# Powered Monitor<br/>SpeakersMARPowered<br/>SubwooferMSP3/5/10/10MSubwooferSW10



# **MSP Speakers Deliver High Quality Performance With Built-In Amplification**

Yamaha is no newcomer when it comes to creating top-performance monitor speaker systems. From the classic NS1000 through to the ever-popular NS10M series, professionals worldwide have chosen Yamaha speaker systems for critical monitoring applications because of their exceptionally accurate, natural reproduction and reliability. The MSP Series Powered Monitor Speakers take Yamaha Monitor performance to new levels with state-of-the-art materials and design. Systems like the MSP5, MSP10 and MSP10M utilize high-performance, built-in biamplification for the utmost in sound quality. For systems requiring extended bass response that only a subwoofer can provide, the SW10 Powered Subwoofer is a perfect match for the MSP series monitor speakers. Finally the new MSP3 is a very compact, two-way system with built-in amplification designed for use in personal music production systems.



MSP5



# Why Built-in Power?

Simple: quality. The interaction between a power amplifier and the speaker it drives has a huge impact on the way the system sounds. Since component amplifiers are expected to drive a wide variety of speakers with varying characteristics while providing the best possible performance, they have to be designed with a certain amount of compromise. The same goes for passive speakers. But in the MSP series monitors, the speakers and built-in amplifiers have been designed from the start to work together to achieve uncompromising audio quality. Convenience is another benefit. Obviously, you won't need external power amplifiers, and your monitor system can be easily transported and quickly set up anywhere you need outstanding audio reproduction.

### Why Biamplification? (Except MSP3)

The usual approach in speaker systems is to power the separate drivers - woofer/midrange and tweeter - from a single power amplifier through a passive crossover network in the speaker's cabinet. A properly designed system of this sort can provide excellent performance, but some phase aberrations and distortion introduced by the passive network and speaker interaction near the crossover point are unavoidable, as well as power loss through these passive components. Biamplification completely bypasses these problems by using separate power amplifiers for the low-mid-frequency driver and the tweeter. An active crossover separates the frequency bands before the power amplifiers. This means the crossover handles line-level signals, while the speakers are directly driven by separate power amplifiers so electronic interaction is virtually impossible. Building the amplifiers into the speaker cabinet allows for the best possible damping, for tight, controlled bass and fast transient response for accurate high frequency reproduction. The overall result is exceptionally smooth, natural response over the crossover range with an absolute minimum of distortion at all frequencies. In short, incredibly accurate reproduction.

Specifically, the MSP10/10M has a 120-watt power amplifier for the low/ mid driver and a 60-watt power amplifier for the tweeter (total power 180 watts). The MSP5 powers the low/mid driver with a 40-watt amplifier and the tweeter with a 27-watt amplifier (total power 67 watts).

## State-of-the-Art Materials & Design

The entire MSP series take advantage of the latest advances in materials and design technology. Drivers like the 20-cm (8") woofer and 2.5cm (1") titanium-dome tweeter in the MSP10/10M, the 12-cm (5") woofer and the same dome tweeter in the MSP5 are designs that feature advanced magnetic structures that achieve exceptionally low distortion. Tweeters on all models, including the new MSP3, operate in conjunction with a unique waveguide horn that

achieves broad, uniform highfrequency dispersion for optimum balance regardless of listening position. Advanced driver and enclosure designs also ensure smooth, uniform dispersion across the system's full reproduction range.



### Professional Connectivity

All models, including the new MSP3, feature balanced XLR-type inputs for direct compatibility with professional equipment. Balanced lines are ideal if the speakers are to be placed at the end of long cable runs which, if unbalanced, might be susceptible to hum and induced noise. The MSP5 also offers an unbalanced 1/4" phone jack connector for

connecting with unbalanced lines sources while the MSP3 offers a balanced 1/4" phone jack in addition to an unbalanced RCA jack making the MSP3 compatible with a wide variety of sources.



MSP10/10M Rear Panel



MSP5 Rear Panel

# Trim Switches for Easy Room Matching

The MSP10/10M and MSP5 are equipped with low and high frequency trim switches that allow optimization of the system's response to a wide range of acoustic environments. The MSP10/10M offers 3-position low and high trim switches, while the MSP5 utilizes a 4-position low and 3position high trim switches. The MSP10/10M offers further optimizing with a low-cut filter that can be activated when used in conjunction with a subwoofer system such as the SW10 (see below). The MSP3 offers high and low tone controls on the front of each unit for sound tailoring.

# **Compact Magnetically-shielded Enclosures**

Along with their compact size and excellent performance, full magnetic shielding in the MSP10/10M, MSP5 and MSP3 allows the speakers to be positioned near all types of audio, video, and computer equipment without sound degradation or negative effects on surrounding equipment.

