

See also

[Magazine Review page](#)

[Socket kits for analogue synths](#)

[Kenton Pro-Solo MIDI-CV](#)

[converter](#)

[Pro-2000 Firmware update](#)

[MIDI to CV information page](#)

[Pedals, PSUs & MIDI accessories](#)

[Leads & cables, plugs & sockets](#)

[Secure prices and ordering page](#)

PRO-2000 MIDI-CV converter

What do MIDI-CV Converters do?

In order to control pre-MIDI synthesisers from a modern MIDI instrument or sequencer, you need to change the digital MIDI messages into the kind of signals the pre-MIDI synth can understand.

For the price, really is the best value converter on the market, anywhere. The versatility of this unit is awesome. Just look at the specifications below.



ITEM	ex VAT	inc VAT
PRO-2000 standard 2 channel & 6 aux	£212.75	£249.98
Rack ears for use with PRO-2000	£17.00	£19.98
DCB port for above (inc cable)	£50.00	£58.75
Wasp / KADI port for above (inc cable)	£40.00	£47.00
Single channel Hz module (for PRO-2/PRO-4)	£40.00	£47.00

[Secure prices and ordering page](#)

Specifications

- Super-fast response times
- Famous Kenton build quality - rugged steel case
- High specification D/A converters for rock-steady pitches
- 'Volts per octave' & 'Hertz/Volt' tuning
- Programmable Gate out(s) inc. S-Trig
- MIDI syncable LFO(s) MIDI IN/THRU
- MIDI analyser mode
- Portamento
- Note priority selection
- Set-ups stored in non-volatile RAM
- Nine waveform LFO(s)
- Programmable auxiliary CV output(s)
- Two completely independent CV channels
- Switchable V/Oct & Hz/V scaling options
- Optional KADI or DCB port on its own channel
- 2 Independent LFO's assignable to any output
- In-built LFOs synchronisable to MIDI clock
- 16x2 Character LCD display
- Software set-up of tuning & scale
- Multiple configuration memories
- Internal power supply
- LFO speed adjustable in real time
- Built-in portamento adjustable in real-time

- MIDI out with filtering to 'channelise' an omni on synth
- Set-ups stored in non-volatile memory
- Designed to control all types of mono-synth
- V-trig (up to 15v) or S-trig (with or without pull-up)
- Selectable note priority newest/lowest/highest
- Adjustable pitchbend range
- Any MIDI channel can be selected
- Set-ups stored in non-volatile memory
- MIDI monitor mode - for easy MIDI troubleshooting
- Sync 24 & Clock pulse outputs
- Six software-assignable auxiliary outputs for
- MIDI Out and Thru socket

Socket kits for Analogue Synthesisers

For those monosynths without the necessary inputs, Kenton have a range of Socket Kits to enable you to add those all-important CV, Gate & Filter sockets and sometimes a few others too. We can fit such sockets for you or, alternatively, supply a kit of parts and instructions. Please look at our [Socket Kits](#) page for further information and our [MIDI to CV information page](#) which shows some typical examples of using our MIDI to CV converters with some popular synths.

Pro-2000 Firmware update

If you bought a Pro-2000 before January 1998 or have a ROM revision earlier than Rev. 4305.048 you may wish to update your Pro-2000.

Holding the inc. and dec. buttons while switching on will display the ROM version number of your Pro-2000.

Upgrading an older Pro-2000 will allow access to all these additional features:

You can now control of up to ten synthesisers! This converter is now even more versatile as each of the six existing LFO-controllable, auxiliary outputs may now be used as CV (V/Oct) or Gate/S-Trig outputs! In addition, a special 'Trigger' mode is provided for Arp-2600 synths and the like. This update may be installed by the user and is supplied with easy to follow instructions. Alternatively we will be pleased to fit the new EPROM for visitors to our premises. [Click here for firmware details.](#)

[Top of page](#)



Firmware history

[PRO-Solo](#)[PRO-2000](#)[PRO-4](#)[Control Freak Original](#)[Control Freak Studio Edition](#)

Firmware upgrades

Please note that new units do NOT need upgrades. The upgrades below are to bring older units up to the current specification.

