




## PRO DG IT 1M6 i 6,5 Inch Aktif Line Array User Manual

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## Safety indications

Please read before use the system and keep for later use

**PRO DG SYSTEMS GIVES YOU THANKS FOR ACQUIRE THIS PROFESSIONAL SOUND SYSTEM FULLY DESIGNED, ASSEMBLED AND OPTIMIZED IN SPAIN, WE WISH THAT YOU ENJOY WITH ITS HIGH QUALITY AND PERFORMANCE.**

- This system has been designed, fabricated and optimized by Pro DG Systems in perfect working order. To maintain this condition and ensure the right operation, the user must respect the following indications and advices of this manual.

**THE FIABILITY, SAFETY AND EFFICIENCY OF THE SYSTEM ARE ONLY AND EXCLUSIVELY GUARANTEED BY PRO DG SYSTEMS IF:**

- Assembly, manipulation, re-adjustment and modifications or repairs are carried out by Pro DG Systems.
- The electrical installation complies with the requirements of IEC (ANSI).
- The system is used according to the use indications.

## WARNING:

- If protectors are opened or sections of chassis are removed, except where this can be done manually, live parts can become exposed.
- Any adjustment, manipulation, optimization or reparation of the system must be done only and exclusively by Pro DG Systems. PRO DG SYSTEMS IS NOT RESPONSIBLE OF ANY DAMAGE OF THE SYSTEM CAUSED

BY A MANIPULATION, ADJUSTMENT, OPTIMIZATION OR REPARATION REALIZED BY

## **NO-AUTHORIZED PERSONAL BY PRO DG SYSTEMS**

- High loudspeaker levels can cause hearing damage, it must avoid the direct contact with loudspeakers operating at high levels, Otherwise it must use hearing protectors

### **MAIN CONNECTION:**

- The system is designed for continuous operation
- The set operating voltage must match the local mains supply voltage.
- The unit has to be connected to the main via the supplied power unit or power cable.
- Power unit: never use a damaged connection lead. Any type of damage must be fixed.
- Avoid connection to the mains supply in distributor boxes together with several other power consumers.
- The plug socket for the power supply must be positioned near the unit and must be easily accessible.

### **PLACE OF SITUATION:**

- The system should stand only on a clean and totally horizontal surface.
- The system must not be exposed to any type of vibration during its operation.
- Avoid the contact with the water or wet surfaces. Do not place objects containing liquid on the system.
- Procure that the system has sufficient ventilation and do not block or cover any ventilation opening. Obstruct the ventilation may cause overheating in the system.
- Avoid direct exposure to the sun, as well as proximity to sources of heat or radiation.
- If the system undergoes an extreme change in temperature may affect its operation, before starting the system hope it has reached room temperature.

### **ACCESSORIES:**

- Do not place the system on a unsteady base that can be cause of damage to people or to the system, use it only with the trolley, rack, tripod or base recommended or supplied by Pro DG Systems following the installation indications. The system's combination must be moved very carefully. The application of an excessive use of force and uneven floors can cause the combination of system and stand to tip over.
- Additional equipment: don't use additional equipment wich has not be recommended by Pro DG Systems. The use of not recommended equipment can cause accidents and damage to the system.
- To protect the system during bad weather or when left unattended for prolonged periods, the main plug should be disconnected. This prevents the system being damaged by lightning and power surges in the AC mains supply.

IT IS RECOMMENDED TO THE USER READ THESE INSTRUCTIONS BEFORE USING THE SYSTEM AND SAVE FOR LATER USE.

PRO DG SYSTEMS IS NOT RESPONSIBLE OF AN INADEQUATE USE OF THE SYSTEM BY NO-AUTHORIZED PERSONNEL WITHOUT ENOUGH KNOWLEDGE OF USE.

THE USE OF THE PRO DG SYSTEMS PRODUCTS IS INDICATED FOR AUTHORIZED PROFESSIONALS THAT MUST TO HAVE ENOUGH KNOWLEDGE OF THE SYSTEM USE AND ALWAYS RESPECTING THE INDICATIONS SHOWED BELOW.

