



# **//A Maxon®**

# User's Guide

- TOD9 TRUE TUBE OVERDRIVE
- TBO9 TRUE TUBE BOOSTER / OVERDRIVE
- PAC9 PURE ANALOG CHORUS
- VJR9 VINTAGE JET RISER
- ST9Pro+ SUPER TUBE
- SM9Pro+ SUPER METAL

## ♦SAFETY PRECAUTIONS●

Be sure to read these precautions before using this product in order to insure safe operation of the equipment.

Keep this User's Guide on hand for future reference whenever you may 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.



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



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.

# \land Warning



## NEVER OPEN THE CASE

•Never try to remove the bottom cover 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

 $\ensuremath{\mathsf{S}}\xspace{\mathsf{S}$ 

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



# \land Warning



## BEWARE OF HEAT BUILT UP

•Never cover AC adaptor with cloth or other objects.  $\langle Built up heat creates the danger of the equipment deformation and fire. \rangle$ 

## \land 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

 $\cdot \text{Never try to unplug AC}$  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.



## TOD9 True Tube Overdrive

World's smallest tube-based Booster Overdrive in a 9-series enclosure. (Jan. 2008 Maxon research) Employs subminiature tube with US Military specification.

- Provides comfortable and powerful tube sound which is very difficult to create with a digital processing simulator. TOD9 has a tube circuit before distortion circuit, which creates powerful overdrive sound retaining the sound character of TOD9.
- ●9V from AC adaptor is bumped up to 30V by the internal regulator and provided to tube circuit and overdrive circuit. Stable high quality sound is consistently available with increased dynamic headroom. Unintentional signal Distortion is greatly reduced.

## FEATURES AND CONTROLS

## AC2009 (AC Adaptor)

- ①AC2009 power plug should be connected to AC outlet with ground. If you do not have AC outlet with ground, use a 2-pin adaptor. Connect green/yellow (or green) ground wire of 2-pin adaptor to ground terminal of the AC outlet. Be sure that guitar amplifier is turned off before connecting/disconnecting the AC2009 power plug.
- <sup>(2)</sup>Connect the power cord plug to the inlet of AC2009. Be sure that guitar amplifier is turned down before connecting/disconnecting the power cord plug.

## TOD9

1 IN (input jack)

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

2 OUT

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





- ●TBS (True Bypass Switching) using 4PDT mechanical switch lets your instrument's signal pass through a non-electronic bypass line when the effect is disengaged, feeding your amplifier with direct, unaltered signal from your instrument.
- Employs tube heater inrush current control circuit to extend tube's life.
- AC adaptor AC2009 can be used worldwide from 100VAC to 240VAC by auto voltage sensing. Main countries' safety standard approved. Useful for worldwide touring musicians.

## 3 TUBE

Controls tube gain. Turn it clockwise for more gain.

**4**DRIVĚ

Controls distortion. Turn it clockwise for more distortion.

(5) TONE

Controls tone in high-frequency range. Turn it clockwise to emphasize high tone. Turn it counterclockwise to cut the high tone.

**6LEVEL** 

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

## 7 FOOTSWITCH

Switch for effect / bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the

switch and effect turns off when you depress and release the switch.

#### **®INDICATOR**

This indicates the effect / bypass status. After AC adaptor is connected, it lights when effect is on with footswitch.

\* Tube heater always slightly lights when AC adaptor is connected.

9 DC INPUT (power input jack)

A jack to connect the provided AC adaptor (AC2009).

Be sure that guitar amplifier is turned

down before connecting/disconnecting the AC2009 power plug or DC plug.

\* It takes 1 - 2 min. warm-up time for tube to reach stable temperature for consistent tone.

TOD9

Please visit www.maxon.co.jp to listen to audio samples.



No.1 Tube powered (G: Les Paul STD) Orthodox overdrive sound with the combination of straight amp sound and TOD9's tube overdrive. Suitable to create fat and bold sound like a transistor amp or tube amp.



No.3 Fat drive (G: Les Paul STD) Fat and powerful overdrive sound. Smooth distortion is most suitable for lead overdrive.



No.2 Tube amp drive (G: Les Paul STD) Overdrive like tube amp sound. Fully clockwise Drive level provides basic distortion, and TUBE level adds thickness to the overdrive sound. Creates distortion with bold attack response.



No.4 Tube crunch (G: Combat Custom 3S) Creates natural crunch and boost like a tube amp, retaining Single PU's attack response and tight tone. On the basis of tube boost sound in TUBE level fully clockwise, it offers dynamic response to picking technique depending DRIVE level you set.

