



DANIEL HERTZ

M5 TELIKOS
MONO REFERENCE
POWER AMPLIFIER

OWNER'S MANUAL

DANIEL HERTZ SA
Switzerland



PLEASE READ THIS MANUAL BEFORE USING YOUR NEW DANIEL HERTZ M5 POWER AMPLIFIERS.
THE INFORMATION IN THIS MANUAL WILL HELP YOU GET THE FULL BENEFIT FROM YOUR INVEST-
MENT.

DANIEL HERTZ IS DEDICATED TO COMPLETE CUSTOMER SATISFACTION. THANK YOU FOR CHOOSING
DANIEL HERTZ EQUIPMENT, AND FOR TAKING THE TIME TO READ THIS MANUAL.

THE DANIEL HERTZ TEAM

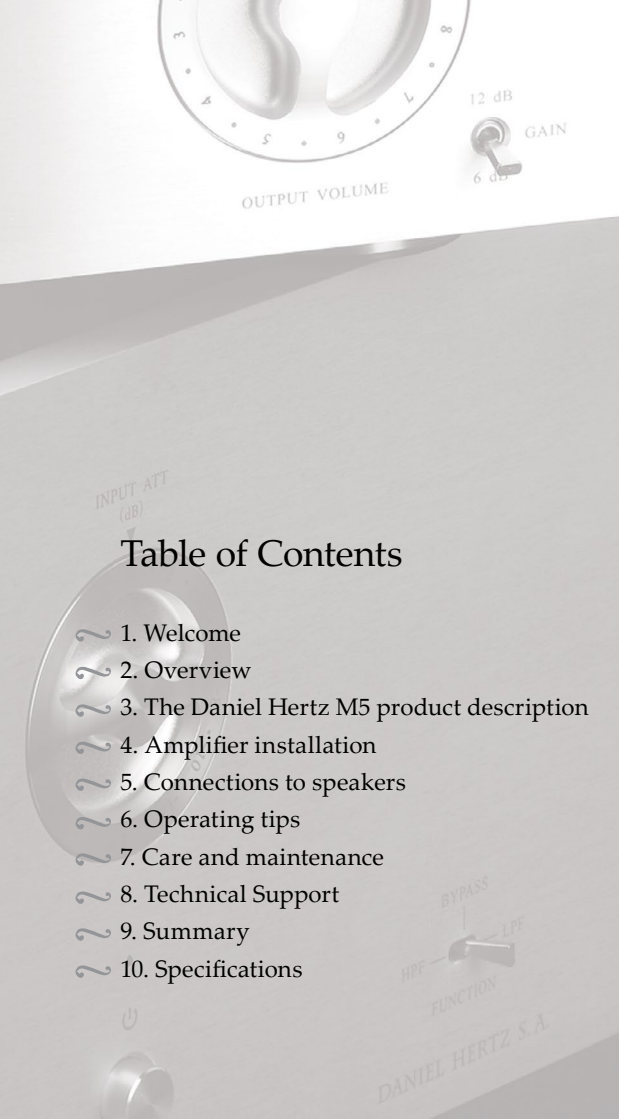
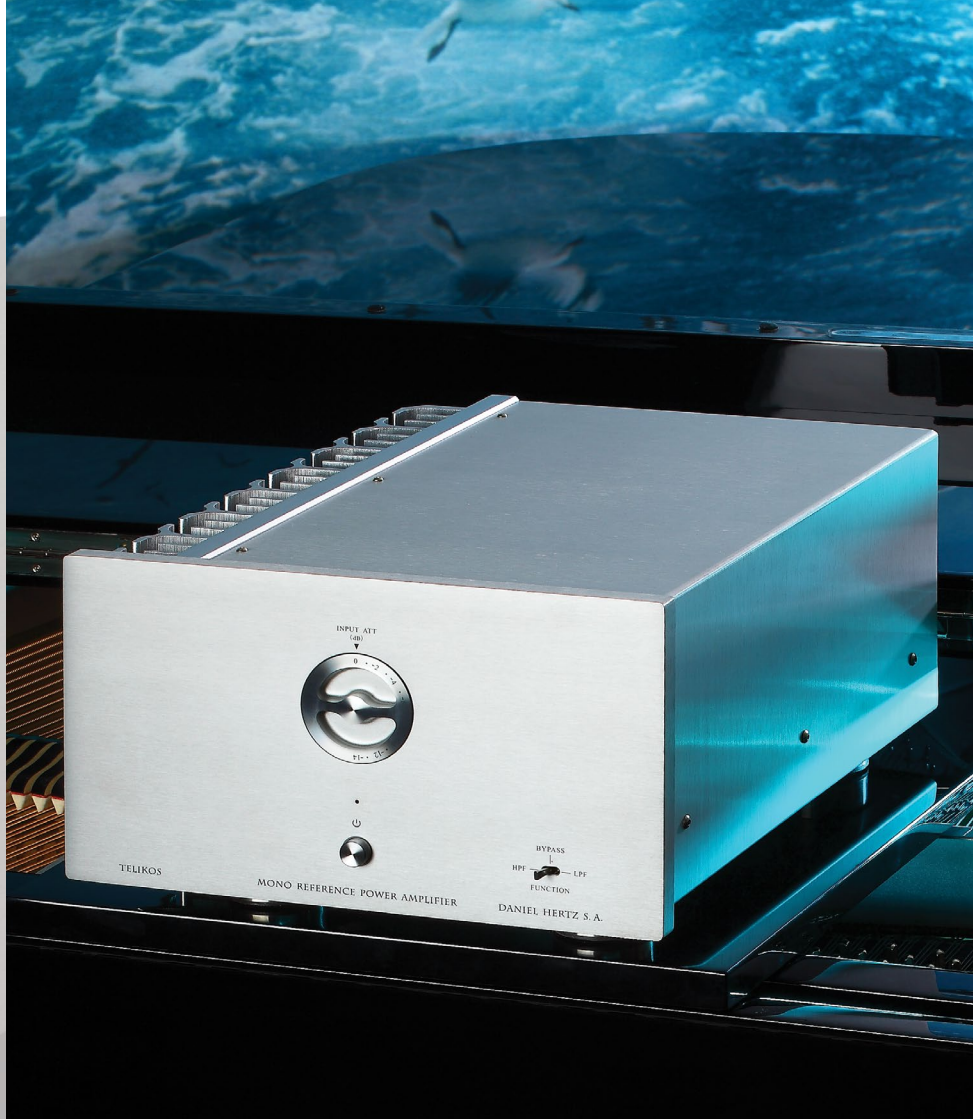


