

MERGING BINADAG

# [ NADAC PLAYER+Roon = Best Sound+Best Ergonomics ]

MERGING+PLAYER restores the concept of the audiophile music server and makes your life simple again. The combination of the best music player available and the best sounding DAC allows you to access your music library from a tablet and connect directly to your amplifier or listen on headphones with the purest sound ever. It doesn't get any simpler!

MERGING+PLAYER internal CPU runs RoonCore and is controlled by any Roon Remote on tablet, smart phone or computer.

MERGING+PLAYER easily connects to your home network to access your music library directly on any NAS or server. Additional or temporary music libraries stored on external drives or memory sticks can be connected on the back plate of MERGING+PLAYER with two dedicated USB ports.

MERGING+PLAYER requires connecting to a Wifi router with access to the Internet, both to connect to your Roon Remote on tablet or smart phone and to the Roon Labs server for authentication, meta data access and additional services access such as Tidal or other features offered by Roon.

## **Proven Concept**

MERGING+PLAYER uses all the same audio components and offers the identical audio quality as the original MERGING+NADAC which has received rave notices from every reviewer. Both are specifically designed to be connected directly to your amplifier or active speakers. The astounding quality of the digital level control removes the need for a pre-amplifier.

As with the original MERGING+NADAC, MERGING+PLAYER enables connection to any player, server or computer on the network and its AES, Optical and Coaxial SPDIF inputs allow other digital equipment to be connected. These are identical features to the original MERGING+NADAC but without the need to have an additional computer to access your music files. Simplicity itself!



MERGING+PLAYER comes in two flavours, Stereo and Multichannel, now fully supported by Roon.





MERGING+PLAYER PL2

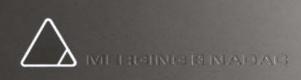
MERGING+PLAYER PL

# The Music Player for Music Lovers is partnered with the Professional's Choice

## Merging Technologies and Roo

You can sit back and not just listen; you can discover all you want to know about the music, the musicians, the composer, concert dates and reviews and more. You can control your listening level, map your channels, check the dynamic range of your track, read the liner notes, organise your play-list or even equalise your room without using anything more than your Roon application.











## SUPERB SPECIFICATIONS > FOR MERGING+NADAC & MERGING+PLAYER

MERGING+NADAC and MERGING+PLAYER share identical audio specifications and features as described below.

However MERGING+PLAYER enjoys an additional CPU that allows running RoonCore on Linux RoonOS and implements a Roon Endpoint. It connects internally through RAVENNA to the MERGING+NADAC hardware and enjoys exactly the same characteristics and flexibility as an external computer running Roon.

MFRGING+NADAC and MFRGING+PLAYER are offered in two versions:

## ST2 / MC8 and PL2 / PL8.

## NO-COMPROMISE HEADPHONE OUTPUTS

Both versions have separate headphone outputs using the same method of combining the channels for uncompromised DSD/DXD listening on your favorite headphones.



## BALANCED ANALOG OUTPUT

- > Connector: gold-plated male XLR
- > Impedance: 40 Ohms
- > Max output level: 18 dBu (6.1 Vrms)
- > Multichannel dynamic range: 127 dB(A)
- > Multichannel THD+N @1kHz: -113 dB (0.00022 %)
- > Stereo dynamic range: 133 dB(A)
- > Stereo THD+N @1kHz: -116 dB (0.00016 %)

## UNBALANCED ANALOG OUTPUT

- > Connector: gold-plated RCA jacks
- > Impedance: 20 Ohms
- > Max output level: 8.8 dBu (2.1 Vrms)
- Multichannel dynamic range: 120 dB(A)
- Multichannel THD+N @1kHz: -113 dB (0.00022 %)
- > Stereo dynamic range: 123 dB(A)
- > Stereo THD+N @1kHz: -114 dB (0.0002 %)