The following upgrades are currently available:

ITEM	ex VAT	inc VAT
Firmware upgrade for PRO-SOLO	£15.00	£17.63
Firmware upgrade for PRO-2000	£30.00	£35.25
Firmware upgrade for PRO-4	£15.00	£17.63
Firmware upgrade for Control Freak Original	£15.00	£17.63
Firmware upgrade for Control Freak Studio Edition	£15.00	£17.63

[Secure prices and ordering page](#)

The above 5 items are to add the latest features to older units - new units are always shipped with the latest firmware already installed. To find out if you can enhance your unit with a more recent upgrade, please read the relevant information below.

KENTON firmware history

Note that only significant changes have been listed, there were other released versions not shown here.

Pro-SOLO firmware history

22/01/2003	K1CV4300.087	Added 2 new clock divide ratios. d2 gives 24 cpqn & d4 gives 48 cpqn to enable you to sync Linndrum
10/01/2001	K1CV4300.084	Reset all controllers recognised
09/01/2001	K1CV4300.082	All notes off recognised
27/07/1998	K1CV4300.042	128 note range for CV, aux can now output trigger signal for ARP2600
16/06/1997	K1CV4300.014	Auto sync added, new wavetable for triangle LFO to sync at top of wave instead of the middle

To check the firmware revision on the Pro-SOLO, hold both Inc & Dec buttons in while you turn the unit on. The display will cycle round 4 groups of 2 numbers, so K1CV4300.086 will be shown as 43 00 00 86.

[Top of page](#)

Pro-2000 firmware history

22/01/2003	KP2K4305.331	Added 1 new clock divide ratio. 48 cpqn to enable you to sync Linndrum (already had 24 cpqn mode)
18/01/2003	KP2K4305.326	Aux ranges now update when you change between programs
31/01/1998	KP2K4305.314	Pitchbend setting range increased to 24 semitones / 128 note range for CV / reset all controllers recognised
11/01/1998	KP2K4305.200	Sysex send & receive added
06/01/1998	KP2K4305.175	All notes off recognised
19/12/1997	KP2K4305.048	Auxes can now be CVs & Gates
17/12/1997	KP2K4305.023	Auxes can now output trigger signal for ARP2600

17/07/1997	KP2K4305.000	Auto sync added
11/06/1997	KP2K4304.745	New wavetable for triangle LFO to sync at top of wave instead of the middle

The firmware revision of the Pro-2000 is briefly displayed whenever you turn the unit on. To display for longer, hold both the Inc & Dec buttons in while you power the unit on and keep them pressed until you have read the revision number.

[Top of page](#)

Pro-4 firmware history

12/11/1998	K4CV4302.324	Changed so that Portamento controller select can be stored with prog sysex dump
10/06/1997	K4CV4302.121	Added MIDI analyser mode / changed so that last program loaded or stored is the one loaded at power on / added fast scroll mode / many controllers now loop from max to min / Portamento Controller select added
25/08/1995	K4CV4212.xxx	Improve sync 24 and arpeggio clock handling of uneven MIDI timing clocks
24/09/1994	K4CV4211.xxx	Polyphonic mode added
17/05/1994	K4CV4210.xxx	Auto sync added

The firmware revision of the Pro-4 is briefly displayed on the bottom line of the LCD whenever you turn the unit on.

[Top of page](#)

Control Freak Studio Edition firmware history

19/07/2002	KC164501.423	Added Sonar 2 profiles in progs #37 & 38 of factory set
04/03/2002	KC164501.422	Improved handling of large SysEx dumps -- allows Freaks to be chained together
23/07/2001	KC164501.420	Added soft thru on-off select / Added control channel for remote control of programs & button presses / Added scene memory / Added erase program feature / Added delete to end of line feature
15/04/2000	KC164501.289	Added 1 profile for Protools in factory set
22/01/2000	KC164501.270	Added 2 profiles for VST in factory set
03/06/1999	KC164501.250	Added Controller 65 to 119-000 in factory set / added settling time after prog change

The firmware revision of the Control Freak Studio is briefly displayed whenever you turn the unit on. To display for longer, hold the shift button in while you power the unit on and keep it pressed until you have read the revision number. It will then enter analyser mode.

