

CDL Sub18

Active Sound Reinforcement Subwoofer

Owner's Manual

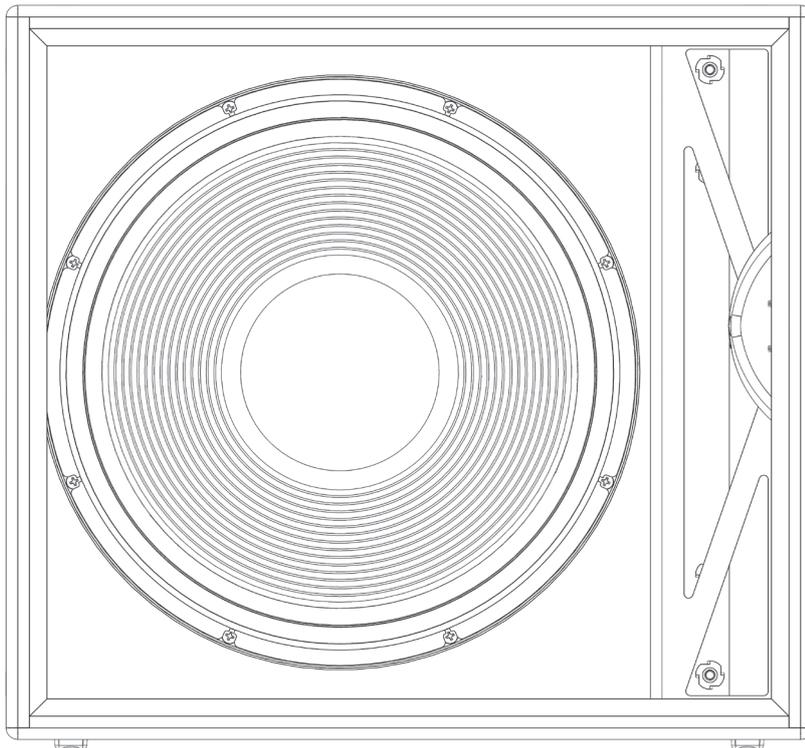


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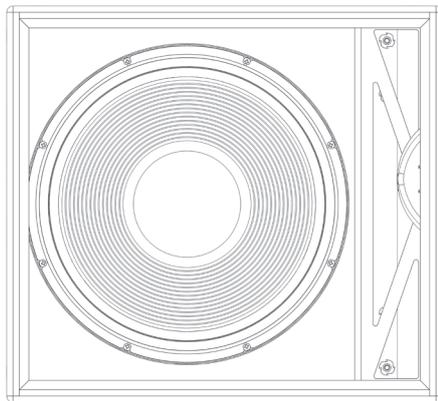
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1 Overview

1.1 Introduction



Thank you for purchasing a PreSonus® CDL Sub18 subwoofer. The CDL Sub18 subwoofer is a 1000W 18" subwoofer with a 4" voice coil. While compatible with any full-range system, the CDL Sub18 was designed to naturally extend the range of the CDL12P and CDL10P loudspeakers for both single box and arrayed configurations.

We encourage you to register your CDL Sub18 subwoofer(s) at My.PreSonus.com and to contact us through the MyPreSonus support portal with any questions or comments regarding this product. PreSonus Audio Electronics is committed to constant product improvement and we highly value your feedback. We appreciate the support you have shown us through the purchase of this product.

1.2 About This Manual

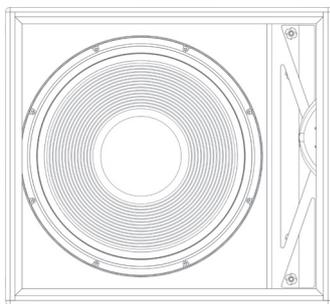
This manual covers hardware features and functions for the CDL Sub18 subwoofer. We suggest that you use the manual to familiarize yourself with the features, applications, and connection procedures for your CDL Sub18 subwoofer before setup and operation.

Throughout this manual, you will find **Power User Tips** highlighting unique aspects of your CDL Sub18 subwoofer.

