electronic components and will sound smooth and "velvety" afterwards.*

# 5. Manhattan DAC Driver and Firmware Installation

## 5.1 USB 1.1 OSX and Windows installation

1. Connect the Analog Outputs to your powered speakers / amplifier. Balanced connections (XLR) are typically for professional audio equipment while unbalanced connections (RCA) are typically for consumer audio equipment.



2. Connect the unit to your computer using USB 1.1 (rear panel).

3. Turn on both the computer and the converter, then your speakers / amplifier.

4. DAC comes as default set to USB1.1 input. Select Mytek as the default playback device in your operating system's sound properties. The DAC should now play all sounds generated by OS or software.
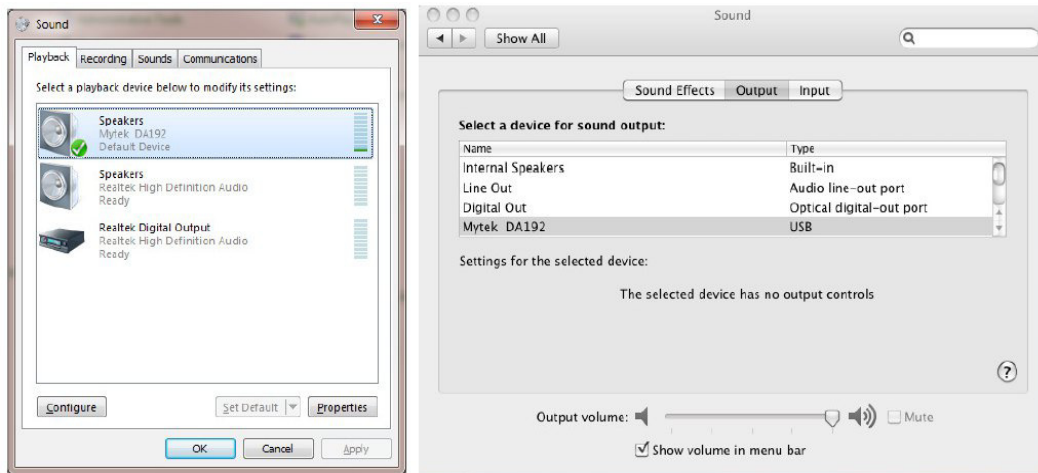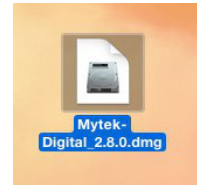
## 5.2 USB 2.0 - OS X driver installation

*USB2.0 and Firewire require installation of Mytek drivers on both Win and Mac OS. (the latest driver are available at mytekdigital.com).*

***Important!*** *- before installing new USB driver previous one has to be uninstalled carefully.*

1. Double click the driver file.
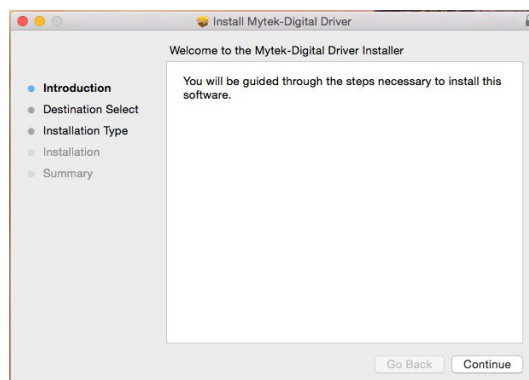   (ensure you have the latest driver by visiting mytekdigital.com).



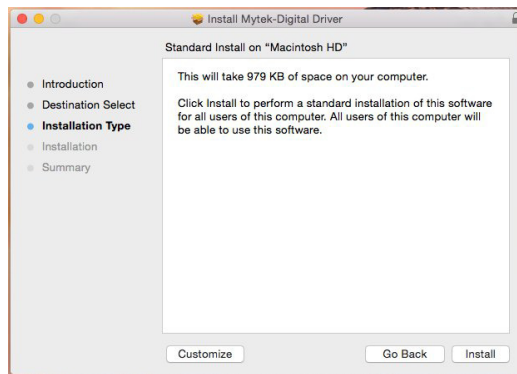2. Open the Mytek-Digital_XXX mounted drive.
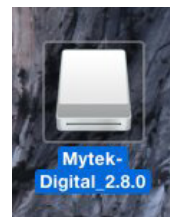


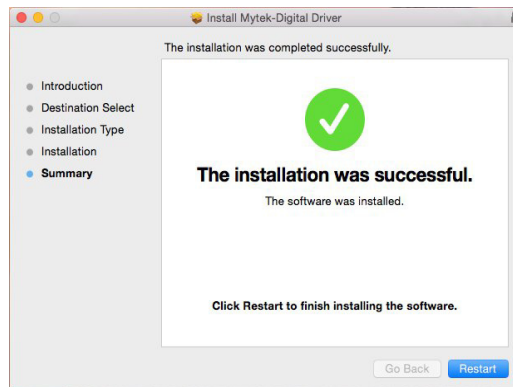3. Open Mytek-Digital Driver.pkg.



