

User's Guide

OD820 Over Drive Pro.

DS830 Distortion Master

CS550 Stereo Chorus

PH350 Rotary Phaser

AD999 Analog Delay

◆SAFETY PRECAUTIONS◆

Be sure to read these precautions before use for your safe use of the equipment.
Keep this User's manual on hand for future reference whenever you need it.

◆安全上のご注意◆

機器を安全にご使用いただくため、ご使用前にこの取扱説明書を必ずお読みください。
そのあとは大切に保管し、必要になったときにお読みください。

SAFETY PRECAUTIONS

Please be sure to observe. The safety precautions listed below are intended to ensure your safety whenever you use the equipment.

■ Precaution text is generally accompanied by the following symbols to alert you and others to the risk of personal and material injury that may be caused if the precaution is ignored.



Warning

This symbol indicates an item that can result in death or serious personal injury if ignored.



Caution

This symbol indicates an item that can result in serious personal injury or material damage if ignored.

■ Precaution text is generally accompanied by the following icons to alert you and others to things you should or should not do.



..... A triangle indicates something you should be careful about.



..... A circle with a line through it indicates something you should not do.



..... A black circle indicates something you must do.

Warning



NEVER OPEN THE CASE

NEVER OPEN THE CASE

• Never try to remove the bottom cover except for battery replacement and to modify the equipment. (Internal components of the equipment use high voltages, and exposing them creates the danger of fire and electrical shock.)



STOP THE USE IN CASE OF A PROBLEM

• Stop using the equipment whenever you notice smoke or a strange odor coming from it.



• Contact your original dealer or nearest authorized service provider for service.

Immediately
unplug AC
adaptor from the
power source



Warning



BEWARE OF HEAT BUILT UP

•Never cover AC adaptor with cloth or other objects.

〈Built up heat creates the danger of the equipment deformation and fire.〉



Caution



USE SPECIFIED AC ADAPTOR ONLY

•Be sure to use only the AC adaptor specified in this User's Guide. Use of non-specified AC adaptors creates the danger of fire and electrical shock.



UNPLUGGING AC ADAPTOR

•Never try to unplug AC adaptor while your hands are wet. Doing so creates the danger of electrical shock.

•When unplugging AC adaptor from the power source, be sure to grasp the adaptor. Never pull on the cord. Doing so can damage the power cord and create the danger of fire and electrical shock.



WATER, HUMIDITY, DUST AND HIGH TEMPERATURES

•Never leave or use the equipment in bathrooms, the outdoors or other areas subject to water, high humidity, dust and high temperature. Doing so creates the danger of fire and electrical shock.



LEAVING THE EQUIPMENT UNATTENDED

•Whenever leaving the equipment unattended for long periods, be sure to unplug AC adaptor from the power source. If not, there is a danger of fire.

Immediately unplug AC adaptor from the power source

OD820 Over Drive Pro.

- OD820 is overdrive for professional that creates expressive guitar tone which reacts to your fingering and picking touch, making the best use of guitar and amplifier's character. It also serves as a gain booster to naturally turn up the output level without changing original guitar tone.
- OD820 becomes true bypass at NORMAL(effect off) and sends natural tone signal to amplifier.

FEATURES AND CONTROLS

① DRIVE

(drive control knob)

Combines functions of Clean Booster and Overdrive by using a Dual-unit potentiometer. At zero (complete counterclockwise position), there is no distortion and pure, clean signal is processed through Tone and Level sections of the pedal. As knob is rotated clockwise distortion is blended in against clean signal until, at full clockwise position, signal is completely distorted. So, at 12 o'clock position, signal is 50% clean and 50% distorted.

② TONE

(tone control knob)

Controls effect tone. Rotate this volume clockwise to emphasize middle and high tone.

③ LEVEL

(level control knob)

Controls output level of effected tone. Typically output levels of both normal tone and effected tone should be adjusted to equal levels.

④ DC. IN

(power input jack)

A jack to connect AC adaptor.

⚠ Set amplifier's volume the minimum before connecting AC adaptor to OD820 in order not to damage other connected equipment.

⑤ NORMAL/EFFECT

(normal/effect switch)

Switch for effect on/off. Stepping on this switch alternately turns effects on (LED on) and off (LED off).

⑥ INDICATOR

(LED indicator)

It lights on when effects are on and lights off when effects are off.