[Top of page](#)

Control Freak Original firmware history

22/08/2003	KCNT4501.450	Added ability to load Control Freak Live & Studio profiles
05/03/2002	KC164501.447	Improved handling of large SysEx dumps -- allows Freaks to be chained together
23/07/2001	KCNT4501.446	Added soft thru on-off select / Added control channel for remote control of programs & button presses / Added scene memory / Added erase program feature / Added delete to end of line feature
15/04/2000	KCNT4501.423	Added 2 x 8ch profile for Protools in factory set
28/01/2000	KCNT4501.422	Added 4 x 8ch profiles for VST in factory set

03/06/1999	KCNT4501.420	Added Controller 65 to 119-000 in factory set / added settling time after prog change
05/11/1998	KCNT4501.244	Added new R/T bytes

The firmware revision of the Control Freak Original is briefly displayed whenever you turn the unit on. To display for longer, hold the shift button in while you power the unit on and keep it pressed until you have read the revision number. It will then enter analyser mode.

[Top of page](#)



Synthesiser

[MINIMOOG](#)[MOOG PRODIGY](#)[MOOG ROGUE](#)[MOOG SOURCE](#)[ROLAND SH-101](#)[SEQUENTIAL PRO-ONE](#)[KORG MS-20](#)[KORG MONOPOLY](#)[YAMAHA CS-30](#)[ARP ODYSSEY & AXXE](#)[ARP 2600](#)

How to connect using our MIDI to CV converters

Useful information on connecting up some popular monosynths to Kenton MIDI to CV converters.

SYNTH INPUTS	CONNECTOR TYPE	CONVERTER OUTPUTS	ADDITIONAL INFORMATION
MINIMOOG			
Oscillator Input	1/4" jack	CV Chan A	Input is affected by the last note played on the Keyboard
S-Trig Input	Cinch-Jones	S-Trig	See note 1 below
Filter Input	1/4" jack	Aux 1	See note 5 below
Loudness	1/4" Jack	Aux 2	
MOOG PRODIGY			
Kbd In/Out	1/4" jack	CV Chan A	Early Models have no CV/GATE Inputs, however we can fit them.
S-Trig In/Out	1/4" jack	S-Trig	Some Prodigy synths have Cinch Jones connectors. See note 1 below
VCF In	1/4" jack	Aux 1	See note 5 below
MOOG ROGUE			
CV In	Ring of 1/4" jack	CV Chan A	See note 7 below
V-trig In		Gate	Do not use s-trig connection
MOOG SOURCE			
Kbd In/Out	Ring of 1/4" jack	CV Chan A	See note 7 below for connections to ring of stereo jack
S-Trig In/Out	Ring of 1/4" jack	S-Trig	If the level 2 EXT TRIG is off, all external triggers are defeated
ROLAND SH-101			
CV Input	3.5mm jack	Cv Chan A	We can fit additional filter and mod sockets to the 101
Gate Input	3.5mm jack	Gate	
Ext Clk In	3.5mm jack	Arp Clock	Will run the internal sequencer in time with MIDI, not concurrently with CV/Gate
SEQUENTIAL PRO-ONE			
CV In	1/4" jack	CV Chan A	
Gate In	1/4" jack	Gate	
Filter In	1/4" jack	Aux 1	See note 5 below
KORG MS-20			
VCO 1+2 CV In	1/4" jack	Hz/V Chan A	Requires Hz/V option
Trig In	1/4" jack	S-Trig	
Any Other	1/4" jack	Aux 1/2	Versatile control exists on the MS-20
KORG MONOPOLY			
CV In	1/4" jack	CV Chan A	CV Init must be set 1 Octave above Factory Default
Trig In	1/4" jack	Gate	Set trig polarity of Monopoly to +15v
VCF fcM In	1/4" jack	Aux 1	Adjust converter Aux 1 to +5v
Porta	1/4" jack	Aux 2	Adjust converter Aux 2 to +5v
Arpeggio Trig In	1/4" jack	Arp Clk	
YAMAHA CS-30			
Key Volt In	1/4" jack	Hz/V Chan A	Requires Hz/V option to be fitted
Trig In	1/4" jack	S-Trig	
ARP ODYSSEY & AXXE			
CV Input	3.5mm jack	CV Chan A	
Gate Input	3.5mm jack	Gate	The Trig Input does not need to be connected
ARP 2600			