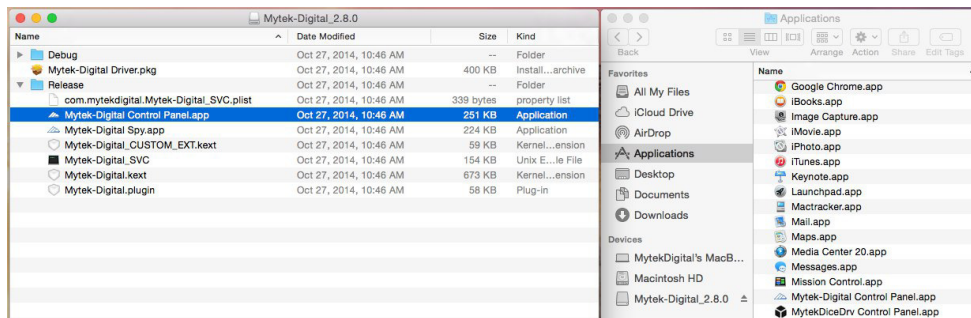4. Click the Continue button in the lower right hand corner.

5. Click the Install button in the lower right hand corner.



6. Once the installation is complete press the Restart button in the lower right hand corner.



7. Copy the Mytek-Digital Control Panel inside the Mytek-Digital_XXX mounted drive to the Applications folder.
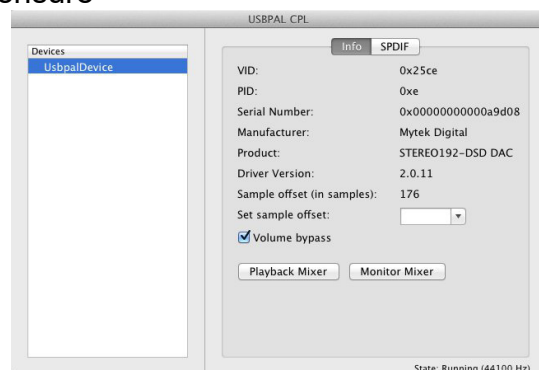


8. Open the Mytek-Digital Control Panel and ensure the Volume Bypass checkbox is checked.

9. Reboot your computer

10. Plug in your Mytek device to available USB port and turn it on.

11. Done! - now you are able to use your Manhattan DAC.

## 5.3 Mac OSX USB driver uninstallation

For removing all installed USB driver files you need to check the following folders and remove the respective files. Please follow all steps below.

1. Go to the boot disk: /Library/Audio/MIDI Drivers

   delete the file: "Mytek-Digital.plugin"

2. Go to the boot disk: /System/Library/Extensions

   delete the file: "Mytek_Digital_CUSTOM_EXT.kext"
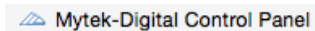   delete the file: "Mytek-Digital.kext"

3. From Finder's "Go" menu, select "Go to folder..." That will open a window in which you have to type"/usr/local/bin"

   delete the file: "Mytek-Digital_SVC"

4. Go to the boot disk: /System/Library/LaunchDaemons

   delete the file: "com.mytekdigital.Mytek-Digital_SVC.plist"

5. Go to Applications

    Mytek-Digital Control Panel

   delete the application: "Mytek-Digital Control Panel.app"
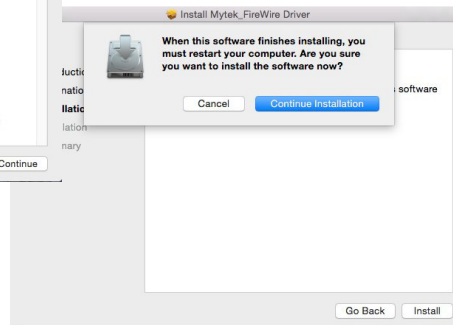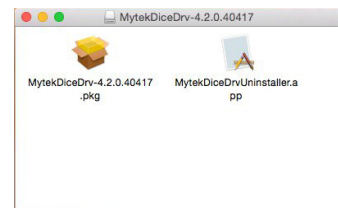
6. Reboot your computer.

7. Done! - USB driver has been uninstalled.

## 5.4 Mac OS X – FireWire driver installation

It is recommended to install the drivers before the unit is connected to the computer.
The latest drivers are available at mytekdigital.com



1. Download the latest FireWire driver from our website and double click it.

2. Next click the .pkg file to start the driver installation.

3. To begin the installation process click "Continue".
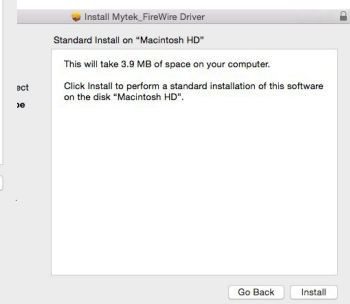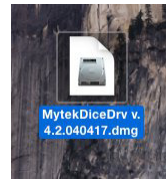


4. Next click "Install"

5. Upon successful installation **restart** the computer to complete Mytek FireWire Driver Installation.

## 5.5 Windows – USB 2.0 driver installation

It is recommended to install the drivers before the unit is connected to the computer.
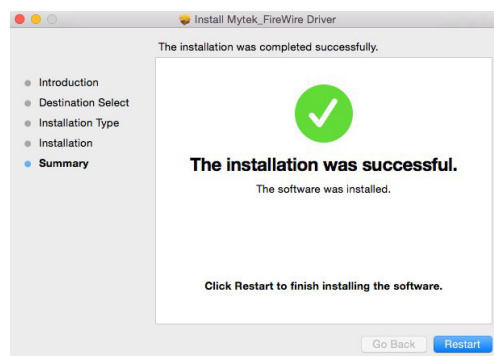The latest drivers are available at mytekdigital.com

