EX5 MEETS THE RM1X

Tips and Instruction Guide

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I have been performing live in the dance music scene for around 5 years now. I've tried everything from portable hardware sequencers to a fully blown Mac and monitor for playing out. Most of these set ups were not the best solution for a live situation - in some cases (hardware sequencer) I was limited in my control & playback options or number of patterns available - in others (computer) the equipment was too much to lug along and set up and as always, too delicate. Yamaha has come up with the evolutionary solution to all these problems - the RM1X. A portable and rugged hardware sequencer - with all the resolution and features of a computer sequencer - just waiting to be hooked up to your EX5!   These two beasts are the complimentary pair for doing a live show. With the EX5 acting as a huge sampler / analog emulator and the RM1x providing a TON of superbly crafted ROM samples (geared right at the dance scene) and a full blown interactive sequencer - you can level the dance floor with a vast arsenal of sounds and patterns at your finger-tips.

The RM1X's interactive pattern sequencer is something we've all been waiting for. How many of you have played out with a sequencer that only allows song playback? Hit play - then jiggle around like you are doing something live, right? Bet people even asked you where the music was coming from, or asked where the DJ was hiding. Now the 'live' in live performance has returned - with the RM1x you have up to 960 patterns - each up to 16 bars long - waiting to go at a beat's notice. You also have 16 instantly muted or soloed tracks. Add to that 8 fully assignable knobs that can send out on ANY of your 16 channels! Now that's a lot of 'live' tools - but that's not all - Yamaha was smart enough to throw in a few more for you to use - I suspect there are some Yamaha engineers hitting the club scene lately. A MIDI delay unit that is always sync'd up and can create delays on any of your channels. A midi Octaver - and two MIDI harmonizers!! But how do I use it with my EX5, you ask? Well here's a quick tutorial for getting the most of your EX5 while running it with the RM1x.

Setting up the RM1X

The RM1X is a truly multi functional tool - it alone could hold up a good show. But I'm sure most of you want to use those custom samples and sounds you worked so hard to make! Lucky for us the engineers at Yamaha were thinking that too - unlike some of the 'other' performance sequencers out there - the RM1x was designed with outboard gear in mind. So getting it hooked up to you EX5 (or other gear) is relatively easy.

MIDI connections:

Getting the RM1X and EX5 going is a simple matter of MIDI IN to MIDI OUT:

- Hook up the RM1X's [MIDI OUT] to the EX5's [MIDI A - IN]
- Then hook up the EX5's [MIDI A - OUT] to the RM1X's [MIDI IN]

This allows the RM1X to act as the master unit - you will be able to play the EX5 from the RM1X's keypads and the RM1X will dictate what channel you are playing from the EX5's keyboard - keep that in mind.

The next thing you want to do is properly set up the assigned channels in the RM1X. The RM1X has a total of 16 midi channels for you to use - they can drive the RM1X's own internal sounds or they can be sent directly out to the EX5 or other gear. My live rig consists of the RM1x and the EX5 - so I divide the channels evenly among them - 8 for the RM1X's own internal sounds and 8 for the EX5. I usually assign the first 8 to the EX5 and the last 8 to the RM1x - this keeps it easy to remember, but the RM1x lets you pick any combination or sequence of assignments that you desire.

On the RM1X:

- While in PATTERN MODE
- Hit the SET UP button 3 times to get to the OUT CHANNEL window (pg. 75 of RM1X owners manual)

This menu lets you assign where your midi data goes for each track - whether it IS or is NOT transmitted out the RM1X's midi out and what midi channel its on. Notice there are two sub-windows with tracks 1-16 listed in them - the top is labeled TO TG and the bottom is labeled MIDI OUT. They are pretty self explanatory - but I'll explain just in case:

If TO TG for TRACK 1 is on and set to CHANNEL 1 (shown by a little line drawn right over the top of the 1) the MIDI data from that track/channel will be transmitted to the internal Tone Generator of the RM1X - meaning the RM1X's track 1 will make sounds on channel1 which is wired to the internal Tone Generator. Our example set up has the first 8 channels TURNED OFF in the TO TG - because we want the first 8 channels to run the EX5 and not sound on the RM1x. (Some of you may want to do some layering effects with the EX5 and the RM1x playing at the same time - if so then this is where you would set that up)

How to turn off the first 8 channels to the RM1X?