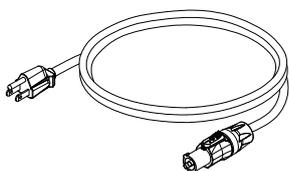
1.3 What is in the Box

In addition to this manual, your CDL package contains the following:

- (1) CDL Sub18 subwoofer



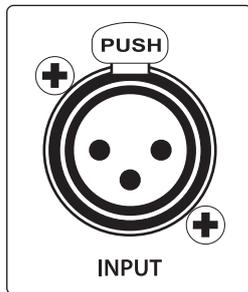
- (1) AC locking 3 conductor 14AWG cord



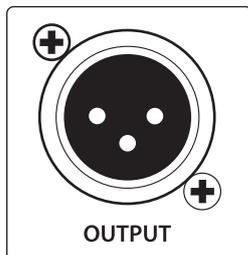
- PreSonus Health and Safety Guide

2 Hookup

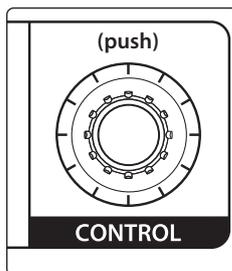
2.1 Rear Panel Connections and Controls



Line Input. Balanced XLR connection for line-level input. Use the Line input to connect the subwoofer to a StudioLive digital mixer or another mixing console, either directly or through the Line out connector on another CDL loudspeaker.



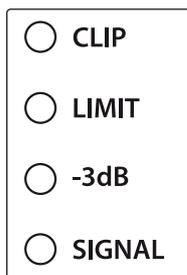
Direct Out. This is the Direct Out for the line input. Use this to connect to another CDL loudspeaker. This output is a passive pass-through of the audio input. Any loss of speaker power will still pass audio to subsequent loudspeakers.



Master Vol. This knob determines the master output level (volume) of the subwoofer power amplifier. It has no effect on the signal level from the direct output. Push this control to access all the DSP functions in the CDL Sub18 loudspeaker.

Power User Tip: A subwoofer can significantly change the frequency response of a full-range system. A 3-way system with a subwoofer will be 6 to 18 dB hotter below 80 to 100 Hz. Set the appropriate level for your subwoofer before adjusting your system EQ.

2.2 Onboard Performance Monitoring



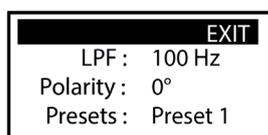
Master Performance Monitoring. These 4 LEDs display the performance status of the internal amplifier:

- **CLIP.** The clip LED illuminates when the input signal has clipping, or when the amplifier exceeds the maximum upper limit (load dependent).
- **LIMIT.** The protection limiter has been engaged when this indicator illuminates.
- **-3dB.** When this LED illuminates, the input signal has exceeded -3 dB.
- **SIGNAL.** This LED illuminates when the input signal exceeds -50 dB.

Power User Tip: Never run your input levels higher than the channel inputs can handle. If you overdrive the A/D converters, it will cause digital distortion (digital clipping), which sounds terrible.

2.3 Onboard Tuning Features

The CDL Sub18 subwoofer has controls for customizing the loudspeaker's performance. To access the controls, press the Master level encoder and turn it to scroll through the menu options. Press the encoder again to select a parameter and adjust it. Press again to continue scrolling.



Level shows the volume level as it's adjusted by the Master Volume encoder.

LPF. Variable LPF

Polarity sets whether the subwoofer's polarity is inverted or not.

Presets. Presets determine appropriate subwoofer settings for selected configuration with CDL speakers. Adjusts the power output.

- **Preset 1.** Full power output for use with two or more CDL loudspeakers per subwoofer.
- **Preset 2.** Lower output for use with one CDL loudspeaker.

Brightness. Adjusts the brightness of the display.

