

Optional accessories:

Maxon AC adaptor

model name	input	output	polarity
AC210N	120VAC	9VDC/200mA	center-/sleeve+
AC210U	220VAC		
AC210	100VAC		
AC212RN	120VAC	12VDC/200mA	center+/sleeve-
AC212RU	220VAC		
AC212R	100VAC		

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

Sample setting by Shiro Tanigawa

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UMN-VTG-0102A

Maxon

User's Guide

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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.

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 create 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

OD-820 is overdrive for professionals 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. OD-820 becomes true bypass at NORMAL(effect off) and sends natural tone signal to amplifier.

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

FEATURES AND CONTROLS

① DRIVE

(drive control knob)
Controls distortion and sustain level. Rotate this volume clockwise for more distortion. Rotate it counterclockwise till the end for complete non-distortion.

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 to the minimum before connecting AC adaptor to OD-820 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

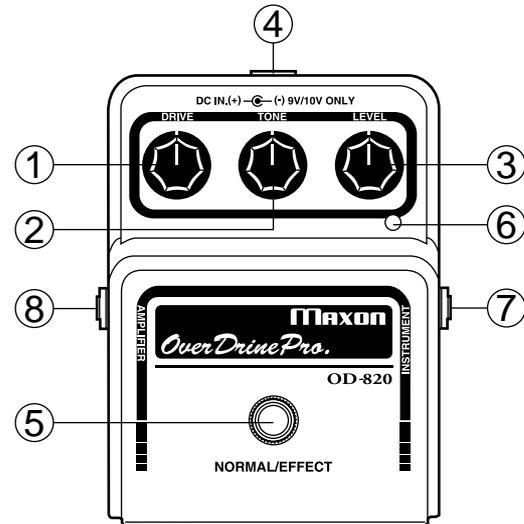
(LED indicator)
It lights on when effects are on and lights off when effects are off. It also indicates battery condition. Dark or no LED light indicates the battery is low or not installed. In that case unscrew four screws on the bottom cover and replace the battery.

⑦ INSTRUMENT

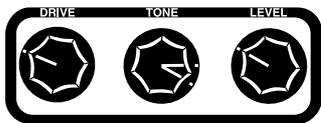
(input jack)
Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when you put a plug into this jack. Pull out the plug when not in use.

⑧ AMPLIFIER

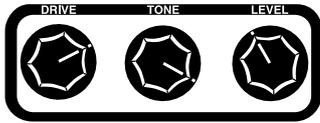
(output jack)
Output jack to connect to the input of amplifier or other effects.



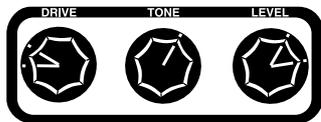
OD-820 SAMPLE SETTING



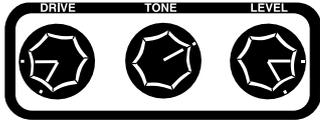
Fat boost
(AMP : Clean)
Booster setting to make your clean solid state amp firm and fat.



Vintage tweed
(AMP : Clean)
OD-820 with clean amp creates firm and bluesy tone.

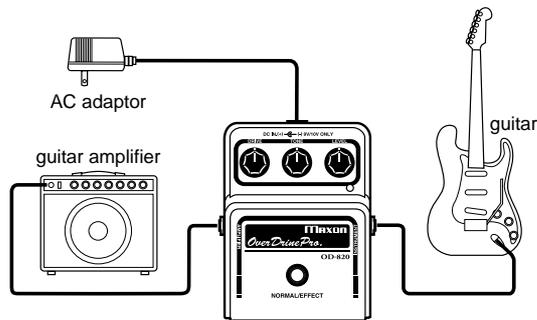


Crunch-Overdrive select
(AMP : Drive)
OD-820 shows its stuff here, making best use of amplifier's character. Set your amplifier crunchy and use OD-820 as channel selector between crunch/overdrive.



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.

OD-820 CONNECTION DIAGRAM



OD-820(OverDrivePro.)

OD-820 SPECIFICATIONS

Input impedance	: 500K
Output impedance	: 10K 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(DC10VDC)
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) x 150(D) x 60(H)mm
Weight	: 500g
Standard accessories	: Maxon AC adaptor(9VDC/200mA)

0dB=0.775Vrms

DS-830 Distortion Master

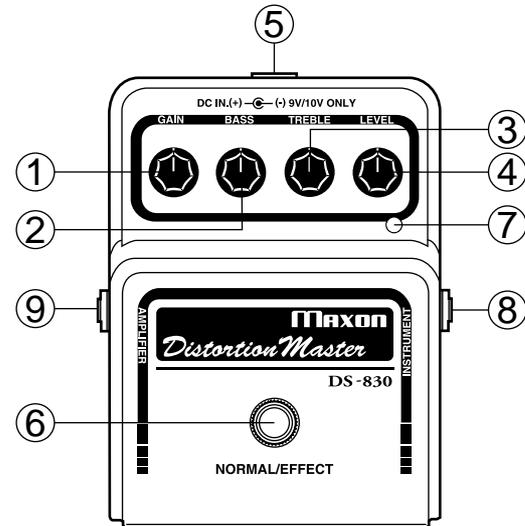
Feature of DS-830

DS-830 is distortion 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.
DS-830 creates real and natural distortion without spoiling your guitar and pickup's character. And you can make various sounds with wide range EQ.

