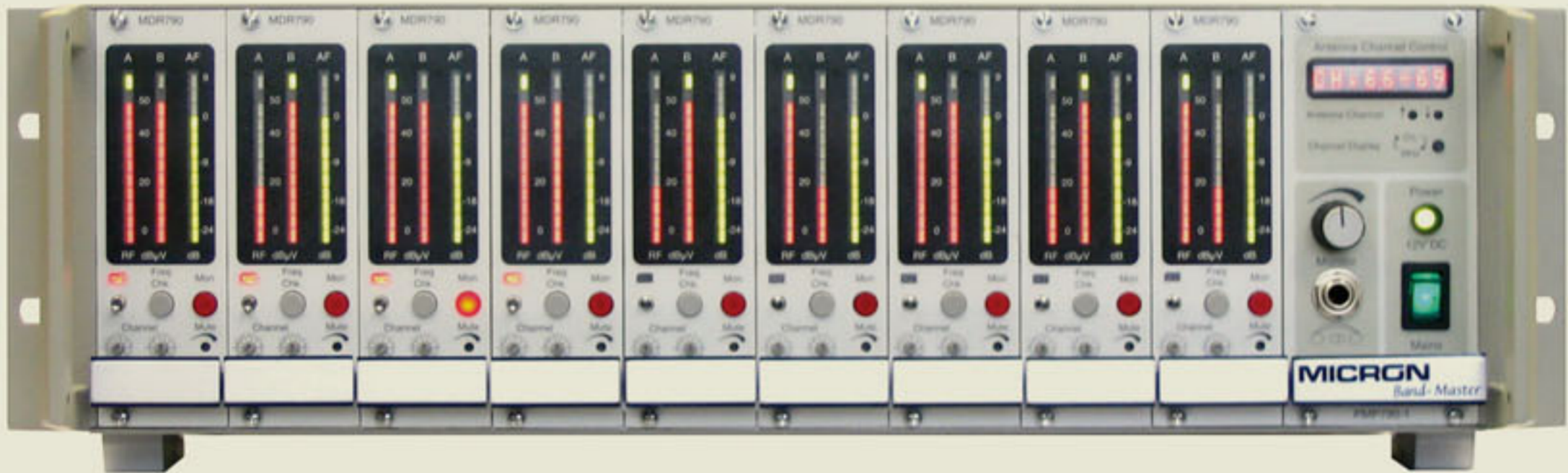


# MICRON 700 Series-MDS3-9 System

## Modular Multi-Channel Diversity Receivers



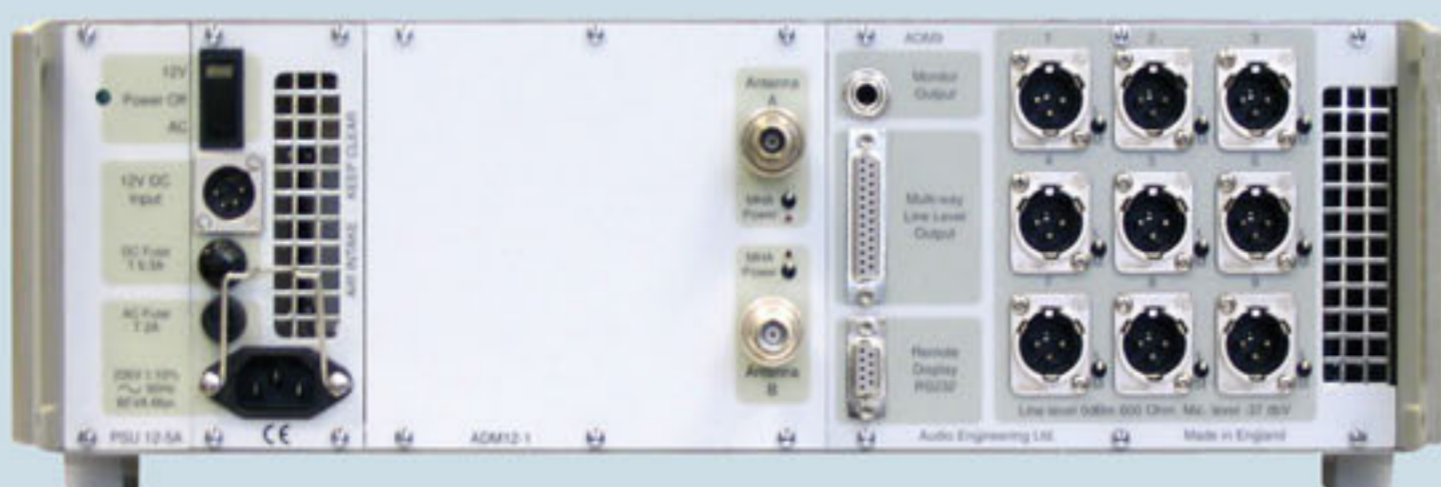
The **MICRON MDS3-9** is a fully modular multi-channel UHF radio microphone receiving system, switchable across pre-programmed 100 channels. It is designed for applications where large numbers of performers are required to be on a stage or studio set simultaneously. These include such as musicals, television studios, OBs, Film sets, large conference venues and arenas.

The MDS3-9 incorporates the **MDR790** series of modular receivers and is available in 19" rack-mounting frame. Up to 9 MDR790 receivers may be incorporated in a single housing, while multiple racks can be combined for larger multi-channel requirements.

