

PRO-CHOP

Contact customer service at **WWW.gig-fx.com** for further information

gig-fx, Inc. 1050 Winter Street, Suite 1000 Waltham, MA 02451

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Patents applied for.

Operating Manual

PATENTS PENDING WORLDWIDE

nouncing the MEGA-WAH: Classic Wah: Mono or STEREO Mega-Wah: Wah on steroids Trig-Wah: Note-triggered • Auto-Wah: Variable frequency • **Reverse-Wah:** Unique Foot-volume control: Noiseless Check it out on www.gig-fx.com

Safety first

Electrical faults can kill you.

In the music world, the most common form of electrical shock occurs when the musician forms a path for an electrical current between two different circuits where one of them is faulty. Usually this is caused by holding a guitar plugged into one circuit and touching a microphone which is plugged into a different circuit. If one of the circuits (or a piece of equipment in the path) is faulty, there is a real danger of electrical shock.

gig-fx pedals offer the possibility of working in stereo using two amplifiers. If one of your amplifiers is connected to a different electrical circuit from the other, you need to make sure that both circuits are wired correctly. Use a 'mains tester' from an electrical or hardware store to test the mains outlets. It should indicate that the 'Live' (Hot), Neutral and Ground are all present on the correct pins.

NEVER USE outlets which are not wired correctly. If you have ANY doubt at all, please call an experienced electrician.

In addition to the above, make sure your amplifiers are wired correctly and have not been modified by inexperienced personnel. Beware of amplifiers that have switches that reverse polarity or lift ground connections. When touring in foreign countries, make sure your amplifiers are set for the correct voltage. If you use a transformer to change the mains voltage from 110VAC to 220VAC or vice versa, use a mains outlet tester to make sure the output of the transformer is correctly wired and the ground is connected.

What to expect The **PRO-CHOP** will challenge your imagination and creativity.

Unlike the myriad of 'me too' effects out there, the **PRO-CHOP** can produce TOTALLY ORIGINAL sounds. For example, the PRO-CHOP can generate a sound that captures the richness and texture of a multi-tracked delay but without the repeated note hanging on. Given the wide variety of settings, you can achieve unique sounds that will define your song or signature sound.

The **PRO-CHOP** can also be employed to reproduce best-in-class classic sounds such as a tremolo, rotating speaker or the chopped sounds hitherto associated with synthesizers, but on top of all this, the **PRO-CHOP** can produce never-heard-before sounds that will inspire you to write the effects into your original compositions. Sync it up with your PC recorder or a MIDI beat and you will be creating some unbelievably cool grooves in no time.

Hooking it up

If you use a lot of gain, it is better to put the **PRO-CHOP** last in the chain of effects. This will retain the signal-to-noise ratio. HOWEVER the **PRO-CHOP** can be followed by note-triggered effects to create some amazingly funky sounds.



In conclusion, providing that one of the amplifier grounds is still present throughout the circuit, it should be safe to lift one of the grounds and any ground-loop buzz should buzz off.

Powering it up - AC Adapter

The preferred adapter is a regulated 9V DC supply class 2 adapter with minimum 50mA output current capability. Most commercially available 9V adapters designed for pedal effects will work (2.1mm diameter plug)). No harm will come to the unit if the power supply jack has the wrong polarity, but double check that the center-pin of the power jack is negative polarity.

Ground loops (the kind of buzz you don't want)

Sometimes, when working in stereo, an annoying hum or buzz will appear when two amplifiers are used. This can occur when the amplifiers are plugged into two separate circuits, or if either of the amplifiers has some internal wiring issues, or if the large ground loop forms an antenna. Test the mains outlets using a mains tester as described in the safety warning in this manual or call an electrician to test the outlets.

Once you have verified that the outlets are wired correctly, you can usually solve the problem by disconnecting ('lifting') ONE of the grounds on the amplifier circuits (NOT BOTH – IT IS DANGEROUS TO PLAY WITHOUT ANY GROUND AT ALL). In the US, you can do this by using a 'ground lifting' plug which eliminates one ground connection. In Europe or elsewhere that uses three-pin plugs, you may need to use a specially adapted plug that does not have a ground connection. Consult an electrician first if you need to modify any 220V mains connections. 220V is a deadly voltage.