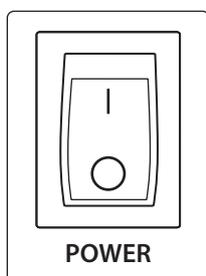
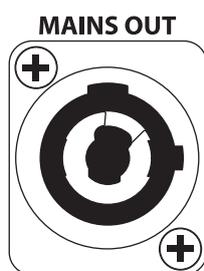
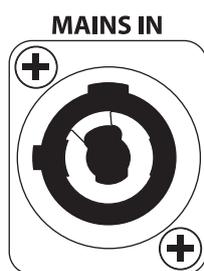
Contrast. Adjusts the contrast of the display.

System Reset. Resets the system settings to factory default.

System Info. Opens the System Information screen.

Exit. Select to return to the Level screen. You will be given the option to save any changes you've made to the DSP settings before exiting.

2.4 Power



AC Line Connection. CDL Sub18 loudspeakers have a universal power with a voltage range of 100-230VAC, 50 - 60Hz. Each loudspeaker is supplied with a locking 3-conductor AC power cord appropriate for the country of sale.

WARNING Do not remove the center grounding prong or use a ground-lift adapter, as this could result in electric shock.

WARNING Connect the power cord to the AC In connection on the amplifier *before* connecting the IEC connection to the AC mains power source.

Power Thru. CDL Sub18 loudspeakers provide loop-thru power. Using locking 3 conductor Loop-thru cables, you can power up to six CDL loudspeakers.

Loop-thru cable connectors are color coded as follows:

- **Blue.** AC In.
- **White.** AC Out.

Power Switch. This is the On/Off switch.

Power User Tip: *If connecting multiple loudspeakers to the same electrical circuit, make sure that adequate line current is available. Maximum current draw for each CDL loudspeaker is 5.45 Amps.*

WARNING The power switch does not cut AC mains power from the loop-thru cables. If AC mains power is connected to one CDL loudspeaker, electrical power will be present on all connected loop-thru cables.

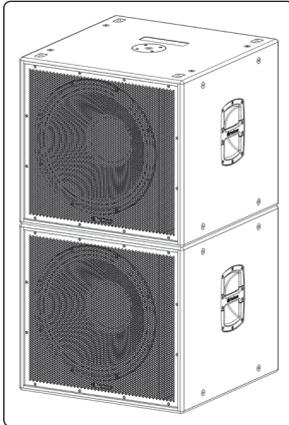
2.5 Connecting Loop-Thru Power

1. Begin by inserting the white connector on the loop-thru cable into the white AC Out connection on the power amplifier.
2. Once the cable is fully seated, twist the connector clockwise to lock it into place.
3. Insert the blue connector into the blue AC In connection on the other CDL power amplifier.
4. Once the cable is fully seated, twist the connector clockwise to lock it into place. Repeat Steps 1-4 for the other loudspeakers you'd like to power.

3 Application and Deployment

3.1 Stacking, Hanging, and Mounting

3.1.1 Ground stacking CDL Sub18 Subwoofer

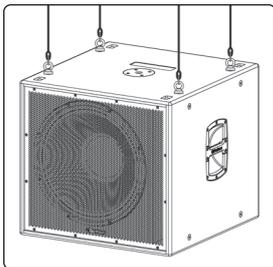


The CDL Sub18 has non-skid rubber feet for applications where the subwoofer is placed on the ground. When stacking another CDL Sub18 atop the CDL Sub18, the feet of the top CDL Sub18 will fit into indentations in the top of the bottom CDL Sub18. This keeps the CDL Sub18 from walking. Provisions should be made to properly secure CDL Sub18s when ground stacked.

Do not stack more than 2 CDL Sub18s.

Do not attempt to pole mount loudspeakers atop ground-stacked CDL Sub18s.

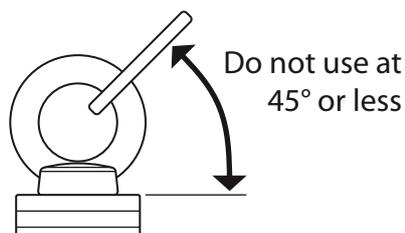
3.1.2 Hanging a CDL Sub18 Subwoofer



The CDL Sub18 requires a minimum of four suspension points to be used. Again, select the strongest overhead structure available. The CDL Sub18 can be flown using the four M10 point on the top or the side.