## CONNECTION DIAGRAM



## SPECIFICATIONS

- Input Impedance Output Impedance Maximum Gain Equivalent Input Noise Control Internal Circuit Voltage Power Consumption Dimensions Weight Power Supply Accessory
- : 500k ohms
- : 10k ohms or less
- : 48.5dB (1.6 kHz)
- : -106.8dB or less (IHF-A)
- : TUBE, DRIVE, TONE, LEVEL
- : 30VDC (DC to DC converter)
- : 260mA/9VDC
  - : 74(W) x124(D) x 54(H) mm
  - : 560g (excluding AC adaptor)
  - : AC adaptor AC2009 (Not operated with battery.)
  - : AC adaptor AC2009

#### \* 0dB=0.775Vrm

- \* All specifications are subject to change for improvement without notice or obligation.
- \* The subminiature tube used for this model is not a socket type.

It cannot be replaced with other tube.

600<u>-</u>

## TBO9 True Tube Booster / Overdrive

- World's smallest tube-based Booster Overdrive in a 9-series enclosure. (Jan. 2008 Maxon research) Employs subminiature tube with US Military specification.
- Provides comfortable and powerful tube sound which is very difficult to create with a digital processing simulator. Wide range of tube sound is available without spoiling the sound character of your guitar and amplifier.
- ●9V from AC adaptor is bumped up to 30V by the internal regulator and provided to tube circuit and overdrive circuit. Stable high quality sound is constantly available with increased dynamic headroom. Unintentional signal Distortion is greatly reduced.

## FEATURES AND CONTROLS

## AC2009 (AC Adaptor)

- ①AC2009 power plug should be connected to AC outlet with ground. If you do not have AC outlet with ground, use a 2-pin adaptor. Connect green/yellow (or green) ground wire of 2-pin adaptor to ground terminal of the AC outlet. Be sure that guitar amplifier is turned off before connecting/disconnecting the AC2009 power plug.
- <sup>(2)</sup>Connect the power cord plug to the inlet of AC2009. Be sure that guitar amplifier is turned down before connecting/disconnecting the power cord plug.

## тво9

①IN (input jack)

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

2 OUT (output jack)

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

3BOOST

This controls tube gain. Turn it clockwise for more gain.





- ●TBS (True Bypass Switching) using 4PDT mechanical switch lets your instrument's signal pass through a non-electronic bypass line when the effect is disengaged, feeding your amplifier with direct, unaltered signal from your instrument.
- •Employs tube heater inrush current control circuit to extend tube's life.
- AC adaptor AC2009 can be used worldwide from 100VAC to 240VAC by auto voltage sensing. Main countries' safety standard approved. Useful for worldwide touring musicians.



#### **4**DRIVE

This mixes clean boost and overdrive. Turn this knob fully counterclockwise for clean boost. Turn it clockwise for more overdrive.

#### **⑤TONE**

Controls tone in high-frequency range. Turn it clockwise to emphasize high tone. Turn it counterclockwise to cut the high tone.

#### 6LEVEL

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

#### ⑦FOOTSWITCH

Switch for effect / bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the switch and effect turns off when you depress and release the switch.

#### **®INDICATOR**

This indicates the effect / bypass status. After AC adaptor is connected, it lights when effect is on with footswitch.

\* Tube heater always slightly lights when AC adaptor is connected.

⑨DC INPUT (power input jack)

A jack to connect the provided AC adaptor (AC2009).

Be sure that guitar amplifier is turned down before connecting/disconnecting the AC2009 power plug or DC plug.

\* It takes 1 - 2 min. warm-up time for tube to reach stable temperature for consistent tone.

тво9

Please visit www.maxon.co.jp to listen to audio samples.



No.1 Real tube booster (G: Combat Custom 3S, PU: Single) Gain booster setting retaining the sound character of your guitar and amplifier. Upgraded fat tone with real tube.



No.3 Full boost (G: Les Paul STD) The TBO9 tube level is powerfully boosted for amp. Crunch sound. The DRIVE control adds fat overdrive tone and natural sustain. Suitable for Humbucker PU.



No.2 Tube 808

(G: Combat Custom 3S, PU: Single) Overdrive setting with a subtle touch of natural smooth overdrive and comfortable sustain.







No.4 TBO9 + PAC9 (rhythm) + AD999Pro (lead) (G: Les Paul STD) Practical sound setting of TBO9 overdrive sound with chorus and delay added. All-around standard overdrive setting. Most suitable for line recording.

