
WALRUSAUDIO
MAKO SERIES
ACS1 AMPLIFIER + CAB SIMULATOR
INSTRUCTION MANUAL
[ACS1]



WALRUSAUDIO

MAKO SERIES

The ACS1 is an amplifier and speaker cab simulator delivering the sound and feel of world-class amplifiers, complimentary speaker cabinets, and controllable room size. With the ASC1, players have expansive options to deliver their tone whether it's on stage, in the studio, or practicing at home. Simple controls, stereo in and out, on-board presets, and MIDI support make the ASC1 an immeasurable tool for a guitarist's arsenal.



*The use of an isolated power supply is recommended for powering all Walrus Audio Pedals. Daisy chain power supplies are not recommended.

CONTROLS

Bass - The Bass knob shapes the low end tone stack of the selected amp model. Turn up for a thicker sound and down to help tame muddy pickups.

Mid - The Mid knob shapes the mid range tone stack of the selected amp model. Try this control above noon for punchy raw mid range tones and below noon for more classic scooped sounds.

Treb - The Treb knob shapes the high frequency section of the tone stack on the selected amp model. Turn up for adding sparkle and down for taming harsh pickups.

The tone stack changes with each amp model and is designed such that noon on each knob is a good starting point.

Vol - The Vol knob controls the overall output level of the pedal. It also controls the volume of the headphone out.

Gain - The Gain knob controls the amount of gain through the amp "circuit" within each model. The amount gain and character changes with each amp. The gain knob also affects the overall volume just like a real amp so you may want to increase the volume knob at lower gain settings.

Room- The Room knob engages a tight room reverb meant to give the impression of your amp being mic'd up in various size rooms. Turn it all the way down to disengage and turn it up to add a sense of space to your sound.

A | B | C Cab Switch - The Cab switch lets you select one of six on-board cabinet impulse responses (IRs) to accompany the selected amp model. The ACS1 ships with six cab IRs carefully captured by the Walrus team to compliment our amp models. Users are also able to upload their own favorite IRs to the ACS1 via walrusaudio.io.

The cabs are broken into two groups of three. The "front" three are accessed by simply moving the toggle switch to the desired position. The "back" three are accessed by holding down the bypass switch while moving the cab toggle. To help make this more intuitive, we have laid these out based on the amp we like using them with, but there is no right or wrong. Mix and match however you like!

Front Cabs
A: Fender® Deluxe Replication
B: Marshall® 4x12 Replication
C: Vox® Green Back Replication

Back Cabs
A: Fender® Super Reverb Replication
B: Two Rock® Replication
C: Vox® Blue Back Replication

L + R Switch - The L+R switch is an important control as it selects which channel the controls will affect. For setting up the ACS1 with similar sounds on both left and right channels, set this switch to the "+" position. Any changes made to a control will sync that parameter across both channels. Select an amp and it will be applied to both sides. Dial-in the tone stack, and it will match on both sides, and so on.

Use the outer switch positions, "L" and "R", for crafting different amp sounds on the left and right channels. Set the switch to the "L" position and use the controls to dial in the desired sound for the left channel. Similarly, set the switch to the "R" position and use the controls to dial in the desired sound for the right channel. You can use this process for things like selecting different cabs for each channel all the way to dialing in a totally different amp and cab combo on the left and right side.

Use the volume knob on each side for balancing the overall level of each amp when crafting unique sounds on the left and right channels.

CONTROLS

Amp Switch (Fullerton | London | Dartford) - The Amp switch selects between one of three classic amp models built into the ACS1. Each amp's circuit topography was meticulously modeled to bring as much feel and character from the amp to the pedal as possible.

Fullerton: Inspired by the classically bright and clear Fender® Deluxe Reverb. Crisp clean tones with loads of headroom that players have come to love over the years.

London: Inspired by a 1962 Marshall® Bluesbreaker with a harmonically rich, valve-driven breakup. Articulate and sensitive response.

Dartford: Inspired by the legendary jangly high-end tones from a 1960s Vox® AC30 with all the bite and chime from the British Invasion.

Bypass Switch - Click to turn the pedal on and click again to turn the pedal off.

Bypass LED - Indicates if the pedal is on or off by illuminating solid when on, and off when the pedal is off.

Boost Switch - The Boost switch, when engaged, applies a percentage volume and/or gain boost to the current volume and gain settings of your preset. To set the boost amount, press the boost switch. The LED light will flash showing that the boost is on. Use the volume and gain knobs to set boost levels. Press the boost switch again to confirm settings. When you disengage the boost switch, the pedal will remember your boost settings in the preset for the next time you engage the boost switch.

Preset/Boost LED - The Preset LED lights up the color of the selected preset – Red, Green, or Blue. When a knob is turned, this LED turns purple to indicate the preset has been modified. When that knob crosses its saved position, the LED changes back to the color of the currently selected preset to let you know its last saved position. This is helpful when you want to tweak a parameter on a preset but cannot remember where a knob was last saved.

