

WAHryTone Users Manual

Firmware Version 2.03
As at 3rd March 2021



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Dear Customer

Thank you for purchasing the Prostage WAHryTone. The WAHryTone allows you, among other things, to remotely control the WahWah effect or the volume with an expression pedal. All you need at the front of the stage is a simple expression pedal or a MIDI foot controller with expression pedal.

With the WAHryTone and the Prostage XDS Loop System for your stompboxes, you can handle the entire guitar signal in the rack, eliminating several meters of guitar cable and the associated loss of sound and dynamics.

The WAHryTone consists of a purely analog audio part, but can be controlled digitally. The device has no controls, but you can adjust all parameters by the app, by the Prostage System Manager Software or by MIDI. You can save up to 128 presets with different sounds.

1.1 WAHryTone Features

- WahWah
- Tremolo
- Contour Booster
- Treble Booster
- Volume Pedal (VCA)
- Level Booster up to 25dB
- Tuner
- Pure analog audio circuit (using Fasel coil)
- A voltage-controlled circuit, called "VCA", fulfills the task of the potentiometer. The VCA is controlled remotely by the expression pedal, by MIDI or by the Auto-Wah function.
- Compatible with all MIDI expression pedals
- Auto Wah function with tap tempo
- Parameters adjustable by app and MIDI
- Auto Enable WahWah function (the effect switches on as soon as you move the expression pedal)
- MIDI controlled parameters: WahWah effect, Input- & Output-Gain, Base-Frequency of the WahWah, Q-factor, Coil damping, Range of the effect, Lin- or Log-Response curve, Contour boost frequency, various Auto Wah and Touch Wah (Velocity-dynamic) functions, Bypass
- Easy creation of presets using the app (iOS & Android) or the System Manager software on your Mac or PC.
- 128 presets (different sounds) can be saved in memory.
- Input impedance: 1 Mega Ohm
- Output impedance: 100k Ohm

1.2 The Prostage System

Prostage stands for professional live-equipment. The different units are to be regarded as a coherent system, all of which are configured using the System Manager software. If the WAHryTone is connected to a Prostage XDS | XLS | XTMpro, presets can also be created very easily using the System Manager software.

If you have any questions, or if something does not work as you expect, please do not hesitate to contact us: info@prostage.eu. Your questions will also help us to improve this users manual.

I wish you lots of fun with the new WAHryTone and big success in your musical career.

Lukas Truninger
Founder & Developer



2.1 MIDI - WTF Is That???

MIDI stands for "Music Instrument Digital Interface". MIDI is the global standard for transmitting notes and control commands to and from all kinds of electronic instruments and sound-processing equipment.

You can connect your WAHryTone and use the basic functions directly, without having to deal with MIDI. If you like to control it via a MIDI expression pedal, all you have to do is to configure your expression pedal so that it sends CC number 7. You can find more information about this in the users manual of your foot controller. And, of course, you've got to connect the WAHryTone to the foot controller with a MIDI cable (see [chapter 3.2](#)).

If you own a Prostage XDS | XLS | XTMpro, you can program the WAHryTone very easily using the System Manager software. No MIDI knowledge is required to do this. But you can also program the WAHryTone using MIDI commands without the XDS | XLS | XTMpro. Then, you need a MIDI interface and a sequencer software that can send Sysex data. For this, MIDI knowledge is necessary. Detailed information about MIDI can be found on www.midi.org and many other sites on the internet.

2.2 Expression Pedal

An expression pedal is a kind of volume pedal that is connected to the WAHryTone, to a MIDI foot controller, or which is part of the MIDI foot controller. However, the expression pedal does not control the guitar signal, but generates a control signal, with which for example the volume, the WahWah effect or other adjustable values of the WAHryTone can be controlled.

2.3 Instant Access = On/Off Switches (Stompbox Mode)

Instant Access are "hardwired" on/off switches. These work like an analog footswitch connected directly to your amplifier, e.g. to switch channels. At the foot controller you can, for example, define a button which switches the effect on and off.

2.4 Preset | Program Change

Presets are stored settings in the effects unit. You can recall presets using the switches on the foot controller. For this purpose, a program number is selected on the foot controller. This is known as a Program Change.

A preset contains all the settings of the WAHryTone belonging to one sound. For example, the following presets are stored:

- Preset 2 => Standard CryBaby Sound
- Preset 3 => XY Signature Wah
-
- Preset 4 => Volume Control

If you now press button 1 on the foot controller, the adjustable values - so-called parameters - are set within the WAHryTone so that the sound corresponds to the CryBaby.

If you press button 2, the parameters are changed as they have been stored for the Extended Wah.

In Preset 13 the WAHryTone switches its operating mode and works as a volume pedal.

2.5 Control Change | CC = > Real-time Control With an Expression Pedal (e.g. Volume)

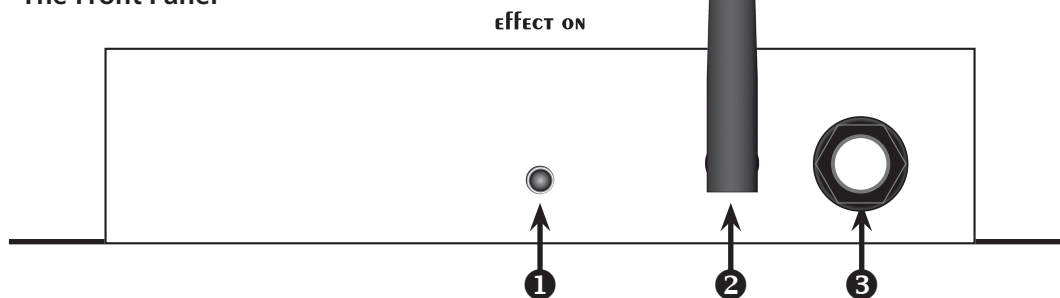
The abbreviation CC stands for MIDI "Control Change". Control Changes are commands, with which parameters (e.g. volume) are controlled in real time. To this end, an expression pedal sends - as long as it is moved - so called Continuous Controller and tells the effects device its position. Control Changes can also switch functions at the receiver device on and off.

2.6 Hard-Bypass | Buffered-Bypass

Bypass means that the signal is passed from the input jack of an effect device directly to its output. The effect is thus bypassed, i.e. it is off. With a hard-bypass, this is done with a relay. That is as whether the jacks are soldered directly to each other. With a Buffered Bypass, the signal still flows through a few electronic components, which "refresh" the signal, but not through the effect.

3 Connecting the WAHryTone

3.1 The Front Panel



1 Effect On LED

This LED lights up when the WAHryTone is operational. A blinking LED means that the device is running but not connected to the app.

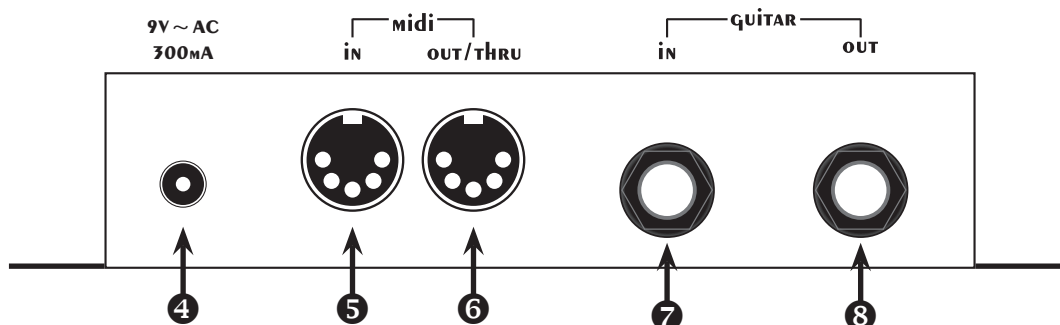
2 Antenna

The antenna is needed by the WAHryTone to communicate with the app.

3 Expression Pedal Connector

Here you can connect an expression pedal via mono jack cable or an expression pedal with switch via a stereo jack cable. (see [chapter 3.3](#)).

3.2 The Rear Panel



4 Power Connector

The WAHryTone must be powered necessarily using a **9V~AC (alternating current!)** power supply. The WAHryTone will not work with direct current (DC). Higher voltages can destroy the WAHryTone.

5 MIDI In

Connect the [MIDI In] of the WAHryTone using a MIDI cable to the [MIDI Out] of the foot controller or the [MIDI Out] of the Prostage XDS | XLS | XTMpro. If several MIDI effect devices are used, the [MIDI In] from the WAHryTone can also be connected to the MIDI [Thru] of another device in your MIDI chain.

6 MIDI Out/Thru

All data received at the MIDI In are forwarded on the [MIDI Out/Thru]. You can connect e.g. other effects devices or a MIDI-capable guitar amp to this connector. Further, MIDI data generated by the WAHryTone (e.g. Tuner data) is also sent on the [MIDI Out/Thru].

7 Guitar In

Connect your Guitar to the [Guitar In] using a jack cable.

8 Guitar Out

Connect the [Guitar Out] to your guitar amplifier or the next effects unit, using a jack cable.

3.3 Avoiding Hum Problems

The WAHryTone can be installed anywhere in the rack (also at the rear) using the mounting lugs. But, it must be mounted as far away as possible from fat power transformers. So, for example, do not fit it directly on top of the amplifier. The power transformers generate a magnetic field that is picked up by the fasel coil in the WAHryTone and, thus, can lead to hum. The closer the WAHryTone is located to the transformer, the more it hums. It can also help to turn the WAHryTone on the spot as the magnetic fields have a direction.

Also, the supplied power adapter must not be placed next to the WAHryTone. We recommend you to fix the WAHryTone on one side of the rack, and the power distribution and power supply of the WAHryTone on the opposite side. For more hints on building the rack, please refer to our "Ultimate Guitar Rig Building Guide", which is available on our website:

<https://www.prostage.eu/en/ebook-the-ultimate-guitar-rig-building-guide.html>

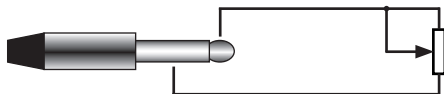
3.4 The expression pedal connection

The WAHryTone does work with most of the commercially available expression pedals. However, there is no standard for expression pedals. Some models will need minor modifications of the internal wiring in order to work. Should you have trouble to get the pedal working, check the internal wiring and rewire the pedal according to the scheme below if the wiring is different. But do not forget to calibrate the pedal as described in 3.4.3 before you start trouble shooting.

