

# TTL55-A

## ACTIVE THREE-WAY LINE ARRAY MODULE DESCRIPTION



The TTL55-A is a high power, three way, active line array module engineered to deliver an incredible output for use in indoor or outdoor large spaces. The system is designed to be easily scalable from few modules for medium and small theatres to full size arrays for very large outdoor stadia and public spaces. The three new designs for the six neodymium transducers that power the system represent the result of many years dedicated in pioneering new solutions using the best materials available on the market.

The TTL55-A midrange transducer features a unique "Impedance Control Coil" technology. A secondary coil wound on the speaker yoke and driven in opposite phase to the primary coil has the function of cancelling the primary coil inductance, increasing the speaker sensitivity and reducing the speaker distortion. A primary effect of this technology is the improvement of the temporal behaviour of the speaker, improving the crossover transition from the midrange to the compression drivers.

The integration of the 3500 W four channel digital amplification and the advanced digital processing set a new standard for distortion, noise and thermal efficiency.

The TTL55-A amplifier represents a state of the art execution of a Dsp controlled multiway digital amplification. The analog input board offers xlr input and output link, cluster size control switches, high frequencies correction switches, pre-loaded equalizations by-pass switch. Ethercon input and output connect the system in daisy chain on a RDNet monitoring and controlling system from the FOH. The signal processor is a 32 bit floating point Dsp running at 96 kHz. The Dsp takes care of crossovers, equalisations, soft-limiters, rms limiters, large signals compression and customised presets for the 4 way amplification. Four digital amplifiers: 2 x 1000 watt low frequency, 1000 watt the midrange, 500 watt for the three high frequency drivers.

The TTL55-A is equipped with a dedicated networking board. Using our proprietary RDNet protocol is possible to monitor all the system parameters, form the input to the status of each single amplifier. Having a Dsp on board of each cabinet, it is possible to address to single cabinets or groups of cabinets specific presets or modifications of parameters like gain, equalisation or delay. The RDNet protocol is based on RS-485 communication protocol, it is very stable and it is possible to send and receive data on a simple XLR cable.

The TTL55-A cabinet is built in Baltic birch plywood and protected with heavy-duty coating. The internal structure is braced and reinforced and all the parts are assembled on metal inserts with metric screws. With a very small size compared to the spl output it is easily transportable as a single module on a dolly or in groups of four in dedicated karts. The front grille is powder coated a features and special foam backing very transparent to the sound.

The suspension system is designed to have a safety factor 7 up to 20 speakers per side.

### MAIN APPLICATIONS

- Touring sound reinforcement for large-sized venues
- High quality reinforcement of music and speech
- Stadiums, arenas, concert halls

### MAIN FEATURES

- Tour grade cabinet and mechanics
- 3500 Watt, 4 way amplification
- 6 x high power neodymium transducers
- High quality analog input board
- 96 kHz, 32 bit DSP processing
- Remote monitoring and control
- Maximum output per size on the market

### ACOUSTICAL SPECIFICATIONS

Frequency response:	50 Hz- 20 Khz
Max SPL:	143 dB
Horizontal coverage angle:	90°
Vertical coverage angle:	max. 7°
Compression driver:	3x1.5" neo, 2.5" voice coil
Midrange:	10" neo, 3.5" voice coil
Woofers:	2x12" neo, 4" voice coil

### INPUT SECTION

Input signal (Impedance):	bal/unbal
Input/Output connector:	XLR, Ethercon
Input sensitivity:	+4 dBu

### PROCESSOR SECTION

Crossover frequencies:	320 Hz/1300 Hz
Protections:	thermal, excurs., rms
Sensitivity control:	-
Limiters:	soft limiter
High pass:	-
Controls:	DSP controlled

