

While Roland's A70 in its basic form is a well-equipped but dumb controller, it can metamorphose into a Roland JV-style synth, a General MIDI synth, or a piano at the drop of an expansion board.
PAUL WARD has a controlling interest...

There can be little doubt that Roland's 88-note A90 master keyboard has won quite a few friends since its release in late '96. The robust build quality, the feel and response of the piano-weighted keyboard, and the optional expandability, in the form of high-quality Voice Expansion Boards, were a combination that made it hard to ignore. Roland have now chosen to bring similar operational features and expandability to a slightly shorter 'synth'-type keyboard in the form of the A70. But the A70 has an extra trick or two of its very own...

The overall layout of the A70's control surface is very much in keeping with its older stablemates, particularly the A90 (reviewed in SOS September 1996). Indeed, with the notable exception of the 'Panic' and sequencer control buttons, which are over on the right-hand side of the front panel, the position and function of the switches and controls is nearly identical. Gone, however, are the JD800-style buttons of the A90, to be replaced with a slimmer variant, leaving more room for panel legending. Happily, all of the important buttons retain their

integral LEDs, which greatly assists in programming, and there are two adjacent backlit LCDs: one large 3-digit display, and one 2-line x 17-character display.

PLASTIC FANTASTIC?

I found myself somewhat perturbed by the build quality of the A70. Although the casing has a good, solid metal base, much of the upper surface, including the end-cheeks, is made from moulded plastic. The review model was already showing signs of a couple of knocks in transit, and I doubt that life on the road would be any more forgiving. The highest and lowest keys also seem a little exposed above the plane of the end-cheeks. For normal studio use, or the odd gig down the Frog and Artichoke, I doubt that these points would be of any major concern, but I would have some concerns about subjecting this machine to an extended touring schedule.

On the positive side, I particularly liked the 76-note keyboard, which features Roland's implementation of weighted synthesizer action. The feel of Roland keyboards often appeals to me, but this is one aspect of a master keyboard that needs to be determined by the individual, since one player's "light and responsive" is another player's "soft and spongy". I was also taken by the textured black keys, reminiscent of the old Ensoniq EPS.

Roland have equipped the A70 with pitch and modulation wheels in addition to their traditional bender lever — although the bender lever gets the better of the two sites, to the immediate left of the keyboard. As one who has spent many years

take control

ROLAND A70 EXPANDABLE CONTROLLER KEYBOARD



Roland A70

pros & cons

ROLAND A70 £999

pros

- Vast range of control options.
- Remote keyboard facility.
- Sequencer controls.
- Expandable with optional boards.
- Useful patch map facility.

cons

- Plastic casing may not be ideal for heavy gigging.
- Small screen.
- Some operations can be confusing.

summary

A very powerful and well-specified master keyboard with serious expansion options. Requires some patience to get to grips with at first, but rewards perseverance. Professional gigging musicians may be put off by the less than tank-like build quality, but this must be weighed against the asking price. If you're looking for a controller keyboard and regularly use sequencers in your work, you'd be unwise to ignore it.

SOUND ON SOUND

► flipping between wheels and levers, both in the studio and on stage, I'd say that each approach has its merits. For pitch-bending, the lever is my preferred choice, whilst for modulation I would rather have a wheel. At least here I have the choice, even if it means having to stretch my left hand over a little further than I would like.

The A70 has a pleasingly busy rear panel, including two MIDI inputs, a MIDI Thru and four MIDI outputs. Four control pedal inputs are provided: the Hold and Volume pedal inputs are standard fare, but two assignable inputs are also present, one of which will function with either a switching or continuous control pedal, whilst the other is for switching pedals only. Power arrives via a standard Euro connector with attendant chunky power switch. A pair of left(mono)/right audio outputs and a headphone socket give further evidence that the addition of a Voice Expansion Board will enable this master keyboard to produce more than a dull thunk, if required.

THE KIT INSIDE

The A70's operating system is very sophisticated. Its memory structure is a little confusing at first, but quite flexible once the basics have been grasped.

- System Memory is where the overall operating environment is defined, and does not require saving between power-ons. In here are delights such as the basic control channel and device ID, program Name Map assignments (more of which later) and LCD contrast controls.
- Internal Memory contains 64 'Performance' memories (I'll explain what these are shortly) and 10 'Chain' memories.
- Manual Memory is an area which behaves much like an extra Performance memory, to be utilised as a scratchpad — changes made here are automatically stored between power-ons. The Manual Performance can be stored to a Performance memory when required.