Volume pedals can also be used as expression pedals. For that, the output of the volume pedal must be connected to the expression pedal connector. Pedals for keyboards are best suited, with a 10k ohm or 20k ohm potentiometer.

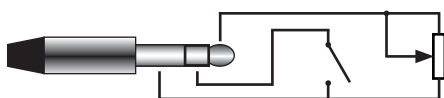
3.4.1 Expression Pedal Without Switch

An expression pedal without switch can be connected with a simple mono jack cable to the expression pedal connector of the WAHryTone. The potentiometer in the expression pedal must be connected according to the following scheme:



3.4.2 Expression Pedal With Switch

Expression pedals with switch usually have two jack connectors. You can connect this type of expression pedal using an Y-cable (also known as insert-cable), or you can modify the internal wiring according to the following scheme. Using this wiring, you can connect the expression pedal using a single stereo jack cable.



3.4.3 Calibration of the Expression Pedal

Important => The expression pedal needs to be calibrated in order to work correctly. The calibration must be done each time you connect a new (different) expression pedal. You can calibrate the expression pedal via the app or the System Manager software. The button for the calibration can be found here:

App: [Settings] => scroll all the way down => [Calibrate Expression Pedal]

System Manager: [Window: Advanced Settings] => tab [Effects Devices]
=> choose top left [Model: WAHryTone]
=> bottom right => [Calibrate]

Click the button and follow the onscreen instructions. The calibration process requires that you calibrate the two end positions (heel and toe) and the center position of the expression pedal. Calibrating the center position gives you the option to define the control curve, thus how your pedal feels below the foot. If you like to calibrate the pedal linear (thus 1:1 to the potentiometer inside the expression pedal), you can do this as follows: After you have calibrated the highest position (toe down), simply leave the expression pedal in the same position and click "OK" again for the calibration of the center position. The WAHryTone then notes that this is not the center position and ignores it.

Note: if you like your pedal to react the other way round, you can simply calibrate it vice verca, meaning, you interchange the toe and heel positions during calibration.

4 Using the WAHryTone

To adjust the various different sounds of the WAHryTone you need the Prostage App. You can download it for free from the Apple Store (iOS) or Google Playstore (Android). With the app you can adjust the so-called parameters and save presets. In addition, your mobile phone serves as a tuner (see [chapter 5](#)).

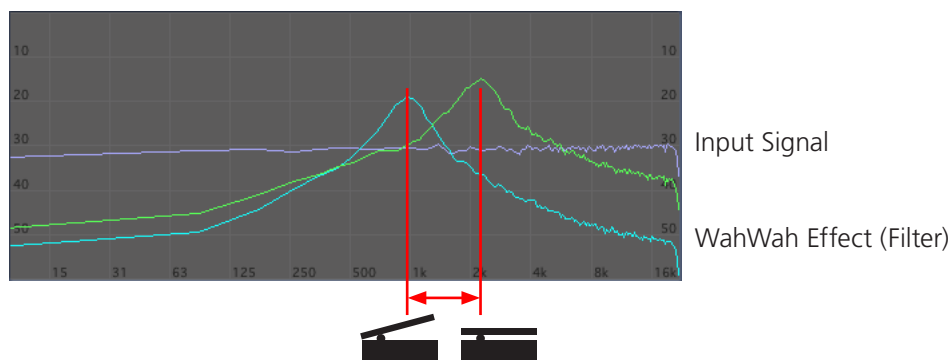
If you own an XTMpro, XDS or XLS system from Prostage, you can also program the WAHryTone using the System Manager software (see [chapter 6](#)).

In addition, all parameters can also be controlled with MIDI Control Change commands. (See [Appendix A](#) for the listing of CC commands.)

4.1 What Exactly is the Prostage WAHryTone?

The Prostage WAHryTone is foremost a WahWah designed with a fully analog signal path. The effect is generated using an original Fasel coil. Instead of the potentiometer, the WAHryTone uses a so-called VCA. This is basically a potentiometer that can be controlled remotely.

The WahWah effect is a filter, which raises the mids and lowers the bass and treble. The special effect is achieved by shifting up and down the frequency of the resonance peak.



The Prostage WAHryTone not only allows you to control the WahWah effect, but it also lets you adjust all the important values - so called parameters - that affect the sound of the WahWah and the other effects. The parameters are further explained in [chapter 8.2](#). You can, for example, make a preset with an original Cry Baby, another preset with the XY Signature Wah, and so on.

The WAHryTone can further be used as a volume pedal, as a tremolo and also as level-, contour- or treble-booster. And it has a tuner, which is displayed in the app or the Prostage tuner & text display.

4.2 Basic Functions of the WAHryTone

The WAHryTone can store up to 128 presets. These are recalled via the app or via MIDI Program Change commands. In [Appendix B](#) you will find a list of factory presets.

The WahWah effect and the volume are controlled either by an expression pedal connected directly to the WAHryTone, or an expression pedal of a MIDI foot controller. The MIDI expression pedal must send "Control Change No. 7" (volume). When using a Prostage Foot Controller, it is recommended to use "Hi Res" instead of Control Change No. 7, as the resolution of the expression pedal is eight times greater. The WAHryTone receives ex factory on all MIDI channels (omni).

4.3 Switching the Effect On and Off

There are various ways to turn the effect on and off :

- **Preset Change**

You can define different presets, including one or more presets in "True Bypass" or "Buffered Bypass" modes. If you call such a "Bypass" preset, the effect will turn off. If you recall another preset, the effect will turn on.

- **Switch on the Expression Pedal**

If you are using an expression pedal with a switch (such as the Misson Engineering SP-1), the switch toggles between Preset 128 and the current preset. By default, preset 128 is a bypass preset. Thus, you can turn the WAHryTone on and off like a conventional WahWah (as long as you do not store any other operating mode on Preset 128).

- **Control Change Command | Instant Access Switch**

The true-bypass relay can be switched on and off with the MIDI command CC74. On a Prostage foot controller, you can e.g. assign this command to any switch. Thus you have a dedicated switch on the foot controller to turn the WAHryTone on and off.

- **Automatic On and Off**

In WahWah operating mode, the WAHryTone offers an [☐Auto Enable] function. If this is activated, the WahWah turns on automatically as soon as the expression pedal is moved. After an adjustable period in which the expression pedal is not moved, the WahWah switches off again. Or it stays on until a new preset is recalled.

If, in addition, the function [Latch ☐Top] or [Latch ☐Bot] is enabled, the WahWah only switches on or off when the expression pedal reaches its top position, respectively, the bottom. So this works like a virtual switch.

4.4 The Preset Number 128

Preset number 128 has a special function: it is the bypass preset, which is recalled when you press the on / off switch of the expression pedal, or when you use the "Auto Enable WahWah" function in the WahWah presets. This function turns the WahWah on as soon as you move the pedal, and it automatically switches back to bypass when the pedal stands still. For a detailed explanation see [8.2.2 "Expression Pedal => Auto Enable WahWah"](#).

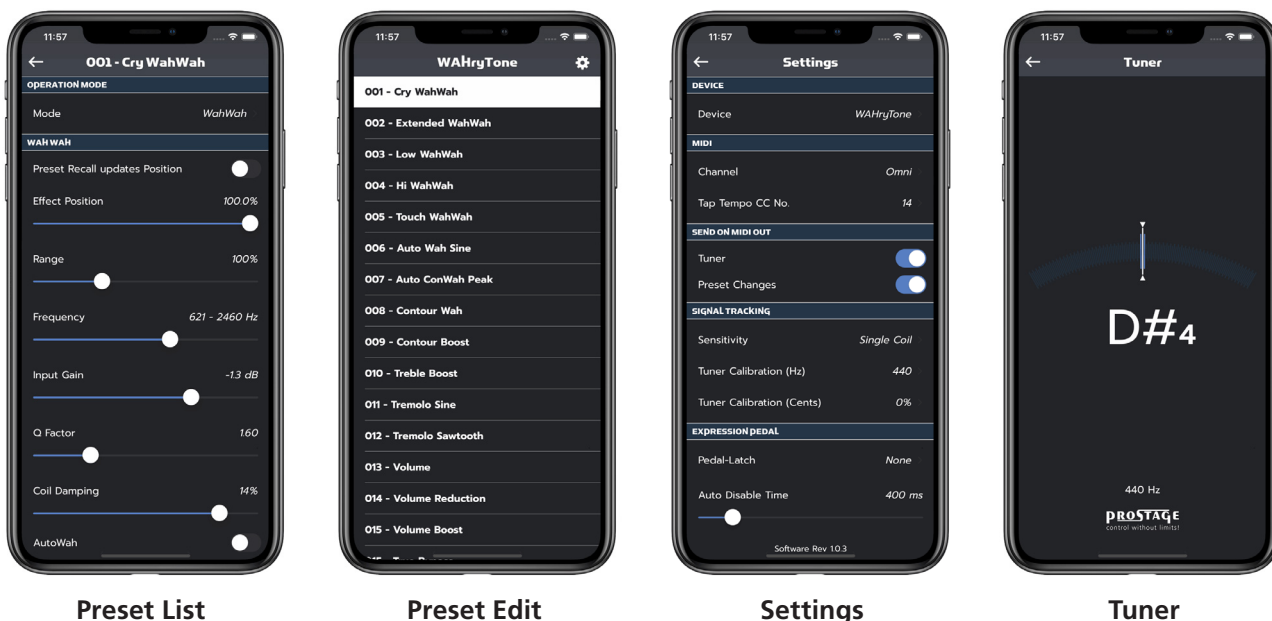
You can now set the operating mode of this preset to either "True Bypass" or "Buffered Bypass". But you can also use the "Volume" operation mode. Like this, you can use the switch on the expression pedal to switch your WAHryTone between WahWah and volume pedal. Further, you can also select "Tuner". This is also a "volume" pedal, but with the tuner activated. The operating modes "Volume" and "Tuner" only make sense if you use an expression pedal with switch. They make no sense with the "Auto Enable" function of the WahWah.

Preset 128 cannot be deleted.

5 Creating Presets with the Prostage App

With the Prostage Remote Control app you can set all the parameters of the WAHryTone and save presets. The app also serves as a tuner display.