## CONNECTION DIAGRAM



## SPECIFICATIONS

- Input Impedance Output Impedance Maximum Gain Equivalent Input Noise Control Internal Circuit Voltage Power Consumption Dimensions Weight Power Supply Accessory
- : 500k ohms
- : 10k ohms or less
- : 52dB (1.6 kHz)
- : -110dB or less (IHF-A)
- : BOOST, DRIVE, TONE, LEVEL
- : 30VDC (DC to DC converter)
- : 270mA/9VDC
- : 74(W) x124(D) x 54(H) mm
- : 560g (excluding AC adaptor)
- : AC adaptor AC2009 (Not operated with battery.)
- : AC adaptor AC2009

#### \* 0dB=0.775Vrms

\* All specifications are subject to change for improvement without notice or obligation.

11

\* The subminiature tube used for this model is not a socket type.

It cannot be replaced with other tube.

TBO9

## PAC9 Pure Analog Chorus

- High-quality pure and clear analog chorus sound with Maxon BBD IC (MC4107D).
- PURE and BRIGHT switches are added to standard SPEED and WIDTH controls. Addition of these switches allows creation of a wide variety of chorus effects such as pleasant chorus and bold and deep chorus.
- •Widely adjustable SPEED range of 0.33Hz 8Hz. Leslie Simulator-like tremolo chorus is available at faster SPEED settings.
- Employs DC to DC converter circuit and internal voltage stabilization circuit. Battery voltage drop and fluctuation of AC power source do not affect the

## FEATURES AND CONTROLS

1 IN (input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when a plug is inserted into this jack without external power supply (AC adaptor) operation. When not in use, disconnect plug from input jack to preserve battery life.

- ②OUT/INV.OUT (output/invert output jack) Output jacks to connect to input of amplifier or other effects. Use either OUT and INV. OUT for monaural mode. Dry signal and delayed signal come out mixed. INV. OUT inverts the phase of delayed signal and makes the resulting tone slightly different from the tone from OUT. Use the one you prefer. Use both OUT and INV. OUT for stereo mode.
- 3 SPEED

Controls modulation rate. Turn it clockwise for more modulation rate.



tone and function.

Dual outputs allow you to play with two amplifiers for stereo chorus effects.

 High-performance Noise Reduction (which consists of RMS level sensor and high-definition VCA) provides high dynamic range with low noise. Clean chorus without distortion is available with high-headroom.

Connectable to effect loop of guitar amp. (+4dB/-20dB)

- TBS (True Bypass Switching) with 4PDT mechanical switch. No tone changes when switching bypass and effect.
- Easy-access, no tools battery compartment.

## . . . . . . . . . . . . . . . . . . .

13

#### **④WIDTH**

Controls modulation depth. Turn it clockwise for deeper modulation.

#### **⑤**PURE

Switch for chorus tone. When PURE switch is ON, delayed signal and the dry signal are mixed at even levels, creating pure chorus based on the chorus theory. When PURE Switch is OFF, level of Delayed signal only is increased by 4dB and then mixed with dry signal, creating tremolo-like chorus.

## 6BRIGHT

When BRIGHT switch is ON, harsh low-frequency range of chorus sound is decreased, creating a brighter sound. When switch is off, standard flat chorus sound is available.

#### **⑦FOOTSWITCH**

Switch for effect/bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the switch and effect turns off when you depress and release the switch.

#### **®LED INDICATOR**

This indicates the effect/bypass status and battery condition. At the battery operation, it lights when plug is inserted to input jack and effect is on. At the external power supply (AC adaptor) operation, it lights when effect is on. No LED light indicates the battery is low or not installed. In this case replace the battery.

#### **9DC INPUT**

Jack for connection of external 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.

PAC9

Please visit www.maxon.co.jp to listen to audio samples.



No.1 Pure chorus

(G: Combat Custom 3S)

Natural and transparent chorus sound with PURE switch ON. Provides spacious modulation at slow speed retaining the sound character of your instrument.



No.2 Deep chorus

(G: Combat Custom 3S)

Wide-range deep chorus setting featuring PAC9's expanding brightness and analog chorus. Do not raise WIDTH level too much.



No.3 Light tremolo (G: Combat Custom 3S)

Sharp tremolo chorus sound with PURE and BRIGHT switches ON. Suitable for "chord cutting" and other muted rhythm techniques. Distinctive sound of tremolo chorus effect at faster SPEED settings.