### AMPLIFIER

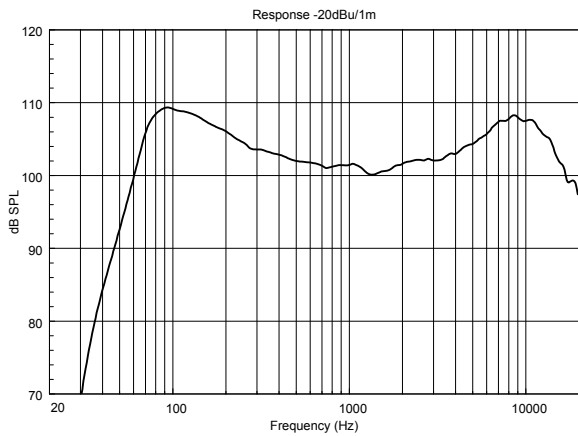
Power supply:	switching 3500 Watt
High frequencies:	D / 500 Watt
Mid frequencies:	D / 1000 Watt
Low frequencies:	D / 2 x 1000 Watt
Cooling:	convection/forced
Connection:	powercon

### PHYSICAL

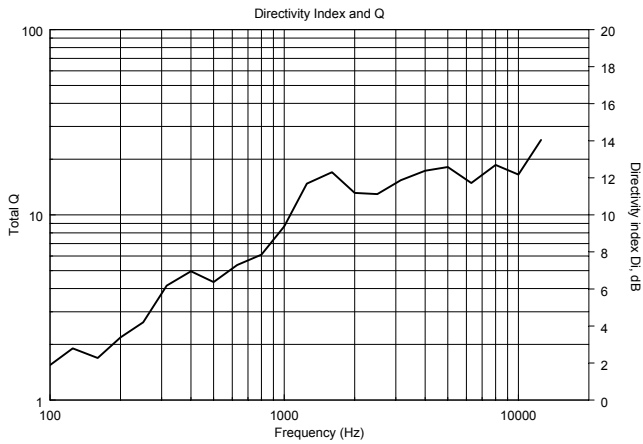
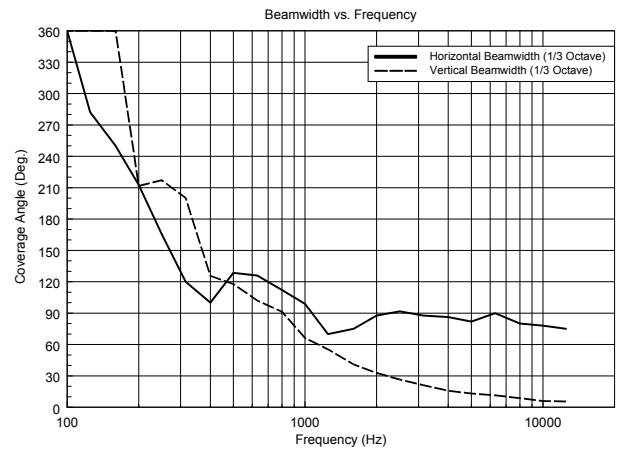
Height:	380 mm (15")
Width:	1020 mm (40")
Depth:	550 mm (21.6")
Weight:	67 kg (147.7 lbs)
Cabinet:	baltic birch plywood
Hardware:	array fly-ware
Handles:	2 side
Pole mount cap:	-
Colour:	Black