## **HEADPHONE**

- > Connector: 3.5mm jack + 6mm jack
- > Impedance: 40 Ohms
- > Max output level: 14.4 dBu (4.0 Vrms)
- > Dynamic range: 123 dB(A)
- > THD+N @1kHz:-111 dB (0.00028 %)

## **INPUTS**

## AES INPUT

- > Connector: gold-plated female XLR
- > Input impedance: 110 Ohms
- > Sample rate: 44.1 kHz 192 kHz

## S/PDIF OPTICAL INPUT

- > Connector: Toslink
- > Sample rate: 44.1 kHz 96 kHz > S/PDIF COAXIAL INPUT
- Connector: gold-plated RCA jack
- > Input impedance: 75 Ohms
- > Sample rate: 44.1 kHz 96 kHz

### **NETWORK INPUT**

- > Connector: Neutrik EtherCon RJ45
- > Bitrate: 1 Gb/s (Gigabit Ethernet only)
- > Sample rate: 44.1 kHz 384 kHz, DSD64, DSD128 and DSD256

## WORDCLOCK INPUT

- > Connector: BNC
- > Input impedance: 75 Ohms
- > Termination: 75 Ohms, software selectable
- > Sample rate: 44.1 kHz 192 kHz

- > Enclosure material: Premium machined and anodized aluminum
- > Dimension: 435 W x 435 D x 95 H mm
- > Weight: 11 kg
- > AC voltage: 100V-240V/47-63Hz (IEC socket)
- > DC voltage: 10V-14V (Hirose HR10A-7R-4S)
- > Power consumption: < 30W
- > Front panel display: OLED, 160x128 pixels, 16 bit colors









MERGING+NADAC S

MERGING+NADAC N

MERGING+PLAYER

MERGING+PLAYER



Not only did we deliver state of the art music listening in an audiophile environment, but also introduced some radical design enhancements to

MERGING+NADAC, like tablet and smart phone remote control as well as some of the recipes which made Horus and Hapi such a great success and revolutionary in their own market. Most notably, the network audio communication through RAVENNA.

MERGING + NADAC

## MERGING+POWER features

Critical acclaim suggests that MERGING+PLAYER and MERGING+NADAC sounds amazing so that would indicate that our designers selected a fine power supply. There is a body of opinion that maintains that removing all AC components from the chassis should improve the performance even more. MERGING+POWER is the answer.

MERGING+POWER is designed for the ultimate no-compromise audio performance. It boasts some very innovative features:

- > Hybrid design Switch Mode mixed with Toroidal transformer
- The Switch Mode powers the high current applications such as the main DSP/FPGA as well as the Media Player.
- The Analog section powers the analog stage plus the noise sensitive digital areas.
- > +13 volt DC main power switch which can handle 7.5 amps continuous current and has an optimized 2nd order low cut filter to attenuate high frequency noise while preserving optimum transient performance.

- > +16 V/-16 V/+6V main Analog power supplies can handle 1 Amp continuous currents. The optimized 2nd order low cut filter feeds the Linear Technology LDOs (Low Dropout Regulator). This design of LDO has better performance and protection characteristics than most discrete designs.
- > Instrument grade Real-Time power monitor keeps everything smooth with more than 3kV of isolation between the power and control sections.
- > Copper Foil Inductor technology for ultimate sonic performance.
- Merging Capacitor Array (MCA) technology mixes three types of capacitor - Polymer + Aluminum + Polypropylene. The latter is designed to aerospace and military specifications.
- > Highest Specification FR-4 printed circuit board designed to deliver military grade performance in a severe environment.