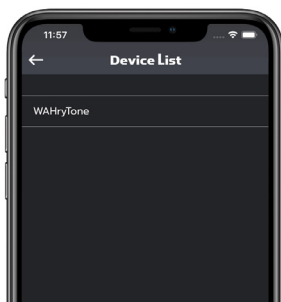
You can download the Prostage App for free from the Apple App Store (iOS) or Google Play Store (Android). The app is divided into four windows:



5.1 Connect the App to the Device | Pairing Code

You have to enable Bluetooth on your phone, so that the app can communicate with the WAHryTone. Please also make sure that the antenna on the WAHryTone is attached correctly.

IMPORTANT => The WAHryTone must be connected to the mobile phone using the Prostage Remote Control app, NOT via the mobile phone's Bluetooth settings. In the app you must first select the WAHryTone in the [Device List]. The [Device List] is automatically displayed when the app is launched. You can also access it via [Settings] => [Device].



On Android: you need to give the app permissions to your location. This is required for the Bluetooth connection. However, we are not interested where you are and the app does not collect any location data. If you connect the WAHryTone for the very first time, you will be asked for a code. Here you must enter the 6-digits serial number of your WAHryTone device. The serial number is found on the sticker on the bottom of the WAHryTone. But the first digit must be replaced with "1". Thus, if the serial number of your device is "WAH-000123", then the pairing code is "100123". This code is required in order that nobody else can connect to your WAHryTone and change your presets.

As soon as the device has connected, the presets of the WAHryTone are read out and shown in the preset list.

5.2 Selecting Presets

You can easily select a preset by clicking it in the list. If you select a preset with operating mode "Tuner", the display changes to the tuner display. This is also the case when a tuner preset is selected via MIDI. The tuner can be used in portrait or landscape mode.

5.3 Adjusting and Saving Sounds | Presets

To edit a preset, you must first select it in the preset list. Then move the white bar to the right and click on the orange symbol. This opens the window for editing the preset. If you have selected a tuner preset and the Tuner window did open, you will reach the window for editing the preset via the icon in the top right of the tuner window (only in portrait mode).

In this Edit window you can now set all parameters. Depending on the selected operating mode, different parameters are available. The parameters are described in detail in [chapter 8.2](#).

To save a preset, click [Save Preset as ...] at the bottom of the window. In the dialog window that opens, you can give the preset a new name and, if you want, also a new preset number. If you do not change anything, the current preset will be overwritten. To confirm, click [Store Preset].

Important => Preset 128 has a special function and therefore has to be a Bypass Preset. See [chapter 4.4](#) for more information.

5.4 Delete Sounds | Presets

You can delete a preset in the preset list as follows: Move the black bar of a non-selected preset to the right and click the red icon. A window opens in which you have to confirm that the preset should be deleted. Or you can also cancel the command.

The currently selected preset can not be deleted.

5.5 Changing the Basic Settings

You can set the basic settings of the WAHryTone in the [Settings] window. You can reach it from the preset list via the icon at the top right. What the individual parameters means is explained in [chapter 8.1](#).

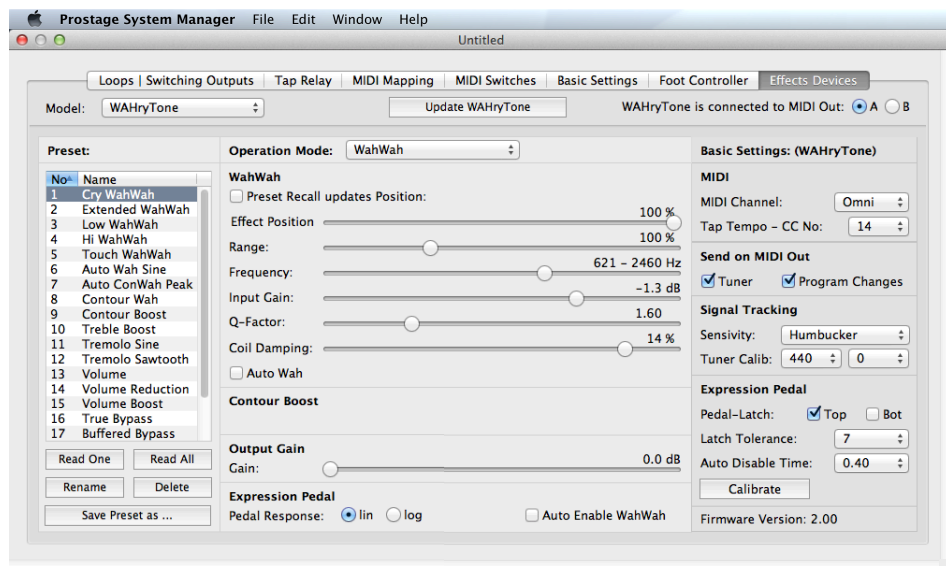
5.6 Error Messages

If you get an error message, most likely your connection to the device is lost. Make sure you are not too far away from the device and reconnect as described in [chapter 5.1](#).

6 Creating Presets Using the Prostage System Manager Software

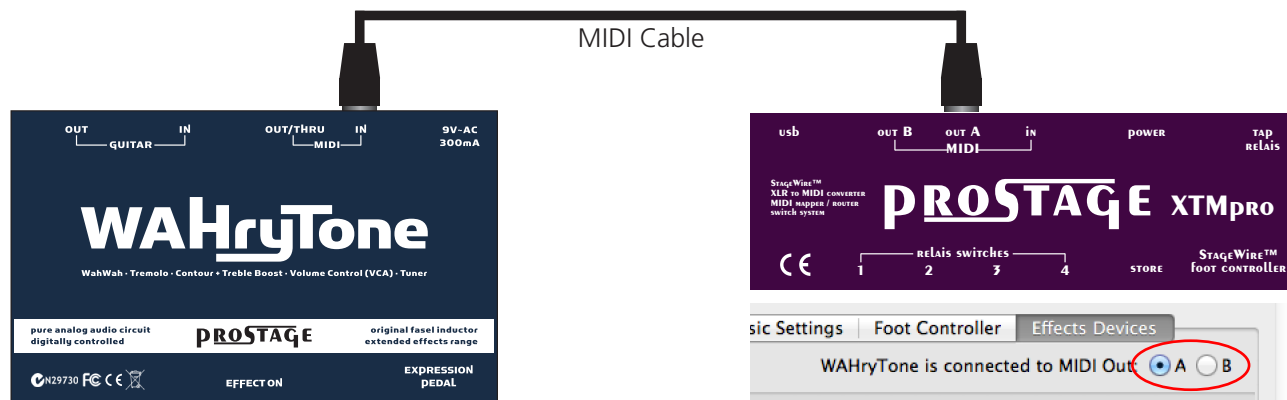
The Prostage System Manager software is the user interface for the configuration of the complete Prostage System. The software is available as a free download on the website (Mac & PC). The software requires a Prostage XDS, XLS or XTmpro as a MIDI interface. This unit is the heart of every Prostage system.

The settings for the Prostage effect devices can be found in [Windows] => [Advanced Settings] in the [Effects Devices] tab. If the WAHryTone is not already selected, you have to select it in the top left corner of [Model]. The software offers you a clear structured window where you can set all the parameters of the WAHryTone and save presets easily.

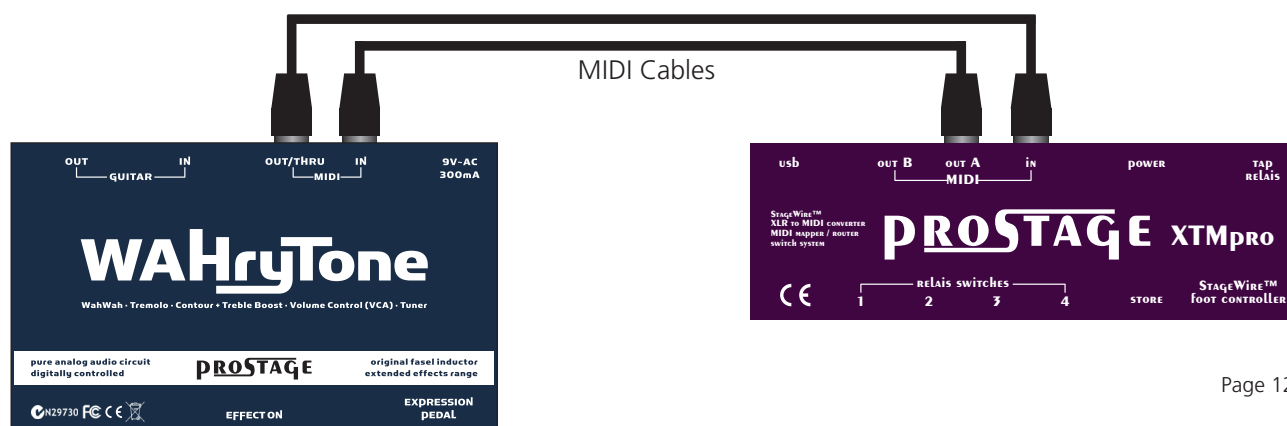


6.1 Connecting the WAHryTone to the XDS | XLS | XTmpro

In order that the System Manager software can communicate with the WAHryTone, it must be connected to the XDS | XLS | XTmpro via MIDI. Connect [MIDI Out A] or [MIDI Out B] from the XDS | XLS | XTmpro to the [MIDI In] of the WAHryTone. In the System Manager window in the upper right you have to specify which MIDI Out you are using [WAHryTone is connected to MIDI Out ☒ A ☐ B].

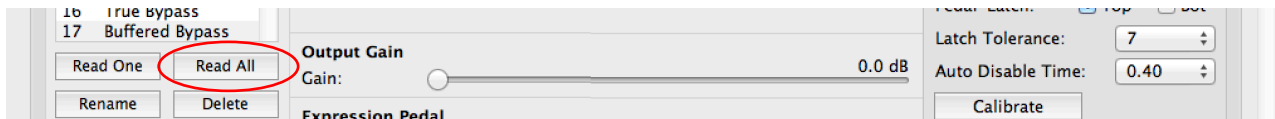


In order to also read the settings of the WAHryTone, another MIDI cable is required from the [MIDI Out/Thru] of the WAHryTone to the [MIDI In] of the XDS | XLS | XTmpro.



