

E User Manual

D Benutzerhandbuch

PRO-12 ASB

Authentic Sound Box



Rev 1.2

 **creamware**[™]
A WORLD OF SOUND

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Introduction



Welcome

Thank you for choosing the PRO-12 ASB. We hope you will have as much fun with your PRO-12 ASB as we did when developing this unique and characterful synthesizer. Please read this manual thoroughly in order to take full advantage of the many features the PRO-12 ASB has to offer.

Introduction

The design of the PRO-12 ASB is now regarded as classic synthesizer style. Two oscillators with multiple waveforms (which may be played independently or simultaneously) constitute the main sound source. The oscillators are mixed with white noise in the mixer section, then routed through the 24dB lowpass resonance filter and amplifier section.

The filter and amplifier each have their own dedicated envelope curve with attack, decay, sustain and release controls. The filter envelope, oscillator B and the LFO (low frequency oscillator) can also be routed to different modulation destinations. One of the major highlights of the PRO-12 is that many interesting combinations of modulation source and destination can be accessed using the mod wheel and the 'poly mod' section. We have added some contemporary features which the original synth lacked: a full effects section comprising chorus, flanging and delay, keyboard aftertouch and MIDI clock synchronisation. In addition, the PRO-12 ASB now has 12 voices - when played in 'unison mode', this produces amazing results.

Getting started

Making Connections



Connecting the power adaptor

To connect your Pro-12 ASB to a mains supply, please use the power adaptor supplied with the unit. First connect the power adaptor to your Pro-12 ASB. Before plugging the adaptor's plug into a mains socket, make sure it is compatible with the mains voltage in your country. If you lose the power supply, a standard AC or DC 12V / 1.5A power adaptor can be used as a replacement. The PRO-12 ASB's power socket requires a hollow plug (5.5 mm x 2.1mm x 11.5 mm, centre positive).

MIDI connections

There are two ways to play your PRO-12 using MIDI:

1. Connect your PRO-12 directly to a master keyboard.
2. Connect your PRO-12 to your computer's MIDI port in order to use it with a sequencer or with the PRO-12 Remote Software.

Connect the MIDI in and out of your PRO-12 ASB to the MIDI in and out of your keyboard or computer. The MIDI input of your PRO-12 ASB should be connected to the MIDI output of your keyboard / computer, and vice versa.

The PRO-12 ASB's incoming MIDI signal can also control another instrument if you connect the PRO-12 ASB's 'MIDI thru' to the instrument's MIDI in. If your computer does not have a MIDI port, you can use USB connection as an alternative.

Audio Connections

In order to hear the PRO-12 ASB, connect its stereo outputs to the left / right inputs of a mixer, a computer sound card or a HiFi system. You can also process external signals by plugging an audio sound source into your PRO-12 ASB's input.



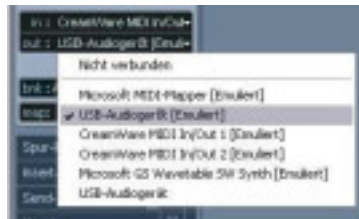
Power Switch

This is rather obvious, but in order to activate the PRO-12 ASB please turn the power switch on!



USB Connections and driver installation (Windows XP)

An alternative to using MIDI to connect your PRO-12 ASB to a computer is to use the built-in USB interface. On a PC, this requires Windows XP with Service Pack 2; the Mac version supports OS10.4. After connecting the PRO-12 to a computer, Windows will automatically recognize the PRO-12 ASB as an audio USB instrument. No extra drivers are required - you can start playing right away! After starting your sequencer program (shown here: Cubase SX), you can use the USB audio instrument driver as a MIDI port. Once in a while, under older versions of Windows XP (before Service Pack 2), the USB port will not re-appear on screen after disconnecting the PRO-12 ASB. In this case, please reboot Windows XP. After rebooting, your USB port should appear again.



Installation of the Remote Software

To install the Remote Software supplied with the PRO-12 ASB on your PC, please put the CD-ROM labelled ' PRO-12 ASB' into the CD-R drive of your computer. The 'Install dialogue' should then automatically appear on your screen. (If you have de-activated the automatic start function of your CD-R drive, please start the installation by double-clicking the file 'setup.exe' on the CD.) On the first page, please choose the language you'd like to use for the install procedure and then confirm your choice by pressing the 'Next' button.



You will then see the message 'Welcome to the Installation' - please continue by pressing 'Next'.

On the following page you will find the license agreement. Please read it carefully and if you agree, select "I accept the license terms" - then continue by pressing the 'Next' button. You can now set the installation path within the 'Installation path' drop-down menu. If you don't set a dedicated path here, the Remote Software will be installed to "C:\Programs\Creamware\PRO-12 ASB Remote". Installation requires 6.7 MB of empty hard disk space.



The 'Choose Start Menu Folder' lets you choose your own directory. If you don't make a choice, a ' PRO-12' directory will be created.



