

# Reference series

# Reference



La serie Reference ocupa siempre un lugar destacado en la línea de productos D.A.S. Ha ganado el respeto de nuestros clientes en todo el mundo gracias a su excepcional rendimiento e inquebrantable fiabilidad. Cuando el proyecto requiere gran calidad sonora tanto en la instalación fija como en aplicaciones móviles, los profesionales confían en la serie Reference.

For almost 20 years the Reference series has been a key part of the D.A.S. product line. The systems have won the respect of our clients the world over thanks to their exceptional performance and steadfast reliability. Whether it be in permanent installations or in mobile systems, when the project requires quality sound and a broad selection of system configurations, professionals count on the Reference series.

MODEL	RF-12.85	RF-15.85	RF-215.85	RF-12.64	RF-15.64	RF-215.96
RMS (Average) Power Handling <sup>(1)</sup>	400 W	400 W	800 W	600 W	Passive: 600 W LF: 600 W HF: 100 W	Passive: 1400 W LF: 1400 W HF: 200 W
Peak Power Handling	1600 W	1600 W	3200 W	2400 W	Passive: 2400 W LF: 2400 W HF: 400 W	Passive: 5600 W LF: 5600 W HF: 800 W
Frequency Range (-10 dB)	54 Hz-20 kHz	50 Hz-20 kHz	45 Hz-20 kHz	50 Hz-20 kHz	45 Hz-20 kHz	37 Hz-20 kHz
Nominal Impedance	8 ohms	8 ohms	4 ohms	8 ohms	Passive: 8 ohms LF: 8 ohms HF: 8 ohms	Passive: 4 ohms LF: 4 ohms HF: 8 ohms
On-axis Sensitivity 1 W / 1 m	98 dB SPL	99 dB SPL	101 dB SPL	97 dB SPL	LF: 98 dB SPL HF: 99 dB SPL	LF: 102 dB SPL HF: 101 dB SPL
Rated Maximum Peak SPL at 1 m <sup>(2)</sup>	130 dB	131 dB	136 dB	131 dB	LF: 131 dB HF: 132 dB	LF: 139 dB HF: 130 dB
HF Horn Coverage Angles (-6 dB)	80° H x 50° V Rotatable	80° H x V 50° Rotatable	80° H x V 50° Rotatable	60° H x 40° V Rotatable	60° H x 40° V Rotatable	90° H x 60° V
Enclosure Material	Plywood	Plywood	Plywood	Plywood	Plywood	Plywood
Color/Finish	Black Paint	Black Paint	Black Paint	Black Paint	Black Paint	Black Paint
Transducers/Replacement Parts	LF: 12P/GM 12P HF: M-30/GM M-50	LF: 15P/GM 15P HF: M-30/GM M-50	LF: 2 x 15P/GM 15P HF: M-50/GM M-50	LF: 12H/GM 12G HF: M-10N/GM M-10	LF: 15H/GM 15G HF: M-10N/GM M-10	LF: 2 x 15G/GM 15G HF: ND-10/GM K-8H
Connector	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon
Dimensions (H x W x D)	64.4 x 37 x 34.6 cm 25.4 x 14.6 x 13.6 in	73 x 41.6 x 41.5 cm 28.7 x 16.4 x 16.3 in	112 x 47.4 x 45 cm 44.1 x 18.7 x 17.7 in	64.4 x 37 x 34.6 cm 25.4 x 14.6 x 13.6 in	73 x 41.6 x 41.5 cm 28.7 x 16.4 x 16.3 in	120 x 55 x 48.5 cm 47.2 x 21.7 x 19.1 in
Weight	22 kg (48.4 lb)	26 kg (57.2 lb)	44 kg (96.8 lb)	25 kg (55 lb)	31 kg (68.2 lb)	62.5 kg (137.5 lb)
Accessories	ANL-2 AX-L AX-Truss AXA-2RF12 AXA-3RF12 TRD-2 TRD-4	ANL-2 AX-L AX-Truss AXA-2RF15 AXA-3RF15 TRD-2 TRD-4	ANL-2	ANL-2 AX-L AX-Truss AXA-2RF12 AXA-3RF12 AXU-RF15 TRD-2 TRD-4	ANL-2 AX-L AX-Truss AXA-2RF15 AXA-3RF15 AXU-RF15 TRD-2 TRD-4	ANL-2

Notes: 1. Based on a 2 hour test continuously applying 6 dB crest factor pink noise (IEC shaped).  
2. Maximum calculated Peak SPL based on sensitivity and RMS power handling.



