K&F SW 112 - **SP**





- Compact 1 x 12" subwoofer with integrated driver and amplifier technology
- Bass reflex enclosure in direct radiation design with exponential tunnel geometry
- Mobile version
- Max. SPL 123 dB (peak/1 m/half space)

The SW 112 – SP is an active plug-andplay subwoofer of matchless performance and is as such the ideal bass supplement for the passive K&F speakers and the active models of the K&F SP Series.

The precise, voluminous bass response which characterizes the SW 112 – SP makes it suitable for a variety of uses where high quality and modest dimensions are the order of the day: in media and conference rooms, lecture halls, live clubs, as well as theatres, discotheques and exhibition booths. In parallel operation the SW 112 – SP is impressive as part of a high-quality self-powered compact system, separately it can supplement passive K&F full-range systems, for example as an active mono subwoofer.

The innovative, fan-free system electronics weigh only 2.5 kg. They encompass the digital 1 kW Class D power amplifier and an elaborate limiter section with RMS and peak limiters. They take care of the system equalization, determine the cutoff frequency and optimize the phase characteristics.

As an option additional flying points are available for suspended operations on ceilings or trusses.

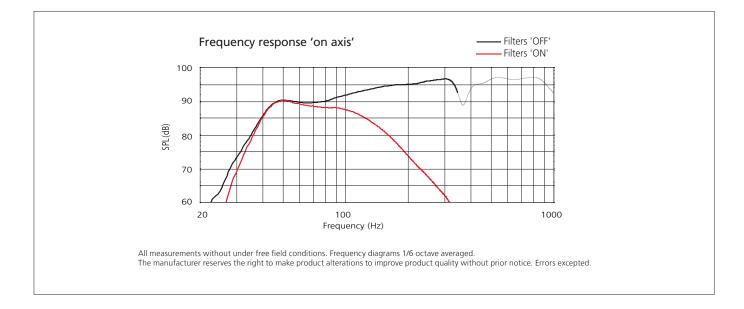
An ergonomic handle, the M 20 adapter for distance rods, and stacking feet with corresponding grooves are all standard equipment.

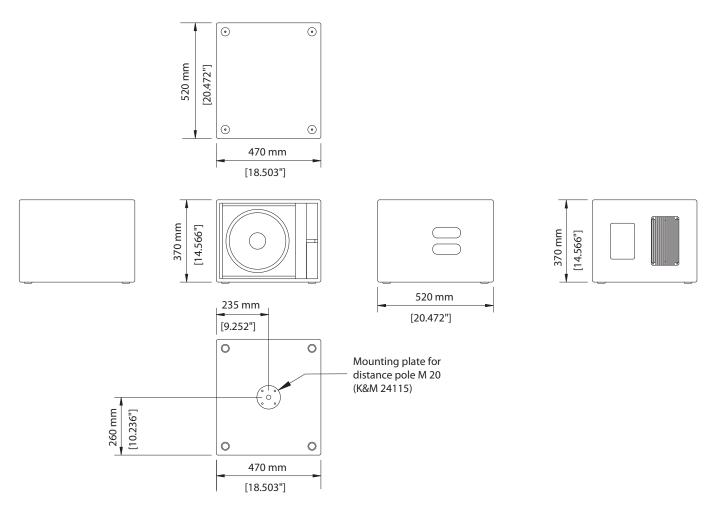
The SW 112 – SP is impressively versatile, is extremely compact and has an excellent power spectrum. As a professional active subwoofer a class of its own!