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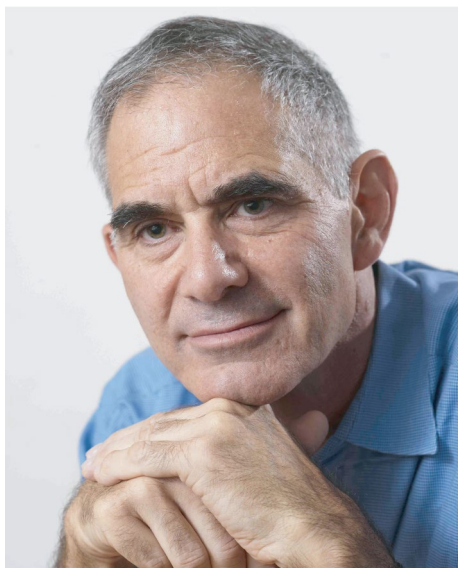


Welcome

Welcome to the world of Daniel Hertz SA of Switzerland. You have joined a family of people with exceptionally high standards who have searched for the ultimate audio equipment to enhance their love of music. I founded Daniel Daniel Hertz SA to introduce new concepts and designs to both the residential and professional audio world so that, for the first time in audio history, both music lovers at home and recording professionals in the studio can use the same equipment to reproduce their music without compromise.

The M5 is designed for decades of trouble-free use. Please care for it as you would a rare musical instrument. In addition to a new level of performance, the Daniel Hertz M5 design reflects elegant simplicity and harmony to the eye. It is a handmade work of art that is practical for daily use.

The Daniel Hertz M5 was designed by a team of the most sophisticated audio engi-



neers and built by dedicated artisans who work to standards of quality rarely found in the audio world. You have acquired a valuable product that will give you excellent service if used according to factory direction. Please read this manual carefully to get the full benefit from your investment.

The Daniel Hertz team and I thank you for your faith and trust in our work.

Should you have any questions or need assistance at any time, please do not hesitate to contact your Daniel Hertz store or distributor, or you may email the factory at info@danielhertz.com. It is our pleasure to assist you at any time now and in the future. Your purchase of the Daniel Hertz M5 Telikos Mono Reference Power Amplifier is just the beginning of a long relationship. We are at your service.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Levinson'.