Presets

Preset administration is handled in the 'sound' section of the 'configuration strip'. There are 128 user and 128 factory presets. To load a preset, press the 'preset' button, then use the 'down/up' button or the data wheel to scroll through the presets. A preset holds all parameter and effects settings, including the additional settings found in the Remote Software's 'Add page' (see below).

You can only save presets in the user bank - consequently, 'user' is automatically selected when saving a preset.

Control Panel

Oscillator A&B

Apart from a few small differences, oscillators A & B are largely identical. Both have sawtooth and pulse waveforms, and oscillator B has an additional triangle wave. Each oscillator waveform has its own dedicated on/off button and all of them can be active at the same time, which allows a mix of up to five waveforms in parallel. The pulse wave has a variable width which can be adjusted manually or via modulation - full width produces a fat 'square wave' sound, while more narrow settings create a thinner, more nasal tone. In addition, oscillator B can operate in a lower frequency band which allows you to use it as a typical LFO (low frequency oscillator). If oscillator B is used as a modulation source, you can disable its keyboard tracking to make it produce a fixed pitch. The pitch of oscillator A can be synchronized with oscillator B, which creates some interesting timbres.



Frequency (both oscillators)

Each oscillator has a basic frequency (tuning / pitch) control which operates in semitone steps over a five-octave range.

Fine (oscillator B)

Oscillator B has its own fine tuning knob with a range of one semitone. Detuning oscillator B slightly and mixing it with oscillator A produces a characteristic 'beating' effect - this instantly recognisable analogue synthesizer sound helps make their sound rich and vibrant.



Sawtooth wave button (both oscillators)

Switches the oscillators' sawtooth wave on and off.

Coarse

Use this to set the oscillator frequency. The range can be adjusted over 6 octaves.

Fine

Use this knob to detune the oscillators with respect to one another. Detuning and then mixing two oscillators produces vibrations that result in a more lively sound. The range can be adjusted over approximately one octave.

Octave Up/Down

Unlike the original model, our remake is equipped with a switch that allows you to set each oscillators' frequency in octave steps over a range of 3 octaves.

Keyboard On/Off

You can use this switch to disconnect Oscillator 1 from the keyboard in order to use it as an LFO. The oscillator is now running at a much slower rate. Instead of frequencies spanning several octaves in the higher ranges, the "coarse" setting now ranges from just 0.2 Hz to 20 Hz.

Sync On/Off

This setting activates the hard sync from Oscillator 2 to Oscillator 1. Hard sync makes the Oscillator 2 waveform re-start with each cycle of the Oscillator 1 waveform. This process transfers the pitch from Oscillator 1 to Oscillator 2. Depending on the "coarse" setting and Oscillator 2's frequency modulation, you can create different overtone spectra each time you re-start the waveform.

Audio mixer

The audio mixer is used to mix the oscillators' signal before they are routed to the filter section. Each oscillator has its own volume control. A third knob controls the amount of unpitched 'white noise' (useful for creating percussion sounds and other effects) in the mix.

The 'Add page' of the Remote Software contains an additional volume control for external sound sources.

Filter section

Along with the envelope curve and other modulation sources, the PRO-12 ASB's filter controls the way the synthesizer's tone changes over time. The filter is the 'lowpass' type with a slope of 24dB per octave; this means that all frequencies above the 'cutoff' frequency (see below) are reduced in volume by 24dB per octave, while frequencies below the cutoff point are left untouched. Filter 'resonance' is created by feedback between the filter's input and output, which accentuates frequencies around the region of the cutoff frequency. When the resonance is turned right up, the filter self-oscillates (i.e. produces a musical pitch).

To modulate the filter cutoff you can use the filter's envelope curve, keyboard tracking, the LFO and the two sources in the 'Poly Mod' modulation matrix (see below).

Cutoff

Filter 'cutoff frequency' is the frequency above which the PRO-12 ASB's tonal spectrum is filtered and its overtones are reduced in volume. You can adjust the cutoff frequency manually.



Resonance

This knob determines the amount of resonance in the filter's sound. Filter resonance is created by feedback between the filter's input and output, which accentuates frequencies around the region of the cutoff frequency. When resonance is turned right up the filter self-oscillates, producing a sine wave at the selected cutoff frequency. The filter can therefore be regarded as an additional sound source

Envelope Amount:

This controls the intensity of the filter's envelope curve. When the knob is turned up the filter envelope curve acts on the filter cutoff, causing its frequency to change over time and producing a mobile timbre. The cutoff frequency returns to normal at the end point of the envelope curve.

Keyboard Amount:

This determines the strength of the filter cutoff's 'keyboard tracking'. When the knob is turned up, the cutoff frequency increases in value in response to higher notes, producing a brighter and more 'open' tone in the upper keyboard range.

This determines the strength of the filter cutoff's 'keyboard tracking'. When the knob is turned up, the cutoff frequency increases in value in response to higher notes, producing a brighter and more 'open' tone in the upper keyboard range.

Amplifier

The amplifier's ADSR (attack / decay / sustain / release) envelope curve determines how the volume of a sound changes over time. The PRO-12 ASB's master volume control is part of the amplifier section.



