TAMARIS Ultra High Power 2 x 15 inch Subwoofer

Data sheet





Overview

TAMARIS is a ultra high power double 15 inch subwoofer, with an operation frequency range from 26 Hz to 110 Hz at a maximum SPL of 142 dB. The primary use is together with DIVUS and on option DELILA in flown or ground stacked configurations. Anyway it can be used in general with all speaker systems where extended low frequency level down to 30 Hz is needed. The width of TAMARIS is equivalent to DIVUS.

The two used 15 inch neodymium chassis have got a 4 inch voice coil with 50 mm linear excursion capability each rated at 1500 watts AES. It's optional integrated frequency modulated free floating class-D amplifier delivers 3100 watts (6200 watts peak). The four centre tunnel bass reflex design produces a symmetric airflow by using it's integrated APCT "Air Pressure Control Technology" for excellent sound at extra ordinary THD level.

The CTG-2.10 multiframe, which is the same as used for DIVUS, can be easily attached via quick lock pins. It allows to fly up to 6 TAMARIS above 18 DIVUS with a 12:1 safety factor, as well as ground stack configurations where a 6:4 ration of DI-VUS on TAMARIS my be safely ground stacked or equivalent divisions. Same regulations and possibilities when using DELILA together with CTG-2.8/2D adapter frame.

Operation

TAMARIS produces a very punchy and precise sounding bass signal with an extreme linear frequence response. In clustered configurations the TAMARIS subwoofer can produce a cardioid or hyper cardioid dispersion pattern with special settings on the HEIMDALL D1 digital controller, also in end fire configuration.

Applications

- Arenas, stadiums, concert halls, large theatres and houses of worship
- Touring sound reinforcement, cinemas,
- · Medium to large indoor or outdoor events

Features

- Ultra high power to size ration with optional integrated fan free amplifier
- Seamless integration with DIVUS and DELILA line array loudspeakers
- Directional subwoofer array support via controller settings
- · Easy quick lock system for fast flown or ground stacked configurations

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Technical Specifications

Transducers

- Low frequency: 2 x 15 inches (381 mm) Neodymium
- · Voice coil size and impedance: 4 inches (101.6 mm) Cu, 8 ohms
- Nominal impedance: 4 ohms / 2 x 8 ohms

Output at 1m

• 142 dB SPL (3) 139 dB driven with PAX P16 139 dB driven with internal amps

Power Handling

· Low frequency: 8000 watts peak 2400 watts AES 4800 watts program rec. amp power on 4 ohms 5600 watts

Crossover type and frequency

• Sub to Low: 80 Hz - 120 Hz

Frequency and Phase response

- Usable frequency range: 26 Hz 110 Hz
- Free field frequency response: 36 Hz - 150 Hz
- Phase response: +/- 45° from 41 Hz to 110 Hz

Coverage

• Horizontal coverage symmetrical: cardioid / hyper cardioid when clustered

Speakers per PAX P16 channel

• For external powered model: 1 / 2 (2) parallel via link connector

Connection

· For external powered model 2 x NL4 (1+/1- LF, 2+/2- Sens)

Mechanical specifications

- Mounting: 4 Steal side plates with quick lock
- Working load: 70 x Speaker-weight
- Construction: 18 to 30 mm premium baltic birch plywood, black PU structured paint, hex stamped powder coated steal grill integrated full size zinced, powder coated steal flying tracks, 4 handles, aluminum back plate. Internal amp module mounted on a 7 mm aluminum back plate with total passive fan free cooling.

Recommended additional Parts

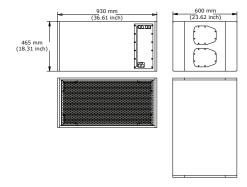
• Flying frame: Multi frame CTG-2.10 Adapter multi frame CTM-2.8/2D Wheel board: Aluminum Wheelbase CRB-2D for max 3x TAMARIS

Size and weight

• Height: 18.31 inches (465 mm) • Width: **36.61 inches** (930 mm) • Depth: **23.62 inches** (600 mm)

Weight:

114.48 lbs (61 kg) internal powered model 127.87 lbs (58 kg) external powered model



Internal Amp module

Type of output stage and power supply

- Frequency modulated FM Class-D with floating modulator, loop back regulated output filter. Fan free.
- · power supply: switch mode load regulated

Total output Power and Volts

- Music: 2 x 3100 Watts / 163 V at 8 ohms
- RMS: 2 x 1550 Watts / 115 V long-term driven with 1 kHz sine wave signal at 8 ohms

Output power on connected load

• Low frequency: **3100 Watts rms** (2 x 1550 W)

Audio specifications

- IM: < 0.05%
- DIM: < 0,005%
- CMRR: > 80 dB (100 Hz) Typical > 90 dB

Audio inpute

- · Connection: XLR female and male link Pin 1 ground, 2 +, 3 -
- Impedance: 20 kOhms Symmetrical between Pin 2 and 3 10 kOhms Unsymmetrical Pin 3 grounded

Ac Power specifications

- Connection: Powercon in and Powercon link
- Voltage and consumption: 180 - 265 VAC, 50 Hz, 5 kW



- (2) possible only with short length cables.
- (3) SPL max peak, test signal: pink noise with crest factor 6 dB.

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