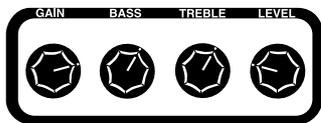
Reliable footswitch and easy-to-see LED for trouble-free performance.
Two types of power supply - 9V battery or Maxon AC adaptor.

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 to the minimum before connecting AC adaptor to DS-830 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.



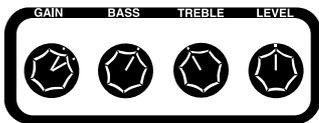
DS-830 SAMPLE SETTING



DS-830 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)

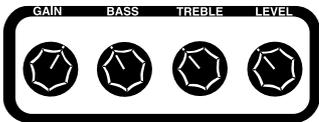
Powerful drive sound for humbucker. Your small practice amplifier turns into a stack amp with high gain sound.



Crunch / lead drive

(AMP : Drive)

Add DS-830 to amplifier's crunch sound for two channel switching between crunch / lead drive, or between clean / crunch / lead on amplifier with clean / crunch select.

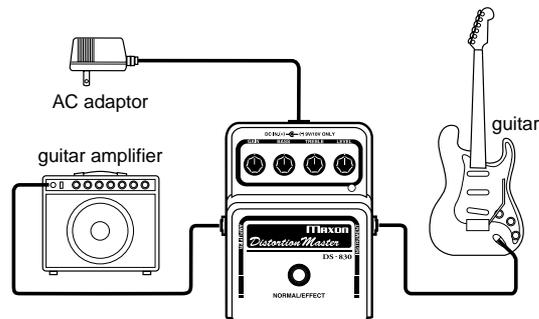


Heavy drive

(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 DS-830's BASS knob to match the character of your guitar and amplifier.

DS-830 CONNECTION DIAGRAM



DS-830 (Distortion Master)

DS-830 SPECIFICATIONS

Input impedance	: 500K
Output impedance	: 10K or less
Equivalent input noise	: -114dB(VR max.)
Residual noise	: -110dB(LEVEL VR min.)
Maximum gain	: 59dB(VR max.) (at 1KHz)
Current consumption	: 8mA(10VDC)
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) × 150(D) × 60(H)mm
Weight	: 500g
Standard accessories	: Maxon AC adaptor(9VDC/200mA)

0dB=0.775Vrms

CS-550 Stereo Chorus

Feature of CS-550

CS-550 was produced under the supervision of Char(Hisato Takenaka), Japanese famous guitarist. It creates deep and spacious chorus effects.

With minimum number of controls, CS-550 allows simple operation for elaborate sound.

Reliable footswitch and easy-to-see LED for trouble-free performance.

Maxon AC adaptor for stable power supply.

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 to the minimum before connecting AC adaptor to CS-550 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

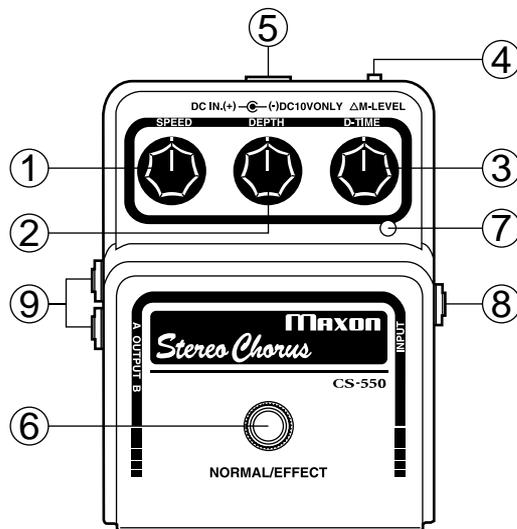
(input jack)

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

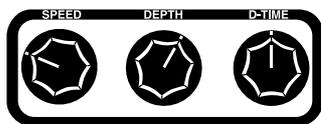
⑨ OUTPUT A/B

(output jack)

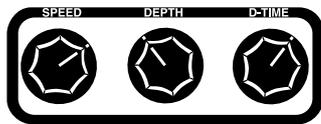
Output jack to connect to the input of amplifier or other effects. Use either A or B for monaural sound, and CS-550 gives mixture of dry tone and effected tone. Use both A and B for stereo sound.