6.2 Reading the Settings of the WAHryTone

IMPORTANT => The WAHryTone is not automatically synchronized with the System Manager software. The presets stored inside the System Manager and the WAHryTone may differ from each other. To view the presets stored in the WAHryTone with the System Manager software, you have to read out the WAHryTone first by clicking on the button [Read All]. All 128 presets and the global/basic settings are read.



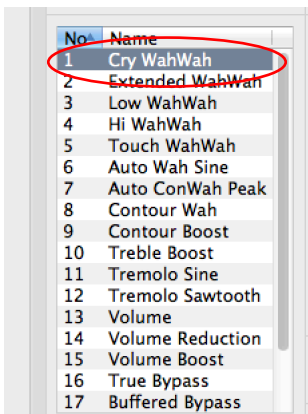
Using the button [Read One], you can also read an individual preset.

NOTE => You can also edit all parameters without reading the WAHryTone. In this case, you need only one MIDI cable from the XDS | XLS | XTMpro [MIDI Out] to the WahWah [MIDI In]. But be aware that the settings on the computer screen do not necessarily correspond to the settings in the WAHryTone.

6.3 Recalling Presets

When recalling presets, you have to consider the following:

If a preset is recalled via the foot controller (StageWire or [MIDI In] of the XDS | XLS | XTMpro), the WAHryTone loads the preset locally stored in the WahWah and the corresponding preset number within the System Manager window will be selected. The screen shows the settings stored on the computer - If the WAHryTone has not been read before, these settings may not match the presets stored on the WAHryTone.

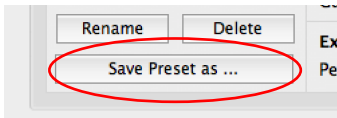


The presets can also be recalled via the preset list on the left side of the System Manager window. In the window that opens up, you can choose whether the preset saved in the WAHryTone should be recalled (thus the same as for the MIDI preset change), or if the System Manager software shall send the settings stored in the computer to the WAHryTone. If you select [Send], the software sends the settings displayed on the screen to the WAHryTone. This means that the preset in the WAHryTone is temporarily overwritten. To save these settings permanently in WAHryTone, you have to click on the button [Save Preset as ...]. Otherwise, the settings will be lost the next time the preset is changed.

If you select [Never Send], the window will not open until the next reboot of the System Manager software and the presets in the WAHryTone will not be replaced by the System Manager software settings.

6.4 Adjusting Parameters and Store Presets in the WAHryTone

All parameters of the WAHryTone can be changed with the knobs and buttons in the System Manager software. What each parameter does is described in [chapter 8](#). You can save your settings on up to 128 different preset numbers and thus create 128 different sounds.

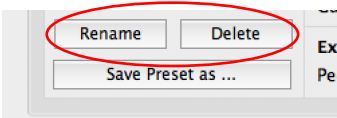


By clicking on the [Save Preset as ...] button, the changes are saved permanently. When saving, you have to select a preset number, via which the settings can be recalled later. In addition, you have to give the preset a name. If you do not save your settings, they will be lost at the next preset change.

IMPORTANT => Storing a preset will always save the settings that are currently set inside the WAHryTone (that is what you hear). When you store a preset, no settings will be sent from the System Manager to the WAHryTone.

IMPORTANT => The preset 128 has a special function and must therefore be a "Bypass" preset: This preset will be recalled when you turn off the effect with the On / Off switch on the expression pedal. In addition, the preset is used by the "WahWah Auto Enable" function. You can save either a "True Bypass" or a "Buffered Bypass" preset here. Alternatively, a "Volume" preset is also possible. Then you can use the switch on the expression pedal to toggle between WahWah and Volume.

6.5 Rename or Delete a Presets



With the [Rename] button you can rename the selected preset.
The button [Delete] deletes, after confirmation, the selected preset.

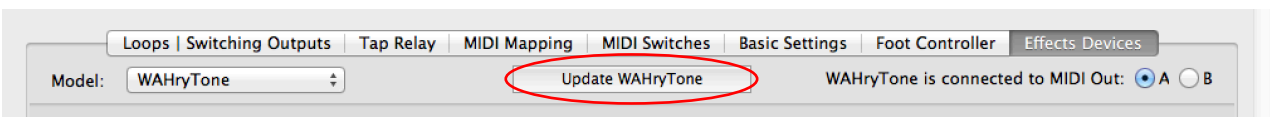
6.6 Saving the Settings to the Local Hard Disk

The settings of the WAHryTone can be saved to the local hard disk. This makes sense e.g. if you play in two different bands using two different setups. With [File] => [Save WAHryTone Presets], the complete configuration (all presets and the settings) is stored to the hard disk.

IMPORTANT => Do not forget to read out the WAHryTone first (see [chapter 6.2](#)) in order to store the correct settings on your local hard disk.

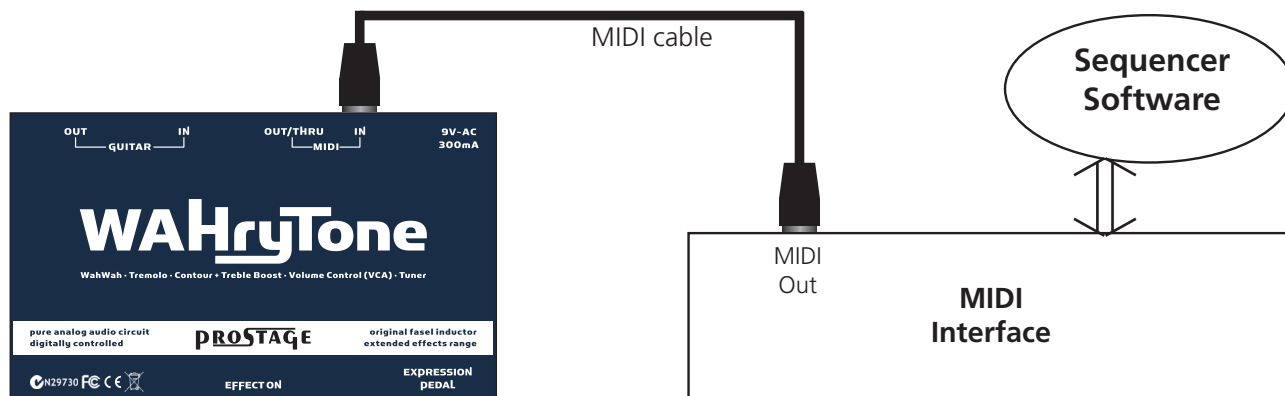
6.7 Reading the Settings from Local Hard Disk

[File] => [Open WAHryTone Presets] will open the WAHryTone settings stored on the hard disk (file extension .pef). The data is loaded into the System Manager window only.



In order to send all the settings to the WAHryTone, you have to click the button [Update WAHryTone]. This will overwrite all presets and the basic settings inside the WAHryTone with the settings from the System Manager.

The presets of the WAHryTone can be edited using a sequencer software. Of course, a MIDI interface must be available too and MIDI knowledge is required.



7.1 Controlling the Parameters using Control Change Commands

The following CC (Control Change) commands are used to adjust the parameters (more about the parameters in chapter 8):

CC 07	(0-127)	WahWah effect (operating mode [<input checked="" type="radio"/> WahWah]), or volume (operating mode [<input checked="" type="radio"/> Volume])
CC 67	(0-127)	Effect Position at Preset Recall
CC 80	(0-8)	Operation Mode *
CC 81	(0-99)	Auto Wah / Tremolo Time fine (in 1/1000 Sec.) ***
CC 82	(0-127)	Auto Wah / Tremolo Time coarse (in 1/10 Sec.)
CC 83	(0-127)	Dynamic Wah Threshold
CC 84	(0-127)	Dynamic Wah Sense
CC 85	(0-127)	Dynamic Wah Decay
CC 88	(0-6)	Auto Wah / Tremolo Mode **
CC 89	(0-127)	Range, in Operation Mode [<input checked="" type="radio"/> WahWah] 180%...0%, in [<input checked="" type="radio"/> Volume]; -100 dB...0 dB
CC 90	(0-127)	WahWah Input Gain (-15 dB ... +4 dB)
CC 91	(0-127)	WahWah Q Factor (Wide ... Steep)
CC 92	(0-127)	WahWah Coil Rating (Flat ... Sharp)
CC 93	(0-127)	WahWah Frequency (162 / 486 Hz ... 2,2 / 6,6 kHz)
CC 94	(0-127)	Contour Boost Frequency (450 Hz ... 3,4 kHz)
CC 95	(0-127)	Output Gain (0 dB ... +25 dB)
CC 14	(off/on)	"Tap" (factory default is CC14. However, this value can be modified using Sysex commands)
CC 68	(off/on)	"Dynamic Wah invert direction"
CC 72	(off/on)	"Preset Recall updates Position" off / on
CC 73	(off/on)	"Curve" linear / logarithmic
CC 74	(off/on)	"True Bypass" on / off
CC 75	(off/on)	"WahWah / VCA" operating mode
CC 76	(off/on)	"WahWah" disabled / enabled
CC 77	(off/on)	"Tuner" disabled / enabled
CC 78	(off/on)	"Contour Boost" disabled / enabled
CC 79	(off/on)	"Auto Enable" disabled / enabled

For CC 14, 68 and 72 to 79, the controller values are 0 = off, 127 = on.

NOTE => Depending on the operation mode, not all the parameters affect the sound.

* Operation Modes:

- 0 - WahWah
- 1 - WahWah & Contour Boost
- 2 - Contour Boost
- 3 - Treble Boost
- 4 - Tremolo
- 5 - Volume
- 6 - True Bypass
- 7 - Buffered Bypass
- 8 - Tuner

** Auto Wah / Tremolo Modes:

- 0 - Auto Wah off
- 1 - Sine
- 2 - Peak
- 3 - Sawtooth Increasing
- 4 - Sawtooth decreasing
- 5 - Square
- 6 - Dynamic
- 7 - Frequency

*** Auto Wah Time

If both values are set to 0, then the time will not update when preset is changed. Instead, the time from previous preset will be kept.

7.2 Saving Presets and Changing the Basic Settings using Sysex Commands

IMPORTANT => In the commands listed below, XX | YY stands for a hexadecimal value each. Values from 00 up to 7F (= 127) are permitted. Higher values are not allowed.

