

## Portable Speakers

# MILAN M15

1100 Watt 2 Way 15" Full Range  
Powered Loudspeaker with KLARK TEKNIK  
DSP Technology for Portable PA and  
Installation Applications

- 2 way full range powered loudspeaker for portable PA and install applications
- 1,100 Watt power featuring KLARK TEKNIK Class-D technology
- KLARK TEKNIK Digital Signal Processing for total system control
- High excursion 15" low frequency driver with low mass voice coil for improved transient response
- 1" high temperature dome compression driver with extended high frequency reproduction
- Converging elliptical waveguide provides wide dispersion and excellent pattern control
- Speech/music switch featuring optimised equalisation for voice or music applications
- Switchable 100 Hz high pass filter for subwoofer integration
- Lightweight composite enclosure with black finish
- Rugged powder coated perforated steel mesh grille
- Dual angle pole mount for accurate audience coverage
- Multiple internal rigging points for installation applications
- 3-Year Warranty Program\*
- Designed and engineered in England



The 1,100-Watt full range MILAN M15 is a portable 15" two-way powered loudspeaker featuring: two independent input channels with Mic and Line Inputs, selectable via a Mic/Line switch; a two-band master EQ (Bass, Treble); intelligent Limiting; and a Mix Out function for connecting additional powered loudspeakers for easy system expansion.



Designed for both portable and permanent install applications, the M15's discrete inputs are each equipped with balanced, combination ¼" jack/XLR connectors and a Level control, making them ideally suited for a wide range of music sources, from low-impedance microphones, acoustic guitars and keyboards – to mp3 players and mixing consoles.

\*Warranty details can be found at [music-group.com](http://music-group.com)

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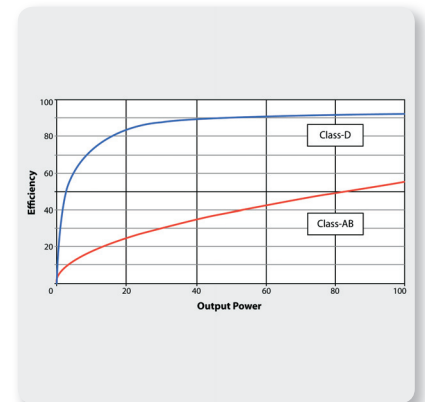
## KLARK TEKNIK DSP – the Secret to Superb Sound

KLARKTEKNIK is recognised worldwide as one of the most prestigious British audio companies, with a 40-year pedigree and a TEC Lifetime Achievement Award to back it up. The Company has designed and manufactured products for world-class artists, and their legendary DN780 reverb processor is considered by leading audio engineers around the world as the industry standard. Check out their website to learn more about KLARK TEKNIK's legendary heritage.

TURBOSOUND is proud to incorporate custom-engineered KLARK TEKNIK DSP into their products. From the instant your signal enters the MILAN M15, the built-in DSP (Digital Signal Processor) takes over, ensuring the highest possible signal integrity. Much more than just selective EQ enhancement, the M15's 24-bit DSP analyses the incoming signal and intelligently applies specific filters to actually improve the sound quality. It is very much like having an audio engineer monitoring the input and output signals of each M15, dialing in the perfect EQ and constantly making subtle adjustments to the crossover, compressor/limiter and more – which all adds up to significantly better sound.

## Class-D - Massive Power, Perfect Sound

Thanks to our revolutionary Class-D amplifier technology, we are able to provide enormous power and incredible sonic performance in an easy-to-use, ultra-portable and lightweight package. Class-D amplification makes all the difference, offering the ultimate in energy efficiency and eliminating the need for heavy power supplies and massive heat sinks. This amazing technology makes it possible to design and build extremely powerful products that are significantly lighter in weight than their traditional counterparts, while using less energy and protecting the environment. The lightweight Switch Mode Power Supply, coupled with the industry-leading KLARK TEKNIK Digital Signal Processing (DSP) module, provides dynamic equalisation and sophisticated limiting functions, ensuring optimal performance and long-term reliability.



## 1,100-Watt Output Power

With its 1,100 Watts of pristine digital output delivered through separately-powered drivers, courtesy of true bi-amping (two amplifiers per speaker system), the M15 delivers high-resolution sound that brings out the best in your music. While some of our competitors apply simple passive crossovers, which inaccurately separate the frequency spectrum and degrade driver performance, TURBOSOUND has gone the extra distance – driving each woofer and tweeter with a separate amplifier for impeccable signal integrity.

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## Custom-Engineered Drivers

Powerful, high-efficiency Class-D amplifiers and Switch Mode Power Supply technology coupled with state-of-the-art DSP functionality sounds very impressive – but what about the part of the system you actually hear? We are known internationally for making some of the best-sounding speaker systems in the world, so we take our drivers (woofers and tweeters) very seriously. Our LF and HF drivers are designed specifically for each application – it is what sets us apart from the competition. When you buy a MILAN M15 loudspeaker, you can rest assured the high-excursion 15" LF and 1" high-temperature dome compression drivers inside have been engineered to perform flawlessly in conjunction with every other element for truly professional results.



## Wide Dispersion

The M15's HF compression driver is mated to a specially designed converging elliptical waveguide, which provides a smooth and pristine midrange to high frequency transition – while maintaining wide dispersion and exceptional pattern control.