CS-550 SAMPLE SETTING

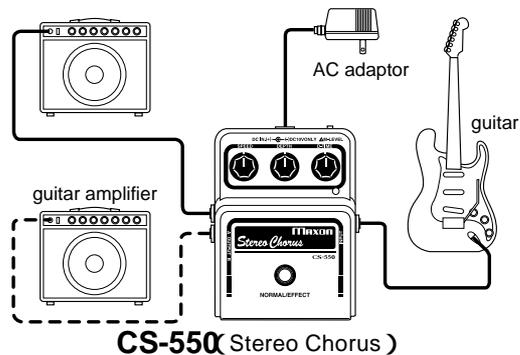


Char's setting for "SMOKY"



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

CS-550 CONNECTION DIAGRAM



CS-550 SPECIFICATIONS

Input impedance	: 500K
Output impedance	: 10K 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 terminal	: INPUT JACK, OUTPUT-A JACK, OUTPUT-B JACK
Current consumption	: 21mA(10VDC)
Power supply	: Maxon AC adaptor
Dimensions	: 117(W) × 150(D) × 60(H)mm
Weight	: 500g
Standard accessories	: Maxon AC adaptor(9VDC/200mA)

0dB=0.775Vrms

PH-350 Rotary Phaser

Feature of PH-350

High-end phase with photo coupler on phase circuit. PH-350 provides little distortion and wide tone range as well as smooth phase shift.

With sufficient frequency response and low noise, PH-350 is good for LINE inputs, too.

Reliable footswitch and easy-to-see LED for trouble-free performance.

Maxon AC adaptor for stable power supply.

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 PH-350'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 to the minimum before connecting AC adaptor to PH-350 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

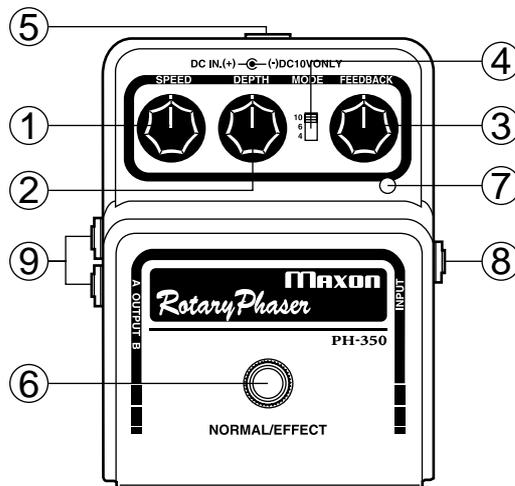
(output jack)

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

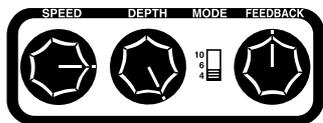
mixed. Use both A and B for stereo sound, then A gives phase shifted sound and B gives dry sound.

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

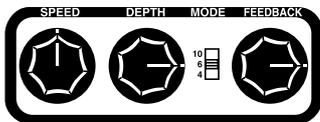
Volume level of the amplifier connected to "A" should be increased a little to emphasize phase shift effect.



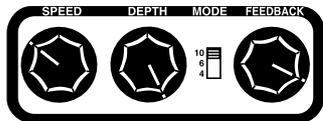
PH-350 SAMPLE SETTING



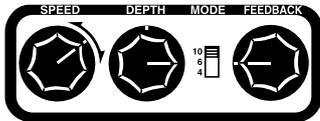
Tremolo
Soft tremolo sound with mild phase shift.



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

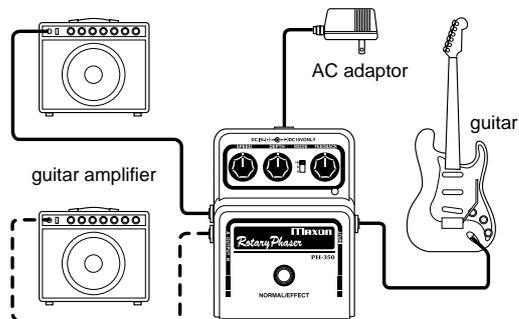


Phase flange
Flanging effect with jet sound. Great for bass guitar and rhythm guitar as well.



'60s vibrate
Only PH-350 gives this unique vibrate sound.

PH-350 CONNECTION DIAGRAM



PH-350 (Rotary Phaser)

PH-350 SPECIFICATIONS

Input impedance	: 500K
Output impedance	: 10K 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 terminal	: INPUT JACK, OUTPUT-A JACK, OUTPUT-B JACK
Current consumption	: 41mA(10VDC)
Power supply	: Maxon AC adaptor
Dimensions	: 117(W) × 150(D) × 60(H)mm
Weight	: 530g
Standard accessories	: Maxon AC adaptor(9VDC/200mA)

0dB=0.775Vrms

AD-900 Analog Delay

Feature of AD-900

AD-900 is an echo machine that reproduces '70s delay sound. Its mild echo sound is created only by analog machine.