1. Locate the Mytek_Stereo192-DSD_DAC_Manhattan_....zip file
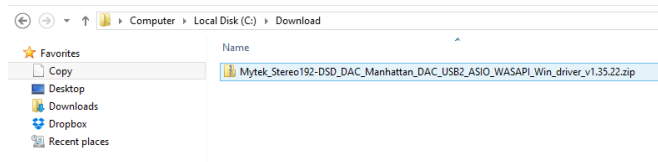


2. Extract the contents of the Mytek_Stereo192-DSD_DAC_ Manhattan_....zip installer by right clicking on the installers icon and selecting Extract All...
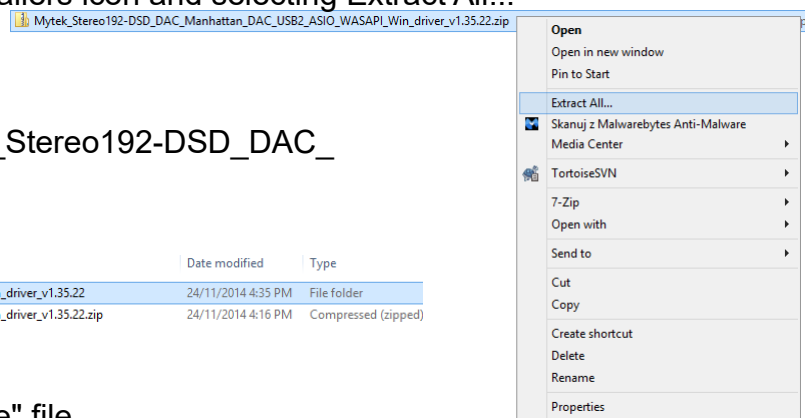


3. Open the extracted Mytek_Stereo192-DSD_DAC_ Manhattan_.. folder.



4. Double click the "Setup.exe" file.
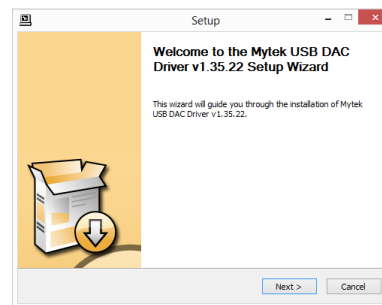


5. Once the Setup.exe opens press "Next"

6. Choose the location of installation. By default it will install in C:\Program Files\MytekDigital\mytek_Driver. We recommend leaving this as is. If you wish to customize the install choose the location by selecting browse. Select Install.
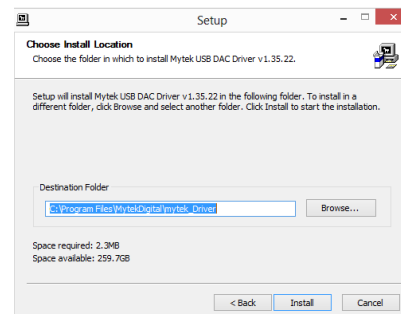
7. Setup.exe will now install the Mytek Driver. This process may take a few minutes.