※ It also indicates battery condition. Dark or no LED light indicates the battery is low or not installed. In that case unscrew four screws on the bottom cover and replace the battery.

⑦ INSTRUMENT

(input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when you put a plug into this jack. Pull out the plug when not in use.

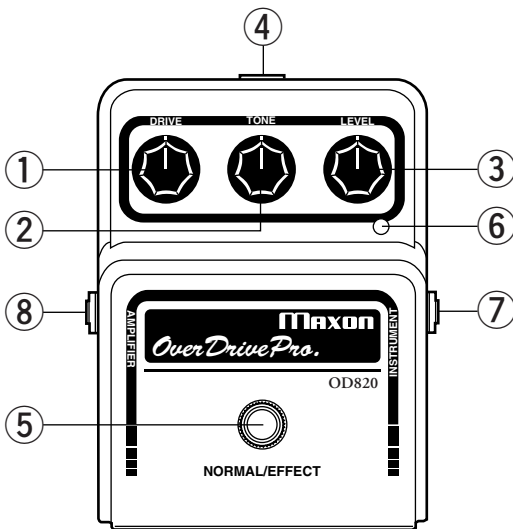
⑧ AMPLIFIER

(output jack)

Output jack to connect to the input of amplifier or other effects.

Feature of OD820

- Reliable footswitch and easy-to-see LED for trouble-free performance
- Internal voltage doubler takes 9 VDC input from battery or AC adaptor and converts it to +9V/-7V, increasing input headroom and eliminating unintentional distortion.



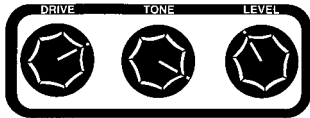
OD820 SAMPLE SETTING



● Fat boost

(AMP : Clean)

Booster setting to make your clean solid state amp firm and fat.



● Vintage tweed

(AMP : Clean)

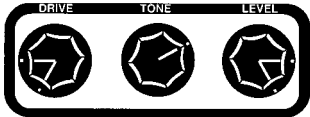
OD820 with clean amp creates firm and bluesy tone.



● Crunch-Overdrive select

(AMP : Drive)

OD820 shows its stuff here, making best use of amplifier's character. Set your amplifier crunchy and use OD820 as channel selector between crunch/overdrive.

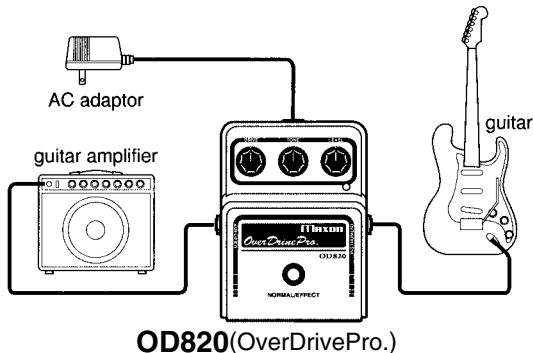


● Gain booster

(AMP : Drive)

Booster setting for dirty amp lovers. It's for lead guitar, with straight gain boost of amplifier's output for better sustain and level.

OD820 CONNECTION DIAGRAM



OD820 SPECIFICATIONS

Input impedance	:500Kohms
Output impedance	:10Kohms or less
Equivalent input noise	:-107dB (VR max.)
Residual noise	:-98dB (LEVEL VR min.)
Maximum gain	:46dB (VR max.) (at 1KHz)
Maximum output level	:+16dB (at 1KHz)
Current consumption	:19mA at 10VDC / 18mA at 9VDC
Control	:DRIVE, TONE, LEVEL
Switch	:NORMAL / EFFECT
I/O terminal	:INSTRUMENT JACK, AMPLIFIER JACK
Power supply	:6F22 9V manganese dry battery or Maxon AC adaptor
Dimensions	:117(W)X150(D)X60(H)mm
Weight	:500g
Accessories	:Maxon AC adaptor
Options	:Maxon AC adaptor (See page 24)

※0dB=0.775Vrms

DS830 Distortion Master

- DS830 is for fat distortion at middle and bass range as well as long sustain. You can feel much sound pressure and powerful low end even with small amplifier.
- DS830 creates real and natural distortion without spoiling your guitar and pickup's character. And you can make various sounds with wide range EQ.

FEATURES AND CONTROLS

① GAIN

(gain control knob)

Controls distortion and sustain level. Rotate this volume clockwise for more distortion and sustain.