## Introduction

This manual has been designed to help all the users of the system IT-A 115 B from Pro DG Systems to its correct use as well as for the understanding of the benefits and versatility of the same. IT-A 115 B is a subwoofer system totally designed, assembled and optimized in Spain

### IT-A 115 B

Totally designed, assembled and optimized in Spain



## Description

**IT-A 115 B** is a self-powered subwoofer system of high performance equipped with one (1) speaker of 15" in a tuned enclosure. It is an excellent bass reinforcement for all the systems from the IT-A Series. It is the perfect solution as compact P.A. in small and medium outdoor events, or permanent installation.

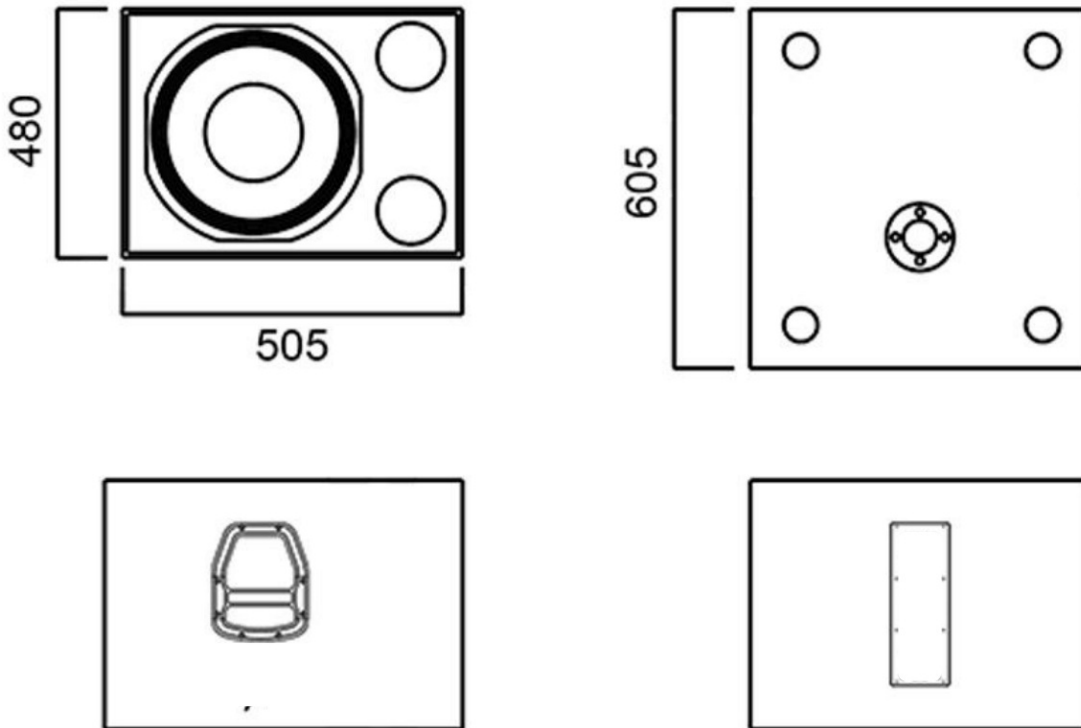
**IT-A 115 B** incorporates a new Class-D amplification module to amplify itself and another passive unit IT 1M6 i, IT 1M6 L.A. IT 2M6 i, i 403, i 803, M 10, or M 12 which allows making configurations.