- **Save the Current Settings:**

F0 00 20 75 01 7F F7 => Store to the current preset number
F0 00 20 75 01 7F XX F7 => Store to a specific preset number, where XX = preset number

- **Save the Preset Name:**

F0 00 20 75 01 65 XX => XX = Preset-Number
YY (YY ...) F7 => YY = Preset-Name: min.1, max. 16 ASCII-7 Characters

- **Deleting a Preset:**

F0 00 20 75 01 65 XX F7 => XX = Preset-Number

- **MIDI channel assignment**

F0 00 20 75 01 70 XY F7 Y => 0-F = MIDI channel (0 = channel 1, F = channel 16);
X => 1 => MIDI receive channel = Omni

- **Tap CC Number**

F0 00 20 75 01 75 XX F7 Tap CC No (XX = CC No.)

- **Tuner Calibration**

F0 00 20 75 01 76 XX F7 XX => Tuner Calibration % (0 = -50%, 50 = 0%, 100 = +50%)
F0 00 20 75 01 77 YY F7 YY => Tuner Calibration Hz (40 = 440 Hz)

- **Auto WahWah Disable Time**

F0 00 20 75 01 72 XX F7 Auto Disable Time (Time in ms = (20 * XX) + 80)
XX = 7F: The WahWah does not switch off automatically

- **Auto Enable Latch Funktion**

F0 00 20 75 01 6B XY F7 Y => 0 = Latch function disabled
5 = Latch Top
A = Latch Bottom
F = Latch Top & Bottom
X => 0-7 = Latch tolerance
0 = Latch at CC7 value 0 or 127, 7 = Latch already at CC7 value 7 or 120

- **Options**

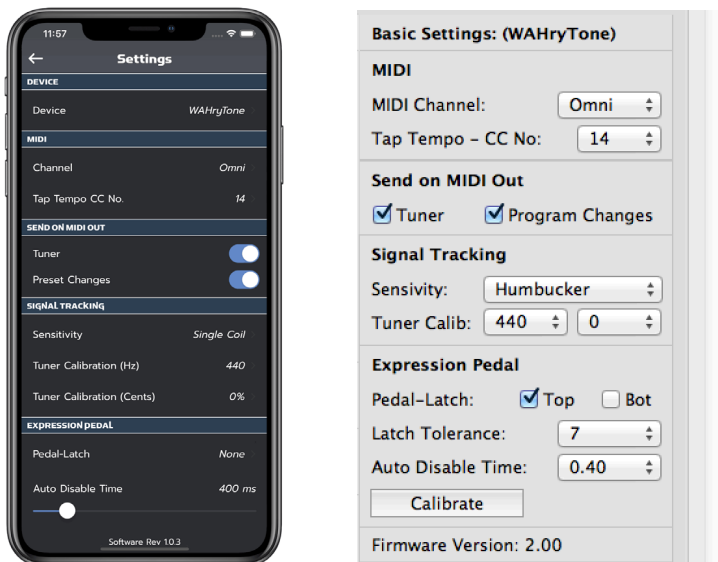
F0 00 20 75 01 6C YX F7 Y => Send on MDI Out:
0 = Do not send Tuner nor Program Changes from App
1 = Send Tuner
2 = Send Program Changes from App
3 = Send Tuner and Program Changes from App
X => Tuner / Touch Wah Sensivity:
0 = Single Coil
2 = Humbucker
4 = Guitar with active Pickup / passive Bass
6 = Bass with active Pickup

8 The Settings of the WAHryTone

In the following, we explain all adjustable values (so called parameters) of the WAHryTone:

8.1 Global Parameters | Settings

The parameters in the [Settings] window are global. That means they apply to all presets. The global parameters are immediately taken from the WAHryTone without you having to save them.



MIDI => Channel

[MIDI Channel] sets the MIDI channel on which the WAHryTone receives and transmits MIDI commands. “Omni” means that the WAHryTone receives on all MIDI channels, respectively, that the MIDI channel is ignored when receiving commands. In the “Omni” setting, the WAHryTone uses MIDI channel 1 for sending. In case of doubt, “Omni” is the correct setting.

MIDI => Tap Tempo - CC No

The WAHryTone has a Tap function for the Auto Wah and Tremolo (see [chapter 8.2.4](#)). That is, the effect makes the movement itself, even without a connected expression pedal. The speed of the auto effect can be tapped. This means that you “knock” on a button of the MIDI foot controller several times according to the beat. Thus the WAHryTone learns the song tempo and the effect moves at this speed.

[Tap Tempo - CC No.] must be set to the Control Change number the foot controller sends for the tap command.

Send on MIDI Out => Tuner

When this function is selected, the WAHryTone sends the tuner commands on the MIDI Out. The tuner can then be displayed on the Prostage Tuner & Text Display. If this feature is turned off, the tuner is only shown in the Prostage App.

Send on MIDI Out => Preset Changes

With this feature enabled, the preset selected in the list of the app is also sent as a preset change on the MIDI Out. Like this, you cannot only use the app to select the presets in WAHryTone, but you can also switch all other devices that follow in the MIDI chain.

Signal Tracking => Sensitivity

Here you can set how sensitively the tuner and the dynamic Auto Wah functions (Touch Wah) react to the guitar signal. The setting depends primarily on the pickup used, but also on your style of playing.

Signal Tracking => Tuner Calibration

The [Tuner Calibration Hz] setting sets the reference frequency for the tuner. Standard is 440 Hz. With the setting [Tuner Calibration %] you can further fine-adjust the tuner half a semitone up or down.

Expression Pedal => Pedal-Latch *

If the [Latch ☐Top] or [Latch ☐Bot] feature is enabled, the Auto Enable function switches on or off only when the expression pedal is at its top or bottom position. Thus, this function is a virtual switch.

Expression Pedal => Latch Tolerance*

If you use [Latch ☐Top] or [Latch ☐Bot], the [Latch Tolerance] determines how exactly the expression pedal must reach the Top (MIDI value 127) or Bottom (MIDI value 0) position in order to switch the effect on or off. If the tolerance is 0, the expression pedal must reach 127 or 0 respectively. If you set the tolerance to 7, the effect will already switch at value 120 or 7 respectively.

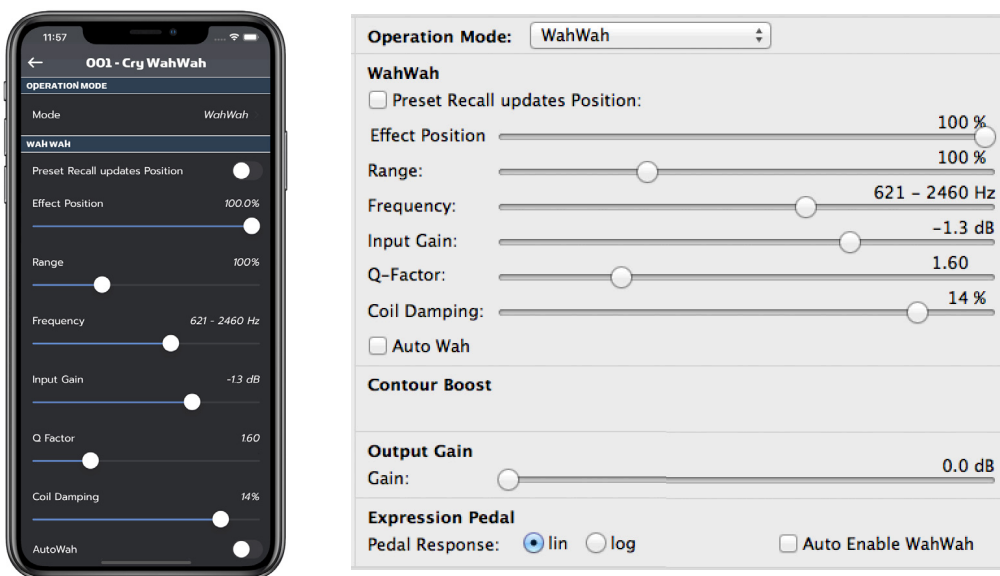
Expression Pedal => Disable Time *

The [Disable Time] determines how long the expression pedal can remain unmoved before the WahWah jumps back to bypass. When set to "Never", the WahWah doesn't turn off automatically, but by a preset change or an Instant Access switch (CC 74).

* This features are only effective if the [☐Auto Enable] function is enabled in the selected preset (see [chapter 8.2.2](#)).

8.2 Preset Related Parameters

The following parameters can be set individually for each preset. We recommend to experiment a bit with all the parameters to understand their function. With the WAHryTone, you can produce effects that differ quite a lot from a standard WahWah.



It depends from the selected operating mode which of the parameters listed below are available.

When adjusting the knobs and buttons, the settings in the WAHryTone are temporarily overridden. To keep the changes permanently, you need to confirm the new settings with the button [Save Preset as ...]. Otherwise they will be lost at preset change.

8.2.1 Operation Mode

Here you select the basic operating mode or the effect:

- **WahWah:** WahWah with the ability to tune variously sounding WahWah sounds.
- **WahWah & Contour Boost:** WahWah with additional center boost, whose frequency is adjustable.
- **Contour Boost:** center boost with adjustable frequency.
- **Treble Boost:** raising the heights.
- **Tremolo:** modulating volume.
- **Volume:** per expression pedal controllable volume (VCA).
- **True Bypass:** The signal goes from the input jack directly to the output jack, without being affected in any way.
- **Buffered Bypass:** The signal goes through a high-quality buffer, but no effect. The impedance is adjusted, from which subsequent effect devices can benefit. In addition, signal losses are avoided.
- **Tuner**

8.2.2 Parameters for WahWah and Volume Operation | Effects Pedal Control

Preset Recall Updates Position | Effect Position

With [☐ Preset Recall updates Position] you determine whether the effect position of the WahWah (Operation Mode "WahWah") or the volume (in Operation Mode "Volume") should be set to a predefined position when the preset is recalled (function switched on) or remain at the position of the previous preset (function switched off).

If [☐ Preset Recall updates Position] is deselected, the position of the WahWah, respectively the volume, remains unchanged when recalling a preset. This means, the effect position will be overtaken from the old preset. However, this only works when switching from one "Volume" to another "Volume" preset, or from one "WahWah" to another "WahWah" preset. This feature makes sense if you, for example, switch from a normal volume preset to a solo Boost preset. With deactivated [☐ Preset Recall updates Position] function there are no volume jumps at preset changes. The volume only changes when the pedal is moved.