② BASS

(bass control knob)

Controls effect tone. Rotate this volume clockwise to emphasize low range.

③ TREBLE

(treble control knob)

Controls effect tone. Rotate this volume clockwise to emphasize high and middle range.

④ LEVEL

(level control knob)

Controls output level of effected tone. Typically output levels of both normal tone and effected tone should be adjusted to equal levels.

⑤ DC. IN

(power input jack)

A jack to connect AC adaptor.

⚠ Set amplifier's volume the minimum before connecting AC adaptor to DS830 in order not to damage other connected equipment.

⑥ NORMAL/EFFECT

(normal/effect switch)

Switch for effect on/off. Stepping on this switch alternately turns effects on (LED on) and off (LED off).

⑦ INDICATOR

(LED indicator)

It lights on when effects are on and lights off when effects are off.

※ It also indicates battery condition. Dark or no LED light indicates the battery is low or not installed. In that case unscrew four screws on the bottom cover and replace the battery.

⑧ INSTRUMENT

(input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when you put a plug into this jack. Pull out the plug when not in use.

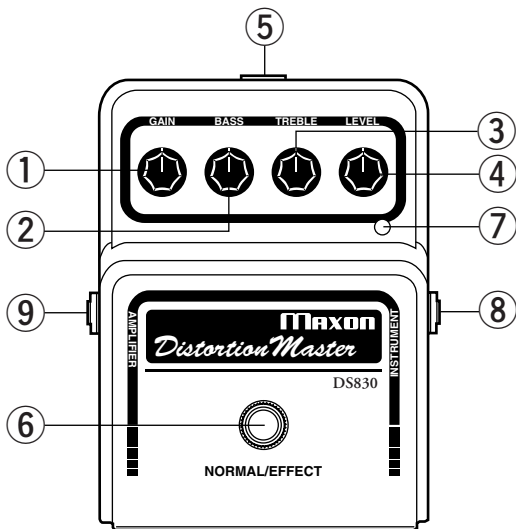
⑨ AMPLIFIER

(output jack)

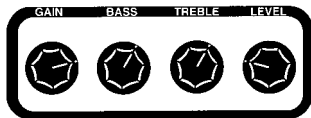
Output jack to connect to the input of amplifier or other effects.

Feature of DS830

- Reliable footswitch and easy-to-see LED for trouble-free performance.
- Two types of power supply-9V battery or Maxon AC adaptor.



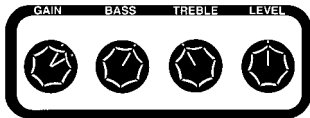
DS830 SAMPLE SETTING



● DS830 Custom distortion

(AMP : Clean)

Smooth distortion sound. Good response to picking and volume even at high gain level. It's for single-coil pickup.



● High power stack

(AMP : Clean)

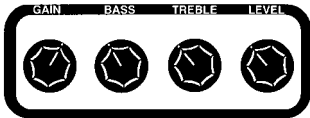
Powerful drive sound for humbucker. Your small practice amplifier turns into a stack amp with high gain sound.



● Crunch / lead drive

(AMP : Drive)

Add DS830 to amplifier's crunch sound for two channel switching between crunch / lead drive, or between clean / crunch / lead on amplifier with clean / crunch select.

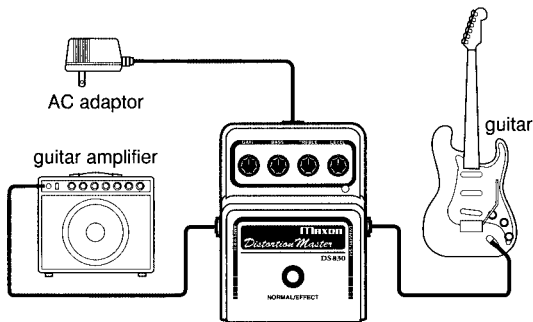


● Heavy drive

(AMP : Drive)

Massive distortion sound with subdued high range tone. The trick in this setting is to keep your amplifier's drive level low. And control the sound weight with DS830's BASS knob to match the character of your guitar and amplifier.