No.4 Wide-range tremolo (G: Combat Custom 3S) Retaining the speed of 3. Light tremolo, wide-range and sharp tremolo with PURE and BRIGHT switches OFF. Set WIDTH low for stable pitch.

## CONNECTION DIAGRAM **Guitar Amplifier** AC adaptor 0000000 FXLOOP At-0000000 Maxon Rain PAC9 Maxon PAC9 PAC9

## SPECIFICATIONS

Input Impedance 500k ohms : 10k ohms or less Output Impedance : +9dB (400Hz) Maximum Output Level SPEED, WIDTH Control Switch : PURE, BRIGHT, BYPASS/EFFECT (mechanical TBS) **Delay Time** · 4 6msec - 7 68msec : 0.33Hz - 8.0Hz Speed Frequency : -95dB or less (IHF-A) **Besidual Noise** : Bypass/Effect LED Indicator : 9VDC (DC to DC Converter) Internal Circuit Voltage Power Consumption : 21mA/9VDC : 74(W) x 124(D) x 54(H) mm Dimensions : 580g (including battery) Weight Power Supply : 6F22 9V battery x 1 or Maxon AC adaptor Batterv Life : manganese battery 8.5 hours 25deg C (Panasonic 6F22NB) : alkaline battery 20 hours 25deg C (Panasonic 6LR61G) : Maxon AC adaptor (Refer to page 29.)

#### Options

\* All specifications are subject to change for improvement without notice or obligation. 15

## VJR9 Vintage Jet Riser

●Vintage Jet Riser VJR9 is a contemporary version of 70s legendary JETLYZER JL-70.

- Employs newly-developed Jet sound generator. Internally generated jet signals are processed in VCA (voltage-controlled amplifier) and VCF (voltage-controlled filter), and then mixed with inputted guitar sound source. Jet sound is generated by analog flanger circuit using BBD (bucket brigade device) and high-performance NR (noise reduction).
- Wide range of effects, such as heavy/deep jet sound and chorus-like tremolo sound, are available.
- •By using an external footswitch, jet sound is turned ON and OFF. VJR9 can be used as a flanger when jet sound is OFF.
- Employs DC to DC converter circuit and internal voltage stabilization circuit. Battery voltage drop and fluctuation of AC power source do not affect sound quality and function.

## FEATURES AND CONTROLS

#### AC2009 (AC Adaptor)

- ①AC2009 power plug should be connected to AC outlet with ground. If you do not have AC outlet with ground, use a 2-pin adaptor. Connect green/yellow (or green) ground wire of 2-pin adaptor to ground terminal of the AC outlet. Be sure that guitar amplifier is turned off before connecting/disconnecting the power cord plug.
- ②Connect the power cord plug to the inlet of AC2009. Be sure that guitar amplifier is turned down before connecting/disconnecting the power cord plug.

#### VJR9

1 IN (input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when a plug is inserted into this jack. When not in use, disconnect plug from input jack to preserve battery life. It is recommended to place a distortion or overdrive guitar effect just before VJR9 for better jet sound effect.

2 OUT (output jack)

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

③ FOOT SW. (external footswitch jack)

A jack to connect an external footswitch. Jet sound ON and OFF is switchable with external footswitch. (Use a generalpurpose external footswitch.) Jet sound is ON unless an external footswitch is connected.

\* There are two types of footswitch; latching type and momentary type. Both types can be used for VJR9. However, the





. . . . . . . . . . . . . . . .

- High-performance NR (which consists of RMS level sensor and high-definition VCA) provides high dynamic range with low noise. Clean flanging effect without distortion is available with high-headroom.
- Connectable to effect loop of guitar amp. (+4dB/-20dB)
- TBS (True Bypass Switching) with 4PDT mechanical switch. No tone changes when switching bypass and effect.
- Easy-access, no tools battery compartment.
- AC adaptor AC2009 can be used worldwide from 100VAC to 240VAC by auto voltage sensing. Main countries' safety standard approved. Useful for worldwide touring musicians.

function is different. Latching type alternately turns ON and OFF when switch is depressed. For momentary type, jet sound is ON when you depress the switch and jet sound is OFF when you release the switch. Normally closed type of momentary switch should be used.

#### **④RANGE**

Controls tone range of jet sound. Turn it clockwise for wider range of tone. VCF of jet sound is bandpass type. Center frequency at no guitar input signals is approx. 70Hz. As guitar input signals increase, it changes to approx. 2Hz at maximum.