If [☐ Preset Recall updates Position] is activated, the WahWah or volume will move to the value set at [Effect Position] when recalling the preset. This value will also be used whenever switching between WahWah and volume Presets.

You can, for example, program a "Mute" preset like this: choose [Operating Mode] "Volume" and set [Volume] and [Range] slider all the way to the left. Further, [☐ Preset Recall Updates Position] must be enabled so that the WAHryTone switches to "Mute" when recalling the preset.

Range

In [WahWah] operation mode, this setting determines how deep the WahWah effect goes, that is, how much the movement of the expression pedal affects the effect. The values go from 180% to 0%. 100% corresponds to a standard WahWah. Note that values above 140% are experimental and may produce noise. If [Range] is set to 0, the WahWah has a fixed setting and the expression pedal is ineffective.

In [Volume] operation mode, this setting determines how loud the volume pedal is in the lower stop (MIDI position 0). The values go from -99.9 dB (Mute) to 0. When set to 0, however, the expression pedal becomes ineffective. With this setting, you can, for example, create a solo boost preset, with the gain set to fixed value (the amount of boost is set via the output gain). If you set the Range e.g. to -20dB, the volume pedal does not go from normal volume to mute, but only slightly reduces the volume.

IMPORTANT => After a new preset is loaded, the position of the WahWah effect, or the volume respectively, usually does not match the position of the expression pedal. The WAHryTone, therefore, has a latching function. That is, after recalling a preset, the expression pedal must "run over" the current value where the WAHryTone is acoustically. The position must be "cached". Once the position of the expression pedal matches the effect position, the WAHryTone latches and from now on follows the movement of the expression pedal.

This has the great advantage that the effect does not jump when the expression pedal is moved for the first time after a preset change. When this function is out of range, the pedal latches onto the upper or lower dead stop of the expression pedal. This can result in level jumps.

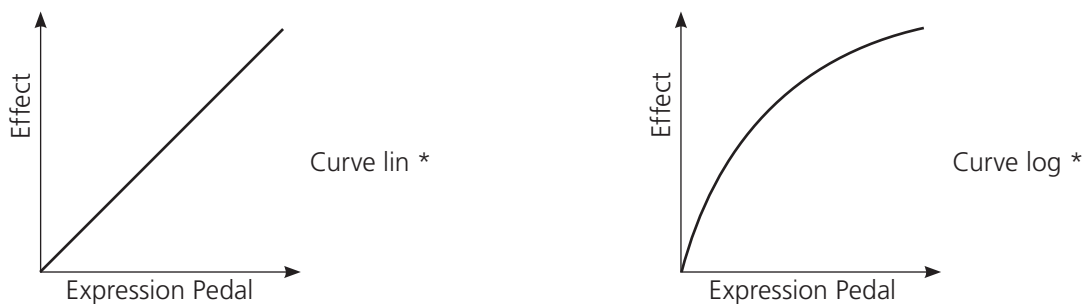
Output Gain

[Output Gain] adjusts the output volume without influencing the WahWah sound. On the one hand, it allows you to compensate the volume, which drops through the WahWah effect. On the other hand, [Output Gain] can also be used as a booster (0 to 25 dB).

Expression Pedal | Pedal Response

This setting determines how the WAHryTone responds to the expression pedal. It affects how the WAHryTone “feels under the foot”: linear or logarithmic. Technically, it is about the frequency of the effect in the middle area of the control path (operating mode “WahWah”) or the volume level respectively (operating mode “Volume”).

Depending on the effect, for one preset [●lin] may be more pleasant, while with a different preset, [●log] might feel better. For example: using a volume preset with [Lowest Value] of “-99.9dB” (mute), probably [●log] is more pleasant. While a slight volume reduction with [Lowest Value] at “-20dB”, [●lin] would be very enjoyable. Try it!



Expression Pedal => Auto Enable WahWah

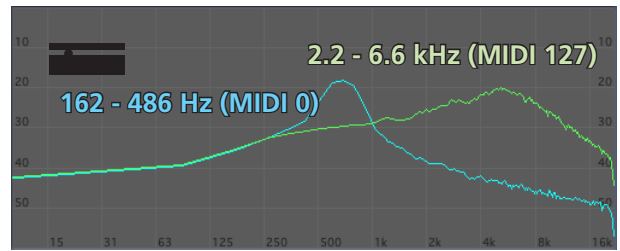
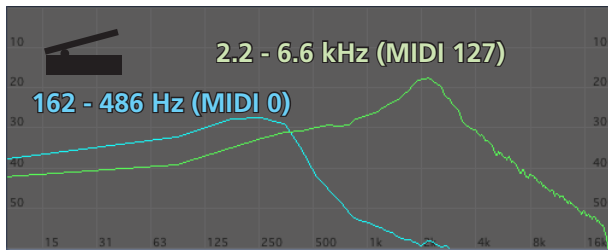
If this feature is active, the WahWah is basically set to “Bypass”. Once the expression pedal is moved, the WahWah turns on. If [Latch ■Top] or [Latch ■Bot] is enabled in the settings, the WahWah only turns on or off if the expression pedal is in its top, respectively bottom position. If the expression pedal is not moved during a predefined time (see [Disable Time] in [chapter 8.1](#)), the WahWah switches back to “Bypass” automatically.

In the bypass position, the WAHryTone selects preset No. 128. Therefore, preset number 128 must have either a “True Bypass” or a “Buffered Bypass” preset stored in it.

8.2.3 WahWah Specific Parameters

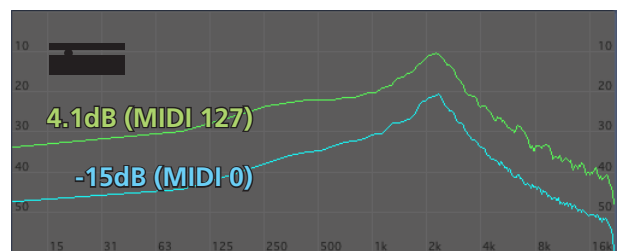
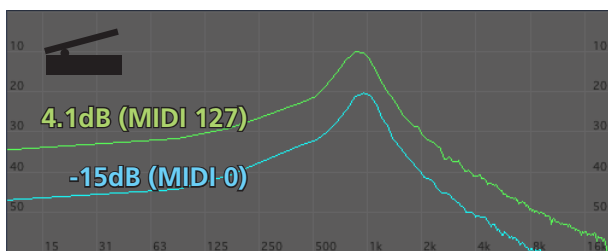
Frequency (WahWah)

Controls the base frequency of the WahWah effect.



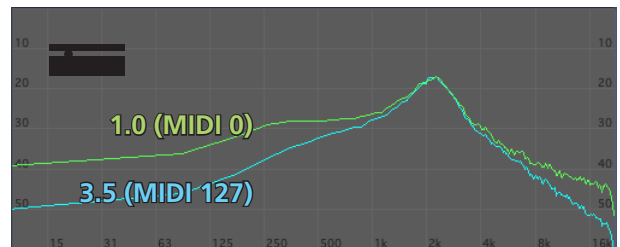
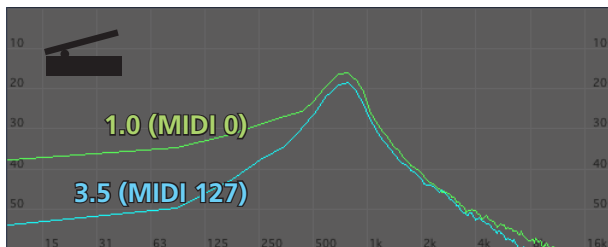
Input Gain

Adjusts the input gain of the WahWah effect. This value influences the drive of the Fasel coil. At high levels, a compression effect will occur.



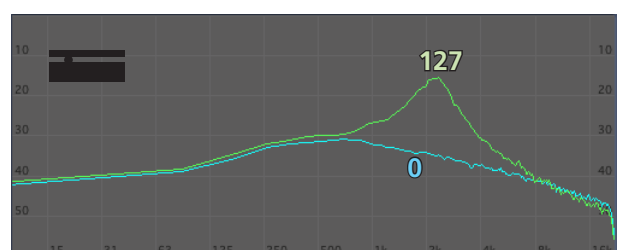
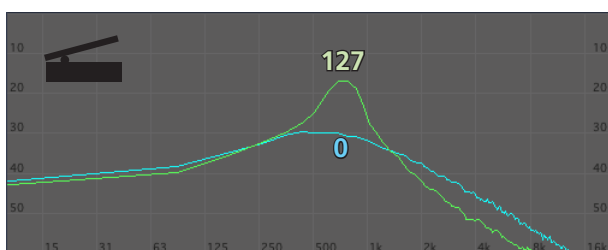
Q-Factor

The Q factor is the width of the WahWah filter. Low values result in a wide WahWah sound with only slightly lowered bass and treble. High values give a thin sound with strongly reduced bass and treble.



Coil Damping

[Coil Damping] controls the rating of the Fasel coil. Small values produce a flat effect. High values result in a sharp WahWah effect.



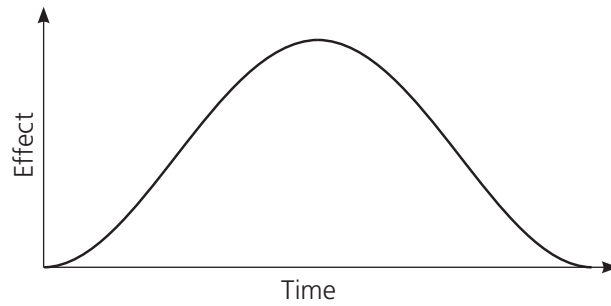
8.2.4 "Auto"-Features for WahWah and Tremolo

If the [☒Auto Wah] function is active, the WAHryTone makes the effect movement independently, without having to move an expression pedal.