DS830 CONNECTION DIAGRAM



DS830(Distortion Master)

DS830 SPECIFICATIONS

Input impedance	:500Kohms
Output impedance	:10Kohms or less
Equivalent input noise	:-114dB (VR max.)
Residual noise	:-110dB (LEVEL VR min.)
Maximum gain	:59dB (VR max.) (at 1KHz)
Maximum output level	:+16dB (at 1KHz)
Current consumption	:8mA at 10VDC / 8mA at 9VDC
Control	:GAIN, BASS, TREBLE, LEVEL
Switch	:NORMAL / EFFECT
I/O terminal	:INSTRUMENT JACK, AMPLIFIER JACK
Power supply	:6F22 9V manganese dry battery or Maxon AC adaptor
Dimensions	:117(W)X150(D)X60(H)mm
Weight	:500g
Accessories	:Maxon AC adaptor
Options	:Maxon AC adaptor (See page 24)

※0dB=0.775Vrms

CS550 Stereo Chorus

- CS550 was produced under the supervision of Char (Hisato Takenaka), Japanese famous guitarist. It creates deep and spacious chorus effects.
- With minimum number of controls, CS550 allows simple operation for elaborate sound.
- Reliable footswitch and easy-to-see LED for trouble-free performance.

FEATURES AND CONTROLS

① SPEED

(speed control knob)

Controls modulation rate. Rotate this volume clockwise for more modulation rate.

② DEPTH

(depth control knob)

Controls modulation depth. Rotate this volume clockwise for deep modulation.

③ D-TIME

(delay time control knob)

Controls time between original dry tone and effected tone. Fully turn this knob counterclockwise for flanger-like chorus with short delay time. Rotate it clockwise for longer delay time.

④ M-LEVEL

(mix level control knob)

Controls volume level of modulated tone which is mixed with original dry tone. Typically dry tone and modulated tone should be adjusted to equal levels by fully turning this knob clockwise.

⑤ DC. IN

(power input jack)

A jack to connect AC adaptor.

⚠ Set amplifier's volume the minimum before connecting AC adaptor to CS550 in order not to damage other connected equipment.

⑥ NORMAL/EFFECT

(normal/effect switch)

Switch for effect on/off. Stepping on this switch alternately turns effects on (LED on) and off (LED off).

⑦ INDICATOR

(LED indicator)

It lights on when effects are on and lights off when effects are off.

⑧ INPUT

(input jack)

Input jack to connect to the output of guitar, other effects or related equipment.

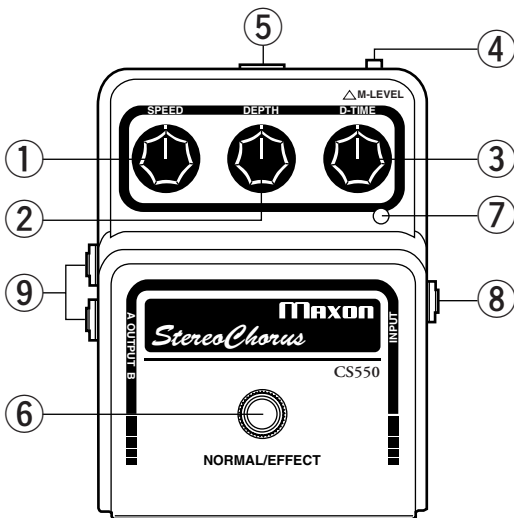
⑨ OUTPUT A/B

(output jack)

Output jack to connect to the input of amplifier or other effects. Use either A or B for monaural sound, and CS550 gives mixture of dry tone and effected tone. Use both A and B for stereo sound.

Feature of CS550

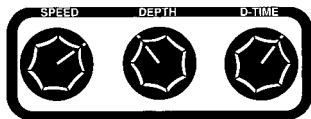
- Maxon AC adaptor for stable power supply.



CS550 SAMPLE SETTING

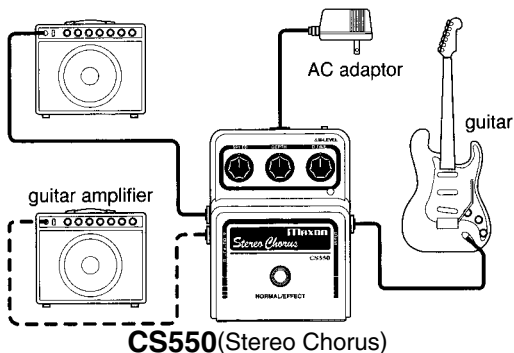


●Char's setting for "SMOKY"



●Char's setting for "I'm here for you"