Each system is tailored to individual customer requirements. The size of the frequency set and the intermodulation performance is computer-optimised, with front-end bandwidth adjusted to match the allocated RF spectrum. By this means the MDS3-9 system provides a high signal handling capability, coupled with good interference rejection and low inherent system noise. Stringent testing at every stage of production ensures a continued high level of performance and long-term reliability.

**MICRON MDR790** modular receivers are designed specifically for multi-channel use, with low noise digitally controlled PLL design providing the high level of frequency agility. The multiple stage of RF filtering and pulse counting discriminators, are used for long-term reliability and stability, ensuring the highest possible sound quality.

- Frequency agile up to 100 channel switchable frequency
- Multi-channel true space diversity receiving system
- Unique MICRON Noise Reduction System for wider dynamic range
- Outstanding selectivity and sensitivity
- High signal handling capability
- Multi-stage testing ensures high performance and long-term reliability
- Individually tailored and computer-optimised frequency sets
- Transformer balanced switchable Line/Mic level output
- Comprehensive monitoring system



**MICRON**  
by Audio Engineering

Audio Engineering Ltd.  
[www.micronwireless.co.uk](http://www.micronwireless.co.uk)

# Technical Specifications

## RECEIVER MODULES MDR790

### UHF RECEIVERS offer:

- ⇒wider dynamic range
- ⇒lower noise, allowing extended operating range, increased immunity from interference and the ability to operate multi-channel systems in custom built RF bandwidths.

### Receiver Frequency

<b>Receiver frequency (to order)</b>	470 to 870MHz
MDR790-124	100 channels
MDR790-132	100 channels
<b>Switching Range</b>	
MDR790-124	24MHz
MDR790-132	32MHz
Modulation System	F3EGN
Minimum Channel Spacing	200kHz
Reference Deviation	40kHz±1dB
Adjacent Channel Rejection	>100dB
Muting Level variable	1µV (nom) to 100µV with front panel adjustment

### Peak Signal to Noise Ratio

Received signal 50µV	>110dB
Received signal 5µV	>75dB

### Audio

Frequency response	80Hz to 20kHz
High pass filter	50Hz nominal
Distortion (@ ref. deviation level)	<0.2% THD

### Output (Ref. deviation level)

Mic level	-37dBV ±2dB
Line level	0dBm ±2dB
Output impedance	50Ω
Monitor output (max output)	+6dBm
Output impedance	8Ω

### Multi-Function Display

Signal strength receiver A	0 - 50dBµV
Signal strength receiver B	0 - 50dBµV
Modulation Meter	-24 to +9dB
TX low battery warning	
A-receiver active	
B-receiver active	
MDS3 low battery warning	
Alphanumeric LED Display	

### Controls

- Mains ON/OFF switch
- Receiver module ON/OFF
- Frequency select switces

### Power Requirements

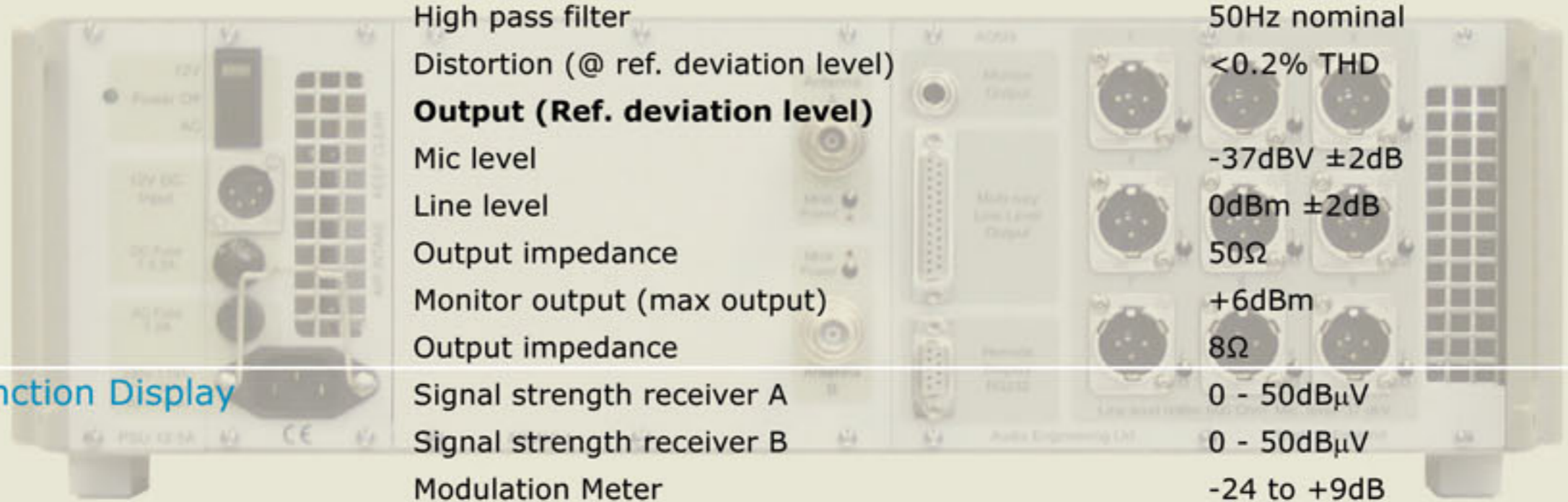
AC Mains	230V±%10(110V to order)
Frequency	48 - 62Hz
DC	10.5 - 15.0V

### Size

Height	3U 5¼"; 133mm
Depth	15¼"; 387mm
Width	17¾"; 451mm

### General

Supplied accessories	IEC Mains Lead operating manual CD
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