PCS-82SQ

#### **DESIGN TEAM**

"Our goal was to create in-wall subwoofer designs that would challenge the performance of our freestanding designs. Advanced design technology, complete measurement analysis and extensive blind screen listening have allowed us to achieve that goal."



# TWICE THE BASS. HALF THE SPACE.

Dual 8" woofers ... one PCS-82SQ does the job of TWO single-woofer PCS subs!



Advanced High-Excursion CFP™ Carbon-Fiber-Reinforced Polypropylene Cones.

The addition of carbon fibers provides excellent cone rigidity. Over-molded "M-roll" design thermoplastic rubber surrounds guarantee greater cone excursion and extreme durability.



Dual Powerful Ceramic/Ferrite Magnets with symmetrical focused-field geometry.
1-1/2" (38 mm) voice coil with four layers of high-temperature copper wire wrapped around a polyamide former. FEA-optimized magnet/motor structure.



High-Strength GRIP™ Glass-Reinforced Injection-Molded Polymer Chassis/ Mounting Bracket. A strong, rigid design that dramatically reduces wall vibration and flexing.



Paradigm Perfect Bass Kit ... even when the finest speakers are perfectly positioned in a room, the room can still have a dramatic negative affect on bass quality. In a process that takes minimal time, our Perfect Bass Kit takes measurements, calculates corrections and results in perfect bass in any room. Better bass through science ... connects directly through the USB port on the new X-300 v.2 amplifier.



Paradigm

#### X-300 v.2 AMPLIFIER

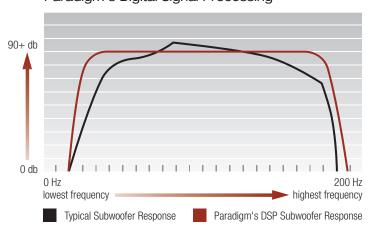
## 900 WATTS DYNAMIC PEAK 300 WATTS RMS SUSTAINED

Designed, engineered and manufactured in North America, the high-power Ultra-Class-D™ X-300 v.2 amplifier is purpose-designed to drive the PCS-82SQ subwoofer with ease. With Paradigm's proprietary Digital Signal Processing (DSP) design and "EQ" settings to match the individual in-wall application, the X-300 v.2 amplifier will coax every ounce of high-performance out of our PCS-82SQ.

Paradigm's DSP design boasts sophisticated algorithms which shape frequency response, ensuring accurate, consistent and musical bass performance without audible distortion, even when the sub plays at the loudest levels (see graph below).

Gold-plated binding posts and optional rack mount ears are included.

#### Paradigm's Digital Signal Processing





#### **Control Facilities**

- Auto On/Off
- Subwoofer Level
- Subwoofer Cut-Off Frequency (continuously variable 35 Hz – 150 Hz) with Bypass Option
- Sub/Sat Phase Alignment (continuously variable 0° – 180°)

#### **Input Facilities**

- Single-Ended RCA Inputs
- Sub-In Right (Mono) Input
- USB Port/PBK Interface

#### **Output Facility**

• 1 subwoofer/2 subwoofers

### **SPECIFICATIONS**



PCS-82SQ

Design

Matching Paradigm® X-Series Amplifier Required (sold sep.)

**Bass Drivers** 

**Frequency Response** 

Low-Frequency Extension\*

**External Dimensions** (Height x Width)

Minimum Mounting Depth\*\*

**Cutout Dimensions** (Height x Width)

**Minimum Internal Volume Required** 

Weight (unpacked)

Finish

Pre-Construction Bracket (sold sep.)

Optional Backbox (sold sep.)

Dual high-excursion drivers, in-wall, GRIP™ chassis/mounting bracket

X-300 (powers up to 2 PCS-82SQ)

Two 210-mm (8 in) CFP™ carbon-fiber-reinforced polypropylene cones, 38-mm (1-1/2 in) voice coils, over-molded TPR™ surrounds, 38-mm (1-1/2 in) 4-layer copper wire voice coils, high-temperature polyamide formers, ceramic/ferrite magnet structures

+/- 2dB from 23 Hz – 150 Hz

4 kg / 8.8 lb each

White, Paintable

PB-8 x 16; retrofit included



#### PCS-82SQ is Powered by our X-300 v.2 Amplifier

Design

Ultra-Class-D™ power amplifier, proprietary EQ software to configure amp for specific application, USB port/PBK Interface for programming and optional PBK digital room correction system, powers up to 2 PCS-82SQ in-wall subwoofers,

Amplifier: High-Current. **Discrete Output** 

900 watts Dynamic Peak / 300 watts RMS Sustained

**Amplifier: Design Features** 

Auto-On / Off, soft clipping, thermal protection, electrical shorting protection

**Subwoofer Cut-Off Frequency** 

Variable 35 Hz - 150 Hz; Bypass option

Sub / Sat Phase Alignment

Variable 0° - 180°

Line-Level Input

RCA. From Sub-Out / LFE-Out of receiver, processor or

other line-level source

**Speaker-Level Outputs** 1 subwoofer/2 subwoofers

Height, Width, Depth

8.9 cm x 43.2 cm x 37.5 cm; 2 standard rack units 3-1/2 in x 17 in x 14-3/4 in: 2 standard rack units

Includes rack ears for mounting in standard 19-inch rack

Weight (unpacked)

6.1 kg / 13.5 lb each

Paradigm Perfect Bass Kit

Accessory (sold sep.)

Black

Finish







\* DIN 45 500. -3 dB in a typical listening room. \*\*Depth required is the distance between 1-1/2" drywall or similar material.