# MLD MultiLoop<sup>™</sup> Driver Range

The new global benchmark for professional audio induction loop amplifiers. The most efficient and high performance loop drivers available, with each dual channel amplifier requiring only a single 19" rack mount. MLDs reduce the cost and size of rack space by 50-90% relative to the closest competitors.

Class leading thermal design minimises size and provides unrivalled robustness. Front inlet variable speed fan cooling for optimum rack integration, eliminating the requirement for empty rack spaces to prevent overheating. New self protection and thermal management systems are included for fit and forget reliability.

Each MultiLoop<sup>™</sup> driver is designed to provide optimum efficiency for a wide variety of loop layouts. Providing ample current to meet IEC60118-4 requirements, the MLDs have unmatched voltage headroom for delivering full frequency response and crystal clear sound reproduction.

Each driver has two separate output channels to drive two separate loop cables, featuring the most stable and accurate 90° phase shift available. Phase shift can be selected or deselected dependent on loop layout. The MLD9 provides the highest output available in any dual output amplifier, capable of driving areas of up 3,300m<sup>2</sup> when installed in conjunction with an Ampetronic MultiLoop<sup>™</sup> system design, and also features Class G technology to reduce power consumption and heat dissipation by up to 60%.

MLD units are also designed for versatility, with 2 configurable inputs to cope with any scenario, usable freestanding, wall mounted or rack mounted with the included brackets. All MultiLoop<sup>™</sup> units are built to our exacting standards and are backed by our 5 year warranty.



### Features

- Drives 2 output channels, selectable and highly accurate 90° phase shift
- Up to 3,300m<sup>2</sup> MultiLoop<sup>™</sup> Loss Control area coverage
- Front panel metal loss corrector adjustment for frequency dependant losses
- Active loop error monitoring & dual loop fault detection with status reporting

- Automatic Gain Control
- Versatile input selection includes:
  2 x XLR balanced mic / line switchable inputs
- Based on proven technology ensuring excellent reliability and minimum lifetime cost
- Tested to and compliant with IEC 62489-1 induction loop amplifier performance Standard

## **Benefits**

- Exceptional rack efficiency single rack space reduces space requirements by 50-90%
- High efficiency amplifiers with low heat dissipation, MLD9 class-G design reduces power use by 60%
- Front inlet & rear exhaust fan cooling for true rack mount integration
- Status output on all models for system integration

- New thermal protection adds to outstanding reliability
- Selectable phase shift to drive independent loops or arrays
- Optimised current and voltage outputs exceeding all requirements of IEC60118-4
- Optimised for speech frequencies with unmatched intelligibility, and capable of high quality musical reproduction

#### MultiLoop<sup>™</sup> System Design Configurations

MultiLoop Drivers can be used for different types of loop layout. You will need a MultiLoop system design for the loop layout which you can obtain from Ampetronic, or have your own design approved by Ampetronic free of charge.

#### Perimeter MultiLoops

Two channels drive single area loops either side by side or overlaid.

Suitable for applications where there is no metal in the buildings construction, or in areas of moderate metal up to a maximum loop width of 5 meters.

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#### Loss Control MultiLoops

Multiple loop segments in two patterns each driven by one out put channel.

Best for optimum even area coverage across any area. Suitable for large areas and buildings with metal construction.

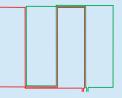
each driven by one out put										

#### Simple MultiLoops

Parallel loop segments with adjacent cables for ease of installation.

Does not give the even coverage of loss control or low spill loops, with dips in level between loops.

Suitable for fixed seating areas, or where dips in field strength are acceptable.



#### Low Spill MultiLoops

Similar in design to Low Loss MultiLoop but with a more complex pattern that requires more cable.

Suitable for applications where loops are close together or where confidentiality is an issue. Low Spill MultiLoops require careful and precise design.



#### Typical MLD Max Area Coverage Scenarios

Scenario System Design Coverage (m <sup>2</sup> )								
1:1 Perimeter	3:1 Perimeter	Simple MultiLoop	Loss Control	Low Spill				
2 x 800	2 x 1,300	1,600	3,300#	1,225				
Max 5m width	Max 5m width	925	925	700				
n/a	n/a	425	400	325				
2 x 400	2 x 650	n/a	n/a	550				
Max 5m width	Max 5m width	425	300	190				
n/a	n/a	n/a	170	130				
2 x 225	2 x 400	n/a	360	190				
Max 5m width	Max 5m width	250	250	150				
n/a	n/a	n/a	n/a	n/a				
	2 x 800 Max 5m width n/a 2 x 400 Max 5m width n/a 2 x 225 Max 5m width	1:1 Perimeter         3:1 Perimeter           2 x 800         2 x 1,300           Max 5m width         Max 5m width           n/a         n/a           n/a         n/a           2 x 400         2 x 650           Max 5m width         Max 5m width           n/a         n/a           2 x 400         1000000000000000000000000000000000000	1:1 Perimeter         3:1 Perimeter         Simple MultiLoop           2 x 800         2 x 1,300         1,600           Max 5m width         Max 5m width         925           n/a         n/a         425           2 x 400         2 x 650         n/a           Max 5m width         Max 5m width         425           Max 5m width         Max 5m width         425           1 A         1         1           1 A         1         1         1           1 A         1         1         1         1           1 A         1         1         1         1           1 A         1         1         1         1           1 A         1         1         1         1           1 A         1         1         1         1           1 A         1         1         1         1         1           1 A         1         1         1         1         1           1 A         1         1         1         1         1           1 A         1         1         1         1         1           2 x 225         2 x 400         <	1:1 Perimeter         3:1 Perimeter         Simple MultiLoop         Loss Control           2 x 800         2 x 1,300         1,600         3,300#           Max 5m width         Max 5m width         925         925           n/a         n/a         425         400           2 x 400         2 x 650         n/a         n/a           Max 5m width         Max 5m width         425         300           Max 5m width         Max 5m width         425         300           Max 5m width         Max 5m width         425         300           n/a         n/a         170         170           1         1         1         1         1           Max 5m width         Max 5m width         360         2           1         1         1         2         2				

Typical scenarios are based on \*a building with no structural metal, \*\*a building with reinforced concrete (re-bar) construction and \*\*\*a room with steel raised access floor tiles.

# Special large-area system, no metal loss outdoor areas



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