## Technical specifications

- **Power Handling:** 2400 W peak / 1200 W program / 600 W RMS (EIA 426A Standard).
  - **Nominal Impedance:** 8 Ohm
  - **Average Sensitivity:** 99 dB / 2.83 V/1m (average of 50 – 1000 Hz wideband).
  - **Calculated Maximum SPL:** / 1m 123 dB continuous / 126 dB program / 129 dB peak.
  - **Frequency Range:** +/- 3 dB from 40 to 150 Hz.
  - **Nominal Directivity:** Omnidirectional.
  - **Low Frequency Driver:** One (1) Pro DG Systems speaker of 15", 8 Ohm, 600 W.
  - **Low Frequency Cutt-off:** 40 Hz Linkwitz-riley 24 filter – 100 Hz Butterworth 24 filter.
  - **Amplifier included:** Last generation Class-D amplifier with 2 channels, 1\*1000w for Low + 1\*600w para Sat, with voltage selector, 96kHz DSP Processor, 24 bit with 3 factory presets. Speak on output for SAT.
  - **Connectors:** 1 XLR channel / combo with output for satellite + XLR Link.
  - **Controls:** ON/OFF switch, volume control, Bluetooth ON/OFF switch, TWS switch, DSP management switch + LCD display for presets selection.
- Acoustic enclosure: CNC model, 15 mm made from birch wood plated on the exterior.
- **Power Supply:** 110~220V 50/60HZ with voltage selector.

- **Finish:** Standard black paint job.
- **Box Dimensions:** (HxWxD); 480x505x605mm (18,90"x19,88"x23,82")
- **Weight:** 22,8 Kg (50,26 lbs net weight / 23.7 Kg (52,25 lbs) gross with packaging.

### Architectural specifications



### Inside IT-A 115 B

**T-A 115 B** incorporates one Pro DG Systems speaker of 15", 600 W (RMS). Specially designed under our own parameters for the best performance of the system.

### KEY FEATURES

- High power handling (600 W RMS)
- Excellent sensitivity: 99 dB
- Extremely low resonant frequency: 27 Hz
- Extended response in the medium frequency range
- Ideal winding length for increased linear excursion

### TECHNICAL SPECIFICATIONS

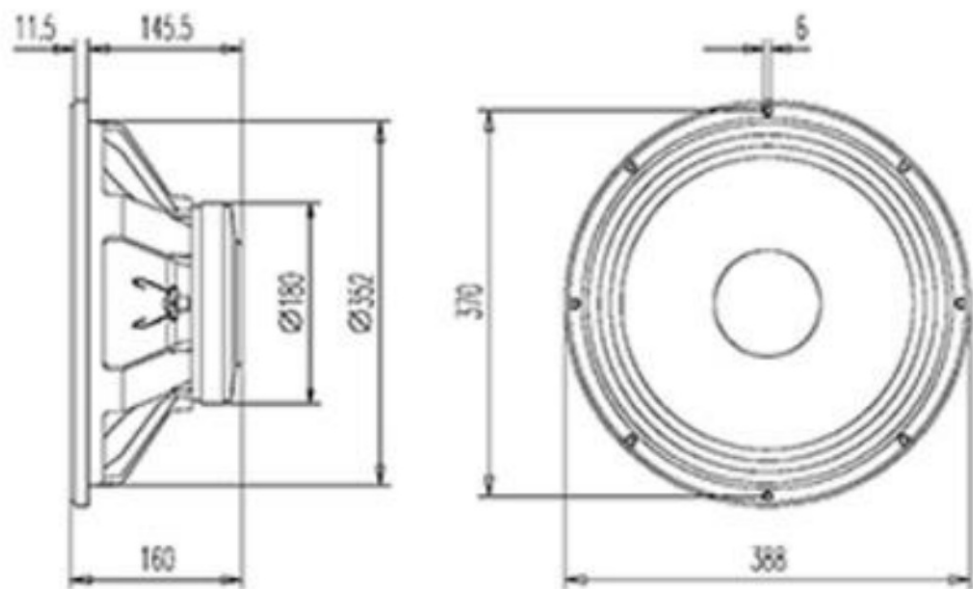
<b>Nominal diameter</b>	<b>380 mm. 15 in.</b>
Rated impedance	8 ohms.
Minimum impedance	6.5 ohms.
Power capacity	600WRMS
Program power	1200W
Sensitivity	99 dB 2.83v@ 1m @2;r
Frequency range	25-2000Hz
Recom. enclosure vol'.	60 / 1150 l 2.12 / 5.3 ft.3
Voice coil diameter	100 mm. 4 in.
Magnet assembly weight	8.8 kg. 19.4 lb.
BL factor	20.5 N / A
Moving mass	0.106 kg.
Voice coil length	21 mm.
Air gap height	9mm.
X damage (peak to peak)	30mm.