Attack

Determines the duration of the initial 'attack' phase of the ADSR envelope curve. In this phase, the volume rises to maximum in the time set by the attack control.

Decay

This determines the duration of the second phase of the ADSR envelope curve. During the 'decay' phase the envelope curve falls to the value set under 'sustain'.

Sustain

'Sustain' sets the volume at which the envelope curve comes to rest once the decay phase is over.

Release

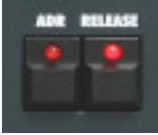
The 'release' controls the duration of the dieaway of the sound after a key is released. (N.B. this dieaway is only introduced when the 'release' switch is turned on.) During the release phase of the ADSR envelope the envelope curve falls back to minimum.

Velocity

Velocity control is a new feature not implemented on the original 1978 synthesizer. The PRO-12's volume and tone can now respond dynamically to subtle variations of keyboard touch - the amplifier velocity control affects overall volume, while the filter velocity control affects the instrument's tone colour. Higher velocity settings produce greater variations of dynamic response.

Options for Amp- and Filter Envelope

ADR



Pressing this button automatically sets the sustain to zero. This is a good way to switch rapidly between a sustaining and a percussive sound without having to change the sustain level each time. ('ADR' is another feature not available on the original 1978 synth.)

Release

This button determines whether 'release' is on or off. When release is switched on, notes die away after releasing the key at a rate set by the amplifier release control.

Volume

This controls the master volume of the synthesizer. It also sets the volume of the signal routed to the effects section, so you can use it to keep effects at a workable level, avoid distortion when using the flanger effect with lots of feedback, etc.

LFO

The LFO (low frequency oscillator) of your PRO-12 ASB features the same three waveforms used by oscillator B - sawtooth, triangle and pulse. Choose a waveform simply by pushing one of the three LED push buttons; you can turn them on individually, all at the same time or in any combination you like, which can lead to very interesting results. The destinations of the LFO modulation are set in the 'wheel mod' section.

The 'Add page' of the Remote Software provides new LFO features not found on the original synthesizer. On the 'Add page' you can sync the LFO to external MIDI clock, and also set the LFO so that it restarts every time a key is played.



LFO Frequency

This controls the frequency (speed) of the LFO - higher frequencies produce faster modulation.

LFO Saw wave

Switches the LFO saw wave on and off.

LFO Triangle wave

Switches the LFO triangle wave on and off.

LFO Pulse wave

Switches the LFO pulse wave on and off.

Modulation Overview

The PRO-12 ASB has three modulation sources: LFO, filter envelope and oscillator B. These can be individually or simultaneously routed to five different destinations - oscillator A frequency, oscillator A pulse width, oscillator B frequency, oscillator B pulse width and filter cutoff.

The LFO has its own dedicated modulation buss which is controlled by the mod wheel - the LFO modulation destinations are selected in the 'Wheel Mod' section. The 'Poly Mod' section has controls for routing the filter envelope and oscillator B modulation sources to any or all of the five destinations - the modulation intensity is adjusted manually for each source. When 'Poly Mod' is in use, pushing up the modulation wheel adds to the overall modulation depth. The filter envelope and oscillator B are polyphonic modulation sources, which means that they act upon individual synthesizer voices; the LFO is a monophonic source which modulates all voices globally.

Wheel Mod

The modulation wheel controls the intensity of the 'wheel buss' LFO modulation. In the original synthesizer, this was the only way to control the wheel buss, but the PRO-12 ASB has more advanced options, including additional controls for overall modulation intensity and modulation offset. (Pitch bend range can also be programmed now - you will find these controls on the 'Add page' of the Remote Software.)



LFO / Noise source mix

This control allows you to blend noise in with the LFO modulation - higher settings introduce more noise!

Poly Mod

In this section you can set the depth (intensity) of the modulation sources (filter envelope and oscillator B) and select single or multiple modulation destinations.

Source Amount

Filter Env

This knob sets the modulation strength of the filter envelope for all selected destinations.

Osc B

This knob sets the modulation strength of oscillator B for all selected destinations.



Destination (Poly Mod / LFO)

Freq A

Selects oscillator A's frequency (pitch) as a modulation destination.

Freq B

Selects oscillator B's frequency (pitch) as a modulation destination.

PW A

Selects oscillator A's pulse width as a modulation destination.

PW B

Selects oscillator B's pulse width as a modulation destination.

Filter

Selects the filter cutoff as a modulation destination.

Glide

The 'glide' effect creates fluent sliding pitches (glissandi) between notes at a speed determined by the glide control.

This knob sets the rate of the pitch glides - higher settings produce slower glides. The glide function doesn't have a separate on-off switch, but is activated simply by turning up this control. If the glide control is set to zero position, no glides will be heard!

Unison



Pressing this button makes the PRO-12 operate in 'unison mode', in which a single note triggers multiple voices sounding in unison - this creates a very big, powerful sound. More unison parameters can be accessed on the 'Add page' of the Remote Software.