CV Input	3.5mm jack	CV Chan A	The Trig Input does not need to be connected See note 5 below
Gate Input	3.5mm jack	Gate	
VCF In	3.5mm jack	Aux 1	Set the aux source to TR and offset to zero
Trig Input	3.5mm jack	Aux 2	

Notes

1. The Cinch-Jones S-Trig connector commonly fitted to MOOG synths, has two flat blades - the narrow blade connects to the tip of a 3.5mm jack plug and the fatter blade connects to the body.
2. The connection info refers to channel A, but this could equally well be channel B etc. If you are going to use channel B of the converter, you would be using the gate, s-trig, aux 1 & aux 2 outputs (as required) of that channel also.
3. All the outputs of the PRO-2000/4/SOLO (except the SYNC 24 and MIDI thru) are on 3.5mm jack sockets.
4. Some of the control inputs on synths are mutually exclusive, ie. you wouldn't use the EXT CLK IN of the SH-101 at the same time as the CV & GATE inputs.
5. References to FILTER control, mean control of the filter cutoff frequency - sometimes also called filter sweep or VCF frequency control (VCF means voltage controlled filter).
6. We can fit CV, GATE and FILTER control sockets to most monophonic synths if they do not have them already in most cases
7. A stereo jack plug has the following connections, tip - ring - and body - in that order. To connect to the ring of the stereo jack involves connecting the body of the 1/4" stereo jack to the body of the 3.5mm jack - and connecting the ring connection of the 1/4" stereo jack to the tip of the 3.5mm jack.
8. The PRO-2000/4/SOLO (or indeed any MIDI to CV converter) is not generally the appropriate solution for the control of Polyphonic synths. Although a few early poly-synths do have CV & GATE inputs fitted, this only enables you to use one of the voices, so you effectively get a monophonic synth when using CV & GATE. The way to control poly-synths using MIDI is to get an internal retro-fit, which of course KENTON can supply and fit for you.

[Top of page](#)

[Other](#)

[Contact us](#)
[How to find us](#)
[History](#)

[Staff profiles](#)
[Famous customers](#)

KENTON

HOME

EMAIL

SITE MAP

We accept these credit & debit cards











INFORMATION

PRODUCTS

ORDERING

DOWNLOADS

LINKS

ABOUT KENTON

Topics

[How do I sync the arpeggiator on my synth to MIDI clock using the Pro-Solo?](#)

[How can I change parameters \(for example the speed of LFO 1\), on my Pro-4 using Sysex?](#)

[How can I change the operating voltage of my Pro-4 for use in another country?](#)

[What's the difference between the MIDI retro-fit and the MIDI-DCB converter for the Juno 60?](#)

[When running my TR-808 from Sync24, I find that it runs at the wrong speed. How do I resolve this problem?](#)

[I have a Kenton PRO-2 MIDI-CV converter, and would like to add on a DCB or KADI port. Is this possible?](#)

[I'm considering purchasing a Kenton PRO-SOLO to control a Roland SH-101. Does the SOLO convert MIDI sync to the clock input used by the SH-101?](#)

[When I try to save the system parameters on my Kenton PRO-4 to 'System Data', they do not store. However, if I save to 'Memory # x' they do store. Is my PRO-4 working correctly?](#)

[What parameters will a Kenton MIDI-CV converter allow me to control on my synth?](#)

MIDI-CV FAQs

Q: How do I sync the arpeggiator on my synth to MIDI clock using the Pro-Solo.

