## **GTO-SUB**

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The GTO-SUB is a dual 18" subwoofer enclosure using phase inversion type loading, which, coupled with the use of several innovative loudspeaker technologies, allows it to deliver consistent performance at the highest levels over many years. The enclosure is tuned to a low frequency by way of a long port with a large surface area. This allows the GTO-SUB to obtain a wide passband and a considerable extension towards the bottom end of the frequency response. Analysis and careful design has completely removed the usual 'port turbulence' associated with traditional cabinets using this loading method.



The GTO-SUB is primarily intended for large-scale applications, as part of the GTO-turnkey solution. It is ideally suited to projects that demand no-compromise audio quality. The GTO-

SUB addresses an increasing demand for accurate, high definition bass reproduction. This product is capable of outstanding electrical to acoustic power conversion but still within a compact package. The performance is aided by the careful choice of the reflex alignment and the construction of the cabinet. The GTO-SUB has a useable frequency range at -10 dB of from 28 Hz to 160 Hz, while the response is just +/-3 dB from 34 Hz to 107 Hz. The max sensitivity is 97 dB in free-field and 103 dB in half-space. The maximum continuous AES power of 2400 W gives 131 dB SPL in free-field and 137 dB SPL in half-space, while peak values can reach 147 dB SPL in half-space.

The GTO-SUB's high quality build finish is constructed from 18 mm (phenolic-glued) balticbirch plywood and includes bracing throughout to reduce box vibration modes and to increase the overall cabinet rigidity. The overall shape of the loudspeaker has been created to avoid internal resonances. The outer finish applied is a scratch-resistant, waterproof black paint and the front of the cabinet is protected by an anti-resonant steel grille. When used in conjunction with the GTO mainframe-bar, each element's integral rigging allows up to 16 cabinets to be flown in standard applications. If required, a splay angle of 3 degrees can be selected via the integral rigging, thus allowing the overall shape of flown clusters to be adjusted according to the coverage requirements.

GTO trolley-board designed for '3-up' aids handling and transporting on even or uneven surfaces. Recessed integrated handles in the side panels of the cabinet are used for a positive grip during handling. Weather protective shower caps also form part of the turnkey package. Connection to the loudspeaker comes in the form of two types of connector, both in pairs and all wired in parallel. These are: two NL4s wired pins 1+/1- for the first woofer and pins 2+/2- for the second woofer, plus two LKI-8 wired pins A/B for the first woofer and pins C/D for the second woofer.

FREQUENCY RESPONSE (-10 dB)	28 Hz - 160 Hz
AVERAGE DISPERSION	Horizontal: Quasi-omnidirectional Vertical: Depending on array configuration
IMPEDANCE	2 x 8 Ω (min 2 x 6.2 Ω)
POWER – WAES	2 x 1200 (2 x 4800 peak)
MAX SHORT-TERM SPL @ 1	141 dB SPL (free-field)
m*	147 dB SPL (half-space)
LOUDSPEAKERS AND LOADING	$2 \times 18^{"}$ hybrid band-pass loaded woofers

WEIGHT - SINGLE UNIT DIMENSIONS (Net)

DIMENSIONS (With Pins)

102 kg (225 lb) Height: 600 mm (23 5/8″) Width: 1126 mm (44 11/32″) Depth: 655 mm (25 25/32″) Height: 600 mm (23 5/8″) Width: 1181 mm (46 1/2″) Depth: 655 mm (25 25/32″) \* calculated using +10 dB crest-factor signal