8. Upon completion of Setup.exe press the Next button.
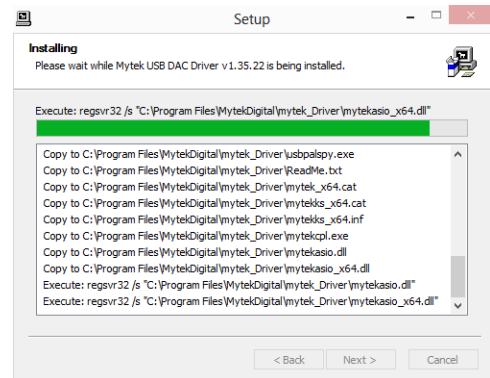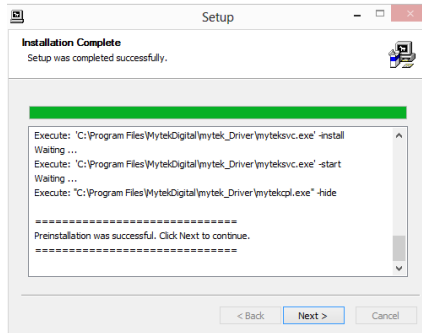
9. To complete installation of the Mytek_Stereo192 -DSD_DAC_ Manhattan_....zip simply click the Finish button.
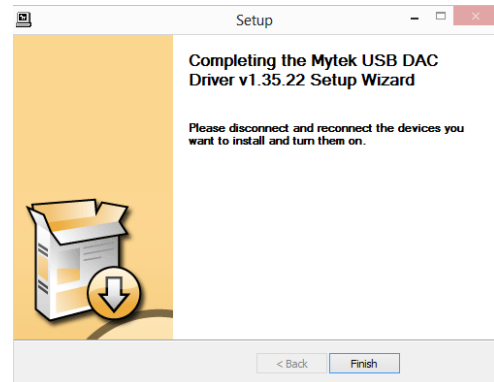
10. Confirm installation by launching the Manhattan DAC Control Panel.
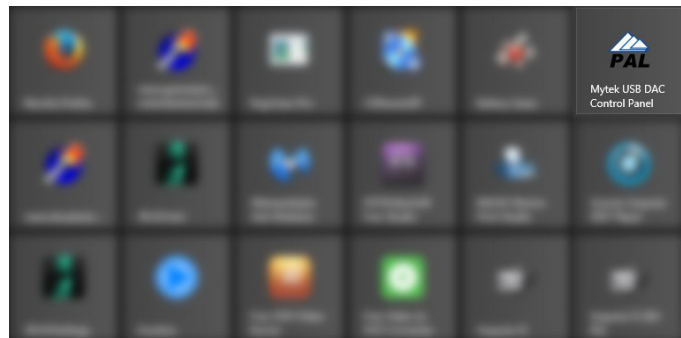
11. Installation was successful if the Manhattan DAC Control Panel shows a device and permits access to playback options. More than 1 DAC can be connected via USB to use the same driver. For example 3 Mytek DACs can be used for playback of Surround DSD SACDs using for example Jriver Player.
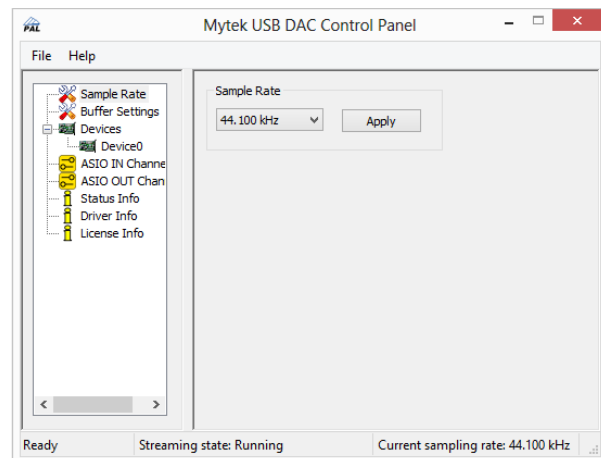
## 5.6 Windows - FireWire driver installation

It is recommended to install the drivers before the unit is connected to the computer.
The latest drivers are available at mytekdigital.com

1. Locate the Mytek_Stereo192-DSD_DAC_Manhattan_DAC_ FW_ASIO_WASAPI _Win_driver_ver.xxx.exe file.
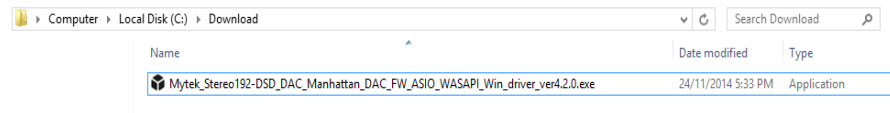
2. Double click the Mytek_Stereo192-DSD_DAC_Manhattan_ DAC_FW_ASIO_WASAPI_Win_driver_ver.xxx.exe file. Once Mytek_FireWire installer begins click "Next" to begin installation.

3. The Mytek Firewire Control Panel is by default installed in the Program Files directory. It is recommended to Use the Default Location. Choose Next once you have decided.
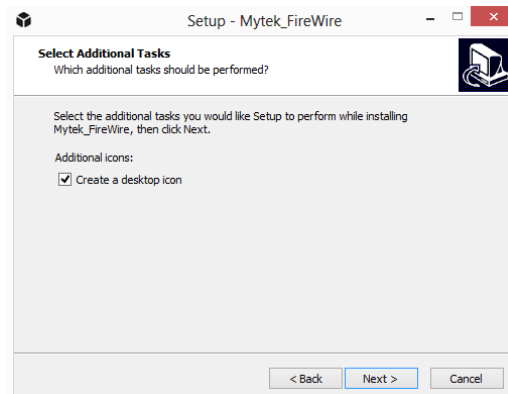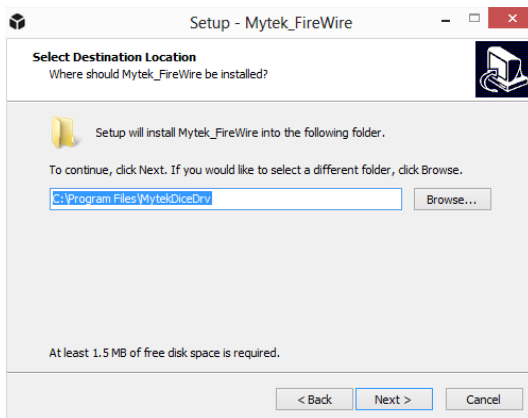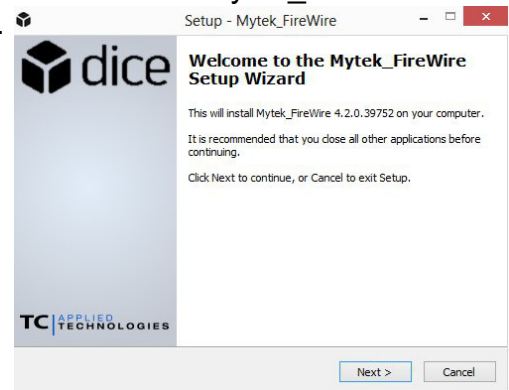
4. Choose to create or not create a new desktop Icon for the Mytek Firewire Control Panel by checking or unchecking the Create a desktop icon box.