A: The Pro-Solo will operate in either sync mode, or CV mode, but cannot perform both tasks simultaneously. This is because in sync mode, the CV, Gate and Aux sockets are used to output the required clock pulses. If you want to clock your synths arpeggiator, put the Solo in sync mode by switching it on with the 'inc' button pressed and connect the 'Aux' output jack to the clock input jack on your synth. If your synth requires a DIN Sync-24 type signal use the Pro-Solo Sync-24 adapter cable available from Kenton.

[Top of page](#)

Q: How can I change parameters (for example the speed of LFO 1), on my Pro-4 using Sysex? A: To change LFO 1 speed on a Pro-4 send the following (Hexadecimal) string from your sequencer or MIDI controller

F0	00	2V	13	04	20	02	06	0L	0H	F7
----	----	----	----	----	----	----	----	----	----	----

V is the device number in hex 0 to F (device #1 = 0 and device #16 = F). 0L & 0H are variable bytes that indicate the speed.

Example Sysex String to set the speed to 90 decimal (the default value)										
F0	00	20	13	04	20	02	06	0A	05	F7

You first need to convert the 90 decimal to hex, which is 5A - but the data has to be sent in the order lo, hi, split into 2 bytes, so you send the variable speed bytes as 0A & 05.Turning this to read top to bottom:

F0	begin sysex message
00	Kenton sysex id
20	Kenton sysex id
13	Kenton sysex id
04	Kenton product code (Pro-4)
For this product the above 5 bytes are always the same	
20	data type and device number
02	address lo (address for lfo speed 1 is 62 hex)
06	address hi
0A	variable data lo byte
05	variable data hi byte
F7	end of sysex

See also

[General Kenton FAQs](#)

[Control Freak FAQs](#)

[Retrofit FAQs](#)

[Email your own question](#)

[Top of page](#)

Q: How can I change the operating voltage of my Pro-4 for use in another country?

A: There are some jumpers inside the PRO-4 to change voltage, all voltages need 3 jumpers set. To open the case of the PRO-4 you need a Pozidrive or Supadrive screwdriver. Do not use anything else or you will destroy the screw heads. Ensure that the PRO-4 is disconnected from the mains power before opening the case, which we recommend is performed by a competent engineer. On the right hand side, undo the two bottom screws, ignore the top one.

On the left hand side undo the two bottom screws, there are no others.

On the top undo the 3 screws near the front, there are no others.

On the back undo the screw between Channel D and Auxilliary output 1,

Undo the screw immediately to the left of the text which reads "No user servicable parts inside etc."

Do not undo any other screws. You should have removed 9 screws only. When you remove the lid, the earth strap will still be attached, you do not need to remove this. The voltage jumpers are beneath a protective cover just behind the mains transformer. Remove the two screws securing the protective cover, be careful not to lose the nylon spacers. The positions for the jumpers are clearly marked. Set each jumper in the correct position for the voltage you require. Please note the mains fuse should have a lower value for units running from 220/240 volts - this is marked next to the fuse. If your mains line voltage is 230 volts, use the 240 volt setting. When replacing the jumper protective cover, do not overtighten the screws as they are only screwed into the printed circuit board. To replace the lid, reverse the disassembly procedure.

[Top of page](#)

Q: What's the difference between the MIDI retro-fit and the MIDI-DCB converter for the Juno 60?