CS550 CONNECTION DIAGRAM



CS550 SPECIFICATIONS

Input impedance	:500Kohms
Output impedance	:10Kohms or less
Maximum output level	:+5dB
Residual noise	:-100dB
Delay time	:0.8mSec-6.3mSec
LFO	:0.4Hz-8Hz
Control	:D-TIME, DEPTH, SPEED, M-LEVEL
Switch	:NORMAL / EFFECT
I/O	:INPUT JACK, OUTPUT-A JACK, OUTPUT-B JACK
Current consumption	:36mA at 10VDC / 36mA at 9VDC
Power supply	:Maxon AC adaptor
Dimensions	:117(W)X150(D)X60(H)mm
Weight	:500g
Accessories	:Maxon AC adaptor
Options	:Maxon AC adaptor (See page 24)

※0dB=0.775Vrms

PH350 Rotary Phaser

- High-end phase with photo coupler on phase circuit. PH350 provides little distortion and wide tone range as well as smooth phase shift.
- With sufficient frequency response and low noise, PH350 is good for LINE inputs, too.
- Reliable footswitch and easy-to-see LED for trouble-free performance.

FEATURES AND CONTROLS

① SPEED

(speed control knob)

Controls modulation rate. Rotate this volume clockwise for more modulation rate.

② DEPTH

(depth control knob)

Controls modulation depth. Rotate this volume clockwise for deep modulation.

③ FEEDBACK

(feedback control knob)

Controls effect level. From center position, rotate this volume clockwise for more effect of ordinary phase shifter, and counterclockwise for PH350's characteristic effects with unique modulation.

④ MODE

(mode switch)

Switch to change number of stages of phase shift. Maximum phasing at 10 and minimum phasing at 4.

⑤ DC. IN

(power input jack)

A jack to connect AC adaptor.

⚠ Set amplifier's volume the minimum before connecting AC adaptor to PH350 in order not to damage other connected equipment.

⑥ NORMAL/EFFECT

(normal/effect switch)

Switch for effect on/off. Stepping on this switch alternately turns effects on (LED on) and off (LED off).

⑦ INDICATOR

(LED indicator)

It lights on when effects are on and lights off when effects are off.

⑧ INPUT

(input jack)

Input jack to connect to the output of guitar, other effects or related equipment.

⑨ OUTPUT A/B

(output jack)

Output jack to connect to the input of amplifier or other effects. Use A for monaural sound, then dry signal and effected signal come out mixed. Use both A and

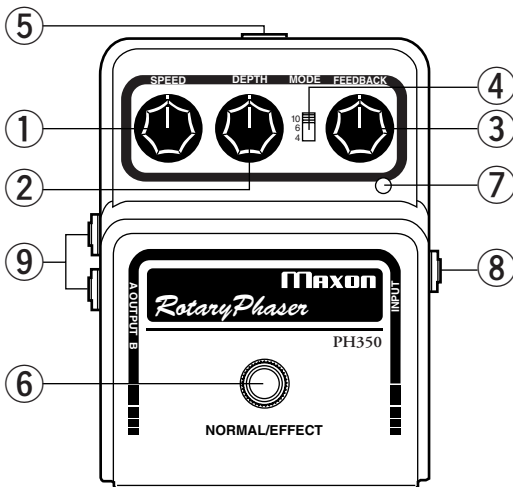
Feature of PH350

- Maxon AC adaptor for stable power supply.

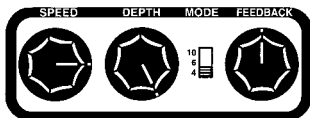
B for stereo sound, then A gives phase shifted sound and B gives dry sound.

For stereo sound, typically both amplifiers' volume should be set equal levels.

Volume level of the amplifier connected to "A" should be increased a little to emphasize phase shift effect.

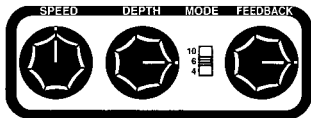


PH350 SAMPLE SETTING



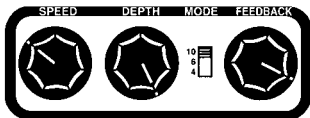
● Tremolo

Soft tremolo sound with mild phase shift.



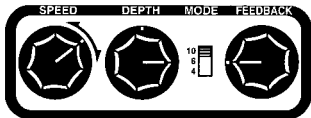
● Vintage phase

Typical '70s phase sound. Ideal for both clean and drive sound.