Mark Levinson
Director
Daniel Hertz SA

Daniel Hertz M5 Telikos Mono Reference Power Amplifier

The Daniel Hertz M5 Telikos Mono Reference Power Amplifier sets a new standard for faithfulness and performance in audio power amplification. The ancient Greek

word “Telikos” means “final” or the “final statement.” After more than 40 years in audio, Mark Levinson personally presents the Daniel Hertz M5 Telikos as the single best power amplifier and the ideal match for Daniel Hertz speakers. The M5 differs from other power amplifiers in the following ways:

☞ Daniel Hertz speakers use high efficiency technology. 1 Watt of power produces 100 dB of sound pressure level (SPL). Listeners usually use only a fraction of a Watt. Yet, for adequate headroom with the most dynamic material, over 400 Watts of power could theoretically be required for reproducing peaks of 126dB SPL without clipping. The M5 has been optimized for excellence in the milliWatt range, and has over 400 Watts output capability to ensure the wide dynamic range.

☞ The M5 has built-in active crossovers. A toggle switch on the front panel allows LPF (low pass filter), Flat, or HPF (high pass filter). With the touch of a finger, the ampli-

fier is configured to the type of operation required. For example, the Daniel Hertz M1 speakers are bi-amplified. Each speaker requires two M5's. One is set to HPF, one is set to LPF. The attenuator on the HPF M5 is set to -2dB. The attenuator on the LPF M5 is set to 0dB. This precisely matches the levels.

☞ The M5 uses all discrete circuitry with no chips. Daniel Hertz proprietary discrete circuitry provides a new level of sonic purity.

☞ The M5 has no fans and operates without excessive heat, yet is pure Class A up to 15 Watts of power while driving Daniel Hertz speakers. 15 Watts produces around 112 dB SPL with Daniel Hertz speakers. This means that when driving Daniel Hertz speakers, the M5 provides pure Class A operation for almost any program material.

☞ The M5 produces no audible noise, even with high efficiency speakers like the Daniel Hertz M1, M2, M3, and M7, even with

your ear against the drivers. Until now, users of high efficiency speakers suffered from audible noise from the power amplifier. The M5 solves that problem.

☞ The M5 has a precision attenuator from 0dB to -14dB in 1dB steps. This allows precise level matching in different applications. For example, bi-amping the Daniel Hertz M1 speakers, a level adjustment of exactly 2dB can be achieved instantly.

☞ The M5 has RCA connectors that allow easy daisy chaining so that multiple M5's can be configured in the most elegant way without ground loops.

☞ A handmade torroidal transformer provides advanced power supply technology for sonic purity.

☞ Insulated output connectors meet the latest standards for safety.

☞ Clear anodized aluminum and stainless steel screws are used throughout.

Overview

Daniel Hertz is dedicated to reproducing music with unprecedented faithfulness and emotional impact. Our philosophy is based on quality and simplicity.

Daniel Hertz components are optimized to work together to produce the most natural sound, extreme ease of operation, the highest reliability, and classical design which is always pleasing to the eye. Daniel Hertz engineers and craftspeople fine tune the sonic quality of each component with science and the ear. The ultimate test is recording a musical event and playing it back. When it truly sounds and feels like the musicians are in the room, we invite you to listen for yourself.

Daniel Hertz introduces a revolutionary breakthrough: the first high efficiency audio systems with extremely natural sound. In addition to high efficiency speakers, Daniel Hertz has developed the ideal pow-

er amplifier to drive them – the M5. Until now, people had to choose between systems that had pleasing sound but lacked vitality, or systems with more vitality but lacking natural sound. A new series of high efficiency speaker drivers is the foundation of Daniel Hertz systems. It is important to understand why high efficiency is important. The laws of physics say that the



lower the efficiency of a speaker, the more electrical energy is turned into heat. Whatever is turned into heat is lost and cannot be retrieved with more powerful amplifiers. With Daniel Hertz systems, 1 Watt of power produces 100 decibels (dB) of sound

pressure level (SPL). This means that most listening levels require only milliWatts of power. With Daniel Hertz systems, you hear the beginnings of notes, the full body of the sound, the details and harmonics and the most subtle sounds, so you have real connection with what the musicians are doing, and you experience what they intend.

This result is achieved with the Daniel Hertz M5 Telikos Mono Reference Power Amplifier with high purity in the milli-Watt region; the Daniel Hertz M6 1 Meg-Ohms Preamplifier, a new design with ultra-transparent sound; the Daniel Hertz Silver 1 pure silver litz interconnects; and Daniel Hertz Premium 500 speaker cable.

Daniel Hertz components can be used individually with other equipment. Those searching for the ultimate listening experience are invited to hear a complete Daniel Hertz system, the most advanced audio achievement personally designed by Mark Levinson.