A: With the DCB box, you get an external unit which is substantially cheaper than a retro-fit. It allows you to send and receive MIDI notes. It has an output so you can clock the arpeggiator and another output so you can control the filter cutoff. The retrofit allows you to send and receive notes, to clock the arpeggiator and to control filter cutoff. You may also control pitchbend, mod wheel, hold, program change and MIDI volume. Plus you have no trailing unit, it's all in the Juno case

[Top of page](#)

Q. When running my TR-808 from Sync24, I find that it runs at the wrong speed. How do I resolve this problem?

A: For the TR-808 to run correctly from MIDI sync, you will need to use PRE-SCALE setting number 3 (quarter notes). TO SET PRE-SCALE - set pre-scale switch to 3 - set to pattern write 1st part - select pattern you want to change - press start button - press clear / pre-scale button until change is heard - press stop - reset to pattern play - done.

[Top of page](#)

Q. I have a Kenton PRO-2 MIDI-CV converter, and would like to add on a DCB or KADI port. Is this possible?

A: No, these modifications are not available for the PRO-2, only for the PRO-2000. The only upgrade available for the PRO-2 is a single channel Hz module which provides Hz/V capability on channel A (if it wasn't fitted originally).

[Top of page](#)

Q. I'm considering purchasing a Kenton PRO-SOLO to control a Roland SH-101. Does the SOLO convert MIDI sync to the clock input used by the SH-101?

A: Yes, but not at the same time as CV/Gate - the PRO-SOLO cannot do both simultaneously. Having said that, you can't use both on the SH-101 anyway, as the CV/Gate override the synth's internal sequencer.

[Top of page](#)

Q. When I try to save the system parameters on my Kenton PRO-4 to 'System Data', they do not store. However, if I save to 'Memory # x' they do store. Is my PRO-4 working correctly?

A: Yes. Saving to 'System Data' only saves parameters such as the display viewing angle, and anything else that says 'System' in the top left hand corner of the LCD - these do not change with the programs. All other parameters should be stored in memories 1 to 8.

[Top of page](#)

Q. What parameters will a Kenton MIDI-CV converter allow me to control on my synth?

A: If you are using just CV and Gate, then you can control notes and pitchbend, plus all Kenton converters have hold and portamento. In addition, they come equipped with built-in LFOs which can be used to modulate the pitch. Other functions may be controlled on the synth, depending on what additional inputs you have besides CV and Gate. Many synths have a VCF input for controlling filter cut-off, and some, such as the Minimoog, also have a VCA (volume) input. Synths such as the Korg MS-10 and MS-20 have even more inputs to control effects such as pulse width. In many cases, Kenton can supply socket kits which add extra inputs (eg: filter and modulation for the SH-101).

[Top of page](#)

Review - The Mix magazine, June 1997



Kenton's new mid-range unit has been eagerly awaited, and boasts two basic MIDI-CV channels, individually switchable between the Moog, Roland or SCI 1V/ octave standard and the early Korg or Yamaha Hz/Volt (making it compatible with 95% of old monosynths) and caters for a comprehensive range of gate and trigger controllers.

It's in the area of extras that the Pro-2000 really scores. For each of the two instruments it's capable of controlling, an independent MIDI channel can be set, note priority can be switched between highest, lowest and newest, single or multiple triggering selected, transpose, pitch bend and portamento rate values can be set, a MIDI controller assigned to switch on portamento, and much more - providing more control over most monophonic synths than you'd get by playing them from their own keyboards.

In use

The Pro-2000 was tested with an SH-101, Pro-One, MS-10, and Doepfer modular, and the results were impossible to fault. It was especially nice to have one box controlling the SH-101 and MS-10 at the same time - something that I'd never managed before. As well as the CV/Gate channels, there are two more control possibilities. One that comes as standard is a MIDI filter/re-channel system, which can take any OMNI output from a synth and convert it to one chosen channel, or take a specific channel output from a synth with primitive MIDI (like the early DX7) and change it to any other channel. These are a nice bonus for anyone with early MIDI synths (Jupiter 6, Poly 800 and so on) which need them. The other is optional but is even more worthwhile if you own bits of quaint old tech that you want to run via MIDI. It's a digital output, either dedicated to DCB (Roland's pre MIDI Juno 60 and JP-8A interface), or dual purpose: KADI/Wasp. KADI Kenton's proprietary interface, is designed either for possible future expansion, or to speak to Kenton modified Roland drum machines. The best bit for me was the Wasp. Although there are severe limitations on what the old EDP synth can respond to, it makes such a good sound that MIDIing it is a real treat.