PreSonus offers an M10 Kit that includes four (4) forged-shoulder steel M10 eyebolts. This kit is to be used with the CDL Sub18 M10 suspension points. These bolts are specifically designed for safe suspension of PreSonus CDL Sub18 subwoofer and must not be substituted. These eyebolts are not a common hardware store item. Please read all included information. A minimum of four (4) eyebolts per CDL Sub18 subwoofer must be used for safe suspension.

⚠ Note: When using the M10-Kit, please remember that the eyebolt strength rating will vary with the pull angle. It is extremely important to observe appropriate pull angles when suspending any loudspeaker with eyebolts. Suspending an object with eyebolts should always be done in a way that ensures the resultant forces are within the allowed pull angles.



3.1.3 Pole Mounting Options

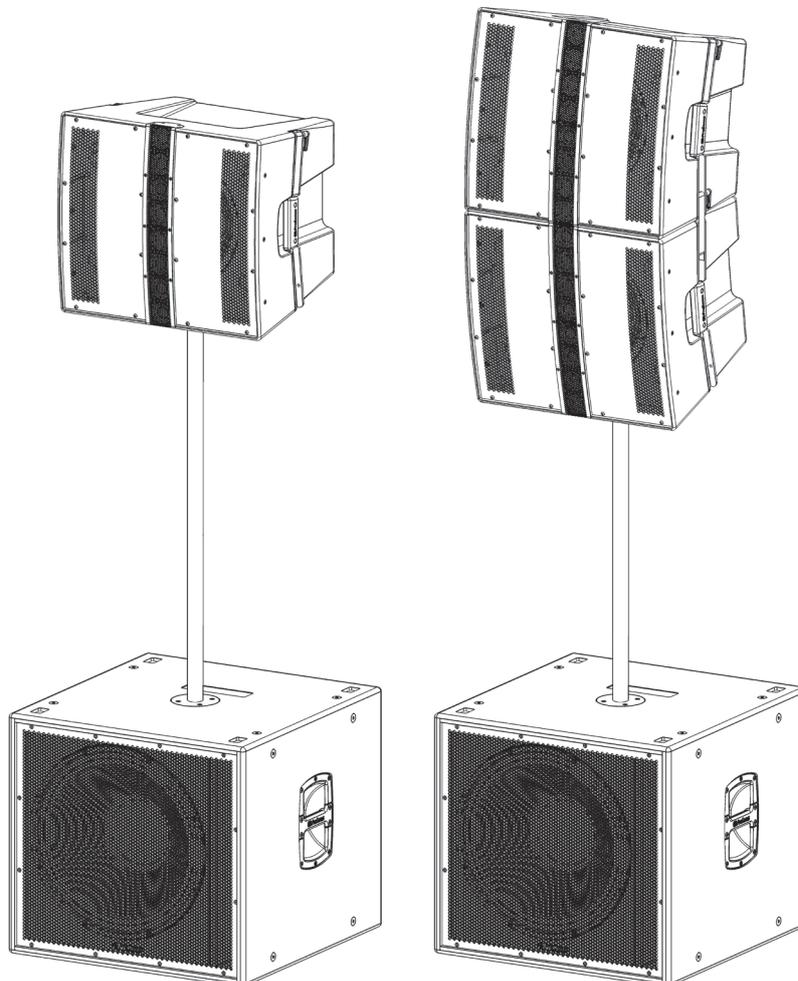
You can mount up to two CDL 12P or CDL 10P loudspeakers on a loudspeaker pole atop a CDL Sub18. A single CDL 12P or CDL 10P may also be mounted atop a CDL Sub18. When mounting atop a supported PreSonus subwoofer, utilize a sub pole that supports the total weight of the CDL loudspeaker(s). **If mounting atop a subwoofer, the elevation height cannot exceed the following guidelines.**

Maximum Sub Pole Height	
(1) CDL12P or CDL 10P + (1) CDL Sub18, CDL 18s, ULT18, or AIR18s	(2) CDL12P or CDL 10P + (1) CDL Sub18 or CDL18s
40"	33.5"

Pole Mounting Instructions

1. Select the pole socket angle for your application (0° or 7.5°).
2. Carefully place one CDL on the loudspeaker pole by inserting the pole completely into the pole socket.
3. If mounting (2 or more) CDL loudspeakers on one pole, place the lower loudspeaker on the pole first, then rig the top one to it.

