



Unity™ UCS1

15-inch Compact Subwoofer

Features:

- **2400 Watt 15-inch Horn-Loaded Subwoofer (1200 Watts Program)**
- **Delivers Max SPL of 137dB Peak (133dB Continuous)**
- **15-inch Long Excursion 8-ohm Driver**
- **Compact Size (11.1 cubic feet)**
- Solid 15mm 11-ply birch plywood cabinet
- Heavy gauge perforated metal grille
- Built in heavy duty casters and tiltback handle
- Optional finish of black ultrathane paint (UCS1B)
- Two-year unconditional warranty*

*Warranty valid in Canada and the United States only

Overview:

The UCS1 is the ideal passive subwoofer to use with the Unity™ U15 or U215 loudspeaker systems. This 1200-watt 8-ohm cabinet takes full advantage of its horn-loaded design to deliver fierce bottom end from a surprisingly compact, single 15-inch loaded passive subwoofer.

The performance UCS1 delivers from a box this manageable in size is the direct result of outstanding loudspeaker cabinet design. Optimized horn flare geometry careful attention to the front and rear internal chamber dimensions, as well as the use of a high performance long excursion 15-inch driver gives the UCS1 surprising high output volume and extended bass response for a subwoofer cabinet occupying only a total volume of just over 11 cubic feet.

The UCS1 is made with a solid 15mm 11-ply birch plywood cabinet construction and has a heavy gauge perforated metal grill to protect the components. Integrated wheels and bar handles make moving and stacking the UCS1 as easy as it can possibly be for a subwoofer in this class.

The UCS1 comes in a black carpet covering to mate with the U15 and U215, or is available in a black painted Ultrathane finish (UCS1B) for use with the Ultrathane painted versions of the Unity™ loudspeakers. (U15B and U215B).

Unity™ Series Overview

The Unity™ Series of loudspeakers is a radical loudspeaker cabinet design utilizing the patented Unity™ Summation Aperture Horn Technology, which was invented by loudspeaker designer Tom Danley and licensed from Sound Physics Labs Inc.

The Unity™ Series pushes the limits of modern state-of-the-art sound reinforcement technology, which features a radical new loudspeaker horn design, arguably the first major evolution in horn technology in the last 60 years. Ultra clear reproduction through the high-mid band with extremely linear frequency response has been achieved using the patented* Unity™ horn technology, licensed from Sound Physics Labs Inc. Unity™ horn technology combines a single 1" throat with a 1.75" diaphragm high frequency compression driver alongside three 5" ceramic magnet midrange drivers on a single, highly efficient conical horn. This combines high and mid frequency energy in a single 60° x 60° conical horn that produces frequencies from 300Hz to 20kHz. Patent holder Tom Danley explains it this way. "With a conical horn, one sees that at the compression driver exit, the expansion rate is very rapid at high frequency cutoff, and since the expansion rate acts as a high pass filter, the low frequency energy does not couple to the mouth. Move a few inches toward the mouth and one finds the expansion rate is much slower and suitable for low midrange, if only that was where the driver was. All one has to do is obtain a mid driver, suitable for efficient horn loading in that frequency band and find the point in the flare where the expansion rate is suitable for that frequency range and couple the sound in at that point. Because the compression driver and each mid driver are less than 1/4 wavelength apart, their output combines fully and coherently, something which cannot happen if the driver were further than about 1/3 wavelength apart." *U.S. Patent # 6,411,718 B1



Unity™ UCS1 Specifications:

Model	UCS1
SYSTEM TYPE	Horn Loaded Subwoofer
ACTIVE OR PASSIVE	Passive
PROGRAM POWER (Watts)	2400 Watts (1200 Watts Peak)
NOMINAL IMPEDANCE (Ohms)	8
SENSITIVITY (dB @1Watt/1m)	102
MAX SPL (dB)	137dB Peak (133dB Continuous)
FREQUENCY RESPONSE (Hz +/- 3db)	37 - 150
LF DRIVER(s)	15 inch, Ceramic Magnet, 3 inch voicecoil
LF PROGRAM POWER (Watts)	1000
LF IMPEDANCE (Ohms)	8
INPUTS - 1/4" Jacks	2
INPUTS - Speakon 4-pin	2
OTHER CONTROLS / FEATURES	Speakon™ connectors feature a configuration switch which allows instant reversal of Speakon™ jack pinouts for easy single wire hook-up using optional four wire Speakon™ cables.
CORNERS	Black Steel
WHEELS	2 Rear
BAR HANDLES	2 Top, 2 Side
POLE MOUNT ADAPTER (1 3/8"-3.5cm)	Yes - Top
ENCLOSURE MATERIALS	15mm (5/8inch) 11-ply Russian Birch
GRILLE	Heavy gauge perforated metal
COVERING / FINISH	Black Ozite (Carpet)
OPTIONAL COVERING / FINISHES	Black Ultrathane Paint (UCS1B)
DIMENSIONS (DWH xbackW, inches)	26.25 x 19.25 x 41
DIMENSIONS (DWH xbackW, cm)	67 x 49 x 104
WEIGHT (lbs/kg)	118 / 44.5