#### THIELE- SMALL PARAMETERS\*

<b>Resonant frequency, fs</b>	<b>27 Hz</b>
D.C. Voice coil resistance, Re	5.8 ohms.
Mechanical Quality Factor, Qms	9.01
Electrical Quality Factor, Qes	0.26
Total Quality Factor, Qts	0.25
Equivalent Air Volume to ems, Vas	3451
Mechanical Compliance, Cms	320 um / N
Mechanical Resistance, Rms	2.1 kg / s
Efficiency, 110 (%)	2.5
Effective Surface Area, Sd (m2)	0.0880 m2
Maximum Displacement, Xmax	7.5 mm.
Displacement Volume, Vd	660cm3
Voice Coil Inductance, Le @ 1 kHz	1.2mH



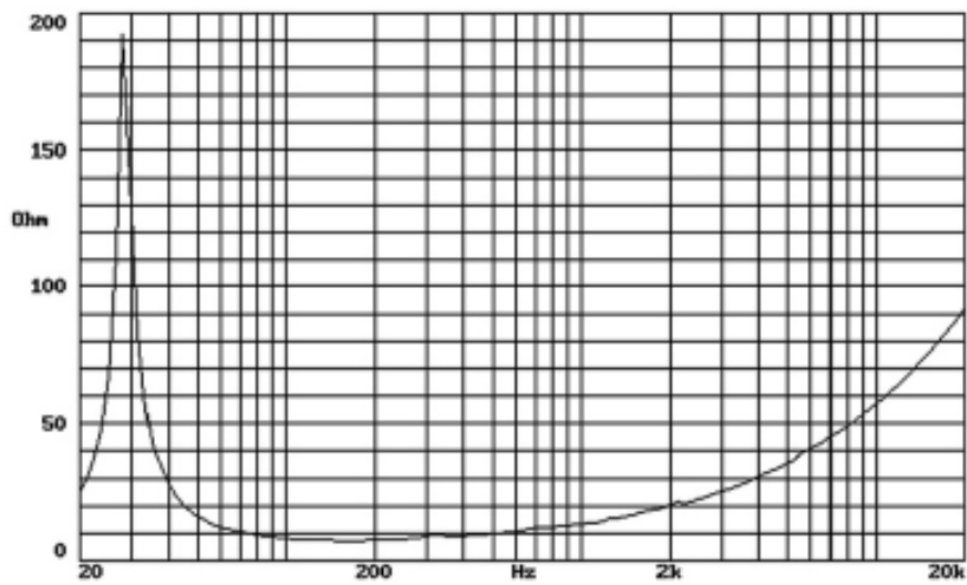
Specially designed under our o m parameter’s for best performance of the system