# SW10 Powered Subwoofer for Extended Lows

If you need the kind of bass response normally only available from a large speaker system without giving up the compact convenience and positioning ease of the MSP5 or MSP10/10M, simply add an SW10 Powered Subwoofer for solid, accurate bass response down to well below the audible limit. The SW10 features a newly designed long-stroke 25-cm (10") woofer which achieves exceptionally smooth, accurate lowfrequency reproduction, while a built-in high-performance 180-watt power

amplifier delivers solid, highly damped power. A variable low pass filter (40 Hz through 120 Hz) makes it easy to achieve optimum crossover with just about any main speaker system, and a built-in phase switch allows instantaneous phase reversal without having to modify cables or connections. The SW10 features three balanced XLR-type inputs and outputs (the outputs feed the audio signal through to the main speakers) for direct compatibility with professional equipment.







# **SPECIFICATIONS**

	MSP3	MSP5	MSP10/10M	SW10
GENERAL				
Туре	Amplified, 2-way, bass-reflex powered speaker	Biamp. 2-way, bass-	reflex powered speaker	Amplified bass-reflex powered speaker
Crossover Frequency	4kHz	2.5kHz	2.0kHz	-
Overall Frequency Response	65Hz-22kHz (–10dB)	50Hz~40kHz (-10dB)	40Hz ~ 40kHz (-10dB)	25Hz ~ 150Hz (-10dB)
Maximum SPL	98dB (1m)	101dB (1m on axis)	110dB (1m on axis)	111dB (1m on axis)
Dimensions (W $\times$ H $\times$ D)	144 × 236 × 167 mm (5-11/16" × 9-5/16" × 6-9/16")	169mm X 279mm X 222mm (6-5/8" X 11" X 8-3/4")	265 X 420 X 329mm (10-7/16" X 16-9/16" X 12-15/16")	328 × 459 × 476mm (12-7/8" × 18-1/16" × 18-3/4")
Weight	4.4kg (9.70 lbs)	7.5kg (16.5 lbs)	20kg (44.1 lbs.)	26kg (57.3 lbs.)
SPEAKER SECTION				
Components	LF: 10cm (4") cone HF: 2.2cm (7/8") Dome	LF: 12cm(4-2/7") cone HF: 2.5cm(1") titanium dome	LF: 20cm (8") cone HF: 2.5cm (1") titanium dome	25cm (10") cone
Enclosure	Bass reflex type Magnetic shielding construction			
AMPLIFIER SECTION				
Output Power	20W at 1kHz, RL=4Ω	Biamplified system LF: 40W at 400Hz. RL=4Ω HF: 27W at 10kHz. RL=6Ω	Biamplified system LF: 120W at 400Hz. RL=4Ω HF: 60W at 10kHz. RL=8Ω	180W at 100Hz. RL=8Ω
Input Sensitivity	LINE1: -10dB LINE2: +4dB	INPUT 1: +4dB INPUT 2: -10dB	INPUT 1: -6dB ~ +4dB	INPUT 1~3: -6dB ~ +4dB
Input Impedance	LINE1: 10kΩ/RCA pin (unbalanced) LINE2: 10kΩ/XLR & Phone (balanced, Parallel)	INPUT 1: 10kΩ/XLR balanced INPUT 2: 10kΩ/Phone	INPUT 1: 10KΩ/XLR balanced	INPUT 1~3: 10KΩ/ XLR balanced
S/N	≥95dB (IEC-A weighting)	≥100dB (IEC-A weighting)	≥98dB (IEC-A weighting)	≥100dB (IEC-A weighting)
Controls	Level Control : LINE1 & LINE2 Tone Control : Low : High Power Switch: ON/OFF	MASTER VOLUME CONTROL TONE CONTROL LOW: 4 position (+1.5dB, 0dB, -1.5dB, -3.0dB at 60Hz) HIGH: 3 position (+1.5dB, 0dB, -1.5dB, at 15kHz) Power Switch: ON/OFF	MASTER VOLUME CONTROL TONE CONTROL LOW: 3 position (0dB, -1.5dB, -3.0dB at 50Hz) HIGH: 3 position (+1.5dB, 0dB, -1.5dB, at 10kHz) LOW CUT FILTER: ON/OFF (80Hz) Power Switch: ON/OFF	MASTER VOLUME CONTROL VARIABLE LOW PASS FILTER (40Hz~120Hz) PHASE Switch (Normal, Reverse) Power Switch: ON/OFF
Power Indicator	Green LED: Power ON	Green LED: Power ON	Green/Red LED: Green=Power ON Red=Amp. Clipping	
Power Requirement	US & Canadian Models AC120V 60Hz European Models AC230V 50Hz Australian Models AC240V 50Hz	US & Canadian Models: AC120V 60Hz General Models: AC230V 50Hz	US & Canadian Models: AC120V 60Hz European Models: AC230V 50Hz AT Models: AC240V 50Hz	
Power Consumption	30W	60W	150W	160W
Optional Accessory	BMS10A (Mic Stand Adaptor)	_	Wall Bracket: BWS251-300	-

\* Specifications and appearance subject to change without notice.

# **DIMENSIONS**



69mm (2-11/16")

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