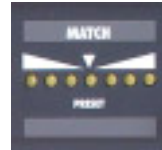
Configuration Strip



The lower 'configuration strip' section of the control panel contains various display features and controls to change system and effects settings and to manage presets.

Match

This display enables you to view the programmed value for every parameter of a currently active preset. When you turn a knob on the control panel, one of the seven yellow 'match' LED's will blink. If the altered value is smaller than the one stored in the preset, a left-of-centre LED will light up; if the value is greater, an LED on the right lights up. When the current front panel setting matches the stored value, the central LED blinks. Using this visual aid, you can easily work out and duplicate a preset's stored parameter settings.



Value

With the data wheel (on the left) and 'down/up' buttons you can set configuration strip parameters such as MIDI channel and volume. You can also toggle between polyphonic and monophonic modes by pressing the 'down' and 'up' buttons at the same time: the display shows 'ON' for polyphonic and 'OF' for monophonic mode.



MIDI

To change MIDI channel, press the 'channel' button and select the channel using the 'down/up' buttons or the data wheel. If a small vertical line appears in the display to the left of the channel number, it indicates that the instrument receives MIDI data on all channels simultaneously (this is called MIDI 'omni mode'). In omni mode, MIDI data is received on all sixteen channels, but transmitted only on the selected channel. When no vertical line is shown, the instrument receives and sends MIDI data on one selected channel.



MIDI Values: MIDI Channel 1 ... 16 (omni off)

MIDI Channel 11 ... 116 (vertical lines = omni on)

Press the 'control' button to select the MIDI local mode using the 'down/up' buttons or the data wheel. The display toggles between 'ON' (indicating that the PRO-12 ASB is set to 'local on' mode) and 'OF', indicating that 'local off' is selected. In 'local on' mode, incoming MIDI messages are transmitted via the Prodisysey ASB's MIDI out socket; in 'local off' mode, only front panel control changes are sent to MIDI out.

Sound

To adjust the PRO-12's overall volume, press the 'volume' button and use the 'down/up' buttons or data wheel. This global volume setting is not saved within presets.



Preset

To load a preset, press the 'preset' button, then use the 'down/up' button or the data wheel to scroll through the preset list. A preset holds all parameter and effects settings, including the settings in the Remote Software's 'Add page' (see below). Presets can only be saved in the user bank, which is why 'user' is automatically selected when saving a preset.

Having selected 'preset', you can press the 'user' button to switch between the factory and user banks. (Please note that this function will not work unless you press the 'preset' button first.)

User (secondary function)

The 'user' button has a secondary function which is activated by holding it down for one second. This sends current front panel settings to the PRO-12's sound engine (and to the Remote Software) so you can hear them in action. (Hidden parameters on the Remote Software's 'Add page' will be set to their default values).

Store

To save a preset, press the 'store' button. The LED will start blinking - now choose a preset number by turning the data wheel or by using the 'down/up' buttons and press 'store' again. At this point the LED will start flickering - press the 'store' button until the LED light goes off. The preset is now stored under the chosen preset number.

Effects

Pressing the 'bypass' button turns all effects off. (Depending on your effects settings, this might make some presets sound a little louder.) Once selected, the 'bypass' LED will light and all effects will be muted - pressing the button again cancels the 'bypass' and turns the effects back on.

To choose an effects program, press the 'program' button and use the data wheel or 'down/up' buttons to make a selection. There are a total of five programs offering various combinations of chorus and delay. As you can see from the 'effects programs' table below, the three effects parameters (labelled 'Param 1 - 3' on the control panel) differ from program to program.



Effects programs:

	PARAMETER 1	PARAMETER 2	PARAMETER 3
Chorus	Chorus Depth	Chorus Rate	Chorus Feedback
Delay Time	Delay Damping	Delay Time Left	Delay Time Right
Delay BPM	Delay BPM	Delay Note Left	Delay Note Right
Chorus Delay Time	Chorus Depth	Delay Time Left	Delay Time Right
Chorus Delay BPM	Delay BPM	Delay Note Left	Delay Note Right

Parameters value range:

	Control Range
Chorus Depth	0 - 10
Chorus Rate	0.01 Hz - 20 Hz
Chorus Feedback	-5 ... +5
Delay Time	0.3ms - 1,4860s
Delay BPM	72 - 192
Delay Note	1/1 1/2P 1/2 1/2T 1/4P 1/4 1/4T 1/8P 1/8 1/8T 1/16P 1/16 1/16T 1/32P 1/32 1/32T 1/64P 1/64 1/64T

PRO-12 ASB Remote Software



General

To control your PRO-12 ASB with the Remote Software, you have to connect the PRO-12 ASB to a computer via USB or MIDI.

The Panel's Layout

The Remote Software has three pages for sound control: the 'Main' page duplicates the control panel of the PRO-12 ASB and contains all the parameters you already know from the hardware. The 'Add' page contains additional parameters which are not accessible from the PRO-12 ASB hardware - these include aftertouch and modulation wheel settings. Control settings for the chorus, flanger and delay effects are found on the 'Effects' page.

An additional 'Prefs' page contains the Remote Software's system settings and also a facility to update your PRO-12 ASB's operating system when updates become available.