A PLACE OF ITS ZONE

Each Performance holds the combination of parameters required to access both external and internal sound sources. A Performance consists of up to eight 'Zones', four of which are designated 'internal' and four 'external'. There's actually no

reason why an 'internal' Zone should not be used to access external sound sources, but with a Voice Expansion Board installed the designations are undoubtedly more meaningful.

Each external Zone is logically 'connected' to one or more of the A70's four MIDI output sockets, while the internal Zones can also be connected to the internal expansion board. All the A70's physical controllers, such as keyboard, pitch-bend lever, and connected pedals, are processed by the Zones before being transmitted from the MIDI outputs and on to the MIDI sound sources.

The 16 most important MIDI performance parameters are presented on the front panel of the A70 as a matrix of Parameter Select buttons. Pressing one of these buttons allows parameters to be edited in either a real-time context or for subsequent saving back to a Performance memory. Four values are shown on the LCD when a parameter is selected, and these correspond to the four internal or external Zones (toggling between the internal and external Zones is accomplished with a dedicated button to the left of the Parameter Select buttons). Editing is carried out either by moving the cursor to the desired field and using the data slider, increment/decrement buttons, and numeric keypad, or by moving one of the four Palette sliders, which correspond to each of the Zone value fields. Most of the parameters are pretty self-explanatory, and shouldn't cause much trouble for the seasoned user. Some parameters vary for internal sound sources (control of fine-tune, attack, decay, release, brightness (filter), effects and EQ settings is offered for internal sound sources), but they are edited in essentially the same way. Let me take you through the parameters on offer:

- **MIDI Channel** is obvious enough and gets us off to a gentle start.
- **Transpose** follows, and has a range of +/- 36 semitones.
- **Key Range** for each Zone can be set with the normal data-input methods or by using the keyboard — and actually it would have been nice to have the option of using the same method for other data input.
- A **Velocity Curve** for each Zone is separately definable, as is velocity sensitivity and a maximum transmitted velocity value.
- **Volume** can be set for each Zone, with the

PLUG & PLAY

There are currently three Voice Expansion Boards available for plugging into the A70: the VE-RD1 (£399), VE-JV1 (£199) and VE-GS1 (£299). The VE-GS1 is a GM/GS compatible board based on the Roland Sound Canvas series, the VE-JV1 is an 8-part multitimbral, 28-voice polyphonic JV80 synth board, and the VE-RD1 is a 4-part, 64-voice board biased toward quality piano sounds, yet featuring a wide range of 'bread and butter' synth voices to boot. The A70 sent for this review came with the VE-RD1, which

was fitted by the reviewer.

Fitting was simplicity itself, involving the removal of a couple of screws from the underside of the A70. I then just slotted the board in. Once I'd initialised the A70, I was presented with 64 factory Performances to show what the board was capable of. The pianos, with a wide range of acoustic, electric and electronic examples, are very impressive, with none of those obvious timbral changes across the keyboard that often mar piano multisamples. I still find the velocity-switching technique used by manufacturers to emulate the hard and soft electric

pianos to be frustratingly clumsy, but the results here are better than most. The hammer 'thunk' on certain of the piano samples is a little too pronounced for my taste, but that's not to say that it's going to cause any major problems in normal use.

As well as the pianos, there's a decent 'bread and butter' selection of organ and synth sounds. The organs are pretty good, the growly B3 being particularly impressive. But some of the synth pads are a little 'safe' by modern standards. However, this is very much in keeping with the nature of the board — it presents a solid range of sound tools

that will fit into a wide range of applications. If you're after something a bit more off the wall, don't forget that the sounds are editable — though not to the degree that you'd expect in a full-blown programmable synth — and modifying filter settings, attack and release times often sees a 'safe' patch well into the realms of the avant-garde. I was very impressed by the quality of the filter, which has a general 'creaminess' to it. However, I did note that editing while playing produces some delays and glitches in the sound, which may preclude its use as a technique in performance.