The mounting pole socket is consistent with industry standards and accommodates standard mounting poles from other manufacturers.



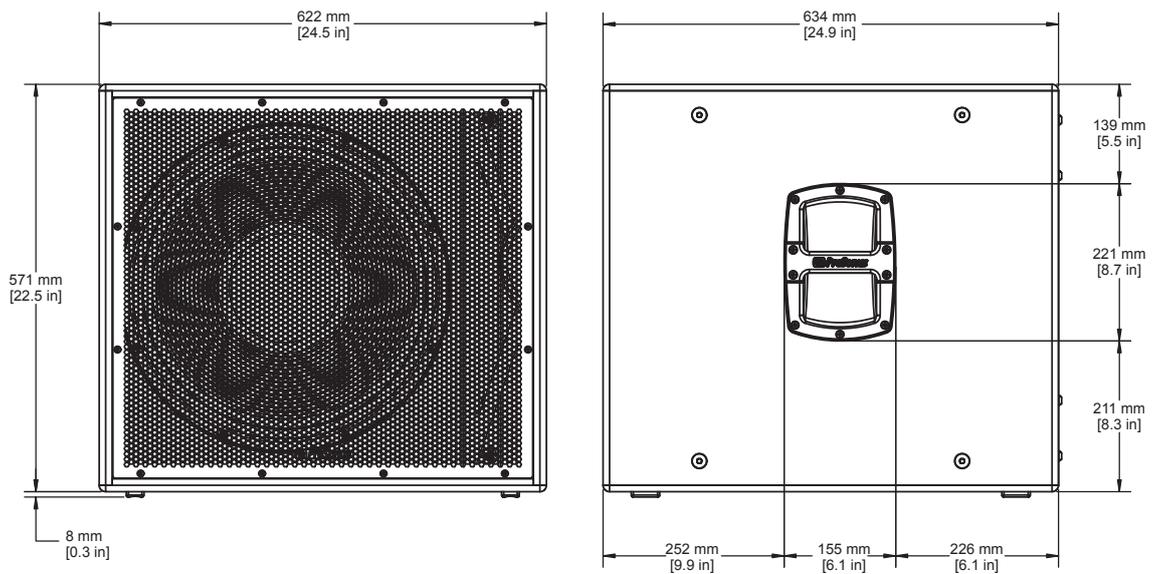
4 Technical Information

4.1 Specifications

Type	Active Subwoofer
LF Driver	18" (4" Voice Coil)
Amplifier Type	Class D
Total System Power	2000W Peak, 1000W Program (500W RMS x 2, BTL)
Frequency Range (-3 dB)	42 Hz – 150 Hz (Variable)
Maximum Peak SPL	135 dB
Input	1 Line (XLR)
Output	Direct Line Out (XLR)
Power Connection	Locking 3 conductor AC connector In and Out
User Controls	LPF, Preset Select, Polarity Invert
Indicators	Clip, Limit, -3dB, and Signal
Enclosure	18mm Eucalyptus plywood
Mounting	<ul style="list-style-type: none"> • M20 Threaded pole receiver, Integrated rigging (10:1 load) • M10 mount points • Support for (4) Ground Stack provisions; • Support for PreSonus Caster Kit; 4 mount points for casters on the rear
Dimensions (H x W x D)	25" x 24.5" x 22.75" (635 mm x 622 mm x 577.8 mm)
Weight	105.8lbs (48kg)
Optional Accessories	Caster Kit, Dust Cover, M10 Hanging Kit

4.2 Mechanical Drawings

CDL Sub18



Added bonus: PreSonus' previously Top Secret recipe for...