5. Begin installing the Mytek Firewire Control Panel by selecting Install
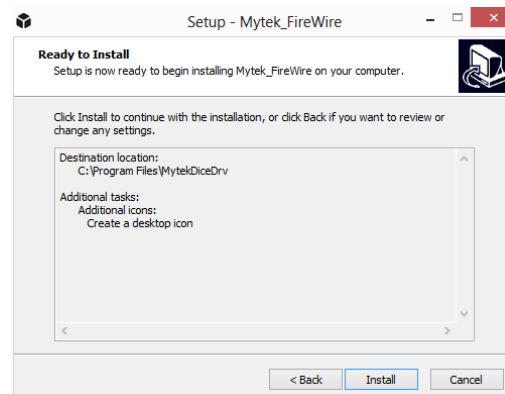
6. If any "Window's Security Warnings" appears choose Install to continue installation.
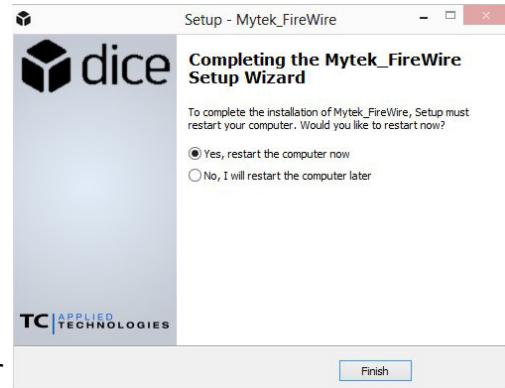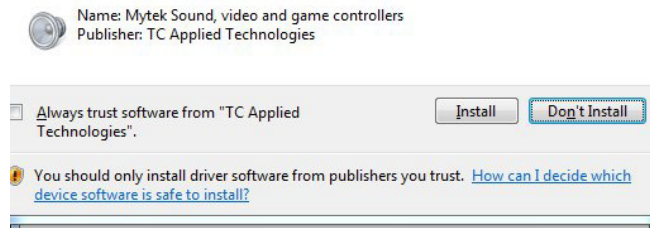




7. Once installation has begun it may take several minutes to complete please be patient until the task completes. Finalize the installation by selecting Restart. This will restart your computer and complete the Mytek Firewire driver installation.

8. After computer reboot turn the Manhattan ON. Next double clict the icon to open the Mytek_Firewire Control Panel. The black cube icon is located in your Start menu and on your Desktop.

9. Make sure the Stereo192-DSD DAC is connected and input is set to Fire. If so the Mytek Control Panel will say System Clock Locked.
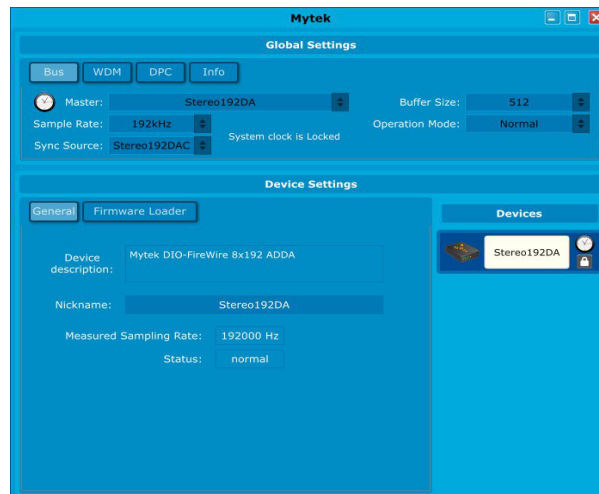
## 5.7 Firmware update Windows and OS X

Currently the DAC firmware update requires Firewire connection (cannot be performed via USB). As of Firmware v.1.6.1 a failsafe feature has been added to ensure proper operation following a firmware load failure. If firmware update is interrupted (by power cut for example), the unit will revert to its last firmware. Prior firmware versions are not failsafe and  must be loaded safely by shutting down all non essential programs, disconnecting USB1 and USB2 ports and ensuring uninterrupted power to the unit. After Firmware has been loaded the DAC and Computer have to be restored.
Inside FireWire control panel, under Device Settings is the Firmware Loader.
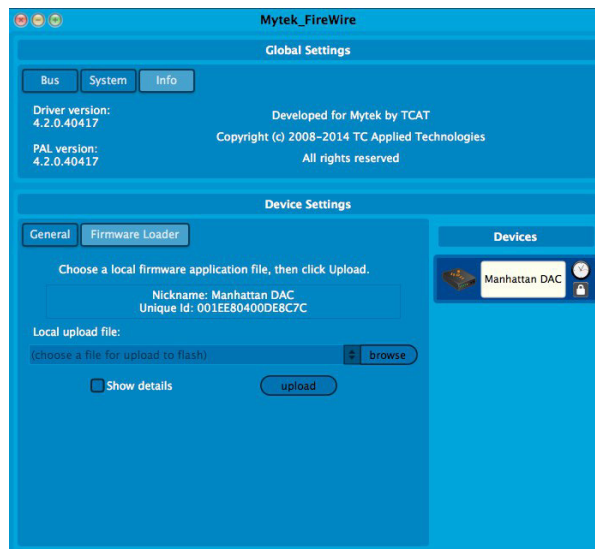


Download the latest Firmware.bin file from http://www.mytekdigital.com. Browse to the new firmware file and press upload. Once the unit wakes up after the firmware update, power cycle the DAC. Once the DAC has been restarted the firmware update is complete with all setting reverting to default.