The Daniel Hertz M5 Product Description

The Daniel Hertz M5 Telikos is a fully discrete mono power amplifier with truly amazing sonic quality and many unique design and performance features . The M5 is hand built to the highest quality standards.

The unique features include

~ Advanced topology that offers excellence in the milliWatt range with outstanding headroom.

~ Internal 18dB/octave 80Hz filters for bi-amping systems such as the Daniel Hertz M1 or M2 and M3.

~ All discrete circuitry for the ultimate in sonic purity.

~ No fans. Massive heat sinks dissipate heat effectively. Overheating is next to impossible.

~ 15W of pure Class A operation into 8 Ohms means that when listening to Daniel Hertz speakers, you have pure Class A operation at all normal levels.

~ A precision attenuator in 1dB steps from 0dB to -14dB, for exact level matching.

~ RCA input and output connectors that allow multiple amp configurations like bi-amping without Y connectors or ground loops.

~ Insulated output connectors that meet the latest safety standards.

~ A handmade toroidal transformer for the most advanced power supply performance and sonic purity.



~ Zero audible noise even with high efficiency speakers (100dB/1 Watt/8 Ohms) like the Daniel Hertz M1, M2, M3, and M7.



Positioning the M5

The M5 can be placed near the speaker, in a remote location, or in a cabinet. If placed in a cabinet, make sure that adequate ventilation is available. The large heatsinks on the M5 dissipate heat very effectively, but air circulation is necessary.

Many users find the appearance of the M5 appealing to the eye, and place them close to the speakers. With Daniel Hertz Premium 500 speaker cable, the M5 can be located far from Daniel Hertz speakers, up to 30M or more. With other makes of speaker, the distance may be shorter due to the load characteristics of the particular speaker.

Since the M5 has no fans and no mechanical noise, it can be close to the listening position if necessary.

Surround sound

Daniel Hertz M5's can be used to drive multiple Daniel Hertz speakers for sur-

round sound without a processor, using the Daniel Hertz matrix approach. Details on request.

Connections to the speakers

The M5 has one red and one black three way binding post for speaker connections. The connectors meet the latest safety stan-



dards and are gold plated for freedom from oxidizing over time.

Daniel Hertz recommends using our Premium 500 speaker cable. The M5 has three way binding posts with a hole in the center of the post. Daniel Hertz Premium 500 speaker wire can be stripped approximate-

ly 1.5 cm, twisted and inserted into the hole. When the cap is tightened, an excellent connection is made. One advantage is that the electrical signal does not pass through any lead solder. Another advantage is that this saves the customer a lot of money for fancy cable terminations. People who like massive speaker connectors can use them but in some cases they will be paying more money for poorer sound.

Low noise AC connection

The M5 has no audible electrical noise even with Daniel Hertz high efficiency speakers. In a given installation, ground loops can occur depending on the other equipment being used and the AC line the particular location. To eliminate ground loops and noise, it may be necessary to ground only one M5 to the AC line. In this case, an AC adaptor cab be used or the ground pin removed from an AC cable. As long as one M5 is grounded, all M5's will be grounded via the RCA connector ground.

Operating Notes

Keep the volume control of the preamplifier at OFF when the system is not being used, or at a very low level.

Raise the volume to the desired level. The M5 can play with extreme power. It is better to raise the volume than to lower it!

People often play the M5 at subjectively lower volume levels than other amplifiers. This is due to the high level of detail and resolution, and the ability of the M5 to faithfully reproduce music at very low levels. You don't have to push the system to bring the music to life.

The distortion is so low that it is easy to turn the volume up too high. Don't be surprised if you start listening and then turn down the volume. Listening with the M5 is different from other power amplifiers.

Feel free to turn up the volume to very high levels if you wish. Most people do not

dare to turn up the volume, as they think the power amplifier will clip. If you continue to turn up the volume slowly, a little at a time, you will discover that the M5 responds differently than other power amplifiers. The sound is always spacious, free, and full of body, clear but not aggressive.

For playing at loud volume levels, choose music that is intended to be played like that. For example, a pop track like "Burn" by Usher sounds incredible at very loud levels. A solo piano recording by Arthur Rubinstein will sound terrible played at such a level. Find the appropriate level for the music you want to hear. Keep in mind that the M5 will do things that other power amplifiers cannot do – not even close.

After listening a high volume levels, remember to turn down the volume control of your preamplifier.