Jet effect is adjusted by the following three controls; RANGE, SENSITIVITY and JET. These controls are mutually related. When either one of these controls is turned fully counterclockwise, no jet sound is available. If there is no guitar signal, no jet sound is outputted.

#### **⑤JET**

Controls volume of jet sound generator. Turn it clockwise for larger volume. No jet sound is available in the fully counterclockwise position. VJR9 can be used as a flanger in the fully clockwise position.

#### **6**SENSITIVITY

Controls sensitivity of jet sound. Set it to pickup output characteristic of your guitar and/or performance. Turn it clockwise for high sensitivity.

#### ⑦SPEED

Controls modulation speed. Turn this knob clockwise for faster modulation.

#### 8WIDTH

Controls modulation depth. Turn this knob clockwise for deeper modulation. No modulation is available in the fully clockwise position.

#### 9FOOTSWITCH

Switch for effect/bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the switch and effect turns off when you depress and release the switch.

#### **10LED INDICATOR**

This indicates the effect/bypass status and battery condition. At the battery operation, it lights when plug is inserted to input jack and effect is on. At the external power supply (AC adaptor) operation, it lights when effect is on. No LED light indicates the battery is low or not installed. In this case replace the battery with a new one.

#### 1DC INPUT

Jack for connection of external power supply to effect. Be sure to use the correct Maxon AD adaptor.

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

VJR9

Please visit www.maxon.co.jp to listen to audio samples.



No.1 VJR jet cutting

(G: Sugi Guitars DS499)

Flanging sound with subtle touch of jet sound. Find your favorite jet sound with SENSITIVITY and RANGE controls.



No.2 Space driving

(G: Sugi Guitars DS499)

VJR9's jet sound + AD999's delay sound. Spacious sound with a feeling of running like the wind. Suitable for lead guitar.



No.3 VJR tremolo (G: Fender<sup>®</sup> Stratocaster<sup>®</sup>) Auto filter-like tremolo sound with faster modulation speed plus jet sound by picking attack.



No.4 VJR slap bass (BASS+VJR9+CP9Pro+) (G: Fender<sup>®</sup> Jazz Bass<sup>®</sup>)

Jet sound responding to picking makes the slap phrases very impressive. Unique sound which is not available with standard chorus and flanger effects.

# ENGLISH

## CONNECTION DIAGRAM



## SPECIFICATIONS

: 500k ohms
: 10k ohms or less
: +12dBu (400Hz)
: RANGE, JET, SENSITIVITY, SPEED, WIDTH
: Bypass / Effect (mechanical TBS)
: Jet ON / OFF
: 1.0msec to 30.0msec
: 0.04Hz to 12.0Hz
: -90dBu or less (IHF-A)
: Bypass / Effect LED
: 13VDC (DC to DC converter)
: 60mA / 9VDC
: 74 (W) ×124 (D) × 54 (H) mm
: 630g (including battery, excluding AC adaptor)
: 6F22 / 6LR6 9V battery × 1 or Maxon AC adaptor
: manganese battery 50min. 25deg C (Panasonic 6F22NB
: alkaline battery 3 hours 25deg C (Panasonic 6LR61G)
: AC adaptor AC2009
: AC adaptor (Refer to page 29.)

\* All specifications are subject to change for improvement without notice or obligation.

## ST9Pro+ Super Tube

- ST9Pro+ was developed based on the legendary overdrive Maxon ST9, which was released in the 80s and still well-known even after it was discontinued. ST9 was reborn as ST9Pro+ with new circuitry.
- ●ST9Pro+ creates powerful, heavy, fat sound like a stack amp with midrange boost control. Wide range of setting, such as a booster, blues and hard rock, is available.
- •With newly added selectable diode clip circuitry and low-end boost circuitry, more powerful distortion and low-end boost are available.
- Operating voltage (9V or 18V mode) is switchable via an internal slide switch accessible through the unit's battery compartment. In new power-saving circuitry for ST9Pro+, DC to DC converter only operates at 18V mode. When 9V mode is selected, DC to DC converter does

## FEATURES AND CONTROLS

1 IN (input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when a plug is inserted into this jack without external power supply (AC adaptor) operation. When not in use, disconnect plug from input jack to preserve battery life.

2 OUT (output jack)

Output jack to connect to input of amplifier or other effects. ③DRIVE

Controls distortion. Turn it CW for more distortion.

**④ MID ENHANCE** 

Controls midrange boost frequency. When turning it CW, boost part moves to high-tone range. When turning it CCW, boost part moves to low-tone range.