# 6. Menu Operation

Menu is accessed by pressing the left triangular button. Once in the Menu, turning the rotary encoder cycles through the options while pressing the right triangular button (or encoder which is equivalent) advances the selection. Pressing the left triangular button again backs the selection one level until you exit the menu. All settings are preserved when the unit is powered off. Default menu setting, also available after resetting the defaults in the firmware menu item, are marked in **bold**. Default values are recommended, please use other values only when required.

## 6.1 INPUT

**USB 1.1** - Driver-less, plug-n-play computer input that is limited to 96kHz.

- **INPUT SYNC**

**USB 2.0** - Hi-speed computer input that is capable of 192kHz and 64x and 128xDSD playback. Use of this input requires drivers installed on the computer.  USB2.0 or the Firewire inputs provide the highest quality playback.

- **INT SYNC**
- WORD CLOCK

**FIREWIRE** - Hi-speed computer input that is capable of 192kHz and 64x and 128xDSD playback. Use of this input requires drivers installed on the computer. USB2.0 or the Firewire inputs provide the highest quality playback.

- **INT SYNC**
- WORD CLOCK

**S/PDIF** - Coaxial S/PDIF input capable of receiving PCM data up to 192kHz and DSD DOP (64xDSD only). This input can also be used to transmit digital data to computer via FW connection.

- INT 48.0kHz, 88.2kHz, 96.0kHz, 176.4kHz, 192.0kHz
- **INPUT SYNC**
- WORD CLOCK

**TOSLINK** - Optical S/PDIF input capable of receiving PCM data up to 192kHz and DSD DOP (64xDSD only). This input can also be used to transmit digital data to computer via FW connection.

- INT 44.1kHZ, 48.0kHz, 88.2kHz, 96.0kHz, 176,4kHz, 192.0kHz
- **INPUT SYNC**
- WORD CLOCK

**SDIF** - Professional DSD input capable of receiving DSD64x to DSD256x formats.

- SDIF RATE

- **DSD 64**
- DSD 128
- DSD 256

- • SDIF MODE

  - **RAW**
  - SDIF-3

- • SDIF SYNC

  - INT SYNC
  - **WORD CLOCK**

**Analog 1** - Unbalanced RCA analog input that can bypass the volume control or be routed through it.

**Analog 2** - Unbalanced RCA analog input that can bypass the volume control or be routed through it.

**Analog 3** - Balanced XLR analog input that can bypass the volume control or be routed through it.

Analog inputs feature internally accesible jumpers which can be used to remove coupling capacitors.

## 6.2 UPSAMPLING

The Manhattan DAC can upsample all PCM data to 32 bit 192kHz allowing analog bandwidth of 100kHz alias free. Upsampling for PCM, will automatically turn off when DSD data is encountered.

- • UPSAMP: ON
- • UPSAMP: **OFF**

## 6.3 FILTERS

There are several filtering options for both PCM and DSD. The filters affect how upper "out-of-audio" band frequencies are rolled off.

- • FILTER PCM

  - FILTER: **SLOW** - gentle cutoff with some aliasing.
  - FILTER: SHARP - brickwall cutoff at ½ sampling rate.

- • FILTER DSD

  Cutoff frequency - 50, 60 or 70 Kilohertz for two pole gentle lowpass filter to reduce high frequency noise.

  - **FILTER 50KLPF**
  - FILTER 60KLPF
  - FILTER 70KLPF

## 6.4 VOL CONTROL - volume control

There are two methods of volume control available and an option for complete bypass.

**ANALOG** - The output level is controlled by a programmable analog fader. This also allows independent level control of the main output or headphone output.

**DIGITAL** - The output level is controlled by a digital 32 bit fader prior to conversion. It controls the main output or headphone output simultaneously.

**BYPASS** - Relay bypass of all faders for the cleanest output path possible. Only the main outputs are affected while the headphone output is still controlled by analog fader.

## 6.5 VOL TRIM - volume trim

Vol trim allows to set of DAC headroom, in other words the loudness of its output. It can be set it from -14dB to -17dB. Default is Disabled referenced at -18dBFS (Full Scale). A -18dBFS digital sinewave will results in +4dBu or 1.228 volts RMS measured between pins 2 and 3 of XLR outs. Trim set at -14dB will result in signal 4dB lower than if it was set to -18dB. Additionally output can be further reduced by 6dB by using internal gain jumpers.