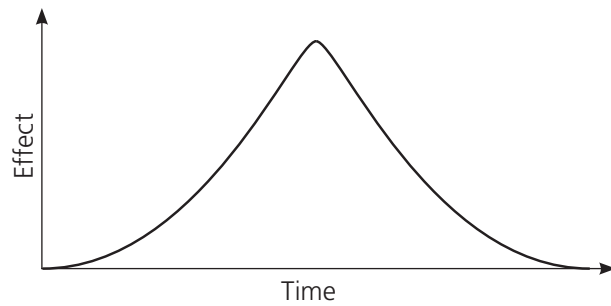
8.2.4.1 Time Based "Auto" Functions

The function types [Sine] to [Square] are time-controlled Auto WahWah or Tremolo functions.

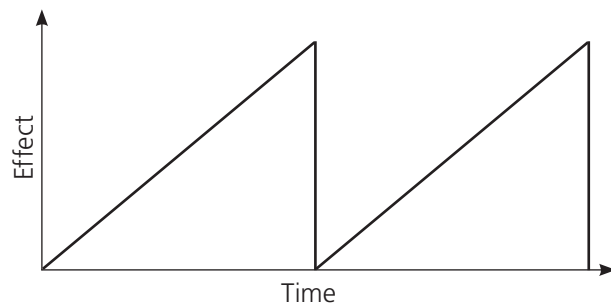
[Function] => [Sine]



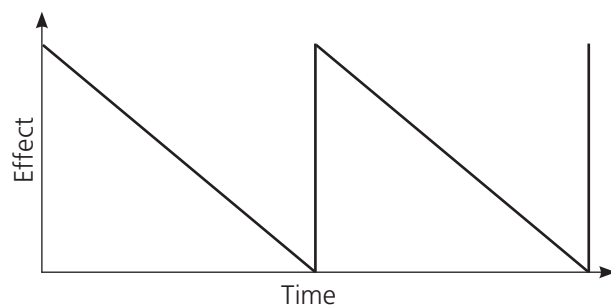
[Function] => [Peak]



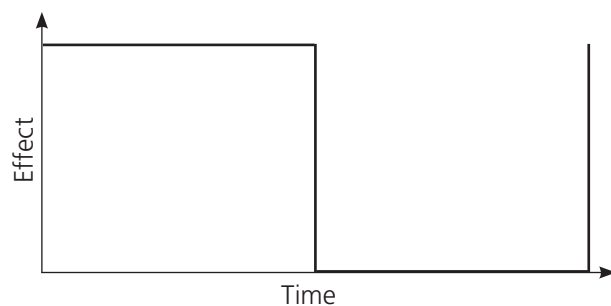
[Function] => [Sawtooth Increasing]



[Function] => [Sawtooth Decreasing]



[Function] => [Square]



Preset Based Cycle Time

If [Preset based cycle time] is activated, the speed of the Auto WahWah or Tremolo effect is set at a preset recall to the value defined with the two sliders. The upper slider adjusts the coarse speed (in 0.1 sec increments), the lower slider adjusts the fine adjustment (in milliseconds).

If [Preset based cycle time] is off, the effect takes over the speed of the previous preset.

On the right above the two controls, the time is displayed which the Auto Wah or Tremolo needs to complete a cycle of the effect movement. "BPM" is the song tempo, "ms" is the corresponding value in milliseconds.

Using the Tap command, the speed of the effect can be adjusted at any time (see [chapter 8.1](#))

8.2.4.2 "Auto" Function [Dynamic] - Touch Wah

If the [Dynamic] function is selected, the WahWah effect will respond to the velocity of the attack. If you use this feature for the Tremolo, you can set completely funky Compressor and Ducking effects.

Important => Before you set the following parameters, you must set the [Signal Tracking] => [Sensitivity] of your instrument in the Basic Settings accordingly.

Threshold

This value determines from which velocity the effect starts to react.

Sense

This value determines the range in which the effect moves, respectively, at which velocity the effect reaches its maximum.

Invert Sense

With this setting, the direction of the effect is set. That is, whether the WahWah is at heel position at soft stroke and at toe position at hard stroke, or vice versa.

Decay

This value determines how quickly the effect returns after striking a string.

Decay Invert

This parameter currently has no function

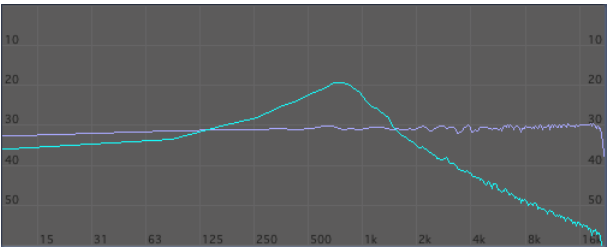
8.2.4.3 "Auto" Function [Frequency]

This feature is not yet programmed in the current version of the WAHryTone and is part of an upcoming firmware upgrade.

8.2.5 Contour Boost

Contour Boost

Contour Boost is an increase of the mid-range and lowers the heights. The Contour Boost can be used with the WahWah, or as a boost without the WahWah effect, e.g. for a solo sound.

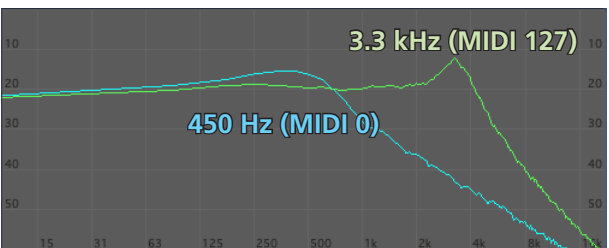


Input Signal

Contour Boost 10 dB

Frequency (Contour Boost)

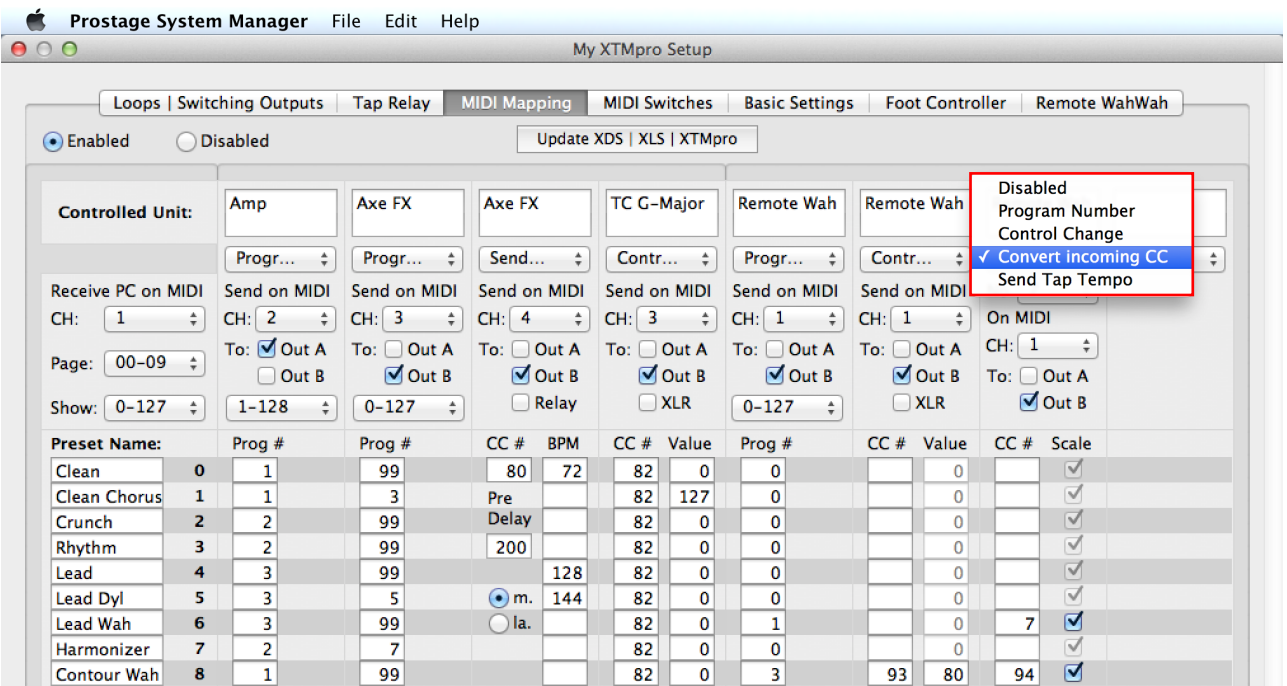
Adjusts the frequency of the Contour Boost.



8.3 Practice Hint

All parameters can be controlled with MIDI Control Change commands (see [chapter 7.1](#)). If the expression pedal sends e.g. CC No. 95 instead of CC No. 7, moving the pedal will change the Contour Boost frequency instead of controlling the WahWah effect. This way, you can generate completely new effects. Some experimenting is worth it!

The XDS | XLS | XTMpro can map and scale Control Change commands generated by the expression pedal. This means that you can control a different parameter of the WAHryTone on each preset. It is even possible to control multiple parameters in parallel (with each other or against each other). See the System Manager software users manual for more information.



9.1 Warnings and Safety Instructions

For reasons of the product liability, we are obligated to make clear certain safety aspects which must not be ignored under any circumstances. The devices must **not be stored or operated in damp or wet environment**. The WAHryTone may only be operated with **9V~AC**.

The device serves as an audio effects processor and may be used for this purpose exclusively.

The equipment may be opened by qualified technical personnel only. There are no user serviceable parts inside the devices.

In order to avoid damages, you should be careful when transporting and setting up the device. Please **avoid strong variations in temperature**. Particularly the change from the cold transport vehicle to the, usually warm, stage can cause condensing humidity, which can cause leaks and thus can evoke defects. Usually, 60 minutes are sufficient to equalize the temperature. For transportation, always carry the devices in a robust packing or rack, especially if you change your place of work frequently.

No containers filled with liquid may be placed on the equipment!

9.2 Warranty / Support

All Prostage PurpleLine units are covered by a 2-year warranty. Prostage shall not be liable if the damage was caused by inappropriate use or if the units are not connected as described in this users manual. There are no user serviceable parts inside the unit. The detailed terms of the warranty can be downloaded from the Prostage website.

If you need technical support, please contact your local dealer or email to info@prostage.eu

9.3 Disposal of Old Devices



The Prostage products are subject to the European guideline 2002/96/EC. All old electric and electronic devices must be disposed separately from the domestic waste, using the collection points provided by the government. The devices may not be disposed with domestic or skip refuse. Information about collecting points or collection dates, can be asked from the local administration or the local waste management company.

