INTEGRATING ROLAND GR-1 FOR MIDI AND AUDIO RECORDING IN CUBASE

Note: The track names set in **bold type** are for reference only; different names may be used.

CONNECTIONS

1. In the Studio menu, Audio Connections (F4), in the External Instrument tab, add a Stereo External Instrument (GM Device). The return BUS which is automatically created should be named accordingly and connected to your audio interface's ASIO.

2. Select inputs for this BUS; for the Steinberg UR-RT4 audio interface, you can choose inputs 3 and 4 on the front panel, which are designed for an external physical instrument. The left and right audio outputs of the GR-1 will be connected to these inputs.

CREATING TRACKS IN CUBASE

3. In the Project window, create a Group track, name it **MIDI GR-1**, and assign it to Cubase's STEREO OUT (or to an auxiliary output BUS if desired).

4. Create another Group track, name it **AUDIO GR-1**, and assign it to Cubase's STEREO OUT output (or to an auxiliary output BUS if desired).

5. Click Add Track, then Instrument, and among the instruments available in your system, choose an External Instrument whose name will correspond to the name of the return BUS of the External Instrument that you created in point 1. The routing of this new track should be as follows: in = All MIDI Inputs; out = return BUS. A separate External Instrument track is thus assigned to the Roland GR-1, which track corresponds to PART 5 from which all the device's audio comes out (refer to the GR-1 diagram in the manual). Name this track **eXT. P-5** and set it to the GR-1 BASIC channel, i.e. channel 11.

6. For PART 5, create an audio track and name it **Audio P-5**; in = AUDIO GR-1, out = STEREO OUT (or to an auxiliary output BUS if desired).

7. Create four MIDI tracks which will correspond to the first four multi-timbral parts of the GR-1 and name them as follows:

   Part 1, on MIDI channel 2; in = All MIDI Inputs; out = return BUS

   Part 2, on MIDI channel 3; in = All MIDI Inputs; out = return BUS

   Part 3, on MIDI channel 4; in = All MIDI Inputs; out = return BUS

   Part 4 (DRUMS), on MIDI channel 10; in = All MIDI Inputs; out = return BUS

   These tracks will be used to record, in MIDI and independently, one of the first four multi-timbral parts of the GR-1 of your choice, through either a MIDI keyboard or your guitar in POLY mode in the GR-1.

8. Create four audio tracks that will correspond to each of the MIDI tracks you just created and name them as follows:

Audio P-1; in = MIDI GR-1, out = AUDIO GR-1

Audio P-2; in = MIDI GR-1, out = AUDIO GR-1

Audio P-3; in = MIDI GR-1, out = AUDIO GR-1

Audio P-4; in = MIDI GR-1, out = AUDIO GR-1

9. For clarity, place each of these audio tracks under its corresponding MIDI track (PART). As it is not possible to use the *Render in Place* function in Cubase for these corresponding MIDI tracks, these four audio tracks will be used to record, in audio and in real time in Cubase, one of the first four multi-timbral parts of the GR-1 of your choice.

10. Next, create six MIDI tracks – which will correspond to each of the strings of your electric guitar connected to the GR-1 – through your installed hexaphonic driver and name them as follows:

   1 - E, on MIDI channel 11; in = All MIDI Inputs; out = return BUS

   2 - B, on MIDI channel 12; in = All MIDI Inputs; out = return BUS

   3 - G, on MIDI channel 13; in = All MIDI Inputs; out = return BUS

   4 - D, on MIDI channel 14; in = All MIDI Inputs; out = return BUS

   5 - A, on MIDI channel 15; in = All MIDI Inputs; out = return BUS

   6 - E, on MIDI channel 16; in = All MIDI Inputs; out = return BUS

   In MONO mode in the GR-1, these tracks will be used to simultaneously record, in MIDI, each string independently on its track.

11. Still in the Project window, for track **1-E**, click on the Input transformer located in the Inspector; the button turns orange. Select Local; the Input transformer is displayed.