On the Remote Software's lower panel you will find the preset administration section, an integrated virtual MIDI keyboard and also a MIDI monitor which enables you to view in-coming MIDI messages.

More details

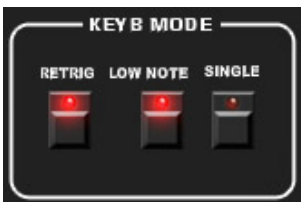
As the 'Main' page controls are identical to the hardware controls described earlier in this manual, this chapter focuses on the additional functions of the Remote Software.



The ADD PAGE

Keyboard Mode

Retrig/Normal



This control toggles between the two trigger modes of the envelope curve. In 'normal' mode, the envelope curve is retriggered only when a detached fingering style is used: this means that when using a legato playing technique, only the initial note will have an attack.

In 'retrigger' mode the envelope curve restarts on every note regardless of playing style, so sounds keep their attack even when played legato. This is useful when a consistently percussive attack is required.

Low Note/Last Note

This switch toggles between 'low note' and 'last note' priority. With 'low note priority', lower notes take priority over higher notes, which means that a high note will not sound if a low note is being held. If 'last note priority' is selected, the last note played always sounds no matter what other notes are being sustained. Along with the envelope trigger modes on the 'Add page', this opens up some interesting musical possibilities! (The difference between the two settings is most noticeable in 'single' and 'unison' modes.)

Single

If you select 'single' the instrument uses only one voice. It's advisable to use single mode when playing solo sounds with glide.

Aftertouch

The original 1978 synthesizer did not have aftertouch facilities, so the PRO-12 ASB's aftertouch function has been modelled on that of the later Prophet™ T8. However, unlike the T8, the PRO-12 ASB's aftertouch works globally (this is called 'channel aftertouch') rather than polyphonically ('key aftertouch'). This means that when aftertouch is introduced on one note, the resulting modulation will affect all the other notes currently being played.



Pitch

The degree to which aftertouch affects both oscillators' pitch can be adjusted here. This facility allows you to use aftertouch to create pitch bends.

Freq A

Selects oscillator A's frequency (pitch) as an aftertouch modulation destination.

Freq B

Selects oscillator B's frequency (pitch) as an aftertouch modulation destination.

PW

Controls the amount of aftertouch applied to both oscillators' pulse width.

PW A

Selects oscillator A's pulse width as an aftertouch modulation destination.

PW B

Selects oscillator B's pulse width as an aftertouch modulation destination.

Filter

Controls the amount of aftertouch applied to the filter cutoff - this allows aftertouch to be used to create filter sweeps.

Amp

Controls the amount of aftertouch applied to output volume.

MW Amt

Controls the amount of aftertouch applied to the 'wheel buss' (LFO) modulation.



LFO Freq

Controls the amount of aftertouch applied to the LFO's frequency (speed).

Time Velocity

These settings allow the envelope curve times to be modulated via velocity.

Filter Envelope

Attack

Controls the amount of velocity modulation applied to the filter envelope attack time.

Dec / Rel

Controls the amount of velocity modulation applied to the filter envelope decay and release times.

Amplifier Envelope

Attack

Controls the amount of velocity modulation applied to the amplifier envelope attack time.

Dec / Rel

Controls the amount of velocity modulation applied to the amplifier envelope decay and release times.

MIDI Clock

BPM

This knob controls the tempo of the the PRO-12 ASB's internal MIDI clock in BPM.

LFO Settings

Retrig

This control toggles between the the LFO's two modes. In 'free run' mode, the LFO cycles freely and independently; in 'retrigger' mode the LFO is restarted / retriggered whenever a note is played.



Phase

This control sets the phase of the LFO from 0 to 180 degrees.

MIDI

Use this switch to select whether the frequency (speed) of the LFO is set manually (via its front panel 'frequency' control) or via MIDI clock. If 'MIDI' is selected, the LFO uses the note length set in 'BPM L' on the Effects page (see below). The combination of MIDI clock tempo and note length will control the speed of the LFO.



Wheel MOD

MW Intensity

This sets the maximum intensity the 'wheel buss' modulation can reach when the modulation wheel is pushed all the way up.

MW Offset

You can use this control to add built-in modulation to a patch, which saves having to push up the modulation wheel every time!

If a patch uses the MW offset, you can still use the mod wheel to add more modulation.

Bend Range

This knob sets the instrument's pitch bend range in semitone steps from 0 to 24 semitones (two octaves).