The M5 is friendly to a much wider variety of recordings than most power ampli-

fiers. Vintage recordings can come to life. Historical material becomes a new listening experience. With high efficiency speakers like the Daniel Hertz M1, M2, M3, and M7, pop tracks can be reproduced at studio levels. You hear all the details in DVD and Blu-ray sound tracks. Compressed music files can sound remarkably good. The M5 is full of surprises.



Care and maintenance

Connect the M5 only to the voltage it was set for at the factory. Connecting the M5 to a different voltage will void the warranty.

The Daniel Hertz M5 requires no maintenance. If the amplifier surface needs to be cleaned, use a glass cleaner such as Windex.

Turn off the m5 before cleaning. do not get liquid inside the M5. If liquid gets inside the M5, the warranty is void.

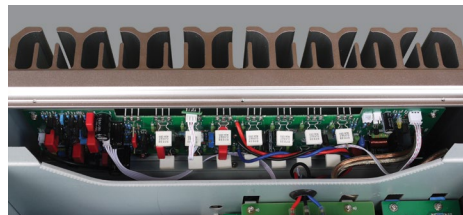
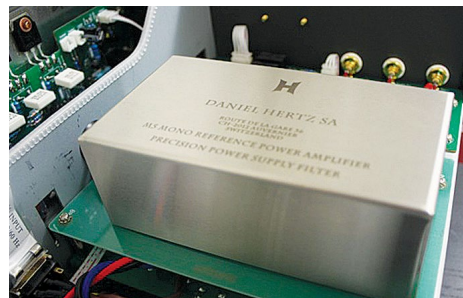
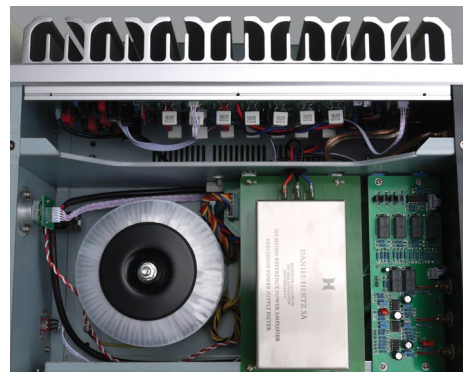
Keep the M5 out of reach of children. Do not allow children touch the controls or the cables connected to the M5.

If you attempt to physically move the M1, remove anything from yourself that can scratch the finish such as a watch, belt buckle or ring.

Technical support

If you have questions or problems, contact your Daniel Hertz specialist immediately. Please do not under any circumstances attempt to disassemble the M5. If your Daniel Hertz specialist is not available and your need is urgent, feel free to contact Daniel Hertz directly at info@danielhertz.com . Email is usually answered within hours. If you supply a phone number, we will call you anywhere in the world. We use Skype as well. It is best to give us a description of the problem or issue you have so that we can prepare to assist you in the best way.

If an M5 is damaged, it must be serviced according to company policy by a trained technician. Any attempt at service by an unauthorized technician will void the warranty.





Technical specifications

Power output	400W @ 8 Ohms
Frequency response.....	10Hz to 25kHz +/- 0.5dB
THD.....	less than 0.05%
Power consumption (max).....	500W
Input.....	RCA
Outputs, line level.....	RCA, fixed level and RCA variable level (tracks the attenuator)
Outputs, speaker	Red +, Black -, three way binding posts
Dimensions	
Length.....	48cm (overall including connectors and front panel controls)
Width	33cm
Height	20cm
Weight.....	18kg

Summary

The Daniel Hertz M5 is a state of the art audio power amplifier built by hand, using only the finest parts and materials, to the highest quality standards. The Daniel Hertz M5 has unique features and offers the most natural sound possible.

Your Daniel Hertz specialist and the Daniel Hertz factory team are ready to assist you should you have any questions or problems.

Care must be taken to install it correctly. Installation guidelines are provided in this manual to ensure your satisfaction.

Congratulations on purchasing the Daniel Hertz M5 Telikos Reference Mono Power Amplifier. You have chosen well.



The image shows the interior of a metal chassis for an electronic device. At the top, there is a silver-colored metal plate with a series of black, semi-circular ventilation slots. Below this, a green printed circuit board (PCB) is populated with several integrated circuits (chips) and various electronic components. A large, circular, black and silver heat sink is mounted on the left side of the PCB. To the right of the heat sink, a large, rectangular, silver-colored metal plate is visible, featuring the company logo and name. The bottom of the chassis shows more wiring and components, including a red and white braided cable. The overall design is industrial and functional.

DANIEL HERTZ SA

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