12. Click on Module 1 to turn it on.

13. In the Input Transformer presets section, select Channel Filtering and Pass CH 11 for the E-string (E-treble) track / string.

14. In order to allow the six strings to be completely independent and mutually exclusive, repeat points 11 to 13 <u>for each of the tracks/strings</u>, filtering the MIDI channel (Channel Filtering) corresponding to the MIDI channel of the track/string concerned, and so on up to the low E track/string. <u>Remember to switch on Module 1 for each string</u>.

15. Create six audio tracks and name them as follows:

   Audio 1-E, in = MIDI GR-1, OUT = AUDIO GR-1

   Audio 2-B, in = MIDI GR-1, OUT = AUDIO GR-1

   Audio 3-G, in = MIDI GR-1, OUT = AUDIO GR-1

Audio 4-D, in = MIDI GR-1, OUT = AUDIO GR-1

Audio 5-A, in = MIDI GR-1, OUT = AUDIO GR-1

Audio 6-E, in = MIDI GR-1, OUT = AUDIO GR-1

For clarity, place each of these audio tracks under its corresponding MIDI track/string. Since it is not possible to use the *Render in Place* function in Cubase for these MIDI tracks/strings, these six audio tracks will be used to simultaneously record, in audio and in real time in Cubase, your choice of strings 1 to 6.

16. <u>In Cubase's mixing console</u>, the **eXT. P-5** track input and output should be set as follows: in = All MIDI Inputs, out = MIDI GR-1.

17. The *Render in place* function in Cubase is only possible for PART 5 of the GR-1, i.e. on the External Instrument track (**eXT. P-5**). Once the *Render in Place* is done, Cubase automatically creates a new audio track containing, in audio, all the MIDI information previously recorded in MONO mode in the **eXT. P-5** track.

18. Still for PART 5 and in selecting the **Audio P-5** track, it is possible in MONO mode to record the following elements directly in audio:

    a) the GR-1's synthesizer component, by setting the GK-2 driver switch to SYNTH (GK for GK-3);

    b) the GR-1's synthesizer component, simultaneously with your electric guitar's audio, by setting the switch to MIX;

    c) audio only from your electric guitar, by setting the switch to GUITAR.

19. It is advisable to assign a particular color to each PART of the GR-1 and according to the tracks created to avoid any confusion.

PROGRAM CHANGES

20. It is possible to do program changes for PART 5 from the Program Selector in the Inspector. The GR-1 being under the General MIDI (GM) standard, you must first change the names created automatically in the patch bank when creating the external Instrument in order to match them to the GR-1's 128 patches. To do this, go to Connections, External Instrument. Click on External Instrument under MIDI Device, then MIDI Device. Open Device Manager, which will be displayed; then click on Open device; then, in the drop-down preset menu, select Patch bank. A clickable GM Voices folder appears along with subfolders. Click on the first subfolder and rename it **11-12**. Expand this subfolder and rename the instruments as follows:

RHODES

FLUGEL

HUGE JP8

SCATIN

FEEDBACKR

PDL STEEL

FANTAPAD

GIT+STGS

These patches correspond to the first eight patches of banks 11 and 12 on the GR-1 pedal board.

21. Click on the first subfolder of the GM Voices folder and rename it **13-14**. Expand this subfolder and rename the instruments as follows:

GRAND

VIBES

BEE GEE

ROCK BEE

V-SWSTGS

BIG STGS

HISYNSTG

SOLO VLN

These patches correspond to the following eight patches of banks 13 and 14 of the GR-1 pedal board.

22. Referring to the list of patches in the GR-1 manual, proceed in the same way for the other subfolders, up to the last one renamed **47-48** if the SR-GR1-01 expansion card is installed, **27-28** if it is not. The renamed GR-1 groups, banks and patches now appear in the Inspector's Program Selector and can be clicked at will to change patch among the instrument's 128 or 64 patches, on the express condition that the track **eXT. P-5** be selected in the Project window and assigned to the GR-1 BASIC channel in the Inspector, i.e. channel 11.