AD-900's delay time of up to 600mSec., which is much longer than other analog delay pedals, gives you a wide range of delay sound.

Reliable footswitch and easy-to-see LED for trouble-free performance.

Maxon AC adaptor for stable power supply

FEATURES AND CONTROLS

① D-TIME

(delay time control knob)

Controls delay time from 40mSec.(at the counterclockwise end) to 600mSec.(at the clockwise end).

② REPEAT

(repeat control knob)

Controls number of delay tone repeats. Rotate this volume clockwise for more repeats. Only one delay tone comes out when you rotate it counterclockwise till the end.

③ D-LEVEL

(delay level control knob)

Controls delay signal level. Delay signal comes to the same level as dry signal when you rotate this volume clockwise till the end. No delay signal when you rotate it counterclockwise till the end.

④ DC. IN

(power input jack)

A jack to connect AC adaptor(DC output : 12V/200mA).

△Set amplifier's volume to the minimum before connecting AC adaptor to PH-350 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.

⑦ INSTRUMENT

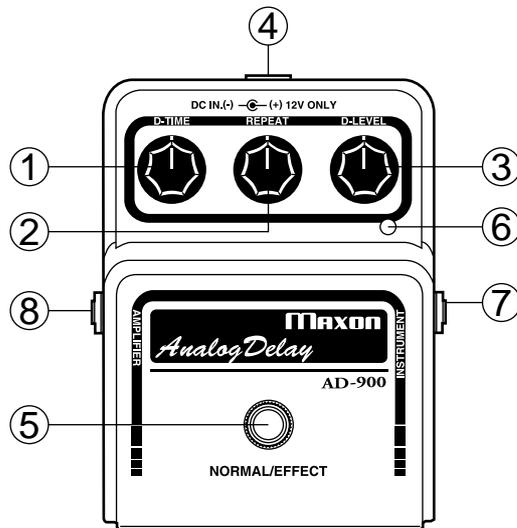
(instrument jack)

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

⑧ AMPLIFIER

(output jack)

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

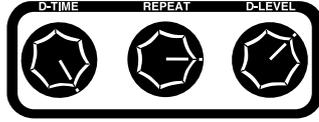


AD-900 Analog Delay SAMPLE SETTING



Ambience delay

It adds faint effect of short time delay to simulate concert hall's live sound echo.



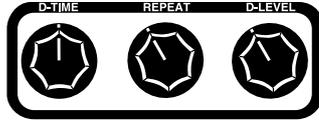
Long time

Warm and smooth long time delay that only analog delay can produce. Best for long sustain at drive sound.



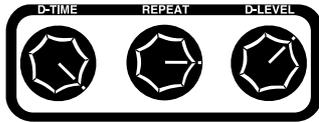
Oldies

Slap echo for old rock'n'roll and rockabilly sound. Adjust "D-TIME" to keep pace with the music's tempo and adjust "REPEAT" to your taste.



Middle time

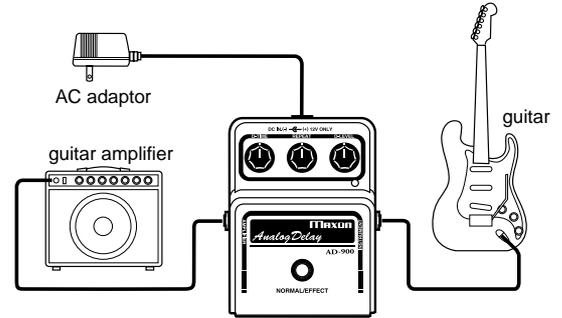
General-purpose setting. It's advisable to set "D-LEVEL" rather low for chord stroke and riff sound.



Sound on sound

Deep effect sound for a mixture of delay signal and dry signal. Best for muted solo.

AD-900 CONNECTION DIAGRAM



AD-900(Analog Delay)

AD-900 SPECIFICATIONS

Input impedance	: 510K
Output impedance	: 10K or less
Maximum output level	: -5dB
Residual noise	: -90dB
Delay time	: 40-600mSec
Current consumption	: 28mA(12VDC)
Control	: D-TIME, REPEAT, D-LEVEL
Switch	: NORMAL / EFFECT
I/O terminal	: INSTRUMENT JACK, AMPLIFIER JACK
Power supply	: Maxon AC adaptor
Dimensions	: 117(W) × 150(D) × 60(H)mm
Weight	: 600g
Standard accessories	: Maxon AC adaptor(12VDC/200mA)

△ AD-900 requires AC adaptor with output of 12VDC and center(+)/sleeve(-), which is different from common AC adaptor for guitar pedals.
0dB=0.775Vrms