There's more too. A 5-pin DIN sync 24 output socket is included, so that some old Roland machines can be run from a MIDI sequencer. There's also a clock pulse output, for syncing arpeggiators or other drum machines with a Trigger/Clock In socket. This can be set to send a pulse at various MIDI clock rates, from 1 to 24. Even better, a clock polarity switch is enabled in software, so that something like a Korg Polysix or MonoPoly arpeggiator can be clocked without a problem. There's also the option of treating 'continue' messages as 'start', or ignoring them.

Verdict

This is an excellent MIDI/CV box, and there really isn't anything more you could reasonably expect from it. Although the business of programming it does take you away from the immediacy of analogue synths, the interface is well designed and easy to use - and you can always store your seven most usual configurations in the Pro-2000's memory. If anyone else comes along with a rival box that represents better value, it'll be a remarkable achievement.

Overall

A superb unit that should be high on your check-list if you're looking for a MIDI-CV converter.

Review by Peter Forrest

[Top of page](#)

Review - PRO-2000, excerpts from Sound on Sound, June 1997



....the Pro-2000 comes in a two-thirds rack width box, which feels solid, reliable and well up to the rigours of regular gigging - although I'd strongly advise the purchase of the optional rack ears for such use. A quick glance inside the unit shows that its beauty is not just skin deep. Neat job Kenton! MIDI In, Out and Thru are included. One of the nicest things about the Pro-2000 is that, despite its size, it features an internal power supply - no wallwarts or line lumps here. Power arrives from a standard IEC mains connector; the CV outputs are all of the mini-jack variety...

...Someone at Kenton Electronics was obviously in a generous mood the day that the auxillary outputs were discussed, because the Pro 2000 has no fewer than six of them! The amount of control that the user has over these auxillaries is generous too, with options for minimum and maximum controller voltages and the reset level. Either of the internal LFOs can be defined as a modulation source, with a definable controller number for LFO depth and a maximum modulation level. The only option I'd like to see added is for any auxillary to copy one of the main channel CV outputs. - for use in filter tracking, for instance....

Conclusion

I'm impressed. Very impressed. OK, it's not perfect: I've mentioned the fiddliness of the user interface and I've touched on one or two features that I feel would enhance the overall package. But Kenton really have understood what a musician wants from a MIDI/CV interface - and have included a small bucketful of useful extras into the bargain. Once the Pro 2000 is in place it's easy to forget you have a MIDI/CV converter in your system at all - which must surely be the best accolade that any interface can hope to attain. If anyone knows of a better alternative to the Pro-2000 then I'd love to see it. Until then I'm nailing this into my rack...

Summary

I can think of no other MIDI/CV interface that comes close to those produced by Kenton - and the Pro-2000 is the best of Kenton's range. Performs the maximum amount of work with the minimum amount of fuss. Anyone still struggling with a variety of cables and boxes to get vintage gear running in their rig really out to take a look. Highly recommended.

Review by Paul Ward

[Top of page](#)

Review - Future Music, May 1998



WINNER OF THE FUTURE MUSIC PLATINUM AWARD (RATING 90%)

The PRO-2000 has been available for almost a year now, so it might seem rather an odd time to review it. The reason lies in the version two software update which now ships as standard with all new machines. In its original incarnation the PRO-2000 was a two-channel converter with a hefty six auxiliary channels, but now thanks to the magic of software, the auxiliaries can also be configured as standard pitch and gate converters. The upshot of this is that the PRO-2000 can now run up to five synths at once, a rather remarkable upgrade.