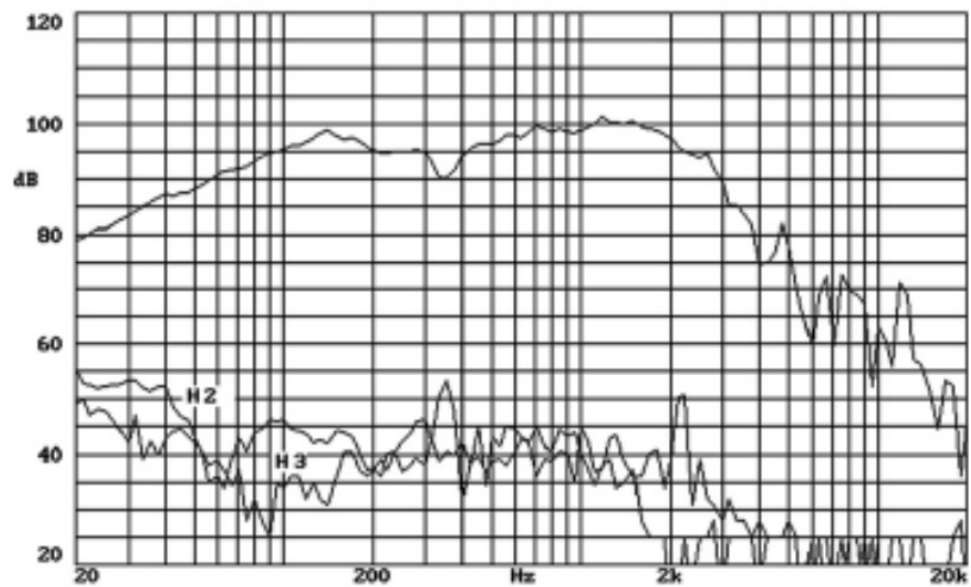
**MOUNTING INFORMATION**

Overall diameter	388 mm. 15.28 in.
Bolt circle diameter	370 mm. 14.57 in.
<b>Baffle cutout diameter:</b>	
– Front mount	352 mm. 13.86 in.
– Rear mount	355 mm. 13.98 in.
Depth	145 mm. 5.7 in.
Volume displaced by driver	71 0.25 ft.3
Net weight	10.2 kg. 22.49 lb