● Phase flange

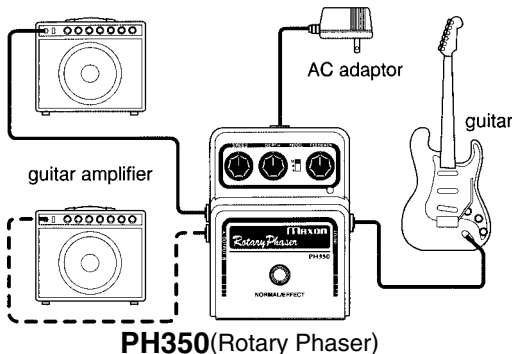
Flanging effect with jet sound. Great for bass guitar and rhythm guitar as well.



● '60s vibrate

Only PH350 gives this unique vibrate sound.

PH350 CONNECTION DIAGRAM



PH350 SPECIFICATIONS

Input impedance	:500Kohms
Output impedance	:10Kohms or less
Maximum output level	:+8dB
Residual noise	:-92dB
LFO	:0.06Hz-12Hz
Control	:SPEED, DEPTH, FEEDBACK
Switch	:MODE 10/6/4, NORMAL / EFFECT
I/O	:INPUT JACK, OUTPUT-A JACK, OUTPUT-B JACK
Current consumption	:41mA at 10VDC / 41mA at 9VDC
Power supply	:Maxon AC adaptor
Dimensions	:117(W)X150(D)X60(H)mm
Weight	:530g
Accessories	:Maxon AC adaptor
Options	:Maxon AC adaptor (See page 24)

※0dB=0.775Vrms

AD999 Analog Delay

- A genuine analog delay with New BBD IC (Maxon MC4107D) installed. It features up to 900mSec. of delay time, largely outperforming its predecessor AD900. And AD999 has two outputs for effected signal and dry signal respectively.
- True Bypass Switching lets your instrument's signal pass through a non-electronic bypass line when the effect is disengaged, feeding your amp with direct, unaltered signal from your

FEATURES AND CONTROLS

① DELAY TIME

(delay time control knob)

Controls delay time from 40mSec. (in the fully counterclockwise position) to 900mSec. (in the fully clockwise position).

② REPEAT

(repeat control knob)

Controls the number of delay signal repeats. Turn it clockwise for more repeats. Only one delay signal comes out when you turn it fully counterclockwise. (The fully clockwise position at a short delay time setting may cause a self-oscillation, which you can cut off by turning down this volume.)

③ DELAY LEVEL

(delay level control knob)

Controls delay signal level. The delay level is reduced to zero in the fully counterclockwise position and is turned up to match the volume of the dry signal in the fully clockwise position.

④ DC. IN

(power input jack)

A jack for connection of power supply to effect. Be sure to use the correct Maxon AC adaptor.

⚠ Turn down amplifier's volume to the minimum before connecting AC adaptor to the product in order not to damage other connected equipment.

⑤ NORMAL/EFFECT

(normal/effect switch)

Switch for effect on/off. Stepping on this switch alternately turns effects on (LED on) and off (LED off).

⑥ INDICATOR

(LED indicator)

It lights on when effect is on and lights off when effect is off.

⑦ INPUT

(input jack)

Input jack to connect to the output of guitar, other effects or related equipment.

⑧ OUTPUT/DRY OUTPUT

(output jack / dry output jack)

Output jacks to connect to input of amplifier or other effects. DRY OUTPUT outputs a dry

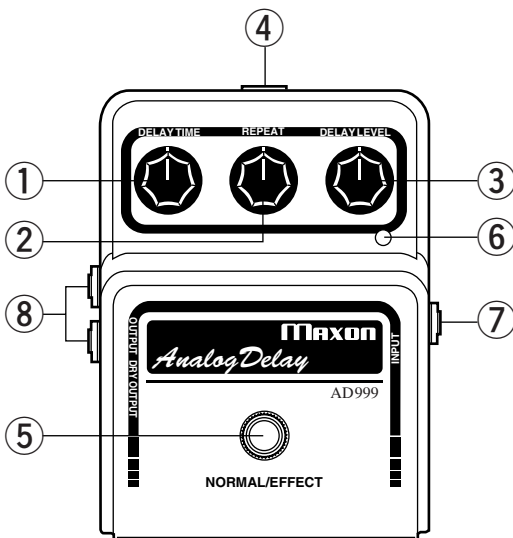
Feature of AD999

instrument. Low noise mechanical switch is used for effect/normal switching.