- RF-12.85
- Altavoz de bajas frecuencias 12P con bobina de 3"
  - Motor M-30 con diafragma de titanio de 2"
  - Nuevo difusor rotatable con dispersión de 80° x 50°
  - Utilizable con trípode
  - Soporte en "U" para la instalación fija
  - Bastidor para formar clusters de 2 y 3 unidades
  - Accesorio para suspensión desde truss

- RF-15.85
- Altavoz de bajas frecuencias 15P con bobina de 3"
  - Motor M-30 con diafragma de titanio de 2"
  - Nuevo difusor rotatable con dispersión de 80° x 50°
  - Utilizable con trípode
  - Soporte en "U" para la instalación fija
  - Bastidor para formar clusters de 2 y 3 unidades
  - Accesorio de suspensión desde truss

- RF-215.85
- Dos altavoces 15P con bobina de 3"
  - Motor M-50 con diafragma de titanio de 2"
  - Nuevo difusor rotatable con dispersión de 80° x 50°
  - 12 puntos de suspensión M10

- RF-12.64
- Altavoz de alta potencia 12H con bobina de 4"
  - Motor M-10N de neodimio y diafragma de titanio de 3"
  - Nuevo difusor rotatable con dispersión de 60° x 40°
  - Utilizable con trípode
  - Soporte en "U" para la instalación fija
  - Bastidor para formar clusters de 2 y 3 unidades
  - Accesorio para suspensión desde truss

- RF-15.64
- Altavoz de alta potencia 15H con bobina de 4"
  - Motor M-10N de neodimio y diafragma de titanio 3"
  - Nuevo difusor rotatable con dispersión de 60° x 40°
  - Utilizable con trípode
  - Soporte en "U" para la instalación fija
  - Bastidor para formar clusters de 2 y 3 unidades
  - Accesorio para suspensión desde truss

- RF-215.96
- Dos altavoces de alta potencia 15G con bobinas de 4"
  - Motor ND-10 de neodimio y diafragma de titanio de 4"
  - Modo de operación conmutable pasivo/activo
  - Pintura alta resistencia Isoflex
  - Dos ruedas posteriores facilitan el transporte

- 12P woofer with 3" voice coil
- M-30 compression driver with 2" titanium diaphragm
- New rotatable 80° x 50° horn design
- Stand and pole mountable
- U-Bracket accessory for permanent mounting
- Array frame for arraying 2 and 3 units
- Mounting accessory for rigging from truss

- 15P woofer with 3" voice coil
- M-30 compression driver with 2" titanium diaphragm
- New rotatable 80° x 50° horn design
- Stand and pole mountable
- U-Bracket accessory for permanent mounting
- Array frame accessory for arraying 2 and 3 units
- Mounting accessory for rigging from truss

- Twin 15P woofer with 3" voice coil
- M-50 driver with 2" titanium diaphragm
- New rotatable 80° x 50° horn design
- 12 M10 rigging points

- 12H Hi-power woofer with 4" voice coil
- M-10N Neodymium driver with 3" titanium diaphragm
- New rotatable 60° x 40° horn design
- Stand and pole mountable
- U-Bracket accessory for permanent mounting
- Array frame accessory for arraying 2 and 3 units
- Mounting accessory for rigging from truss

- 15H Hi-power woofer with 4" voice coil
- M-10N Neodymium driver with 3" titanium diaphragm
- New rotatable 60° x 40° horn design
- 12 M10 rigging points
- Stand and pole mountable
- U-Bracket accessory for permanent mounting
- Array frame accessory for arraying 2 and 3 units
- Mounting accessory for rigging from truss