Battery Power

By-Passing the unit

The unit can be operated on a single 9V battery and will be 'on' and drawing current as long as there is a ¼" jack plug inserted in the input jack socket. To replace battery, unscrew the smaller base panel as indicated underneath the unit. When the battery is running low, the most likely event is that the unit will fail to turn off as there is insufficient current to drive the optical switch.

The **PRO-CHOP** draws around 30mA giving a reasonable battery life but it is recommended that you use a power adapter on



important sessions or gigs. Be aware that if your power supply does not supply enough current to power all your effects, power supply noise can increase substantially or cause other unwanted sound defects. To preserve battery life, always unplug the input jack when pedal is not in use.

Pedal Board Mounting

Attach strips of self-adhesive Velcro sufficient to cover the rubber pads on the base plate of the pedal. Do not put Velcro in the middle of the pedal base plate as it will stress the plate if the pedal is ever removed from the pedal board. Cover your pedal board with matching opposite strips of Velcro et vôila!



The unit is by-passed if the pedal is in the full-back position. You will not feel any switch as it is a noiseless, wear-free optical switch. The effect will turn on when the pedal is depressed. When bypassed, neither the Chop nor Pan LED will be illuminated. Please note, even when by-passed, the pedal will draw current as long as there is a jack plug inserted in the input jack socket so to preserve battery life, remove jack plug when pedal is not in use. The nature of the bypass is a silicon switch (as opposed to a mechanical switch) which has an open bandwidth and will not affect the harmonics or integrity of your sound, and provides a silent switching mechanism.

Stereo v. Mono

12

14

16

The **PRO-CHOP** can be used as a mono device or a stereo device, however, the **PRO-CHOP**'s sound effects are much more entertaining in stereo. It is HIGHLY recommended to use the device in a stereo set up either by using a stereo amplifier, two amplifiers or by using two channels in a PA, stereo preamp, or mixer - each panned alternately to the left and the right.

The **PRO-CHOP** produces many original and melodic effects in stereo. Think about it ... on a recording, your instrument is rarely confined to one side or another, it is always in stereo, and many productions require panning or other effects which sound much better in stereo, now your live performance need not be limited to mono and you have control of the sounds with a foot pedal.



11

15

17

"SNC" (MIDI)

(Pedal)

(Preset) CHOP RATE (Pedal)

If chop

displayed: "SNC" (MIDI) If PAN displayed: "PAN RATE"

SELECTED

RATE PAN OR CHOP

23

25

M CHOP RATE

Flashing CHOP RATE

MODE SELECTOR SWITCH (top right)

- Put the **PRO-CHOP** in CHOP mode and the unit produces unique chopped sounds by modulating a signal from an 'off' state to an 'on' state at various frequencies (rate)
- using a variable on / off duty cycle (ratio) • In mono, the chop signal is a dramatic sound that can be used as a rhythmic musical 'chant', or a groove, or when the rate is varied by the pedal, the chop can be sped up or slowed down to produce dramatic effects such as a helicopter, motorbike, machine gun, or spacey sounds like no other.
- In CHOP mode, in stereo, the left side is on at the same time as the right side is off so the signal alternates left and right seamlessly. The ratio controls the pulse length on either side according to the direction you turn the knob.

BLEND MODE:

- In this mode, the **PRO-CHOP** combines the chop sound with a PAN cycle. Both the Chop wave and the PAN wave work independently. The chop rate and 'ratio' and the PAN frequency and depth can all be varied independently to produce a variety of effects.
- In this mode, the **PRO-CHOP** can be combined with other effects such as a wah or synth wah to produce some startlingly original effects. The sound in the blend mode can be used to emulate the intro to the Who's famous song, You Won't Get Fooled Again, which was the inspiration for the **PRO-CHOP**.

SHAKE MODE:

- In this mode, the chopped signal and PAN cycle are combined with some out of phase trickery to produce
- The chop rate, ratio, PAN rate and depth can all be varied independently to produce stunning never-heard-before effects, such as delay emulation (sounds like a delay and has all of the texture - but none of the hanging repeats).