Roland A70



FEATURES

- Keyboard: 76-key, weighted, synthesizer action, with velocity and channel aftertouch.
- Zones: 4 internal and 4 external
- 64 programmable Performances.
- 10 Performance Chains.
- 4 User Name Maps.
- 9 Preset Name Maps.
- Displays: large, 3-character; small, 17-character x 2-line, both backlit LCD.
- Connections: MIDI (In x 2, Thru, Out x 4), Foot Controller, Foot Switch, Total Volume pedal, Hold pedal, Output (L(Mono),R), Phones.
- Weight: 16kg.
- Dimensions: 1245 (W) x 357 (D) x 136 (H) mm.
- Optional Voice Expansion Board (VE series).

► added advantage that the relative volume levels for the Zones are preserved when using the A70's 'Total Volume' slider.

• Pan, Reverb Send, Chorus Send, Portamento

Time: these do pretty much what might be expected — providing, of course, that the receiving sound source can make use of these messages.

• **Modulate, Aftertouch, Expression:** these parameter buttons permit these controller messages to be transmitted to individual Zones, rather than globally, as would normally be the case.

• **Program Change, Bank Select:** these can access all of your sound sources' available patches, and Roland have made life even easier by giving the A70 a number of Patch Name Maps, so you can select sounds by name, rather than by bank and program number. No less than 13 preset maps are provided, covering a range of Roland's recently released synths. Four maps are user-definable, but I'd like to see the number of user-definable maps increased, by allowing the preset maps to be overwritten.

• **Aux 1, Aux 2:** these parameters can be used to transmit just about any MIDI control message, including RPN [*Registered Parameter Number*], NRPN [*Non-Registered Parameter Number*] and System Exclusive messages. This is extremely useful, but it's a shame that the Aux 1/2 usage and their SysEx messages can only be defined at a global level, rather than on a per-Performance basis. When used as controllers, Aux 1/2's minimum and maximum controller values can be specified.

More in-depth editing power is to be found in Edit mode. Here the functions of any of the physical controllers may be specified, including those controllers assigned to the Mono and Portamento buttons. Edit mode is also where the global transpose function is set up: you enter a value between +/-36 semitones and this applies as a global setting, switchable from the Transpose button. This seems a very inflexible and needlessly fussy process to go through for what is essentially a very simple requirement. How much easier it would be to hold down the Transpose button and then press a key on the keyboard, like Roland machines of old.

No list of Zone and Performance facilities would be complete without a mention of the 'Effector Control' memories. Each Performance has four such memories, separate from the internal and external Zones, and their data can be set to appear

at any or all of the A70's MIDI outputs. In their simplest form, these memories would be used to transmit a program change for an effects device.

IN NEED OF HELP

Shortcuts are implemented in the Edit and Utility modes. Double-pressing either of these mode buttons allows you to enter a two-digit code, corresponding to a specific menu item: you'll then be taken straight there. For the more cautious there remains the longer route, navigating through the menu system, with the assistance of the Help button if required. The Help facility is available at all times, and though it's very welcome, its usability is compromised by the size of the A70's screen — the information presented by the Help facility is often as cryptic as what it's attempting to clarify!

The Panic button is there to be used when the A70's Voice Expansion Board or an external MIDI instrument suffers from a hanging note. A single press sends MIDI Note Off and Hold Off messages for currently held keys, and also re-transmits the A70's current settings. Double-pressing the Panic button also sends Note Off messages for all MIDI note numbers and Controller Reset information on all channels. Now there's a feature which could save a few blushes!

On the far right of the A70's front panel is a set of sequencer controls: Play/Stop, Reset (to song start), Tempo and Song Select (up and down). Like the Zones, these buttons can be assigned to any of the four MIDI outputs. The A70 transmits standard MIDI clock signals, the tempo of which can be

Roland A70

“A healthy screen size, with graphic representations of routings and data values, would make the A70 a much friendlier machine...”

THE SMALL SCREEN?

The size of the A70's screen causes me some concern. On a device with as much flexibility as this, it seems a shame to attempt to cram so much into so small an area. A healthy screen size, with graphic representations of routings and data values, would make the A70 a much friendlier machine, and would probably encourage a greater degree of programming. The lights may well now be on in the hall, but we're still wallpapering it through the letterbox.