## Integrated Mixer

The onboard mixer features a Level control for each input and a two-band master EQ, complete with a switchable Low Cut filter (set at 100 Hz), which allows the M15 to provide superb clarity and projection when used as a wedge monitor – or to ensure correct integration with subwoofers. An additional filter allows the user to select Speech (for enhanced voice intelligibility), or Music for the broader frequency range required for the high-fidelity reproduction of musical content. A convenient Mix Out XLR connector sends a post-EQ mix of both input channels to additional powered loudspeakers – for fast and easy system expansion.



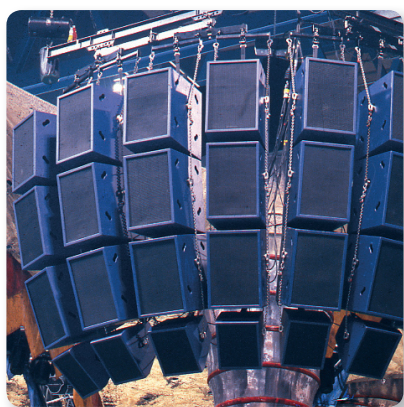
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## Built for Durability and Versatility

The M15's trapezoidal enclosure is fabricated from high-density polypropylene, and ribbed extensively externally and internally to eliminate resonances – and to provide an attractive, durable cabinet finish. The symmetrical 43° side angles allow the loudspeaker to be conveniently used as a floor monitor. A recessed carry handle on the top is provided for easy lifting and transport, while the dual-angle, pole-mount socket allows the loudspeaker to be mounted on straight poles or speaker stands, either vertically or raised higher and angled down to optimise audience coverage. A total of six M10 rigging points are provided on the top and bottom of the cabinet for secure vertical or horizontal suspension in permanent installations using M10 shoulder eyebolts. Mains power is connected via a non-locking IEC with integrated fuse holder. The illuminated front badge operates in one of three modes: permanently on; permanently off; or to indicate limiting.



## Rock-Solid Performance

Designed to provide exceptional performance for traveling musicians, houses of worship, banquet facilities, night clubs – and a host of other venues, the 1,100-Watt MILAN M15 puts touring-grade sound quality into a scalable loudspeaker system that is supremely portable and versatile. See your authorised dealer, or place your M15 order online today – and let your audience experience the **TURBOSOUND** difference!

## You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own **MUSIC Group** factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous **3-Year Warranty** programme.



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### Technical Specifications

#### Model

Components	1 x 15" LF driver 1 x 1" HF driver
Connectors	Mic/Line input: combo jack/female XLR wired pin 2 hot; Mix out: male XLR wired pin 2 hot; IEC mains connector with integrated fuseholder

#### Controls

Controls	Level, Line/Mic, Low Cut, Speech/Music, Bass and Treble, Front LED, Mains on/off
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#### System Data

Frequency Range	45 Hz–18 kHz $\pm 3$ dB 40 Hz–20 kHz -10 dB
Dispersion @-6 dB pts	90° H x 60° V
Max SPL (peak)	130 dB
Equalisation	Bass: $\pm 6$ dB @ 80 Hz; Treble: $\pm 6$ dB @ 12 kHz
Boost Frequency	N/A

#### Indicators

Power LED	Blue
Signal LED	Green
Limit LED	Red
Clip LED	Red

#### Circuit Protection

Amplifier Protection	Full short circuit, open circuit, thermal
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#### LF/HF Driver

Max Output Power	LF: 1000 W HF: 100 W
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#### Audio Inputs

Input Sensitivity	Mic: -32 dBu; Line: -2 dBu
Input Impedance	Mic: 560 $\Omega$ unbalanced, 1 k $\Omega$ balanced; Line: 20 k $\Omega$ unbalanced, 40 k $\Omega$ balanced

#### Power Supply, Voltage (Fuses)

USA / Canada	100–120 V~, T 8.0 A H 250 V
UK / Australia / Europe	220–240 V~, T 4.0 A H 250 V
China	220–240 V~, T 4.0 A H 250 V
Japan	100–120 V~, T 8.0 A H 250 V
Power consumption@ $\frac{1}{8}$ max power	140 W
Rigging options	6 x M10 threaded internal rigging points

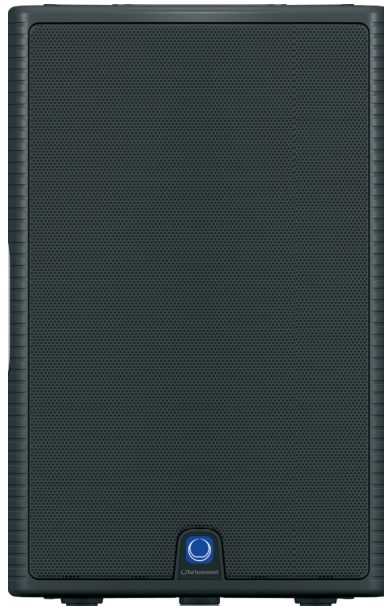
#### Construction / Dimensions / Weight

Construction	Injection-moulded polypropylene enclosure. Recessed carrying handles. Integral dual-angle pole mount socket. Powder coated galvanised perforated steel mesh grille with foam backing
Dimensions (H x W x D)	719 x 457 x 368 mm (28.3 x 18 x 14.5")
Net weight	27.7 kg (60.9 lbs)

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For service, support or more information contact the TURBOSOUND location nearest you:

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