## 6.6 FUNCTION 1

Two buttons, FN1 and FN2, are user programmable switches. Each button's function is set inside the Function menu. The following options are available (*PCM Only – not DSD):

- **INPUT** - Allows the user to select 3 user "Presets," Input A, Input B, Input C; Each input can be assigned to either SPDIF, AES, Toslink/ADAT, USB1, USB2, FireWire, Analog/SDIF or none. The none allows to only switch between 2 Input presets

  - INPUT A (TOSLINK, SDIF, ANALOG 1, ANALOG 2, ANALOG 3, USB 1.1, USB 2.0, FIREWIRE, S/PDIF, AES/EBU)

  - INPUT B (TOSLINK,  SDIF, ANALOG 1, ANALOG 2, ANALOG 3, USB 1.1, USB 2.0, FIREWIRE, S/PDIF, AES/EBU)

  - INPUT C (TOSLINK, SDIF, ANALOG 1, ANALOG 2, ANALOG 3, USB 1.1, USB 2.0, FIREWIRE, S/PDIF, AES/EBU)

- **MUTE** - mutes the audio output

- **PHASE** - Inverts the signals phase

- **MONO** - Sums left and right channel to mono

- **L-R*** - Subtracts one channel from the other, canceling out mono information while leaving the stereo information

- **MID-SIDE*** - A combination of Mono (L+R) and L-R, the mid signal is the sum of L and R (mono) and the side signal is the stereo information from the L-R operation

- **DIM VOL** - Instantly lowers the level by 20dB

## 6.7 FUNCTION 2

The second  programmable switch. To program see description above (6.6).

## 6.8 REMOTE

The Mytek Manhattan DAC is infrared remote ready and will work with any Aluminum Apple Remote or any Universal Remote Control using the Philips RC5 standard.

- MODE (APPLE -> *ADR SET* or RC5 -> *ADDRESS*)

- ENABLE (ON / OFF)

### 6.8.1 The Manhattan Apple Remote Setup

1. Press the Menu button.

2. Rotate the knob until Remote is selected. Press the knob to enter Remote menu.

3. Rotate the knob until Enable is selected. Press the knob to enter Enable menu.

4. Rotate the knob until On is selected. Press the Menu button to turn on Remote Control.

5. Rotate the knob until the Mode is selected. Press the knob to enter Mode menu.

6. Rotate the knob until Apple is selected. Press the knob  to display Address Set. Aim the Aluminum Apple Remote at the Manhattan DAC and press the silver button at the center of the circle on the Apple Remote until display blinks momentarily.

7. Success the Apple Remote is Paired!

### 6.8.2 The Manhattan RC 5 Remote Setup

1. Press the Menu button.

2. Rotate the knob until Remote is selected. Press the knob to enter Remote menu.

3. Rotate the knob until Enable is selected. Press the knob to enter Enable menu.

4. Rotate the knob until On is selected. Press the Menu button to turn on Remote Control.

5. Rotate the knob until Mode is selected. Press the knob to enter Mode menu.

6. Rotate the knob until RC 5 is selected. Press the knob to enter RC 5 menu.

7. Rotate the knob to select your remote's proper channel, either 00, 16 or 20. Press the Menu button to set the Address channel.

8. Exit all menus by pressing the Menu button until volume and sample rate are visible, this will reactivate the volume knob.

### 6.8.3 RC 5 Remote Overview

The Mytek Manhattan DAC can operate as:

- TV - address – 00
- Preamp - address – 16
- CD - address – 20

In each of these options the remote's volume up and volume down buttons correspond to turning the Manhattan DAC's main knob.

### 6.8.4 RC 5 Remote Assignments

| | |
|---|---|
| **"vol_up"  - vol knob right** | **(command - 16)** |
| **"vol_down" – vol knob left** | **(command - 17)** |
| **"1" - press "menu"** | **(command - 01)** |
| **"2" - press "FN1"** | **(command - 02)** |
| **"3"- press "FN2"** | **(command - 03)** |
| **"4"  menu knob left** | **(command - 04)** |
| **"5" - press knob** | **(command - 05)** |
| **"6" - menu knob right** | **(command - 06)** |

## 6.9 DISPLAY

- **BRIGHTNESS** – Sets the brightness the LED display (16 levels)

- **METERS** - Turns the signal level meters on or off. Available settings: ON / OFF

- **AUTO-OFF** - This will turn the whole display off after selected amount of time (secs). A dim dot will stay lit to show that the unit is operational. Engaging any controls will wake up displays.
Available settings: DISABLE / 5 SEC / 10 SEC / 15 SEC

## 6.10 FIRMWARE

- **Version: 1.0.7** - displays the current firmware version.

- **RESTORE** - restores the unit's parameters to the factory default.

## 6.11 AUTOSCANNING

Available settings: ON / OFF
It automatically detects which input is connected. If several inputs are connected there is following priority: USB 2.0, FireWire, USB 1.1, AES/EBU, SDIF, SPDIF

# 7 User Adjustments

## 7.1 Bypasing analog input capacitors

There are jumpers  inside the Manhattan which allow bypass of the capacitors in the analog input signal path. Connecting jumpers will extend the low-frequency response to 0 Hz. It will also allow DC to pass. Bypass the capacitors only if you are sure that there is no DC in your signal, as DC can be harmful. The jumpers are located behind the output XLR's.

## 7.2 Reduction the output level

Internal -6db Gain Jumpers: these 4 jumpers allow the user to lower the output level of the DAC by -6 db without affecting sound quality. All 4 jumpers must be engaged to ensure proper operation and should only be used when the DAC is clearly overloading the following amplifier stage in the chain.