- Move the cursor till it highlights TR - use the arrow keys.
- Change tracks by [NO -1 / Yes +1] keys above the arrow cursor keys.
- When over your desired track selection (1-8) - turn KNOB 3 under the display to the right until that channel reads OFF - this turns OFF the TO TG function for that track.
- Do this for each channel 1 - 8.

Notice that KNOB 4 - the MIDI OUT feature - allows you to assign the MIDI out channel for each track - or to turn it off.

- Continue selecting tracks 8 - 16 using [NO -1 / YES +1] keys.
- When over each track (8-16) - this time turn KNOB 4 under the display to the right until that channel reads OFF - this turns OFF the MIDI OUT function for that track. This ensures that the tracks assigned to internal RM1X sounds will not sound unwanted on your EX5.

Great! - You are almost there - you now have the RM1X running the EX5's sounds for tracks 1-8, while running its own sounds for tracks 8-16.

A few more settings you need to know in the RM1X:

- From PATTERN mode
- Press UTILITY once - this gets you to the SYSTEM page in the UTILITY mode - from here you can use the DISPLAY arrow keys to view 3 pages of options - the only one that I want to mention on this page is the EVENT CHASE - I like to keep this one OFF when setting up for live performance - this feature keeps data in the pipeline when you are actively fast forwarding or rewinding your sequence… not something I would suggest doing in a live situation. (Read more on PG. 134 of the RM1X manual if you need more info on it!)

- Press UTILITY a second time - this takes you to the first page in the MIDI SET UP - the first option you see here is MIDI SYNC - For our example we will set this to INTR - or internal, meaning the RM1X becomes the master clock for the system. (If you wanted to run the RM1X from the front panel of the EX5 or from an external sequencer then you could set this to MIDI - although I recommend using the RM1X as the master - its designed to be the master)

- The next option you want to tweak is MIDI CONTROL - set this to OUT - this dictates how song position pointer data is dealt with - you want it sent out and since in our example set up the RM1X is the main control unit - you don't want any accidental messages from the EX5 to stop the songs from playing.

- Now make sure the ECHO BACK setting is set to RecM - this ensures that the midi data path is transmitted according to your mappings that we previously set up - channel 1-8 going to the EX5 and 9-16 sent internally to the RM1X.

- Press the DISPLAY CURSOR to the right - you are now on the second page of the MIDI SETUP mode. The first option you should see is TG PARAM OUT - this setting tells the RM1X whether it should send out MIDI data when you are tweaking parameters in VOICE submode or EFFECT submode. When this is set to ON - any parameter changes in these modes will be transmitted in real-time out the RM1X's midi outs (according to the MIDI track channel assignments) - this can be useful if you want to control things like the effect level of a channel on your EX5 FROM the RM1X. Set this to ON or OFF depending on your control preference. (I like it on)

- The next setting you should see is the VOICE SET UP TO TG setting - when this setting is ON, changing songs or styles will reset your voices and effects to the ones you used in that song or style - very nifty - you just pick sounds and it remembers what they were with that style or song. In our example we will leave this on.

- Now we are at VOICE SET UP TO MIDI - this setting dictates whether the RM1X sends out voice changes and effect changes through the MIDI out - along with each style or song. Some people might want this - so if they change a song or style- all the associated parameters are also changed on the external device. My preference is to leave it OFF - instead, I set up custom PERFORMANCES in the EX5 and switch them manually with each new song or style I choose. This is all user preference, but in our example and for ease of understanding - leave it OFF.