**5**LEVEL

This controls output level of effected signal. Typically output levels of both normal signal and effected signal should be adjusted to equal levels.

6 TONE

Controls high-tone range. Turn it CW to accentuate high-tone range. Turn it CCW to cut high-tone range.





not operate, and ST9Pro+ operates with battery or AC adaptor directly. There is no power consumption for DC to DC converter, which makes battery life last longer.

- ST9Pro+ has increased dynamic headroom with internal operating voltage set at 18V. Stable high-quality sound is available as unintentionally-generated distortion is significantly reduced.
- ●TBS (True Bypass Switching) using 4PDT mechanical switch lets your instrument's signal pass through a non-electronic bypass line when the effect is disengaged, feeding your amplifier with direct, unaltered signal from your instrument. No tone changes when the effect is engaged as signal does not pass through electronic switching circuitry. This TBS gains enormous popularity among artists.
- Easy-access, tool-free battery compartment.

#### **⑦ MODE SWITCH**

The lower switch position, labeled "CLASSIC" selects the original ST9's diode clip circuitry. The upper switch position, labeled "LOW BOOST" selects an alternate paired-diode clip circuitry and low-end boost circuitry. This alternate paired-diode clip circuitry adds more distortion in entire frequency range. The low-end boost circuitry provides boost by approx. 10dB around 100Hz.

#### **®FOOTSWITCH**

Switch for effect/bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the switch and effect turns off when you depress and release the switch.

#### 9 BYPASS/EFFECT INDICATOR

This indicates the effect/bypass status and battery condition. At battery operation, it lights when plug is inserted into input jack and effect is on. At the external power supply (AC adaptor) operation, it lights when effect is on. No LED light indicates the battery is low or not installed. In this case replace the battery.

#### 10 9V INDICATOR

This indicates the operating voltage status. It lights when 9V is selected.

1118V INDICATOR

This indicates the operating voltage status. It lights when 18V is selected.

1 DC INPUT (power input jack)

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



**13 OPERATING VOLTAGE SWITCH** 

Slide it to right side for 9V and left side for 18V.



\* Turn down amplifier's volume to the minimum before switching.

ST9Pro+

Please visit www.maxon.co.jp to listen to audio samples.



No.1 Overdrive booster

(Amp:Crunch / G:Gibson Les Paul STD / Mode SW:LOW BOOST / Voltage SW:9V) Booster-like setting to power up overdrive sound of a stack amp, etc. Make basic sound with amp and add sustain and a little distortion with ST9Pro+.



No.3 Tube crunch

(Amp:Clean / G:Fender<sup>®</sup> Stratocaster<sup>®</sup> / Mode SW:CLASSIC / Voltage SW:9V) This Setting changes clean combo amp sound to warm crunch sound like a tube amp. You can use it like a pre amp when you turn DRIVE to lower position.



No.2 Natural overdrive

(Amp:Clean / G:Gibson Les Paul STD / Mode SW:CLASSIC / Voltage SW:18V) Adds high-quality distortion to light crunch sound. Best suited for lead guitar. Control MID ENHANCE to fit your guitar's character.



No.4 Light crunch

(Amp:Crunch / G:Fender<sup>®</sup> Stratocaster<sup>®</sup>/ Mode SW:CLASSIC / Voltage SW:18V) Adds light distortion retaining your amp and guitar's character. Recommended for guitar with single PU. Better to increase MID EN-HANCE level.

## CONNECTION DIAGRAM



## SPECIFICATIONS

Input Impedance Output Impedance Maximum Gain Equivalent Input Noise Control Switch	: 500k ohms : 10k ohms or less : 51dB (2.2kHz) : 115dB or less (IHF-A) : MID ENHANCE, DRIVE, TONE, LEVEL : Bypass/Effect, Voltage Switch (9V/18V) MODE Switch (CLASSIC/LOW BOOST)
Indicator	: Bypass/Effect LED, 9V LED, 18V LED
Internal Circuit Voltage	: 9VDC / 18VDC (DC to DC Converter)
Power Consumption	: 12mA/9VDC, 36mA/18VDC
Dimensions	: 74 (W) ×124 (D) × 54 (H) mm
Weight	: 610g (including battery)
Power Supply	: 6F22 / 6LR6 9V battery X 1 or Maxon AC adaptor
Battery Life	: 9VDC manganese battery 26 hours 25°C (Panasonic 6F22NB)
	: 9VDC alkaline battery 48 hours 25°C (Panasonic 6LR61G)
	: 18VDC manganese battery 2 hours 25°C (Panasonic 6F22NB)
	: 18VDC alkaline battery 8 hours 25°C (Panasonic 6LR61G)
Option	: AC adaptor (Refer to page 29.)