Guitar Inputs and Outputs – The ACS1 offers multiple input and output configurations and features true bypass circuity.

- Mono In / Mono Out
- Mono In / Stereo Out
- Stereo In / Stereo Out

Headphone Jack - The ACS1 features an on-board headphone output for quite practicing. Simply connect your headphones and adjust the Volume knob to raise and lower the headphone volume.

USB - Used to load IR files and update firmware via computer via walrusaudio.io.

PRESETS

The ACS1 includes 128 total presets slots. The first three presets are accessible from the pedal using both stomp switches.

All 128 are accessible via MIDI Program Change messages which are outlined in the MIDI section.

- **To recall a preset:** Simply press both stomp switches at the same time to scroll through the three on-board presets - red, green, and blue then back to red.

- **To save a preset:**
  1. Navigate to the preset in which you want to save a new sound.
  2. Using the knobs and switches, dial in the desired sound. The preset LED will turn purple indicating the preset has been modified.
  3. To save, hold down the Bypass and Tap switches until the LEDs stop blinking. The preset is now saved.

MIDI

The ACS1 can be controlled via standard MIDI messages. Simply connect your MIDI controller to the ACS1 MIDI "IN". Downstream MIDI devices can be connected to the MIDI "THRU" which simply lets all incoming MIDI messages pass through to your other MIDI devices. The ACS1 ships with the MIDI channel set to 1 by default

- **To assign the MIDI device channel:**
  1. Hold down both stomp switches at power up then release once the LEDs begin flashing white.
  2. Now send a MIDI Program Change message on the desired MIDI channel for the pedal.
  3. The LEDs will flash green momentarily, and the pedal will save that MIDI channel and only respond to messages on that channel until the user changes it again.

- **MIDI In** – Connect upstream MIDI devices or your MIDI controller to the ACS1 MIDI "IN".
- **MIDI Thru** – Connect downstream MIDI devices to the ACS1 MIDI "THRU".
- **MIDI PC** – Presets on the ACS1 are able to be recalled via MIDI program change messages. Simply send a program change message corresponding the desired preset to be recalled on the ACS1 MIDI channel. See the table on the next page for a list of ACS1 presets and how they map to program change messages.



MIDI

PRESET	MIDI PROGRAM CHANGE (PC)
Red	0
Green	1
Blue	2
Accessible via MIDI	3-127

- **MIDI CC** – Most parameters on the ACS1 can be controlled via MIDI CC messages. The list below shows all applicable MIDI CC numbers and their associated parameters and control values.

PARAMETER	MIDI CC #	MIDI CC Value
Bass	3	0-127
Mid	14	0-127
Treb	15	0-127
Vol	20	0-127
Gain	21	0-127
Room	22	0-127
Cab Switch	27	Front A: 0-20, B: 22-42, C: 44-64 Back A: 66-86, B: 88-108, C: 110-127
L + R Switch	28	Left: 0-42, Middle: 43-85, Right: 86-127
Amp Switch	29	Fullerton: 0-42, London: 43-85, Dartford: 86-127
Bypass Switch	30	Bypass = 0, Engaged = 127
Boost Switch	31	Bypass = 0, Engaged = 127

GLOBAL PREFERENCES

Factory Reset - Use the following procedure to restore the pedal to its factory settings.

1. Hold both stomp switches while applying power.
2. Continue holding both stomp switches for longer than 10 seconds.
3. After 10 or more seconds, release both stomp switches and your pedal is now reset.

WALRUSAUDIO.IO

Walrusaudio.io is a simple interface to update your pedal's firmware and to load your own cabinet IRs. To connect to your computer, you'll need a micro USB sync cable. Some micro USB cables are only designed to charge devices. Make sure you have one that is able to sync for your computer to recognize the pedal.

To upload your own speaker IRs:

1. Connect the USB cable to the ACS1 and power on the pedal.
2. Click on the ACS1 pedal image.
3. Click on IR Manager.
4. Find the slot that you wish to change and click edit.
5. Click Choose IR file to upload your IR. Note the ACS1 accepts 24-bit 48kHz .wav IR files.



*Note: To use all features of walrusaudio.io, you must be connected through a desktop computer running Google Chrome. Mobile devices do not offer syncing and updating capabilities.

UPDATES

We occasionally may have new features and updates for the ACS1.
These will be made available through:
walrusaudio.io

Scan the code below to be the first to know when any firmware updates are available.

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WALRUSAUDIO.COM

Got questions?
customerservice@walrusaudio.com.

Need a repair?
repairs@walrusaudio.com
All our pedals come with a limited lifetime warranty.

Visit walrusaudio.com/pages/warranty-and-repair for more info.