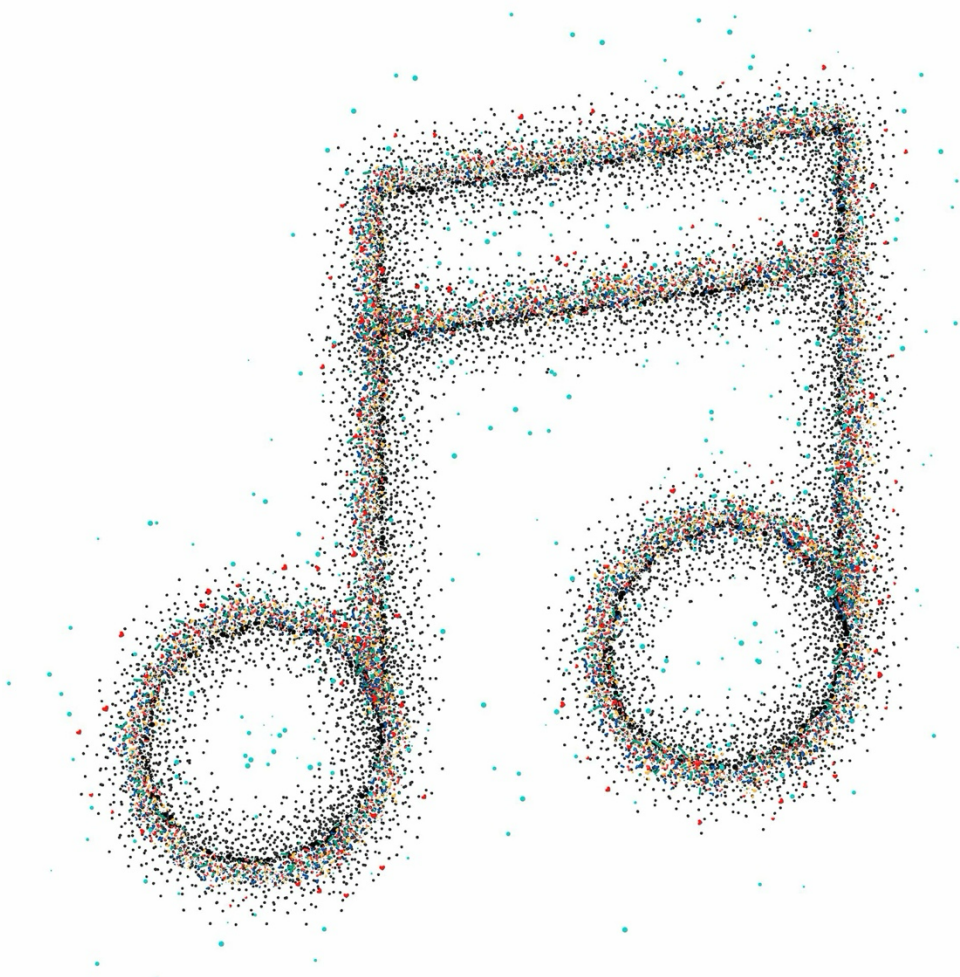


Technical Specification

MUSIC MEMORIES PLUS #ZZ54

NICKEL-CHROMIUM ALLOYS

Intelligent music entertainment system for the smart home



1. General Description

The Music Memories Plus #ZZ54 (MMP) is the most advanced audio system of the Metal Series, designed to combine artificial intelligence, acoustic comfort, and environmental security in a single integrated platform.

It is the only model capable of associating security, motion, brightness, and presence data with user musical profiles, generating personalized, contextual, and emotional sound experiences.

Crafted from Nickel-Chromium Alloy, the device combines exceptional acoustic performance, extreme durability, and electromagnetic purity—ensuring audio fidelity and maximum physical resilience.

The MMP #ZZ54 is ideal for luxury residences, hotels, wellness centers, yachts, resorts, and smart communities.