- Easily viewable LED to indicate normal / effect.
- Maxon AC adaptor for stable power supply.

signal only. OUTPUT, when used by itself, outputs a mixture of dry and effect signals and, when

used with DRY OUTPUT connected as well, it outputs a delayed signal only.



AD999 SAMPLE SETTING



● Short delay / Ambience

Simulates the ambience of live music at clubs by adding analog delay's unique echoes.



● Short delay 2 / Rhythm delay

Adds short delays to a muted arpeggio, thus mixing the original notes and sixteenth notes. For recordings you can use Dry output too to send out original notes and delayed notes separately.



● Medium delay

Medium/long delay for solos featuring analog delay's warm and natural atmosphere.



● Long delay

Delayed notes come after the original notes, creating spacious long-delay sound.

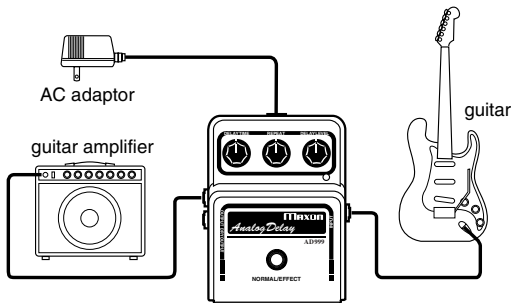


● Feedback loop

Simulates tape echo's feedback, a one-shot effect created by increasing Repeats for self-oscillation and changing Delay time.

Note: The feedback may sound very loud. Be sure to reasonably turn down your amp's volume before you try this setting.

AD999 CONNECTION DIAGRAM



AD999(Analog Delay)


AD999 SPECIFICATIONS

Input impedance	:500Kohms
Output impedance	:10Kohms
Residual noise	:less than -95dB (input shorted, IHF-A weighted)
Delay time	:40mSec. -900mSec.
Control	:DELAY TIME, REPEAT, DELAY LEVEL
Switch	:NORMAL/EFFECT (Mechanical True Bypass)
I/O	:INPUT, OUTPUT, DRY OUTPUT
Current consumption	:46mA at 9VDC / 48mA at 10VDC
Power supply	:Maxon AC adaptor
Dimensions	:117(W)X150(D)X60(H)mm
Weight	:600g
Accessories	:Maxon AC adaptor
Options	:Maxon AC adaptor (See page 24)

※0dB=0.775Vrms

※Specifications subject to change without notice.

Optional accessories: Maxon AC adaptor

model name	input	output	country	polarity
AC2009*1	100VAC to 240VAC	9VDC/2000mA	worldwide	 center-/sleeve+
AC210N	120VAC	9VDC/200mA	USA, Canada	
AC210U	220VAC		Europe (except UK)	
AC210UK	230VAC		UK	
AC210	100VAC	10VDC/200mA	Japan	
AC310	100VAC	10VDC/300mA	Japan	

*1 Plug type of AC2009 varies with the suffix as shown below.

Please specify exact model (like AC2009AN, AC2009C) when ordering.

suffix	country	suffix	country
AN	Australia, New Zealand	U	Australia, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, etc.
C	China	UK	UK
J	Japan		
K	South Korea		
N	USA, Canada		



If you want to dispose this product, do not mix with general household waste.

There is a separate collection system for used electronics products in accordance with legislation under the WEEE Directive (Directive 2002/96/EC) and is effective only within European Union.

Maxon shall not be held liable to you or any third party for any losses caused by incorrect operation of this equipment, malfunction or any other failure of this equipment to operate as expected, or normal use of this equipment, except to the extent stipulated by law.

Maxon shall not be held liable to you or any third party for any losses related to concerts, exhibitions, or any other type of event due to malfunction or incorrect operation of this equipment.

Make it your favorite for a long time.

Maxon

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TEL:+81-263-40-1403 FAX:+81-263-40-1410

<http://www.maxon.co.jp/>

sales@maxon.co.jp

For North America - URL : <http://www.maxonfx.com>

e-mail : info@maxonfx.com

※ALL SPECIFICATIONS ARE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT NOTICE OR OBLIGATION.

Sample setting by Shiro Tanigawa

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