Loudspeaker	
Design	Bass reflex system with exponential tunnel
	geometry and integrated driver and power
	amplifier technology
Lower cut-off frequency -10 dB	35 Hz (FILTERS 'ON')
Frequency range ±3 dB	41 Hz – 350 Hz (FILTERS 'OFF'), 40 Hz – 120 Hz (FILTERS 'ON')
Max. SPL	123 dB (SPL peak/1 m/half room)
Components	12" long excursion chassis, 100 mm voice coil, internal and external ventilation
Input connectors	LINE IN: XLR 3-Pol female, LINE OUT: XLR 3-Pol male, parallel zu LINE IN, Pin 1=ground/Pin 2=+signal/Pin 3=-signal
Power connectors	1 x Neutrik PowerCon lockable, 1 x input and 1 x output
Input module	
Input sensitivity	+6 dB/1.55 Vrms for rated output
Input impedance	50 k Ω (balanced/unbalanced)
Common mode rejection	Min.: 74 dB, typical: 90 dB
Controls	Level control ± 6 dB, bypass switch for the active filters (for operations i.e. K&F System Controller), ground lift switch
Display	Bi-coloured LED: green=Power On,
	red=Limit/Protect
Driver circuit	High pass 32 Hz (-3 dB), 24 dB/octave (FILTERS 'ON'), Low pass 110 Hz (-6 dB), 24 dB/octave (FILTERS 'ON'), Phase correction, frequency equalisation (EQ), peak limiter, RMS limiter
Amplifier module	
Туре	Class D
Type Power	Class D 1000 W @ 8 Ω (EIAJ)
Type Power Power bandwidth	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz
Type Power Power bandwidth Damping factor	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz)
Type Power Power bandwidth Damping factor S/N ratio	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A)
Type Power Power bandwidth Damping factor S/N ratio Cooling	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan)
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @115 V: 2.5 A
TypePowerPower bandwidthDamping factorS/N ratioCoolingProtection circuitsSupply voltagealternativePower consumption nominalBurst current (Irms/<500 ms)	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @ 2115 V: 2.5 A @ 230 V: 7 A @ 115 V: 14 A
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @115 V: 2.5 A
TypePowerPower bandwidthDamping factorS/N ratioCoolingProtection circuitsSupply voltagealternativePower consumption nominalBurst current (Irms/<500 ms)	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @ 115 V: 2.5 A @ 230 V: 7 A @ 115 V: 14 A @ 230 V: 200 mA @ 115 V: 400 mA
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current	Class D1000 W @ 8 Ω (EIAJ)10 Hz to 30 kHz>500 (100 Hz), >100 (10 kHz)>105 dB (A)Air convection (without fan)Short circuit, over-temperature, clipping, overload230 V version: AC 195 – 250 V, 50/60 Hz115 V version: AC 95 – 125 V, 50/60 Hz@ 230 V: 1.25 A@ 215 V: 2.5 A@ 230 V: 200 mA@ 115 V: 400 mA15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current Enclosure	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @115 V: 2.5 A @ 230 V: 7 A @ 115 V: 14 A @ 230 V: 200 mA @ 115 V: 400 mA 15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of the grille
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current	Class D1000 W @ 8 Ω (EIAJ)10 Hz to 30 kHz>500 (100 Hz), >100 (10 kHz)>105 dB (A)Air convection (without fan)Short circuit, over-temperature, clipping, overload230 V version: AC 195 – 250 V, 50/60 Hz115 V version: AC 95 – 125 V, 50/60 Hz@ 230 V: 1.25 A@ 215 V: 2.5 A@ 230 V: 200 mA@ 115 V: 400 mA15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current Enclosure Weight	Class D1000 W @ 8 Ω (EIAJ)10 Hz to 30 kHz>500 (100 Hz), >100 (10 kHz)>105 dB (A)Air convection (without fan)Short circuit, over-temperature, clipping, overload230 V version: AC 195 – 250 V, 50/60 Hz230 V version: AC 95 – 125 V, 50/60 Hz115 V version: AC 95 – 125 V, 50/60 Hz@ 230 V: 1.25 A@ 230 V: 7 A@ 115 V: 14 A@ 230 V: 200 mA@ 115 V: 400 mA15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of the grille 29.5 kg
Type Power Power bandwidth Damping factor S/N ratio Cooling Protection circuits Supply voltage alternative Power consumption nominal Burst current (Irms/<500 ms) Idle Current Enclosure Weight Colour	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @115 V: 2.5 A @ 230 V: 7 A @ 115 V: 14 A @ 230 V: 200 mA @ 115 V: 400 mA 15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of the grille 29.5 kg RAL 9005 (black)
TypePowerPower bandwidthDamping factorS/N ratioCoolingProtection circuitsSupply voltage alternativePower consumption nominalBurst current (Irms/<500 ms)Idle CurrentEnclosureWeight ColourDimensions (W x H x D)	Class D 1000 W @ 8 Ω (EIAJ) 10 Hz to 30 kHz >500 (100 Hz), >100 (10 kHz) >105 dB (A) Air convection (without fan) Short circuit, over-temperature, clipping, overload 230 V version: AC 195 – 250 V, 50/60 Hz 115 V version: AC 95 – 125 V, 50/60 Hz @ 230 V: 1.25 A @115 V: 2.5 A @ 230 V: 7 A @ 115 V: 14 A @ 230 V: 200 mA @ 115 V: 400 mA 15 mm multiplex with highly resistable structured paint (PU) in RAL 9005 (black), 1 ergonomic handle, K&M mounting plate M20 for distance pole, 4 non-abrasive plastic sliders, stacking grooves for stacking identical enclosures, ball proof steel grille with exchangeable acoustic foam (black) in front of the grille 29.5 kg RAL 9005 (black) 470 x 370 x 520 mm









Further information and data like specifications, manuals, technical drawings as DWG, DXF and PDF files as well as data files for acoustic simulations with Ease and Ulysses are available on our web site www.kling-freitag.de

KUNG & FREITAG GmbH Wohlenbergstr. 5 D-30179 Hannover Tel. +49 (0)511 96 99 7-0 Fax +49 (0)511 96 99 7-97