Please also carry the packing to an environmentally fair disposal. Cardboard boxes can be transferred with waste-paper collections or to the public collecting stations for recycling. Foils of the shipment are collected by the local waste management company and are forwarded to environmentally fair disposal.

10 Declaration of Conformity

Company: Prostage SL
Apdo 57
ES-07560 Cala Millor



Type of Equipment: Audio Effects Unit

Trademarks: Prostage / WAHryTone

Model: WAHryTone

The products meet the requirements of the following standards:

EMC: EN 55103-2 | EN 55103-1:2009 | EN 55103-2:2009
EN 61000-3-2
EN 61000-4-2 | EN 61000-4-3 | EN 61000-4-4 | EN 61000-4-5 | EN 61000-4-3 | EN 61000-4-11
Safety: IEC 60065:2001 | EN 60065:2002 / A1:2006 / Cor.:2007 / A11:2008

Year: 2021

A handwritten signature in black ink, consisting of a large, stylized 'L' shape with a horizontal line extending to the right and a vertical line extending upwards, followed by a small 'S' shape.

Cala Millor, 3. March 2021

Lukas Truninger, CEO

Information to the user:



Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

NOTE: 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 does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the 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 different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC& IC Radiation Exposure Statement:

This equipment complies with FCC and Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Déclaration d'IC sur l'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux radiations définies par le Canada pour des environnements non contrôlés. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre l'antenne et votre corps.

Cet émetteur ne doit pas être installé au même endroit ni utilisé avec une autre antenne ou un autre émetteur.

Appendix A | MIDI Implementation Cart

Manufacturer: Prostage Model: WAHryTone Date: November 2019			
	Transmit/ Export	Recognize/ Import	Remarks
1. Basic Information			
MIDI Channels	1-16	1-16, Omni	Ch. 1 / Omni is set by default
Note Numbers	No	No	
Program Change	0-127	0 - 127	
Bank Select Response	No	No	
Note-On Velocity	No	No	
Note-Off Velocity	No	No	
Channel Aftertouch	No	No	
Poly (Key) Aftertouch	No	No	
Pitch Bend	No	Yes	
StageWire Instant Access Switches	No	No	Prostage unique feature
Active Sensing	No	No	
System Reset	No	No	
Tune Request	No	No	
Universal System Exclusive	No	No	
Manufacturer System Exclusive	Yes	Yes	Manuf. ID: 00 20 75
NRPNS	No	No	
2. MIDI Timing and Synchronization			
MIDI Clock	No	No	
Song Position Pointer	No	No	
Song Select	No	No	
Start	No	No	
Continue	No	No	
Stop	No	No	
MIDI Time Code	No	No	
MIDI Machine Control	No	No	
MIDI Show Control	No	No	
3. Extensions Compatibility			
General MIDI compatible	No	No	
DLS compatible	No	No	
Standard MIDI Files	No	No	
XMF Files	No	No	
SP-MIDI compatible	No	No	

Control Number Information				
Control #	Function	Transmitted	Recognized	Remarks
0	Bank Select (MSB)	No	No	
1	Modulation Wheel (MSB)	No	No	
2	Breath Controller (MSB)	No	No	
3	Undefined	No	No	
4	Foot Pedal (MSB)	No	No	
5	Portamento Time (MSB)	No	No	
6	Data Entry (MSB)	No	No	
7	Volume	No	0 - 127	Effect Control
8	Balance (MSB)	No	No	
9	Expression Pedal	No	No	
10	Pan (MSB)	No	No	
11	Expression Controller (MSB)	No	No	
12	Effect Control 1 (MSB)	No	No	
13	Effect Control 2 (MSB)	No	No	
14	Tap (latching)	No	0 or 127	Tap Auto Wah Tremolo Speed
15	Tap (momentary)	No	No	
16	General Purpose Controller 1 (MSB)	No	No	
17	General Purpose Controller 2 (MSB)	No	No	
18	General Purpose Controller 3 (MSB)	No	No	
19	General Purpose Controller 4 (MSB)	No	No	
20	Undefined	No	No	
21	Undefined	No	No	
22	Undefined	No	No	
23	Undefined	No	No	
24	Undefined	No	No	
25	Undefined	No	No	
26	Undefined	No	No	
27	Undefined	No	No	
28	Undefined	No	No	
29	Undefined	No	No	
30	Undefined	No	No	
31	Undefined	No	No	
32	LSB for CC 00	No	No	
33	LSB for CC 01	No	No	
34	LSB for CC 02	No	No	
35	LSB for CC 03	No	No	
36	LSB for CC 04	No	No	
37	LSB for CC 05	No	No	
38	LSB for CC 06	No	No	
39	LSB for CC 07	No	No	
40	LSB for CC 08	No	No	
41	LSB for CC 09	No	No	
42	LSB for CC 10	No	No	
43	LSB for CC 11	No	No	
44	LSB for CC 12	No	No	
45	LSB for CC 13	No	No	
46	LSB for CC 14	No	No	
47	LSB for CC 15	No	No	
48	LSB for CC 16	No	No	
49	LSB for CC 17	No	No	
50	LSB for CC 18	No	No	
51	LSB for CC 19	No	No	
52	LSB for CC 20	No	No	
53	LSB for CC 21	No	No	
54	LSB for CC 22	No	No	
55	LSB for CC 23	No	No	
56	LSB for CC 24	No	No	
57	LSB for CC 25	No	No	
58	LSB for CC 26	No	No	
59	LSB for CC 27	No	No	
60	LSB for CC 28	No	No	
61	LSB for CC 29	No	No	
62	LSB for CC 30	No	No	
63	LSB for CC 31	No	No	

Control Number Information				
Control #	Function	Transmitted	Recognized	Remarks
64	Sustain Pedal	No	No	
65	Portamento On/Off	No	No	
66	Sostenuto	No	No	
67	Soft Pedal	No	0 - 127	Effects position at preset recall
68	Legato Footswitch	No	0 or 127	Dynamic Wah invert Sense
69	Hold Pedal 2	No	No	
70	Sound Controller 1	No	No	
71	Sound Controller 2	No	No	
72	Sound Controller 3	No	0 or 127	Preset Recall updates Position
73	Sound Controller 4	No	0 or 127	Pedal Response lin / log
74	Sound Controller 5	No	0 or 127	True Bypass
75	Sound Controller 6	No	0 or 127	--
76	Sound Controller 7	No	0 or 127	--
77	Sound Controller 8	No	0 or 127	Tuner off / on
78	Sound Controller 9	No	0 or 127	--
79	Sound Controller 10	No	0 or 127	Wah: Enable Auto Wah
80	General Purpose Controller 5	No	0-8	Operation Mode
81	General Purpose Controller 6	No	0-99	Auto Wah Time fine (ms)
82	General Purpose Controller 7	No	0-127	Auto Wah Time coarse (1/10s)
83	General Purpose Controller 8	No	0-127	Dynamic Wah Threshold
84	Portamento Control	No	0-127	Dynamic Wah Sense
85	Undefined	No	0-127	Dynamic Wah Decay
86	Undefined	No	No	
87	Undefined	No	No	
88	Undefined	No	0-7	Auto Wah Mode
89	Undefined	No	0 - 127	Range
90	Undefined	No	0 - 127	Wah: Input Gain
91	Effects 1 Depth	No	0 - 127	Wah: Q Factor
92	Effects 2 Depth	No	0 - 127	Wah: Coil Rating
93	Effects 3 Depth	No	0 - 127	Wah: Frequency
94	Effects 4 Depth	No	0 - 127	Contour Boost: Frequency
95	Effects 5 Depth	No	0 - 127	Output Gain
96	Data Increment	No	No	
97	Data Decrement	No	No	
98	Non-Registered Parameter Number (LSB)	No	No	
99	Non-Registered Parameter Number (MSB)	No	No	
100	Registered Parameter Number (LSB)	No	No	
101	Registered Parameter Number (MSB)	No	No	
102	Undefined	No	No	
103	Undefined	No	No	
104	Undefined	No	No	
105	Undefined	No	No	
106	Undefined	No	No	
107	Undefined	No	No	
108	Undefined	No	No	
109	Undefined	No	No	
110	Undefined	No	No	
111	Undefined	No	No	
112	Undefined	No	No	
113	Undefined	No	No	
114	Undefined	No	No	
115	Undefined	No	No	
116	Undefined	No	No	
117	Undefined	No	No	
118	Undefined	No	No	
119	Undefined	No	No	
120	All Sound Off	No	No	
121	Reset All Controllers	No	No	
122	Local Control On/Off	No	No	
123	All Notes Off	No	No	
124	Omni Mode Off	No	No	
125	Omni Mode On	No	No	
126	Poly Mode Off	No	No	
127	Poly Mode On	No	No	

Appendix B | Factory Presets

The following presets are programmed ex works in the WAHryTone. They give you an overview of the possibilities of the WAHryTone.

1.	Cry WahWah	Standard WahWah
2.	Extended WahWah	WahWah with full extended effects range
3.	Low WahWah	WahWah effect with very low base frequency, for Bass Guitars
4.	Hi WahWah	WahWah effect with very hi base frequency and AutoEnable feature
5.	Touch Wah	Dynamic WahWah which responds to Velocity
6.	Auto Wah sine	Time based Auto WahWah with sine curve
7.	Auto ConWah peak	Time based Auto WahWah with peak curve and Contour Boost at 911 Hz
8.	Contour Wah	WahWah with slightly extended effects range and Contour Boost at 781 Hz
9.	Contour Boost	Contour Boost at 911 Hz
10.	Treble Boost	Treble Boost of 10dB
11.	Tremolo sine	Tremolo with sine curve
12.	Tremolo sawtooth	Tremolo with sawetooth increasing curve
13.	Volume	Normal Volume Pedal
14.	Volume Reduction	Volume Pedal with just a little bit of volume drop
15.	Volume Boost	Volume Pedal from unity Gain to +10dB
16.	True Bypass	Bypass, switched via True Bypass Relais
17.	Buffered Bypass	Bypass via the high quality input/output stage of the WAHryTone
18.	Mute	Fix Volume with -100dB
19.	Tuner	Tuner which goes down til 30Hz (String: B0)
128.	Buffered Bypass	Note: This preset ist used for the "Auto Enable" feature of the WAHryTone and the On/Off switch of the Expression pedal.