\* 0dB = 0.775Vrms

\* All specifications are subject to change for improvement without notice or obligation.

## SM9Pro+ Super Metal

SM9Pro+ was developed based on the distortion core of Maxon SM9 (Super Metal 9). Original SM9 was sold just after NWOBHM which created a big boom in the late 1970s.

SM9Pro+ creates scooped heavy metal tones with high-level gain circuitry and cut midrange circuitry. Wide range of setting from NWOBHM to current heavy rock / loud rock using drop D tuning is available with simple four control knobs.

Operating voltage (9V or 18V mode) is switchable via an internal slide switch accessible through the unit's battery compartment. In new power-saving circuitry for SM9Pro+, DC to DC converter only operates at 18V mode. When 9V mode is selected, DC to DC converter does not operate, and SM9Pro+ operates with battery or AC adaptor directly. There is no power consumption for DC to DC converter, which makes battery life last longer.

## FEATURES AND CONTROLS

①IN (input jack)

Input jack to connect to the output of guitar, other effects or related equipment. The product automatically turns on when a plug is inserted into this jack without external power supply (AC adaptor) operation. When not in use, disconnect plug from input jack to preserve battery life.

2 OUT (output jack)

Output jack to connect to input of amplifier or other effects. ③GAIN

Controls gain level. Turn it CW for more gain.

(4) SCOOP

Controls cut midrange frequency. When turning it CW, the frequency range of scoop moves to high range. When turning it CCW, frequency range of scoop moves to low range.

**⑤LEVEL** 

This controls output level of distortion signal. Typically output level in effect/bypass should be adjusted to equal level.

6 EDGE

Controls treble range. Turn it CW to accentuate treble range. Turn it CCW to suppress treble range.







- SM9Pro+ has increased dynamic headroom with internal operating voltage set at 18V. Stable high-quality sound is available as unintentionally-generated distortion is significantly reduced.
- ●TBS (True Bypass Switching) using 4PDT mechanical switch lets your instrument's signal pass through a non-electronic bypass line when the effect is disengaged, feeding your amplifier with direct, unaltered signal from your instrument. No tone changes when the effect is engaged as signal does not pass through electronic switching circuitry. This TBS gains enormous popularity among artists.
- Easy-access, tool-free battery compartment.



#### **⑦FOOTSWITCH**

Switch for effect/bypass. Stepping on this switch alternately turns effects on and off.

\* Effect turns on when you depress the switch and effect turns off when you depress and release the switch.

#### 8 BYPASS/EFFECT INDICATOR

This indicates the effect/bypass status and battery condition. At battery operation, it lights when plug is inserted into input jack and effect is on. At the external power supply (AC adaptor) operation, it lights when effect is on. No LED light indicates the battery is low or not installed. In this case replace the battery.

#### 99V INDICATOR

This indicates the operating voltage status. It lights when  $9\mathsf{V}$  is selected.

#### 10 18V INDICATOR

This indicates the operating voltage status. It lights when 18V is selected.

1 DC INPUT (power input jack)

Jack for connection of external 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.

10 OPERATING VOLTAGE SWITCH

Slide it to right side for 9V and left side for 18V.



\* Turn down amplifier's volume to the minimum before switching.



SM9Pro+

Please visit www.maxon.co.jp to listen to audio samples.



No.1 Classic distortion

(Amp:Drive / G:Fender<sup>®</sup> Stratocaster<sup>®</sup> / Voltage SW:9V)

Retaining the amp sound, adds distortion with SM9Pro+. Gives overdrive and sustain. Mild distortion is available. Better to decrease SCOOP level.



No.3 80s distortion

(Amp:Clean / G:Gibson Les Paul STD / Voltage SW:9V)

Turns clean sound into 80s pleasant and clear distortion sound. Find your favorite tone with SCOOP and EDGE.



No.2 Power stack for clean

(Amp:Clean / G:Fender<sup>®</sup> Stratocaster<sup>®</sup> / Voltage SW:18V)

This setting turns clean sound of transistor combo amp into powerful sound like highgain stack amp. Control EDGE according to your guitar character.