STIR MODE:

- This is the PAN wave by itself, which, when used in mono, produces a tremolo effect.
- The **tremolo** goes where other tremolos do not go...all the way from zero sound to full on, and down as low as 0.3Hz.
- like a repeated swell sound. Control the rate either by the pedal or a preset. Adjust the depth to suit.
- When used in stereo, the STIR mode becomes an AUTO-**PANNER.** The signal will gradually PAN from left to right at the rate set either by the pedal or a preset rate.
- A LESLIE rotating speaker emulator can be achieved by putting the **PRO-CHOP** in STIR mode and using the pedal to vary the 'speed of rotation' to produce a startlingly realistic Leslie effect. If you add a subtle flange / chorus to your guitar sound it will sound very 'Hammondish'.

SLIDE SWITCHES

- There are two slide switches, one on the left side of the **PRO-CHOP** and one on the right. The switch on the left controls the CHOP parameters, whereas the switch on the right controls the PAN parameters
- If either slide switch is in the 'Pedal' position, the chop or PAN rates (frequency) can be varied by the pedal being moved up and down. By putting the slide switches to 'Preset', the frequencies are adjusted by means of the 'rate' controls on each side. Either the Chop or the PAN effects are independent and therefore the rates can either be preset or adjusted by the pedal. Usually, the preset knobs can give a little extra range, so, for example, if you want a really slow pan, use the pre-set rather than the pedal.

RATE CONTROLS	DEPTH CONTROL (PAN or tremolo only)
• There are two rate controls, one on the left side of the PRO-CHOP and one on the right. The control on the left controls the CHOP frequency, whereas the control on the right controls the PAN frequency. The rate controls are operative if the relevant slide switch is set to 'preset' and	• The depth control adjusts the modulation depth of the PAN (stereo) or Tremolo (mono). The PRO-CHOP modulation depth goes all the way to 'off' giving a 100% PAN effect of a very deep tremolo pulse.
by-passed if the slide switch is set to 'Pedal'. These rate	MIDI Sync
controls can be over-ridden if a MIDI signal is presented.	The PRO CHOP can be superid to a MIDI beat from a drum
RATIO CONTROL (Chop only)	machine, PC recording software or a synthesizer. The idea is to
In mono, the ratio control adjusts the ratio of the Chop 'ON' time to 'OFF' time. If turned to the left, the pulse becomes very short, giving a dramatic Chop sound. As the knob is turned to the right, the pulse gets longer and the interval gets shorter. In stereo, if one pulse is long, the other is short.	other pedal effect can give. Simply hook up the MIDI out from the PC / drum machine to the PRO-CHOP and the PRO-CHOP will automatically detect the beat and sync to it. When engaged with MIDI, the pedal will allow the MIDI clock signal to control the 'rate' of either the CHOP or PAN according to how the pedal is set. The treadle unit then becomes an off -on switch. When turned on, the PRO-CHOP will be automatically in sync. It is a stunning and original effect never before available in a pedal.



CHOP

CHOP

CHOP

CHOP

BLEND/SHAKE

BLEND/SHAKE

BUTTONS	SETTING 1	SETTING 2	SETTING 3	SETTING 4
SCROLL BUTTON:	M (MIDI)	Number of	Chop or Pan	Hz or BPM
Selects a		Chops or Pans		(beats per
parameter to		per MIDI beat		minute)
modify				
MODIFY BUTTON:	OFF/ON	Scroll Through	Select one	Select
Modifies the		1x, 2x, 3x,		which one
selected		4x, 8x-		you prefer
parameter.				to monitor
	Disables/	Multiplies	Determines	Selects
	Enables	modulation	which Rate is	rate
EXPLANATION:	MIDI Input	rate when	displayed	display in
	Port	Sync'd to MIDI	Chop (C) or	either Hz
			Pan (P)	or BPM
2				