Unison

Voices

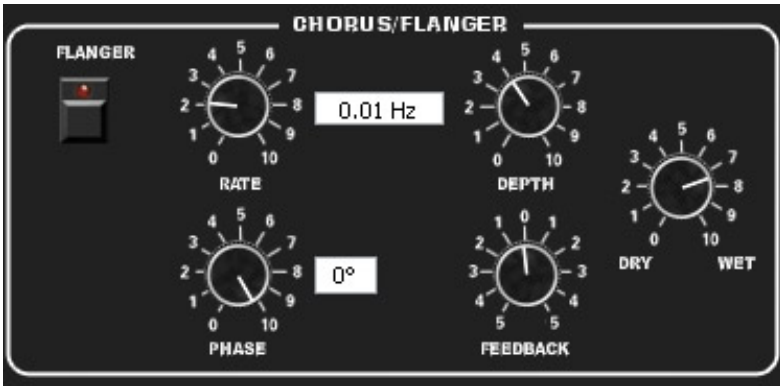


Determines how many voices sound simultaneously when one note is played in unison mode.

Detune Controls the amount of detuning between the unison voices.

EFFECTS PAGE

The 'Effects' page contains controls for the chorus / flanger and stereo delay effects built into your PRO-12 ASB.



Chorus / Flanger

Flanger

This switch toggles between the chorus and flanger effects.

Rate

Controls the speed of the chorus / flanger modulation.

Depth

Sets the intensity of the modulation.

Phase

Sets the phase of the modulation from 0 to 180 degrees.

Feedback

Controls the amount of feedback (regeneration).

Dry / Wet

This controls the mix balance between the dry and effected signals - a maximum setting gives 100% chorused / flanged sound with no dry signal.

Delay Left / Right

This section contains separate controls for the left and right channels of the PRO-12 ASB's stereo delay effect.



BPM L

Click on this button to set the left channel delay to a musical note length - if you click on the arrow to the right of the 'note' window, a drop-down menu appears with values ranging from whole notes (1/1) down to 64th note triplets (1/64T). (N.B. when the LFO is set to 'MIDI' on the 'Add page', the note length selected here will affect the LFO speed.)

BPM R

Click here to set the right channel delay to a musical note length.

Cross

Controls the amount of left channel delay feedback signal sent to the right channel.

Time (left / right)

Adjusts the time of the delay from 1 to 1365 milliseconds (= 1.365 seconds). If 'BPM' is selected, you can enter the value as a note length.

Feedback (left / right)

Controls the amount of feedback applied to the delay effect. (This affects the number of repeats you will hear.)

Hi Damp (left / right)

Controls the amount of 'treble damping' applied to the delay. (This simulates the effect of old tape echo devices, whose repeats used to grow successively duller on each reiteration!)

Level (left / right)

Controls the delay volume level.

Dry / Wet

As with the chorus / flanger effects, this controls the mix between the dry and effected signals - a maximum setting gives a delay-only sound with no dry signal mixed in.



PREFS PAGE

The 'Prefs' page is used to edit the PRODYSEY ASB's system settings.

MIDI In / Out

Device (in / out)

Use these windows to select the MIDI device (and port) you use for connecting the Prodissey ASB's MIDI in and out to your computer.

Channel (in / out)

Set the PRO-12 ASB's MIDI in and out channels.

Please make sure that you have set both MIDI in and MIDI out channels correctly.



Hardware Info

In this section you will find details of your PRO-12 ASB's hardware version, which you may need when downloading firmware updates.



Device

Displays the name of your unit.

Version

Shows the version number of your PRO-12 ASB's firmware.

Serial Number

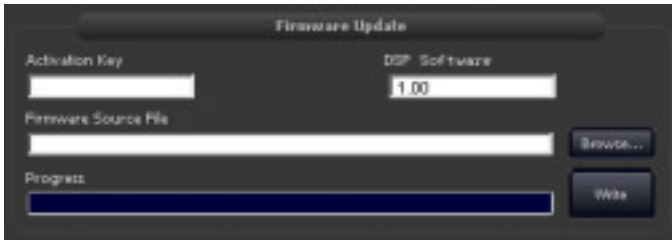
Displays the serial number of your PRO-12 ASB.

Refresh

Click on this button to update the displayed information for the unit, while reconnecting the software with the PRO-12 ASB again.

Firmware Update

This facility enables you to download software updates for your PRO-12 ASB's operating system when they become available.



Activation Key

Enter the activation key code of your PRO-12 ASB here.

Firmware Source File

Displays the name of the update file to be downloaded.

Browse

Click on the 'Browse...' button to select the directory where the update file will be saved.

Write

Click on the 'write' button to install the update on your PRO-12 ASB.

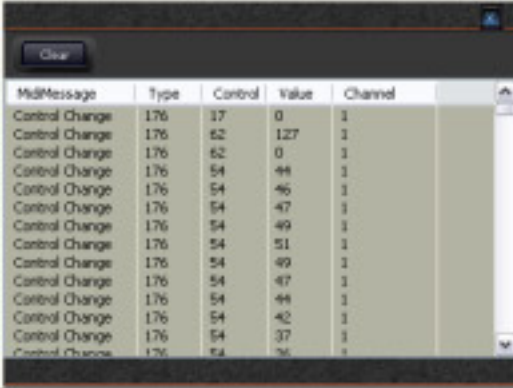
MIDI MONITOR

The 'MIDI monitor' button is on the lower panel of the Remote Software's display. Click on it to view a list of incoming and outgoing MIDI messages.

Controls

Clear

Removes all entries from the MIDI monitor's display list.