No.4 High-powered drive

(Amp:Crunch / G:Gibson Les Paul STD / Voltage SW:18V)

Setting for firm and high-gain distortion which is characteristic of SM9Pro+. Provides powerful and sharp sound even with deep distortion. Fuzz-like distortion can be made with SCOOP and PU position.

## **CONNECTION DIAGRAM**



## SPECIFICATIONS

Input Impedance Output Impedance Maximum Gain Equivalent Input Noise Control Switch Indicator Internal Circuit Voltage Power Consumption Dimensions Weight Power Supply Battery Life	<ul> <li>500k ohms</li> <li>10k ohms or less</li> <li>52.5dB (4kHz)</li> <li>-60dB or less (IHF-A)</li> <li>GAIN, SCOOP, LEVEL, EDGE</li> <li>Bypass/Effect, Voltage Switch (9V/18V)</li> <li>Bypass/Effect, LED, 9V LED, 18V LED</li> <li>9VDC / 18VDC (DC to DC Converter)</li> <li>12mA/9VDC, 42mA/18VDC</li> <li>74 (W) ×124 (D) × 54 (H) mm</li> <li>600g (including battery)</li> <li>6F22 / 6LR6 9V battery × 1 or Maxon AC adaptor</li> <li>9VDC manganese battery 27 hours 25°C (Panasonic 6F22NB)</li> <li>18VDC manganese battery 1.3 hours 25°C (Panasonic 6F22NB)</li> </ul>
Option	: AC adaptor (Refer to page 29.)

\* 0dB = 0.775Vrms

\* All specifications are subject to change for improvement without notice or obligation.

## BATTERY REPLACEMENT

BATTERY REPLACEMENT (excluding TOD9 and TBO9)

PAC9, VJR9, ST9Pro+ and SM9Pro+ operate on one 9V battery (6LR61 or 6F22). Follow the procedures below to replace batteries:



\* Be sure the battery is firmly connected to battery snap with the correct polarities.

## ATTENTION:

- Turn down the volume of effect and amplifier to the minimum before connecting Maxon effects to guitar, amplifier or other effects in order not to damage other connected equipment by unintended noise.
- When not in use, disconnect plug from input jack to preserve battery.
- Take out the battery if the product is not used for a long period of time.
- No or dark LED light indicates the battery is low or not installed. In this case replace the battery to avoid poor effect or distorted signal.
- Be sure to use the correct Maxon AC adaptor. Use of any other adaptor may cause trouble.
- Do not try to remove screws.

Optional accessories: Maxon AC adaptor

model name	input	output	country	polarity
AC2009*1	100VAC to 240VAC	9VDC/2000mA	worldwide	
AC210N	120VAC		USA, Canada	
AC210U	220VAC	9VDC/200mA	Europe (except UK)	⊕—€–⊖
AC210UK	230VAC		UK	center-/sleeve+
AC210	100VAC	9VDC/200mA	Japan	
AC310	100VAC	9VDC/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	Austria, Belgium, Denmark,
С	China		Finland, France, Germany, Italy,
J	Japan		Netherlands, Norway, Sweden,
K	South Korea		Switzerland, etc.
Ν	USA, Canada	UK	UK



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.

#### FCC Class B Equipment, United States Only.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate

radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment causes harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- •Connect the equipment into an outlet on a circuit that is different from that to which the receiver is connected.
- •Consult the dealer or an experienced radio or television technician for help.

Declaration of Conformity for Products Marked with the FCC Logo, United States Only. This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# F©

For questions regarding this FCC declaration, contact us by mail, phone or e-mail: MAXON United States distributor:

Godlyke, Inc. P.O. Box 3076 Clifton, NJ 07012 USA Phone: 973-777-7477 E-mail: info@godlyke.com MAXON / NISSHIN ONPA CO., LTD. E-mail: sales@maxon.co.jp

To identify this product, refer to the model number found on the product.

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.

## **Maxon**<sup>®</sup>

NISSHIN ONPA CO., LTD.

4172-1 Shimauchi, Matsumoto-City, Nagano, 390-0851 Japan TEL:+81-263-40-1403 FAX:+81-263-40-1410 www.maxon.co.jp sales@maxon.co.jp

For North America www.maxonfx.com info@maxonfx.com

All specifications are subject to change for improvement without notice or obligation. Sample setting by Shiro Tanigawa

Copyright 1999 - 2010 NISSHIN ONPA CO., LTD. All rights reserved. UMN-9SE-0106C

Printed in Japan

All brand names and product names are trademarks or registered trademarks of their respective companies.