RO-CHO	P BEHAVIOR		SIGNAL F	RESEN	T Cont	Additional Features	
OTARY WITCH ETTING ND/SHAKE	CHOP PEDAL/PRESET SWITCH SETTING PRESET PEDAL	PAN PEDAL/PRESET SWITCH SETTING NA	MIDI DETECTED NO NO	MIDI DISPLAY ICON Flashing "M"	NUMERIC DISPLAY SELECTED RATE PAN OR CHOP SELECTED RATE	DISPLAY BACKLIGHTTurns LCD display off to conserve battery power- Press th Button once. Press it again to turn the Backlight backDISPLAY "SLEEP" MODETo Disable the LCD Display entirely, Press and Hold the Button and then Press the Left Button. To Enable the LCD display, press the Left Button on REMEMBER PREVIOUS SETTINGSREMEMBER PREVIOUS SETTINGSThe unit will AUTOMATICALLY power up in the last state being powered down.	e Rig ON. Righ ce. prior
STIR	NΛ	PRESET	VES	"\\\"	PAN OR CHOP	Safety, EMI	
STIR	NA	PEDAL	YES	"M"	PAN RATE (Pedal)	This unit is compliant with:	
STIR	NA	PRESET	NO	Flashing "M"	PAN RATE (Preset)	 FCC requirements for conducted and radiated emission EMI as described in CISPR 22 EMI requirements as described in EN55013 	S
STIR	NA	PEDAL	NO	Flashing "M"	PAN RATE (Pedal)	 UL listing not required if used with class 2 (limited curpower supply or 9V battery CE norms 	ren



PRO-CHOP BEHAVIOR WITH MIDI SIGNAL PRESENT:

NA

NA

NA

NA

NA

YES

YES

NO

NO

YES

YES

"M"

"M" Flashing "M"

"M"

PRESET

PEDAL

PRESET

PEDAL

PRESET

PEDAL

ROTARY	СНОР	PAN	MIDI	MIDI	NUMERIC
SWITCH	PEDAL/PRESET	PEDAL/PRESET	DETECTED	DISPLAY	DISPLAY
SETTING	SWITCH SETTING	SWITCH SETTING		ICON	
BLEND/SHAKE	PRESET	NA	NO	Flashing	SELECTED
				"M"	RATE
					PAN OR CHO
BLEND/SHAKE	PEDAL	NA	NO	Flashing	SELECTED
				"M"	RATE
					PAN OR CHO
STIR	NA	PRESET	YES	"M"	"SNC" (MID
STIR	NA	PEDAL	YES	"M"	PAN RATE
					(Pedal)
STIR	NA	PRESET	NO	Flashing	PAN RAT
				"M"	(Preset)
STIR	NA	PEDAL	NO	Flashing	PAN RAT
				"M"	(Pedal)

How to get the sounds...

26





35



34

All gig-fx pedal products are tested three times - once with a scope looking for correct waveforms, one electrical test on the bench before assembly, and then a final full audio test and visual examination prior to packaging. Having said all this, some components can change characteristics or fail without our permission so if you have a problem, please let us know.

Adjusting pedal resistance

gig-fx pedals can be adjusted for resistance to movement. If the pedal is too loose or too tight for you, you can adjust to your liking. Having said this, if the pedal is too loose, it can cause the bypass not to work if it does not stay in the back position.

To adjust the pedal resistance, you will need a 10mm crescent wrench and a Philips screwdriver. Most wrenches can fit in the cavity so that they can hold the locking nuts, but some are too fat and the wings need to be filed or ground a bit in order to fit in the limited space. If you do not have one, gig-fx will send you a wrench free of charge. Insert the wrench into the cavity under the pedal from the back and locate the locking nut into the jaw of the wrench so that the nut is held. Now use the screwdriver to tighten or loosen the screw to provide the resistance of choice. Be careful to tighten both sides evenly. If you have a spring-scale, such as those used for weighing fish, the correct uplift force need to lift the front of the pedal is in the range of 1kg (2lbs), but if not, just set it so that is tight enough to stay in the off position or any other position, but not so tight it is stiff to move with your foot. Let your foot be the judge, as it is much stronger than your hand. DO NOT OVERTIGHTEN as the locking mechanism might get damaged.