



*"Questions and Answers" gives you the opportunity to write in and get authoritative answers to your technical and applications-related questions concerning Roland and BOSS products. Our resident expert is Jim Mothersbaugh, the director of the Roland Service Department. Address your questions to Roland Users Group, Department Q and A, 7200 Dominion Circle, Los Angeles, CA 90040.*

**?** I just purchased a GM-70 Guitar-to-MIDI Converter and I am learning how to use it, but I still want to be able to use my old GR-700. Is it somehow possible to use them together?

**☞** Yes, with the Roland US-2 Unit Selector you can connect any two GR Guitar Synthesizers together, or a GR unit with the GM-70, enabling you to control both units from one guitar controller. The US-2 allows you to switch between either unit, or use them both simultaneously.

**?** I would like some clarification on the PCM partials found in the new D-50 Linear Synthesizer. Do these sounds have pitch, tone, and harmonic structure? Or are all the sounds purely percussive, such as chuff, mallet strike, breath, and so forth? Can the length of the PCM partial sounds be expanded using the envelope generator?

**☞** The PCM partials in the D-50 are a special selected group of samples that are available to you as components when programming a sound. Some of the PCM partial sounds are complete samples in themselves. What really makes the PCM partials special is that some of them are only the single attack portion of a sampled sound, whereas others are the looped center part of a sampled sound, but these are all individually available to you as components when creating a new sound. In other words, you could combine the attack lips of a trumpet with the looped center of a violin as the basis of a completely new sound! The envelope generator can modify any of the PCM sounds, but it cannot be used to create an edit of a given PCM sampled sound, such as changing the loop point. (That kind of work, which is usually the most tedious, has already been done for you.) Some of the PCM partials do have pitch, and all have some form of tone and harmonic structure, and all these characteristics can be modified by adjusting the tuning, modulation, equalization, and signal processing— all programmable parameters in the D-50.

**?** I just brought my D-50 home and took it out of the box, but I can't get any sound out of it, or change patches. What's wrong?

**☞** It sounds like the MIDI Local function is turned off. To correct this problem, follow these steps:

1. First push the MIDI button, then push the MIDI Local button so the display flashes;

2. Move the joystick to toggle the display to show Local ON, then push the Exit button to resume normal play.

**?** I like to use the S-50 Keyboard Sampler as a source for drum and percussion sounds, and would prefer that the cymbal sample get cut off rather than sustain over the retriggering of the following cymbal attack. How is this possible?

**☞** S-50 designer Akira Matsui has hidden a very special test mode inside the system software that will enable you to take the S-50 out of Rotary Mode and set the voices to retrigger operation. The following will enable you to operate your S-50 in a special mode that retriggers a voice, rather than play sounds in the usual rotary manner:

1. Load Ver. 2.0 software;
2. Press the Function button;
3. Press the P-4 button;
4. Press the 0 button in the ten-key pad, then press the Cursor Left button;
5. Press the 1 button in the ten-key pad, then press the cursor left button;
6. Now press the Play button, and you should notice a difference when playing the cymbal in rapid succession; it should no longer sustain over each repeated attack.

Another hidden feature will enable you to identify the MIDI note number for any key you touch on the keyboard. The following will leave the voicing system in Rotary or normal mode, but will display MIDI note number information on your CRT monitor (not in front panel display of S-50 itself, however):

1. Load Ver. 2.0 Software;
2. Press the function button;
3. Press the P-4 button;
4. Press the 0 button on 10 keypad, then press cursor left button;
5. Now, press the Play button and your S-50 will operate in a normal fashion while displaying MIDI note number infor-



mation on the CRT monitor for any key you touch on the keyboard. (Note that in the MIDI note number display, you will see three groups of numbers. The first number tells you which of the sixteen voices is being displayed, the second indicates the MIDI note number of the particular key being pressed, and the third is the velocity with which it is being played.)