## AC POWER ENTRY

- Line Type-I(115V)
  Range 95V 125V & 50Hz 60Hz
  Typical 30W with MERGING+NADAC /
  Typical 55W with MERGING+PLAYER
- Line Type-II(230V) Range 200V - 250V & 50Hz - 60Hz Typical 35W with MERGING+NADAC / Typical 60W with MERGING+PLAYER
- > Line Fuse / Time-Lag 3.15A

## DC POWER OUTPUT

- > Total Typical 120W / Max 150W
- > DIGI = 80W / OPA + DAC =40W
- > Light Load Ripple & Noise / (10W) <50uV rms @ 10Hz - 100kHz / 0PA <40uV rms @ 10Hz - 100kHz / DAC
- Heavy Load Ripple & Noise / (30W)
  80uV rms @ 10Hz 100kHz / 0PA
  40uV rms @ 10Hz 100kHz / DAC
- > Typical Transient Performance / Less Than 10uS @ Bang Bang Test
- Load Regulation / Less Than ±10mV Operating Temperature / 40°F - 120°F
- > Aluminum-Alloy fan less Silent Cooling System
- > Environment Humidity / 10% 70% RH

# MERGING+POWER makes the best even better.

Golden ears have told us that our components sound incredible, but we wanted to see if we could improve even more. Removing AC power from the chassis and providing DC from an astonishing hybrid power plant using the highest quality components has achieved the seemingly impossible. If you care about the ultimate fidelity, this is the magic ingredient you must have.





ERGING+NADAC with adapted connector for POWER



## Network Attached Digital to Analog Converter

Nice acronym, but what is it all about? The modern world has become dependent on networks and the technology has been designed to be reliable and scalable. As the network capacities have increased, the possibility of using IP networks for video and audio became an obvious choice. Clearly Gigabit Ethernet had sufficient capacity for high quality audio but it was not optimal without an additional protocol adding the required precision and management. There was a suitable choice.

## **RAVENNA**

An open and published IP network technology had been created to meet the demands of national broadcasters and focused on essential requirements of extremely accurate clocking, high resistance to packet loss and very low latency. It could also be adapted to handle DSD and DXD with the help of our engineering team. The added bonus to using an advanced networking solution is being able to send and receive control information as well as audio data. This opened up exciting possibilities in the studio and now you can enjoy these same benefits in your own home.

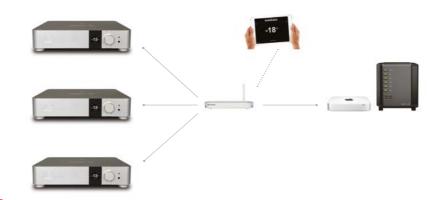
## Compatibility

The RAVENNA protocol comes with standard drivers for any computer operating system. ASIO for Windows, CoreAudio with DoP support for MacOS and Linux. As easily installed and configured as any other driver for USB or Firewire, the MERGING+NADAC RAVENNA driver allows use of any application of your choice to playback your music files, JRiver, Audirvana, iTunes, etc... as well as any music server or streamer able to communicate through those standard Linux, ASIO or CoreAudio drivers.



## The most usual configuration

Connect your MERGING+NADAC and your computer to the same switch or Wifi router and enjoy audio playback from that computer and remote control from any smart phone or tablet.



### Multi-zone

Multiple MERGING+NADAC can coexist on the network and can listen to the same source. Just select the same source on the front panel menu and you easily integrate a multi-zone system. Each MERGING+NADAC can however be independently remotely controlled with a different volume control.



## Multiple network sources

Any computer, music server or streamer connected to the network can be selected as an audio source for the MERGING+NADAC. Any playback application running on any of the computers will appear in the MERGING+NADAC source selection menu, exactly like any internal digital input. A different source can even be selected for the main MERGING+NADAC output and the headphone. As above all sources can be from different application, different operating system, different computer type.



that music was actually being made in my room, not merely

it is playing music totally unconstrained by the electronics."

every penny - even if the price tag might not suit everyone."

sounded completely natural - the antithesis of early digital. There were no hard edges, no overly crisp transients - just

Takahito Miura - Stereosound "I was struck by the NADAC's extraordinarily vibrant, lucid, transparent, and highly three-dimensional presentation."