- Press the UTILITY once more - you are now looking at the MIDI FILTER screen - Here is where you can decide what MIDI events are sent and received - My preference is to turn OFF - PROGRAM CHANGE - IN and OUT - from this screen. This means that no program changes will be sent or received from the RM1X - I do this to maintain manual control of the sounds on my EX5. Once again this is a user preference - I like switching the sounds myself - gives me something to do while playing and leaves me open for improvising on any sound I might pick. But the choice is up to you.

Setting up the EX5

Now your RM1X is ready to drive the EX5 - Here are a few pointers on getting your EX5 ready to work in this scenario.

First you will want to set up a custom PERFORMANCE in the EX5 - remember we had the first 8 channels allocated for the EX5. I usually have my custom Drum VOICES and other samples in the first two or three channels - giving them highest MIDI priority - this makes sure that your beats will stay in time. Its up to you how you use the channels you have available in your EX5 - try using one for an AN or VL voice. Then save a few for some ethereal pad sounds to fill in your beats as they go.

Fill the remaining channels (8-16) with a BLANK voice - haven't created one yet? A BLANK VOICE in the EX5 is one with NO assignment of elements to it.

How?

- Put the EX5 in VOICE mode.
- Hit JOB.
- Hit F1 to INIT VOICE - (*make sure you are initializing a voice that you don't want or have already saved)
- Hit ENTER to begin the function.
- Hit INC/YES to confirm your choice.

You now have a newly initialized voice. But you are not done yet - the EX5 initializes voices with an AWM element assigned - I guess they want you to hear something even when your voice is initialized – Here's the trick.

- Hit OSC to get to the OSC assignment page.
- Your cursor should already be on the one AWM element assigned - PRE:0001 Grnd1
- Turn the DATA WHEEL one click to the left - you should see dashed lines appear on that line.
- Now your voice is truly BLANK!
- Hit STORE - to save it and make sure you pick the right spot!
- Hit ENTER then hit YES to confirm your choice.

This voice is now ready to be put into your EX5's custom PERFORMANCE. Set up your EX5 performance like this - put this BLANK VOICE in the last 8 channels. (If you don't know how to set up a custom performance - consult your EX5 manual! Its not that difficult.)
Now you can pick any sounds you want for the first 8 channels on your EX5! Including any drum kits or samples you may have loaded.

Just a few more settings in the EX5 I should mention - might save you some time and frustration.

First the MIDI SYNC - you need to set the EX5 to receive clock from the RM1X. This way you can use the EX5's arpeggiator while the RM1X drives the whole setup.

- Hit UTILITY to get to the Utility page.
- Hit F3 to get to the Sequencer page.
- Hit F8 to get to the Sync page.
- From here set the Sync to MIDI-A.

Now the EX5 will show MIDI in the Arpeggiator's Tempo selection - (Yeah I know - its a strange place to put the Arpeggio's sync options… in the Sequencer Utility page? - took me hours to find it! I guess the EX5's sequencer code is what drives the timing unit of the EX5 - so all timing originates there… In any case - that's where it is.)

Now you just need to make sure your Global MIDI settings are useable:

- Hit UTILITY to get to the Utility page.
- Hit F4 to get to the MIDI page.
- Set your GLOBAL RECIEVE to channel 1.
- Set your MIDI TRANSMIT to channel 1.
- Turn MIDI-A ECHO BACK to OFF.
- Set RECIEVE PGM CHANGE to OFF (this is really up to you - but setting it off will make dealing with changes more in your control)
- Set TRANSMIT MIDI-A to ON.
- And turn your LOCAL to OFF.

Conclusion

That should get you started! Keep in mind that this is just a general set up that should get you up and running quickly. There are many permutations to this set up - all dependent on what options you want and how you plan on using the whole rig.

Now you are off and running - put the EX5 into the custom performance you've created and start tweaking on the RM1X! I've been using this set-up for about a month now - I find it works well. Feel free to send me any suggestions or tips you might run across with your rig – I'll post them up here for others to see.

- Happy sequencing -

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