

# epos



The ELS SUB has a massive and powerful 10" loudspeaker driver fitted to the front of the cabinet, with enough magnet strength and voice coil size to handle very high power levels for long periods without distress. Its cone diaphragm is very stiff to keep distortion and colouration to a minimum. The rubber suspension surround is smaller than normal and quite stiff, which also helps to reduce distortion and low frequency over-hang. In short it has been designed to be more appropriate for a two-channel bass unit than a conventional sub-woofer.

To further boost the fidelity of the ELS SUB it has a very stiff cabinet with extensive internal bracing which is rarely found in conventional subwoofers. It has a completely separate section at the back of the cabinet to house the amplifier, which is more normally found in professional speakers and not found in conventional subwoofers at any price.

To further improve the sound quality Epos does not use port tuning to achieve increased bass extension, which avoids 'chuffing' air turbulence noises interfering with the fidelity of the loudspeaker.

As a general rule, stereo systems tend to be difficult to integrate with conventional sub woofers because, for the most part, sub woofers are generally not designed to match them, and therefore suit 5.1 systems only. The Epos ELS SUB is different and was conceived as a means of extending the frequency response of a small pair of bookshelf speakers, rather than just producing large outputs at one particular frequency, such as 60 Hz.

This may appear to contradict established principles, but Epos engineers have not limited themselves to only trying to produce a product that plays 'one note' sound. For that reason the ELS SUB is capable of extending low frequencies with a relatively flat response down to 20 Hz. This is most unusual and would normally be unheard of in conventional woofers, because apart from anything else their cabinets and amplifiers would rattle and buzz, due to the simple method of construction used.

As a consequence of the design principles, this ELS SUB is dynamic when part of a 5.1 system.

Back panel controls include High Level Input, Volume, Low Filter, Power Switch (when left on with no signal the sub's standby feature activates), AC Voltage Selector Switch, High Filter, Phase, Low Level Input, and High Level Input.

Additional features to be found in this sub are both over current cut-out and over temperature cut-out. The ELS SUB does not use a compression limiter to pre-distort the signals it cannot handle. No amplifier has infinite power capabilities and has to be protected against destroying itself under extreme conditions. To protect the sub's 300W amplifier from excessive current demands it has been designed to cut the signal to the speaker in the event of an overload. The sound output is restored automatically immediately the demand is lower. To protect the amplifier from damage caused by excessive heat, there is a thermal sensor attached to the amplifier's heatsink that is set to trip the output if the internal temperature exceeds a pre-set level. The reasons this might occur are high ambient room temperature, direct sunlight, high level operation for long periods and insufficient ventilation of the amplifier control panel.

With a finish similar to the ELS 3 speakers and ELS 3 centre channel, the new ELS SUB will be available in the same three finishes – light cherry, dark cherry and black ash. The sub woofer has a black fabric grille and is sold complete with spikes.

Configuration One 10' Bass Driver  
Power Handling 300 W max  
Frequency Range 20Hz – 150Hz with high & low filtering  
Impedance 4 Ohm nominal.  
Sensitivity 89dB/2.83V/1m.  
Power consumption Max 500W  
Power consumption at idle < 40W  
Finish Light cherry, Dark Cherry, Black Ash  
Cabinet 18mm MDF  
Size HxWxD – mm / ins 372 x 342 x 450  
Packaged One per carton.  
Weight 20Kg per single speaker