2. Hardware Specifications

Parameter	Description
External Structure	Nickel-Chromium Alloy (80/20) with satin anti-oxidation finish
Main CPU	Octa-Core AI Engine @ 2.8 GHz – optimized for musical analysis and machine learning
Audio Co-Processor	High-Fidelity Neural Sound™ DSP for real-time audio processing
RAM Memory	8 GB LPDDR5
Local Storage	1 TB SSD with AES-256 encryption for cache and offline playlists
Cloud Storage	Dedicated MetalCloud™ audio server with secure access and automatic synchronization
Connectivity	Wi-Fi 6E / Bluetooth 5.3 / Ethernet / AirPlay 2 / Chromecast / DLNA / USB-C
Audio Outputs	Stereo RCA / Digital Optical / HDMI ARC / Wireless multiroom
Audio Inputs	Line-In, environmental microphone, DAB+ radio, digital streaming
Power Supply	100–240V AC / 12V DC (integrated UPS)
Average Power Consumption	22 W (playback) / 6 W (standby)
Operating Temperature	0°C – 55°C
Acoustic Materials	Nickel-Chromium alloy with vibrothermal insulation and integrated sound chamber
Main Unit Weight	2.7 kg

3. Sensors and Expandable Modules

Module Type	Main Function
Presence Sensors (IR / Radar)	Automatic playback activation in occupied areas
Light Sensors	Adjustment of brightness and sound intensity
Environmental Sensors	Monitoring of temperature, humidity, and acoustic comfort
Biometric Modules	User recognition via body parameters or voice
Directional Microphones	Acoustic analysis and contextual voice response
Metal Series Domotic Modules	Control of lighting, curtains, climate, and ambient music scenarios
Vehicle Interface	Detection of in-car musical preferences and data synchronization

The MMP #ZZ54 system communicates with Metal Domotics Series modules and smart home devices to create an adaptive and secure audio ecosystem.

4. Software and Advanced Features

Adaptive Musical Intelligence

- Real-time analysis of over 400 acoustic and emotional parameters (timbre, harmony, intensity, rhythm, dynamics, context)
- Evolutionary machine learning based on individual behavioral models
- Interpretation of musical preferences according to:
 - Current activity (cooking, relaxing, workout, driving, working)
 - Time of day and season
 - Emotional state and surrounding environment

Playlist Management and Music Discovery

- Access and integration with all major licensed streaming platforms
- Analysis of personal playlists, radio, TV, public environments, or live instruments
- Automatic recognition of playing tracks (AudioID + Neural Match)
- Creation of the YOUR-NEXT-PREFERRED-PLAYLIST™ — a generative playlist evolving with the user's taste
- Empathetic music suggestions based on mood detection and context mapping

Behavioral Analysis and Emotional Response

- Automatic detection of user interactions (likes, skips, listening duration, volume level)
- Correlation with optional biometric parameters (heartbeat, posture, vocal stress)
- Emotional Feedback Loop™ system that refines the listening experience with every session

Integration with Metal Security and Automation Systems

- Direct coordination with Night Plus #711 and Cyber Control #3A1 systems:
- In case of an alarm, playback may stop or adapt to the emergency context
- Playlists synchronize with lighting, temperature, or presence scenarios
- Multiroom and environmental control with intelligent voice response

5. Data Security and Privacy

- All personal data remains local and encrypted
- No transmission to unauthorized external servers
- Profile access only through two-factor authentication
- Proprietary MetalCloud™ firewall and AES-256 encryption
- Fully GDPR compliant

6. User Interface and Management

- MMP Commander Suite software for desktop and mobile
- Interface with interactive sound map and emotional graph per user
- Integrated voice commands (Alexa®, Google Assistant®, Siri®)
- Ambient Intelligence Mode for automatic volume and tone regulation
- Remote control and synchronization via app, CPU, or Metal Series touch panel

7. Versions and Configurations

Version	Description
MMP #ZZ54 Standard	Integrated home audio system with AI and multiroom streaming
MMP #ZZ54 PRO	Full version for hotels and complex installations
MMP #ZZ54 Personal	Individual edition with dedicated voice and biometric profiles
MMP #ZZ54 Hybrid	Dual architecture (local + cloud) for professional or community use

Available finishes: Satin Nickel, Titanium Black, Light Gold, Pearl White

Installation options: Wall-mounted, recessed, rack-mounted, or portable module

8. Services and Support

- Certified installation and acoustic calibration
- AI configuration and personalized user profiles
- Training for residential or professional use
- Automatic software updates and 24/7 remote assistance
- 3-year warranty, extendable up to 6 years