"Switching to DSD with the NADAC moves it to another level

and reveals the absolute excellence of its playback quality."

"I was taken aback by how natural the applause, whistling

detail was as though the NADAC was being used with an

external clock - although none was actually connected."

and other audience sounds were reproduced. The clarity and

Chris Martens - The Absolute Sound

Giulio Salvioni - Audio Club

"I have not heard a clearer and cleaner reproduction of DSD at all levels than that offered by the NADAC."

David Robinson - Positive Feedback Online

"Give to Caesar what is Caesar's: I never heard before a cleaner and more detailed reproduction of a DSD file than NADAC offers through an Ethernet connection. The transparency level is just exceptional!"

Joel Chevassus - Audiophile Magazine

"What sets the NADAC apart is the sheer sound quality on offer, with a sparkling combination of power and subtlety, information and musical involvement."

[ Hi-Fi News - Outstanding Product ]

"It is most likely that the inclusion of Roon with the NADAC will transform this excellent DAC into a package that is hard to beat."

Audio & Cinema em Casa

# Merging Technologies Partner's

Merging Technologies has been blessed with customers who feel that recording quality is of paramount importance. This has been true from the early days of our involvement with professional audio products. It stepped up a pace when SACDs were launched and continues today with Pure Audio Blu-ray discs capable of providing great surround music content. This means that there is now a large archive of true Hi-Res Audio material on DSD & DXD. Increasingly, our partners have been making

these files available for download on a rapidly expanding number of sites. Hi-Res streaming is just starting in those countries with sufficiently fast broadband networks. As a MERGING+NADAC owner, this provides an ideal source of recordings that truly allow you to hear what the artists and musicians intended. Merging is in a unique position to be able to partner with our many friends to spread the word about the wealth of content that is already available and that is being produced daily.

















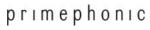
























# The Merging Heritage

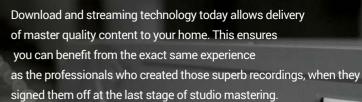
Merging Technologies is the world's foremost manufacturer of highresolution digital audio recording systems. Our list of customers reads like a who's who in the recording industry and recordings made with Merging Technologies' systems regularly receive the recording industry's prestigious Grammy® Award. So many in fact, that we have lost count.

The company was founded in 1990 in Chexbres, Switzerland by Claude Cellier; an electronics' graduate of the Institute of Technology in Lausanne. Prior to this, Claude worked for the famous Swiss audio maker Nagra Kudelski for 10 years. Nagra is well known to music lovers for their audiophile products, but they are even better known in the professional audio industry, where their products are work horses, providing first class audio performance and doing so day in, day out. Legendary among these are the Nagra IV-S and Nagra T-Audio TC analogue tape recorders, where Claude played a pivotal role in their design and development.

Within a short time of its founding, Merging quickly established a reputation for expertise in digital signal processing and associated hardware, and with the Pyramix Virtual Studio, was one of the first companies to produce a DSD recording system. The DXD format, (Digital eXtreme Definition) which works at 352.8kHz/24bit, was developed by Merging Technologies in collaboration with Philips, to overcome the challenges in editing and mastering DSD for SACD.

## Driven by the Demands of Professional

The idea behind MERGING+PLAYER and MERGING+NADAC is to allow listeners to finally enjoy Master quality recordings at home, with the exact same equipment with which it has been recorded, mastered and validated. Our current generation of high-resolution converters is drawing praise from even the most demanding recording engineers. Praise from such people is praise indeed, as their reference is the live performance, which they have access to on an almost daily basis.







MERGING+NADAC, MERGING+PLAYER and MERGING+POWER are products created by Merging Technologies.

Merging Technologies SA, Le Verney 4, CH-1070, Puidoux, Switzerland

T +41 21 946 0444

E nadac@merging.com

W nadac.merging.com