► specified as a preset within the Performance, or changed temporarily as the song plays. (It is important to understand that the A70 will not pass on clock information received at either of its MIDI Input sockets to the MIDI Out sockets — it will only generate its own clock signals.) The song select number can also be pre-set to be transmitted when a Performance is recalled.

REMOTELY CONNECTED

As I mentioned earlier, a pair of MIDI inputs graces the rear of the A70, and these connections require a little explanation. MIDI input 1 is designated the 'Remote' input. For those of us still loath to produce all of our music from a single keyboard, this is an ingenious way of making the A70 sprout another (or a set of MIDI bass pedals, for that matter). Data received at the Remote input is sent to any combination of Zones specified by the user and then onto the MIDI outputs as if it had been generated by the A70's own keyboard. With a system such as this, it's obviously important to specify which Zones are accessible by the remote keyboard and which by the A70's own keyboard, and Roland allow full flexibility to separate or merge to each Zone at will — brilliant!

MIDI input 2 is specifically designed to take multi-channel information from a sequencer. The data received at this input is not sent via any of the A70's Zones, but is passed straight to the MIDI output(s) or the internal Voice Expansion Board. This allows a full multi-channel sequence to be sent to your MIDI rig and merged with the data generated live by the A70 (and any connected remote keyboard). The MIDI outputs which re-transmit the data received from MIDI input 2 are assignable, on a per-Performance basis. Bulk dumps are also received from MIDI input 2, which seems sensible given its designated use with a bulk storage device or sequencer.

Once you've designed a number of Performances you'll probably want to use them in a specific order, perhaps to follow the order of songs in a live set. Re-ordering Performances every time the set changes would be a drag, so Roland have given the A70 10 'Chains', of up to 64 Performances each. Creating a Chain is relatively easy: select a step number and then assign a Performance number to that step. Steps may be inserted, deleted or edited. During editing, and on playback, the Chain display screen shows the current step number and the total number of steps assigned, and also details the previous, current and next Performance numbers in the chain — very friendly, I'd say. Chains can be set to loop back when they reach the end, if required.

HONING WITHOUT DRONING

With all this MIDI data flying around, things can get confusing for the best of us. The A70's four MIDI output buttons are there to help restore order. These controls simply toggle the A70's four MIDI output sockets on or off. Whilst these are obviously useful when honing your Performances, they would also be handy for switching sounds in and out in a

live situation. Any sustaining notes caught in the middle of switching are held until the notes or hold pedal are released normally. It is also possible to tag Zones with comments, which will be displayed on the LCD when the Zone button is held down for a couple of seconds. You have a healthy two lines, with 17 characters to each line, for entering comments, and this is certainly a thoughtful addition for those of us who invariably have a mental block at the most inopportune moments.

Two display modes are available to make the best of the A70's diminutive screens. Data may be displayed as numerical values or bar graphs, and note values as MIDI note numbers or note names. It would be nice if each screen was able to remember its own preferred setting, but it is quite easy to toggle between the two modes at any time.

The Utility button hides housekeeping functions, such as saving or copying Performances, initialising Performances or system settings, and making System Exclusive dumps to an external storage device. System Exclusive dumps are divided into a number of data types which may be individually selected for inclusion in the current dump.

CONCLUSION

Generally speaking, I found the A70 a pleasure to use. The power and flexibility of the control features is exemplary, and the sheer range of parameters and easy real-time control are superb, leading to many of those "Hey! I could..." moments. I find the option to add Voice Boards enlightened, and the facility for adding a second 'remote' keyboard is little short of perfection. The A70's sequencer controls, and the way it handles sequencer MIDI throughput, would certainly prove a great asset to the live performer — the software certainly seems bullet-proof. However, its potential for live use (for which its feature set qualifies it admirably) is marred by a build quality that falls short of what I would have expected of Roland. In a studio context, this is obviously of less concern. The small screen must also be seen as something of a handicap. When so many manufacturers are leaning towards larger screens I would find it hard to justify one of this size.

Despite these gripes, the A70 can certainly deliver the goods as a powerful master keyboard, and could well solve problems that you may never have realised you had. Give one a thorough examination in your local store and I doubt that you'll disagree.

SOS

£ £999 including VAT.

See 'Plug & Play' box for Voice Expansion prices.

A Roland (UK) Ltd., Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan SA7 9FJ.

T Brochure Line 01792 515020.

F 01792 799644.

W www.roland.co.uk

info