The PRO-2000 is a solidly built, rather anonymous black box about two-thirds rack-width (optional rack ears are available). Its 2x16 backlit LCD, 5 LEDs and four buttons access an extremely intuitive user interface, with one of the fastest learning curves of any piece of equipment. A quick flick through the parameters for a single channel reveals a choice of V/Oct or Hz/V, 5 and 15V pull-up and normal S-Trig (for Moog) and 5 and 15V Gate (for everybody else). Unique to the PRO-2000 is its provision of Trig Pulse, a sort of secondary gate signal used on some older synths such as the Arp 2600 and Odyssey. If you can't get the right combination from that little lot then you're obviously trying to interface it with your toaster or something.

LFO modulation from one of the unit's two LFOs as well as portamento rate can be set to give the desired amount of vibrato and slide, and auxiliary channels can be fed from almost any of the 127 MIDI controllers. When using the auxiliaries as additional channels some of these facilities are not available, Hz/V and portamento being the main casualties. Even so, keeping any Yamaha and Korg synths on the fully featured first and second channels isn't a problem unless you've got more than two of them. Not content with five channels of conversion, the PRO-2000 has other tricks up its sleeve, namely a MIDI channel filter, DIN Sync output and arpeggio clock output. The channel filter extracts a single channel of MIDI data from the MIDI In port and sends it to the MIDI Out, allowing older MIDI synths that could only receive in Omni mode to work in a modern set-up. The DIN Sync and arpeggio clock out provide timing information for old drum machines and synth arpeggiators.

Finally an optional interface allows for polyphonic connection to early Roland polysynths such as the

Juno 60 and some Jupiter 8s, or for a 'MIDI-to-Wasp' converter. (The EDP Wasp refuses to recognise any form of communication other than a custom-designed Wasp interface). The settings for the whole machine can be stored in one of the seven memory locations, which in turn can be dumped to MIDI.

So is there anything wrong with it? Well, it would be nice to have full-size not mini-jack connectors on the back but apart from that, absolutely nothing. The simple fact is that this box can control six different synths and a drum machine simultaneously. To get so much power at this price is a breakthrough, particularly as Kenton's trademark quality and attention to detail are blatantly evident in the PRO-2000. Playing your old synth via the PRO-2000 is as near to playing it from its own keyboard as you can get, maybe better, so what more could you want?

CONCLUSION

In a perfect world there would be no incompatibilities. PCs and Macs would run each other's software, samplers would read each other's disks and we'd all write songs in Esperanto. However, we don't and aren't likely to in the near future so MIDI-to-CV converters offer a neat solution in an imperfect world. But there's another way round the problem, one that requires no understanding of such mysteries as gate polarities, note priorities and voltage scales. A number of specialist companies are more than willing to make things a lot easier, by just welding a couple of MIDI sockets on to the back of your synth. If you're a fearless death-or-glory madman they'll even sell you a diagram and all the bits to do it yourself (needless to say, you'll need at least a passing acquaintance with electronics if you intend to fit the kit yourself). Once completed, the obvious advantage of one of these MIDI retrofits is there is almost no setting up

required and the synth behaves almost like any other MIDI instrument. The disadvantage is that it costs a lot more per instrument than a single-channel converter would, at least £200 typically.

To find out more you should speak to Kenton Electronics (0181-337-0333). It would seem the MIDI-to-CV converter route is the best as it offers more flexibility. If you decide to sell a retrofitted synth, then you also sell your MIDI-to-CV capability, but with a converter you just plug it into the next synth and carry on.

So do we really need MIDI-to-CV converters? With the growing market in analogue modelling synths like the Roland JP-8000 and Korg Z1, do we really need the original relics? The new synths have a lot going for them, particularly a MIDI spec to die for, but they aren't the same. They're close enough to start affecting the value of the older gear (hooray!) , but not quite right. Plus, there's an unmatched richness to the originals that you appreciate if you use analogue synths. If you don't then you owe it to yourself to find out what the fuss is about. Just don't forget to budget for the MIDI-to-CV converters.

[Top of page](#)