Redfish Couvillion

Ingredients:

- ¼ C Vegetable oil
- ¼ C flour
- 1 onion diced
- 1 clove garlic minced
- 1 green pepper diced
- 3 celery stalks diced
- 1 14oz can diced tomatoes
- 1 bottle light beer
- 2 bay leaves
- 1 tsp thyme
- 2 lbs Redfish fillets

Cooking Instructions:

1. In a heavy saucepan or large skillet, heat oil on medium high and slowly add flour a tablespoon at a time to create a roux. Continue cooking the roux until it begins to brown, creating a dark blond roux.
2. Add garlic, onions, green pepper, and celery to roux.
3. Sauté vegetables for 3-5 minutes until they start to soften.
4. Add tomatoes, bay leaves, thyme, and redfish. Cook for several minutes.
5. Slowly add beer and bring to a low boil.
6. Reduce heat and simmer uncovered for 30-45 minutes until redfish and vegetables are completely cooked, stirring occasionally. Break up redfish into bite size chunks and stir in. Add pepper or hot sauce to taste. Do not cover.
7. Serve over rice

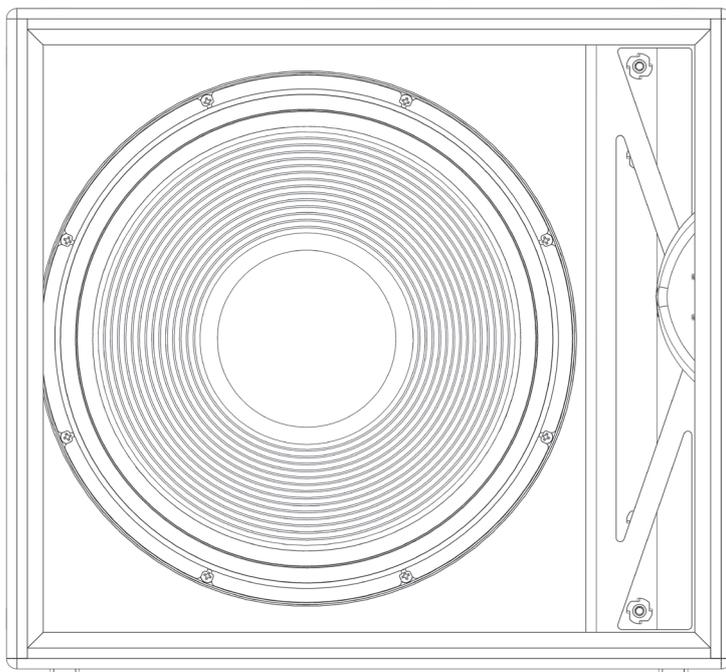
Serves 6-8

While not one of Southeast Louisiana's more famous dishes, Redfish Couvillion is a favorite way to serve our favorite Gulf fish. Also known as Reds or Red Drum, Redfish is not only fun to catch, it's also delicious!

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Register your CDL Sub18. Visit **my.presonus.com** and create or log into your MyPreSonus user account to manage all your PreSonus hardware and software registrations, connect with Tech Support, and more. You can also register using the MyPreSonus app on your mobile device.

Registra tu CDL Sub18. Visita **my.presonus.com** y crea o entra en tu cuenta de usuario MyPreSonus para gestionar todos tus registros de hardware y software de PreSonus, conectar con el servicio de asistencia técnica y mucho más. También puedes registrarte con la aplicación MyPreSonus en tu dispositivo móvil.

Enregistrez votre CDL Sub18. Visitez **my.presonus.com** et créez votre compte utilisateur MyPreSonus ou connectez-vous-y pour gérer tous vos enregistrements de matériel et de logiciels PreSonus, prendre contact avec l'assistance technique, etc. Vous pouvez également vous inscrire en utilisant l'appli MyPreSonus sur votre appareil mobile.



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18011 Grand Bay Ct. • Baton Rouge,
Louisiana 70809 USA • 1-225-216-7887
www.presonus.com

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