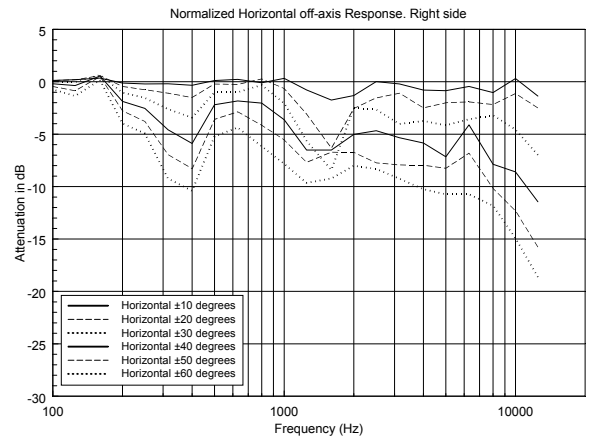
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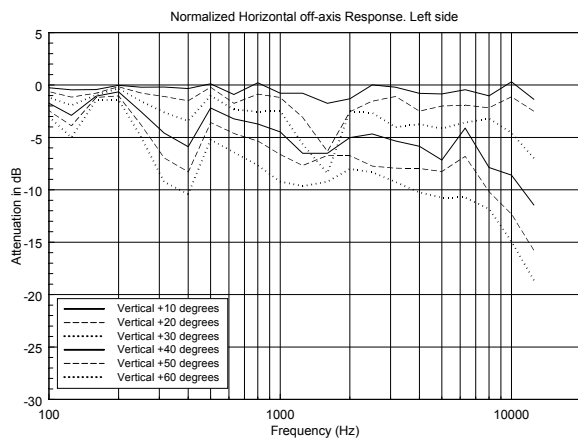
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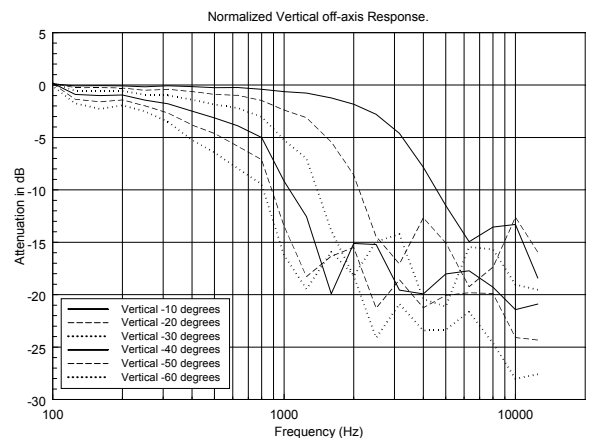
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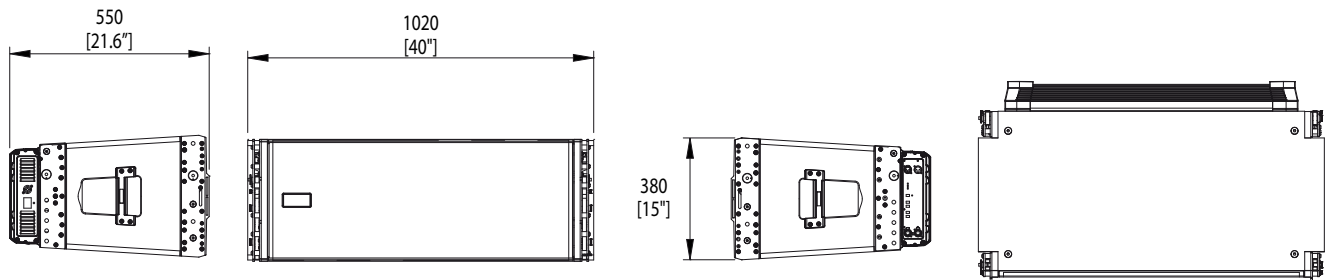
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## PART NUMBERS

13000188 - 230VOLT

13000189 - 115 VOLT

## DIMENSIONS (All data are in mm)



## ACCESSORIES

RAIN COVER TTL55	2 x Rain Cover for 1 x TTL55-A amplifier.
COVER TTL55	Single protection for one TTL55 array module. Includes a soft bag on top to store cables and spare pins. To be used in conjunction with TTL55-A single kart.
FLY BAR TTL55	Suspending bar for TTL55-A line array system (including Pickup Point and Quick Lock pins).
LIFT KART TTL55	Lifting trolley for TTL55-A arrays.
AC 4PIN TTL55	Spare set in case original pins are damaged or lost.
AC 4PIN FLY BAR TTL55	Spare set in case original pins are damaged or lost.
SHACKLE TTL55	To be added to the flybar accessory in case the pick up is made with 2 motors.
LINK BAR TTL55-33-31	Transition Frame to connect up to 8 TTL33-A or TTL31-A under a TTL55-A line array system
AC WOOD KART TTL55	This kart self lock to the front of the module for transportation. It can be used to fly easily a limited number of moduls in daisy chain. Best used in conjunction with the TTL55-A soft cover for best system protection.
SAFETY CHAIN TTL55	To be added to the fly bar to provide a secondary safety (specially when the cluster is suspended with a single motor).
HOIST SPACING CHAIN TTL55	Hoist Connector Chain to distance the motor and the chain bag from the suspending bar keeping in vertical balance the system.
AC POWER EXTENSION TTL55	AC power cable extension 20 meters.
AC POWER BOX 6XTTL55	AC Stage Box to connect 1 x 19 pin LKS female connector.
AC POWER CABLE 6X TTL55	AC Cable to power up to 6 TTL55-A or TTS56-A amplifiers.