



# ONE SYSTEMS

## Technical Bulletin

April 29, 2009 (Supersedes prior editions)

### Sound Pressure Level (SPL) Ratings

Both one watt, measured at one meter, and maximum SPL, measured at one meter, are listed below for all One Systems enclosures. ***Caution should be exercised when comparing this data with that of products from other manufacturers.*** A sound reinforcement system that has a high one watt/one meter rating ONLY means it plays at a certain level with a specific power input. It does NOT mean that the system offers linear response, low distortion, or good time domain performance and balanced amplitude response.

***An even greater level of caution should be exercised when viewing maximum SPL data from any manufacturer.*** This data is almost always derived by a simple piece of arithmetic that ASSUMES the system is totally linear. The typical max SPL data is calculated by taking the system power handling specification and the one watt/one meter specification and deriving the maximum SPL. Again, this ASSUMES that the system is completely linear...and this is never the case.

For this reason, it is possible to have a very high maximum SPL rating and have a system that is TOTALLY unintelligible. (but, very loud!)

One Systems products are designed to provide very linear response regardless of input power levels. All One Systems designs are optimized for excellent time domain response and fidelity. They are designed to be played at high power levels, and to project very high fidelity with highly intelligible program material over long distances for both outdoor and high ambient noise indoor environments.

### Full Range “Direct Weather” Injection Molded Speaker Systems

<u>Model</u>	<u>1W/1M</u>	<u>MAX SPL</u>
103IM	87dB	104dB
106IM	89dB	109dB
108IM (105x60 and 60x40)	92dB	115dB

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**Full Range “Direct Weather” Injection Molded Speaker Systems (cont.)**

208CIM	96dB	122dB
112IM (105x60 and 60x40)	96dB	125dB
212CIM	99dB	130dB
212IM	99dB	130dB

**Full Range “Direct Weather” Fiberglass Speaker Systems**

<b><u>Model</u></b>	<b><u>1W/1M</u></b>	<b><u>MAX SPL</u></b>
Cross Field Array	105dB	136dB

**Full Range “Direct Weather” Baltic Plywood Speaker Systems**

<b><u>Model</u></b>	<b><u>1W/1M</u></b>	<b><u>MAX SPL</u></b>
112UM	96dB	125dB
115UM	96dB	125dB
115TW (105x60 and 60x40)	96dB	125dB
115RW (105x60 and 60x40)	96dB	125dB
215RW	99dB	130dB

**Sub Woofer “Direct Weather” Baltic Plywood Speaker Systems**

<b><u>Model</u></b>	<b><u>1W/1M</u></b>	<b><u>MAX SPL</u></b>
212Sub-W	97dB	129dB
118Sub-W	95dB	124dB
218Sub-W	98dB	130dB