## 7.3 Changing the mains voltage

There is a 115/230 voltage switch on the back of the unit.
Normally this will be set to the proper voltage of the
country of purchase. The the voltage switch ,
is located next to the power plug socket. The same power
module houses the 20mm 2 Amp T slow blow fuse and 1 replacement fuse.
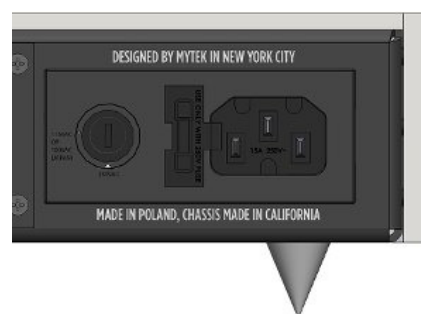
# Specifications

- Conversion: 32bit PCM up to 384k, DXD, DSD-DS-DSD256 (11.2 MHz)

- Dynamic Range: 130dB (ESS Sabre chipset in 8 mono to 2 stereo config.)

- Femtoclock Internal Clock Generator (lps jitter.) Wordclock In and Out, or sync to incoming digital audio input with JET (tm) PLL. Time Domain Jitter Eliminator

- Headphone Amp: High Current, High Slew Rate ultra low distortion 1600mA Hi-Fi dual mono design, 0.25 Ohm impedance with gain selector switch

- Computer Audio Inputs and Outputs: Firewire 400/800 up to PCM 192k/DSD async, USB2.0 up to 384k/DSD256, USB 1.1 up to PCM 96k, driver-less. DSD DOP256 SDIF DSD input, optional SACD optical input ***

- Digital Audio Inputs: SPDIF, AES/EBU, Toslink all up to 192k single wire. DSD-DSD256 SDIF DSD input, optional SACD optical input ***

- Internal Hardware Upsampling to DSD256: Any digital signal can be upsampled to DSD256 for superior DAC chipset performance*

- Internal PCM Hardware Upsampling: 16bit 44.1k etc. can be optionally upsampled prior to conversion to 192k/24bit.

- Analog Attenuator: Transparent, 1dB stepped programmable, separate for main out and headphones. Or 32 bit digital attenuator or relay bypass of the attenuator can be chosen by user

- Analog Inputs: 2 Unbalanced RCA, 1 Balanced XLR

- Linear Power Supplies, Separate: Oversized 50VA analog, 50VA digital, Worldwide

- Firmware updates: online, user downloadable, periodic feature upgrades

- Ability of converting standard digital audio inputs into computer FW/Thunderbolt input

- Apple aluminum remote (included) and universal remote capable
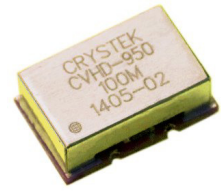
# Special hardware options

- EMM Labs, Playback Design compatible optical SACD digital input board ***

- Ultra high preformance MM, MC phono preamplifier board ****
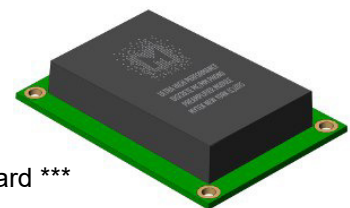
* DSD256 upsampling available in Q3/2015 via firmware update

** 115/230V 50/60 worlwide model, or 100V/230V Japanese model (available only in Japan)

*** Available Q4/2015

**** Available Q4/2015

# Warranty

This Manhattan DAC is warranted by Mytek to the original purchaser against defects in workmanship and materials used in manufacture for a period of two years from the date of purchase. Faults due to customer misuse, unauthorized modifications or accidents are not covered by this warranty. No other warranty is expressed or implied.

Any faulty unit should be sent, shipping prepaid to the manufacturer service center. Prior to shipping the client must obtain an RMA# from Mytek for warranty services. Units sent without RMA# will not be accepted.

Mytek extends affordable repair service for all units manufactured to date that are not covered by this Warranty. Mytek repair centers are located at Mytek Headquarters  in Brooklyn, New York, and in Warsaw, Poland (at Mytek EU Distribution Office).

# Important Safety Information

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this device near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is 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.

## Warning

Excessive sound pressure from speakers and headphones can cause hearing loss. In order to use this product safely, avoid prolonged listening at excessive sound pressure levels.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European standards:
• EN55103-1 : Electromagnetic Interference (Emission)
• EN55103-2 : Electromagnetic Susceptibility (Immunity)
This product is intended for use in the following Electromagnetic Environments: E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors), E4 (controlled EMC environment, ex. TV studio).

## Information on Disposal for Users of Waste

## Electrical & Electronic Equipment
## (private households).
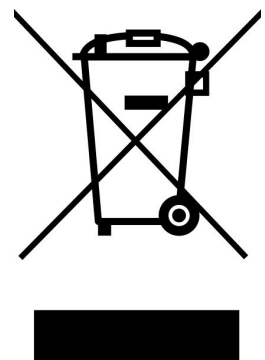
The Wheelie Bin symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment.

To properly dispose harmful substances and recycle the product, the user is obliged to return it at the point of collection of electrical and electronic equipment waste. For more information please contact your local authorities, waste disposal units or retailer.