The screenshot shows a window titled 'MIDI Monitor' with a 'Clear' button at the top left. Below the button is a table with the following columns: 'MidMessage', 'Type', 'Control', 'Value', and 'Channel'. The table contains 15 rows of data, all of which are 'Control Change' messages on channel 1.

MidMessage	Type	Control	Value	Channel
Control Change	176	17	0	1
Control Change	176	62	127	1
Control Change	176	62	0	1
Control Change	176	54	48	1
Control Change	176	54	46	1
Control Change	176	54	47	1
Control Change	176	54	49	1
Control Change	176	54	51	1
Control Change	176	54	49	1
Control Change	176	54	47	1
Control Change	176	54	48	1
Control Change	176	54	42	1
Control Change	176	54	37	1
Control Change	176	62	76	1

MIDI KEYBOARD

The Remote Software's built-in MIDI keyboard enables you to play the PRO-12 ASB without using an external keyboard or sequencer software - you can play the synthesizer with the computer mouse. Turn on the MIDI keyboard by clicking on its switch of the Remote Software's display.

Channel

Sets the MIDI keyboards's MIDI channel.

Octave

Sets the range of the MIDI keyboard in octave steps.



PRESET ADMINISTRATION

The Remote Software always displays the currently active preset's name at the top right of its panel. Use the forward / back arrows to the left of the preset name to step through the presets. When it comes to more advanced preset management, the Remote Software's integrated preset administration section is an easy and convenient way of storing, exchanging and editing your presets.

Preset Window

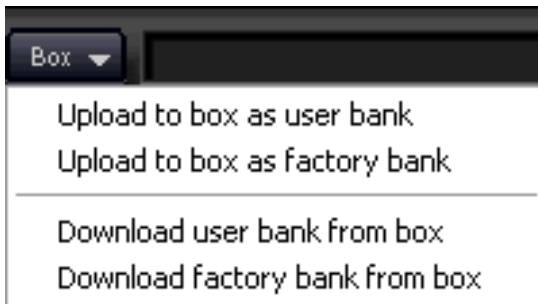
Click on 'Preset' (on the lower part of the Remote Software's front panel) to open the preset window and view lists of presets.

Open / Save File

When you click on the 'preset' button in the top left corner of the preset window, a drop-down file menu appears. Select 'open file' to open an existing preset file (which can contain multiple banks of presets) from your computer's hard drive. You can save preset files to create back-up copies, or to exchange with other *PRO-12* ASB users. The extension for preset files is *.pdy.

The Preset Bank

To save a preset to your computer hard drive, you first have to create a bank. If no bank exists or you want to create additional banks, select 'create bank' from the drop-down menu. Presets may be dragged and dropped from one bank to another. (To change the name of an existing bank, click and hold on its name, enter the new name and press 'enter' - the new bank name is now stored.) Use 'new file', 'open file', 'save file' and 'save file as' to manage your banks of presets.



Storing, deletion and changing of Presets

To store a single preset in a bank, please create a new entry by selecting 'create preset' from the dropdown menu. The preset will be added to the bottom of the preset list with the name 'New Preset' - right click on the name to rename it. (You can also give it a number and rating, define its category and add a comment.) After creating a new entry, store the edited preset bank by clicking on 'save' or 'save as'. Right click on a preset name to select further options, 'restore', 'overwrite' and 'delete' (use 'restore' to load an existing preset).



Upload of Preset files

To transfer presets between the PRO-12 ASB hardware and the Remote Software, click on the 'Box' button. You will see four options in a drop-down menu:

1. Upload user bank to box

Ports user bank data from the Remote Software to the PRO-12 ASB unit.

2. Upload factory bank to box

Ports factory bank data from the Remote Software to the PRO-12 ASB unit.

3. Download user bank from box

Ports PRO-12 ASB user bank data to the Remote Software.

4. Download factory bank from box

Ports PRO-12 ASB factory bank data to the Remote Software.

