



# SpotDAP 450 & 460

Directional Audio Sound System



## product information

Imagine broadcasting your audio messages straight to your target audience and nowhere else! ... That's the SpotDAP, a revolutionary sound-generation technology designed to target specific areas. The SpotDAP is American Technology Corporation's patented HSS<sup>®</sup> HyperSonic<sup>®</sup> Sound system.

The directionality of the SpotDAPs is unsurpassed (3°), which significantly reduces the noise pollution levels anywhere ambient noise is an issue. Another advantageous SpotDAP feature is its long projection distance of intelligible sound (up to 20 meters).

Applications include digital signage, points of sale, kiosks, grocery stores, lobbies, parks, banks, and museums.



### Avoids noise pollution

The SpotDAPs are able to direct sound where you want it (with a directivity of 3 degrees).

### Outstandingly flexible

The SpotDAPs are small and lightweight. They are very simple to install as all their elements are contained within the enclosure (digital processing, amplification and emitter devices).

### Simple to use and operate

The SpotDAPs are simply and can be directly connected to any audio source. No power amplifier is necessary as the SpotDAPs work on the same principle as an active loudspeaker.

### Long projection distance

The sound level decreases very slowly with the distance. It's a unique feature of the HSS<sup>®</sup> technology. The sound remains clearly intelligible up to 20 meters away!

### Surprise effects!

Surprising effects can come from directing a SpotDAP onto sculptures or paintings making them come alive with sound!

The SpotDAPs can also be used to attract a visitor's attention by directing it along passage ways.

### Award winning

HSS<sup>®</sup> technology received several awards including the 'innovation label' at the SITEM 2003 exhibition in Paris.

## RSF - EXTREME Products

### Reliability... EXTREME

- Designed for 24/7/365 time operation.
- Fully solid state with no moving parts.

### Service... EXTREME

- One year warranty extendable to two.

### References... EXTREME

Our customers range from the smallest regional museums to the largest attraction parks. Some of our important references: Disneyland Paris (FR), 'Futuroscope de Poitiers' (FR), City of Sciences, Paris (FR), British Museum, London (UK), Stonehenge (UK)...



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## Technical specifications

### Audio

Impedance.....	10k Ohms
Frequency response .....	500Hz - 16 KHz
Max Audio SPL output .....	85 dB @ 1kHz/1 meter (SpotDAP450) 91dB (SpotDAP460)
Max Input for Max Output .....	160 mVrms x1 channel or 80 mVrms x2 channels

### Buttons

Equalizer .....	3 switch positions
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### Connectors

Input Connectors .....	2 RCA/phono style connectors
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### Indicators

Signal/saturation presence indicator
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### Power supply

Input.....	90V – 264VAC
External transformer.....	48VDC

### Maximal consumption.....100 W max

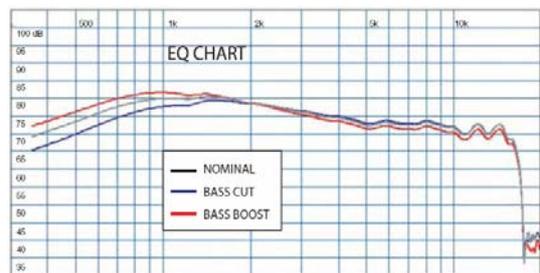
### Environmental

Operating Temperature .....	0°C to 40°C
Operating Humidity Range.....	0 to 95% (non-condensing)

### Enclosure .....

### Dimensions (enclosure).....88.1 x 151.4 x 311.1 mm (SpotDAP450) 75 x 310 x 310 mm (SpotDAP460) (D x H x W)

### Weight .....



## SpotDAP's HyperSonic Sound® technology

A revolutionary new concept in sound reproduction—a paradigm shift in technology application. The HyperSonic Sound® (HSS®) technology projects a column of modulated ultrasonic frequencies into the air. These ultrasonic frequencies are inaudible by themselves. However, the interaction of the air and modulated ultrasonic frequencies creates audible sounds that can be heard along the column. This audible sound wave is caused when the air down-converts the ultrasonic frequencies to the lower frequency spectrum that humans can hear. Since the audible sound is produced by the column of ultrasonic frequencies (which is highly directional), an important by-product of this is that the audible sound can be tightly focused in any direction within the listening environment. This provides outstanding flexibility in placing the sound exactly where you want it and substantially eliminating sound in all other areas. By eliminating the bulky magnets and moving coil found in a conventional speaker, the SpotDAP system brings other advantages. The system is small and lightweight; designed for easy mounting. Positioning is straight forward, with no bulky housing, cabinet, vibration, or back wave emissions to consider.

The directionality of the SpotDAP system is unsurpassed, with the added benefit of long projection distances and retention of intelligibility. Getting sound right where it is wanted eliminates having to use high sound pressure levels to get sound to “carry” to distant points.

Since the SpotDAP directs the audio in a precise manner, less volume is necessary to project sound where it is needed. An audio signal is sent to an electronic signal processor circuit where equalization, dynamic range control, distortion control, and precise modulation are performed to produce a composite ultrasonic wave form. The patent pending ModAmp™ technology is used to produce the compact and lightweight Modulation/Amplifier portions of the SpotDAP. This amplified ultrasonic signal is sent to the emitter that produces a column of ultrasonic sound that is subsequently converted to highly directional audible sound within the air column. Since ultrasound is highly directional, the audio sound placement is precise. Directional sound is pointed to the target listener(s) or reflected off an object to create a Virtual Speaker that is some distance from the SpotDAP unit.

## Accessories

WMT-SPT .....	Wall Mounting Bracket
CMT-SPT.....	Ceiling Mount for the SpotDAP450



WMT-SPT



CMT-SPT