**FREE AIR IMPEDANCE CURVE**



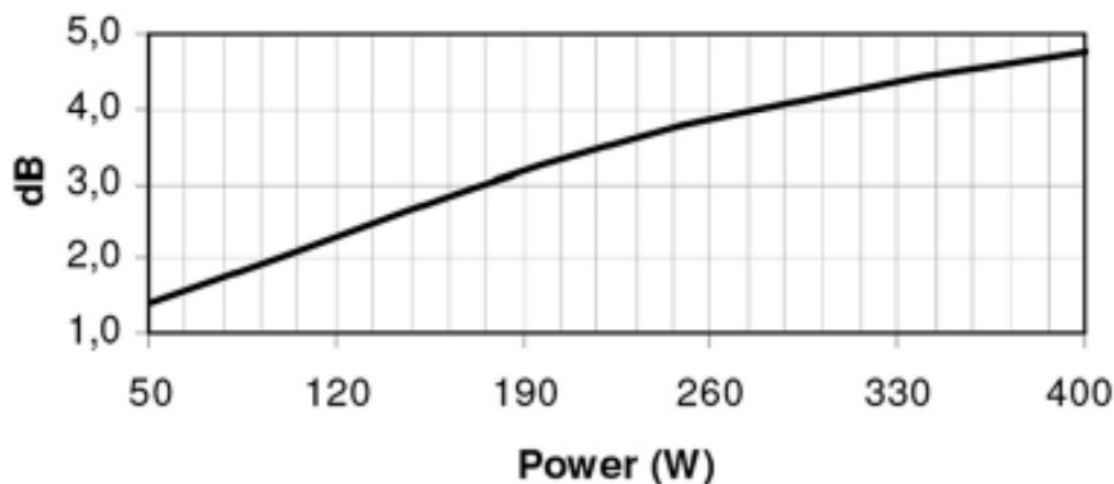
## FREQUENCY RESPONSE & DISTORTION



**Note:** on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

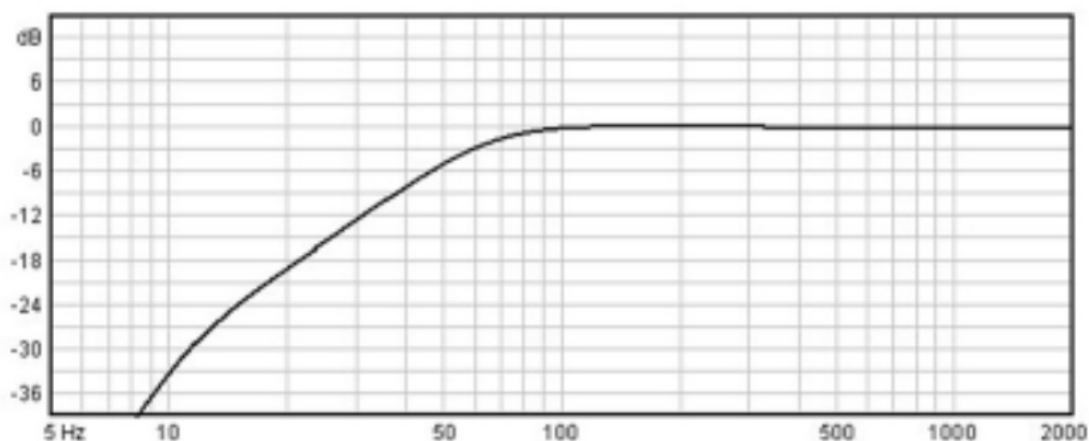
## POWER COMPRESSION LOSSES





**Note:** These losses are calculated from a five minutes AES power test applying band limited pink noise (25 - 1200 Hz). The loudspeaker is free-air standing.

#### PREDICTED LF RESPONSE



**Note:** Bass-reflex cabinet,  $V_b=100$  l,  $f_b=25$  Hz

\* T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

\*\* The  $A_{max}$  is calculated as  $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$ , where  $L_{vc}$  is the voice coil length and  $H_{ag}$  is the air gap height.

#### Amplification

**IT-A 115 B** incorporates a new Class-D amplification module with 2 channels of 1\*1000w for Low + 1\*600w for SAT, with voltage selector. 96kHz DSP Processor, 24 bit with 3 factory presets. Speak on output for SAT in order to amplify itself and another passive unit IT 1M6 i, IT 1M6 L.A. IT 2M6 i, i 403, i 803, M 10, or M 12, which allows making configurations.

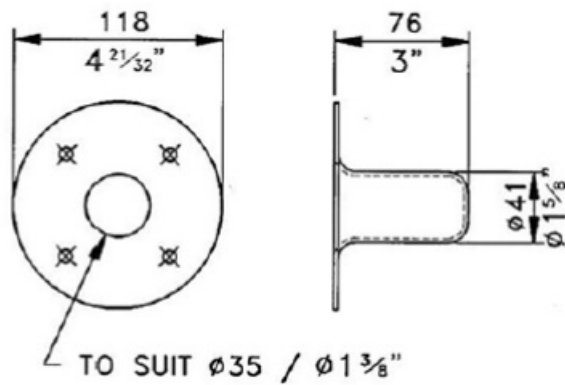
1. channel XLR/combo with output for satellite + XLR Link available.

ON/OFF switch, volume control, Bluetooth ON/OFF switch, TWS switch, DSP management switch + LCD display for presets selection.



## Pole mount adapter

- Material: Reinforced drawn steel
- Dimensions (WxHxD): 76x118x118mm 2.99x4.65x4.65 in
- Diameter: 118mm external / 35mm internal 4.65 in / 1.38 in Peso: 0.27 Kg / 0.6 lbs



**IT-A 115 B** allows interaction with different Pro DG Systems products in order to provide with the maximum versatility and performance for the professional, depending of the type of need and event. Below are some examples of IT-A 115 B interaction with different Pro DG Systems models.

Extensible bar to combine IT 115 B with i 803, M 10, M 12 or M 15.



Excellent interaction with IT 1M6 LA and IT 2M6 LA in Line Array mode or stacked as well.



## Accessories.

Pro DG Systems offers to their customers all type of equipment and accessories for their systems. Complete cabling for the system ready to use are available for IT-A 115 B.





Complete cabling for the system is available and ready to use.

[www.prodgsystems.com](http://www.prodgsystems.com)



Documents / Resources

 	<p><a href="#">PRO DG IT 1M6 i 6,5 Inch Aktif Line Array</a> [pdf] User Manual IT 1M6 i, 6 5 Inch Aktif Line Array, Aktif Line Array, Line Array</p>
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Manuals+.