C C	Parameter	C C	Parameter
0	Bank Select	64	Sustain Pedal
1	Modulation	65	
2	Unison voices	66	Sostenuto
3	Unison Detune	67	Soft Pedal
4		68	Single Mode
5	Glide Time	69	Unison
6	Data Entry	70	Dry/Wet
7	Device Volume	71	Rate
8	LFO Settings Retrig	72	Phase
9	LFO Settings Phase	73	Depth
10		74	Feedback
11	Volume	75	Poly Mod Destination Freq A
12	Osc A Frequency	76	Poly Mod Destination Freq B
13	Osc A Shape Saw	77	Poly Mod Destination PW A
14	Osc A Shape Pulse	78	Poly Mod Destination PW B
15	Osc A Pulse Width	79	Poly Mod Destination Filter
16	Osc A Sync	80	Dry/Wet
17	Osc B Frequency	81	Time Left
18	Osc B Fine	82	Note Left
19	Osc B Shape Saw	83	Feedback Left
20	Osc B Shape Triangle	84	Damp Left
21	Master Tune	85	Level Left
22	Osc B Shape Pulse	86	BPM Left
23	Aftertouch Pitch	87	LFO Shape Saw
24	Bend Range	88	LFO Shape Triangle
25	Osc A Volume	89	LFO Shape Pulse
26	Osc B Volume	90	Cross
27	Osc B Pulse Width	91	Time Right
28	Osc B Lo Freq	92	Note Right
29	Osc B Keyboard	93	Feedback Right
30	Aftertouch Dest Freq A	94	Damp Right
31	Aftertouch Dest Freq B	95	Level Right
32	Bank Select	96	BPM Right
33	Noise Volume	97	LFO Frequency
34	Aftertouch PW	98	Bypass
35	Aftertouch MW Amt	99	Program
36	External Volume	100	Chorus/Flanger
37	Aftertouch Dest PW A	101	
38	Aftertouch Dest PW B	102	Wheel Mod Freq A
39	Keyboard Amount	103	Wheel Mod Freq B
40	Cutoff	104	Wheel Mod PW A
41	Resonance	105	Wheel Mod PW B
42	Envelope Amount	106	Wheel Mod Filter
43	Filter Env Attack	107	BPM
44	Filter Env Decay	108	Wheel Mod Source Mix
45	Filter Env Sustain	109	External Source
46	Filter Env Velocity	110	LFO Settings MIDI
47	Filter Release	111	
48	Aftertouch LFO Freq	112	
49	Release	113	Time Velocity Attack Filter Env
50	Aftertouch Filter	114	Time Velocity Dec/Rel Filter Env
51	Aftertouch Amp	115	
52	Amp Env Attack	116	Time Velocity Dec/Rel Amp Env
53	Amp Env Decay	117	Time Velocity Attack Amp Env
54	Amp Env Sustain	118	
55	Amp Env Velocity	119	
56	MW Intensity	120	All Sounds Off
57	MW Offset	121	
58	Poly Mod OSC B	122	Local Control Off
59	ADR	123	All Notes Off
60	Keyb Mode Retrig	124	Omni Off
61	Low Note	125	Omni On
62	Amp Env Release	126	Mono On
63	Poly Mod Filter Env	127	Poly On

Specifications

Synthesizer Type	Virtual analog synthesizer
Technology	Physical Modelling, Virtual Circuit Modelling
Number of Voices	12
Sampling Rate	44.1 kHz (internal oversampling)
Resolution	32 bit (Audio)
Analog Output	2 x 1/4 inch (6,3mm) unbalanced
Analog Input	2 x 1/4 inch (6,3mm) unbalanced
Control Inputs	Pedal, Switch
MIDI	In, Out, Thru
USB	Full Speed USB rev 1.1
Power Supply	AC or DC, 12V, 1.5 A < 20 W
Dimensions (mm)	480 wide (448 without wood panels) 209 deep (203 without wood panels) 40/76 high (front/rear)
Weight	3,4 kg



Warranty Regulations

The hardware described within this documentation and the warranty regulations are governed by and granted according to German Law.

CreamWare Audio GmbH ("CreamWare") warrants, that the described product has been free of failures within parts or components of the hardware and was found to be fully functional. Any single units has been checked by Quality Assurance Department several times and with various measures, before this product has been delivered to you. Therefore please carefully read the following information, which are important in the case of probable damages or malfunctions:

If goods are being found defective, missing features described within the present documentation or becoming defective due to eventual fabrication deficiency or material defects within the first six months after purchase, then CreamWare shall at its sole discretion and evaluation replace or repair the defective parts or goods. Multiple repairs shall be permissible. In case the malfunction or physical failure can not be fixed, customer receives the right to refrain from the purchase with refund of the amount originally paid for the defective product. Within the time frame of 6 to 24 months customer has to provide proof, that the claimed malfunction or defective part or component has already been defective upon first delivery. In this case CreamWare will execute required repair or replacement at no cost upon acceptance of customer's proof by CreamWare.

Any deficiencies caused by transportation have to be declared within a 14 days period after receipt of goods by written notice. Please note, that any warranty repair at no cost ruled by the above regulations requires registration of name and address either online at the "My Page" area on the CreamWare website (www.creamware.com) or by sending the proof of purchase together with the defective product.

To return defective goods, please contact the retailer where you purchased the product. As an alternative you can also contact CreamWare directly to receive the RMA number for the defective product. PLEASE NOTE: It is mandatory to return the product with the referring RMA number to avoid delays in repair. If possible, please also add a description of the failure occurred to enable us executing the repair as soon as possible.

Non-compliance with the operation and maintenance instructions, any alterations or modifications to the goods delivered, changing or utilizing any parts or materials not conforming to Sellers specifications will immediately render any warranties null and void. For a warranty claim, customer has to prove to CreamWare beyond a reasonable doubt that none of these aforesaid actions caused the goods to be defective or deficient.

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The hardware described within this documentation is herewith certified to conform to the requirements set forth in the guidelines for electromagnetic acceptability (89/336/EWG)

CreamWare Audio GmbH, July 2006
sgn. Wolf Roth





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