**?** I can't seem to get the aftertouch to work on my D-50. Is the problem with me or my D-50?

**☞** If your D-50 could talk it would have told you to try the following:

1. Press the Tune function button until in the display you see Ext Cont., set to AFTER;
2. Press the Ext Cont. button and it will flash, now move the joystick until the display says OFF
3. Next, press the Exit button to resume normal play. The aftertouch has now been reassigned to the keyboard function and is no longer being controlled by an external controller (such as the EV-5).

through 100; you can edit these tones, but they cannot be stored in these same locations (51 through 100). These edited presets may be stored in locations 1 through 50. These preset tones exist as part of the internal firmware of the JX-10 and cannot be erased or lost. If you wish to program new sounds and store them without losing the first fifty tones that came with the JX-10, you must first save these tones on a 64C RAM cartridge, such as the one provided with the unit. If by chance you lose the first fifty tones, or are in need of alternate sounds, Roland makes available two sets of alternate sounds, as well as the original tones that came with the JX-10. (See the Order Page in this issue.) Since there is no "secret" way to retrieve the original fifty tones once they are erased, make sure you save them on a RAM cartridge before you write over these tones.

**?** I've heard it's possible to create overlapping split points on the Super JX. Could you explain how to do it?

**☞** Yes, the Super JX has the ability to overlap split points or "zone" via MIDI. This means that you can transmit data to two receiving sound modules via MIDI and assign each to specific parts of the keyboard using the upper and lower split point function (Patch Edit buttons 13 and 14).

An example of this would be to transmit to the MKS-20 Digital Piano Module on MIDI Channel 1 using Patch Edit button 61 (Upper MIDI Channel Send). Then go to Patch Edit button 13, and set the upper split point to note number E1. This will assign the MKS-20 to be triggered across the whole keyboard. Next, set up to transmit to the MKS-80 Super Jupiter on MIDI channel 2 using Patch Edit button 62 (Lower MIDI Channel Send). Then go to Patch Edit button 14 and set the lower split point to note number C4.

Since we set the MKS-20 on upper split point E1 (which is the lowest note of the keyboard), the MKS-20 will be assigned from that point on up the keyboard. In other words the whole keyboard will be assigned to trigger the MKS-20. But since we put the MKS-80 on lower split point C4, the MKS-80 will be assigned from that point on down the keyboard as well. As a result the MKS-20 will be triggered across the whole keyboard, while both the MKS-20 and MKS-80 will be layered across only the lower half of the keyboard. This gives you the ability to play two sound modules layered on the lower half of the keyboard, and just one of the modules on the upper half.

Note that two important adjustments must be made before this is possible: One is to make sure that MIDI Function button 67 (MIDI Send Key mode) is turned OFF. Because we are actually using the same functions for "zoning" through MIDI as we would when accessing the JX-10's internal tones, when this key mode is turned on it overrides patch edit buttons 13 and 14 (Upper and Lower split points), allowing you to use only those functions available in this key mode. This mode does give you a MIDI split option, but it only allows you a hard split left and right without the "zoning" capability described. The second important fact to note when using this MIDI "zoning" capability is that since you are using the Patch Edit functions 13 and 14 (which would normally correspond to the JX-10's internal sound module), the JX-10 patch called up at the time of this procedure will have its tones affected in the same way as the external sound modules. In other words, those JX-10 tones will have the same split points assigned to them. If you do not want to hear the JX-10 while using this method, you could either turn the JX-10's local OFF (since all this is programmable per patch), or you could turn the total volume of the JX-10 down and write that setting into this particular patch, thus enabling only the external sound modules to be heard.

One again, the JX-10 proves to be not only a versatile polyphonic synthesizer, but also a welcome addition to any MIDI system as a powerful master keyboard controller.

**?** Could you please explain how the tones and patches on the JX-10 work?

**☞** In the JX-10 there are 100 tones available to you for use when constructing your patches. Tones 1 through 50 are programmable, which means you can edit these tones or program new tones and store them in the locations 1 through 50. Preset tones are found in positions 51