- Twin 15G Hi-power woofers with 4" voice coil
- ND-10 Neodymium driver with 4" titanium diaphragm
- Passive or Bi-amp operation
- 12 M10 rigging points
- Painted in durable Iso-Flex paint
- Rear located wheels for ease of transport



# Subwoofer series

# Subwoofers



Cuando la aplicación requiere un refuerzo de las bajas frecuencias los sistemas de subgraves de D.A.S. ofrecen la solución adecuada. Una amplia variedad de versiones permite múltiples configuraciones con o sin la necesidad de añadir amplificadores adicionales. Son ideales tanto en instalaciones fijas, tales como clubes, discos y bares, como en aplicaciones móviles.

When the application requires increased bass response, the D.A.S. subwoofer systems are the answer. The wide range of versions allow for multiple configurations, with or without the need for extra amplifiers. Ideal for music applications such as clubs, discos and bars, they are equally capable in portable applications such as mobile DJ's or general sound reinforcement.

MODEL	Sub-15F/Sub-15P	Sub-18H/Sub-18HF	Sub-218G
RMS Power Handling <sup>(1)</sup>	400 W	600 W	1400 W
Frequency Range (-10 dB)	40 Hz-125 Hz (F version) 40 Hz-300 Hz (P version)	35 Hz-125 Hz (HF version) 35 Hz-160 Hz (H version)	27 Hz-160 Hz
Nominal Impedance	8 ohms	8 ohms	4 ohms
On-axis Sensitivity 1 W / 1 m	97 dB SPL	98 dB SPL	101 dB SPL
Rated Maximum Peak SPL at 1 m <sup>(1)</sup>	129 dB	132 dB	138 dB
Crossover: Passive Included	125 Hz (F version)	125 Hz (HF version)	
Bi-amp Recommended	100 Hz (P version)	100 Hz (H version)	
Transducer/Replacement Parts	15P/GM 15P	18H/GM 18G	2 x 18G/GM 18G
Connectors	2 x NL4 ±1 (P version) 3 x NL4 ±1 (F version)	2 x NL4 ±1 (H version) 3 x NL4 ±1 (HF version)	2 x NL4 Speakon 3 x NL4 ±1 (HF version)
Enclosure Material	MDF	Plywood	Plywood
Color/Finish	Black Paint	Black Paint	Black Paint
Dimensions (H x W x D)	53 x 47 x 46 cm 20.9 x 18.5 x 18.2 in	63 x 55 x 53 cm 24.8 x 21.7 x 20.8 in	110 x 55 x 48.5 cm 43.3 x 21.7 x 19.1 in
Weight	22.3 kg (49 lb)	35 kg (77 lb)	60 kg (132 lb)
Accessories	TRD-4	ANL-2 TRD-4	ANL-2

MODEL	Sub-18HA
Nominal Amplifier Power	500 W (Class D)
Frequency Range (-10 dB)	35 Hz-125 Hz
Input type	Balanced Differential Line
Input Impedance	Line: 23 kohms
Output (satellite) Impedance	280 ohms
Sensitivity	Line: +6 dBu
Rated Maximum Peak SPL at 1 m <sup>(3)</sup>	131 dB
Electronic crossover	100 Hz, LR-24 dB/octave
Transducer/Replacement Parts	18H/GM 18G
Connectors	Input: Female XLR Loop/X-over Out: 2 x Male XLR AC Input: PowerCon NAC 3
AC Power Requirements	115 V, 50 Hz/60 Hz 230 V, 50 Hz/60 Hz
Enclosure Material	Plywood
Color/Finish	Black Paint
Dimensions (H x W x D)	63 x 55 x 53 cm 24.8 x 21.7 x 20.8 in
Weight	42.7 Kg (94 lb)
Accessories	ANL-2 TRD-4

Notes: 1. Based on a 2 hour test continuously applying 6 dB crest factor pink noise (IEC shaped).  
2. Maximum calculated Peak SPL based on sensitivity and RMS power handling.  
3. Maximum calculated Peak SPL based on sensitivity and RMS amplifier power.