Configuring the ACT MIDI Controller Plug-in

There is new ACT documentation in the SONAR 6.0.1 help file (see the links in the online help's New Features section). If you're still having setup problems with the ACT MIDI Controller plug-in, see the following.

Setting up ACT in the ACT MIDI Controller plug-in requires 6 basic steps:

1. Enabling the correct MIDI input driver for your controller/surface.
2. Enabling the ACT MIDI Controller plug-in in the Controllers/Surfaces dialog.
3. Loading the correct preset in the control panel of your hardware controller/surface. Your controller/surface should have a factory preset that is designed for controlling software applications.
4. Opening the ACT MIDI Controller property page, selecting the name of your controller/surface in the Presets window, and enabling the Active Controller Technology Enable button.
5. **This step is optional if your controller/surface has a preset in the ACT MIDI Controller property page (not optional if your controller/surface doesn't have a preset)**: Mapping knobs and sliders on your controller/surface to cells in the ACT MIDI Controller property page. This is the MIDI Learn function, and is different from the ACT Learn function in the next step. The preset you chose in step 4 provides default MIDI Learn mappings, which you can use or change. If you change them, save them as a preset in the Presets window.

   Note: if your controller/surface doesn't have an ACT MIDI Controller preset, How to Create ACT MIDI Controller Presets shows you how to create one. But do steps 1-4 above first.
6. **Optional**: Mapping the cells in the ACT MIDI Controller property page to various parameters in your effect and synth plug-ins. This is the ACT Learn function. Cakewalk plug-ins have default mappings that you can use or edit. These mappings are the same for every instance of each plug-in, and are saved automatically whenever you change them.

Step 1: Enabling the correct MIDI input driver for your controller/surface.

This might require reading your controller/surface's documentation to see which MIDI input driver the controller/surface uses to control software applications:

- If your controller/surface has a piano-style keyboard attached to it, your controller/surface may have a separate MIDI driver for the keyboard part of your controller/surface, and a different MIDI driver for the knobs and sliders on your controller/surface.
- If you are using default Windows drivers for your controller/surface (if you didn't install the drivers that came with the controller/surface's installation CD), your driver might be labeled as an audio driver.

In any case, you need to enable the driver that the manufacturer recommends. The command to enable a MIDI input driver in SONAR is the ***Options-MIDI Devices*** command. This opens the MIDI Devices dialog. You enable input drivers by highlighting the ones you want to use in the Inputs section of the dialog.

Step 2: Enabling the ACT MIDI Controller plug-in in the Controllers/Surfaces dialog.

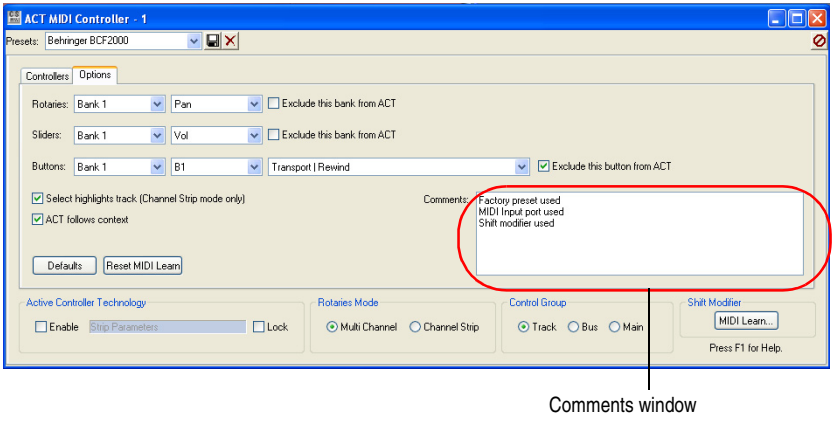
- Use the ***Options-Controllers/Surfaces*** command to open the Controllers/Surfaces dialog.
- Click the Add New Controller/Surface button  to open the Controller/Surface Settings dialog.
- Choose ACT MIDI Controller in the Chontroller/Surface menu, and in the Input Port menu of this dialog, choose the MIDI input driver that you enabled in step 1 above.
- Click OK to close the Controller/Surface Settings dialog, and click Close to close the Controllers/Surfaces dialog.

Step 3: Loading the correct preset in the control panel of your hardware controller/surface.

Identifying the correct preset requires either:

- Reading the documentation for your controller/surface, or

- Opening the ACT MIDI Controller plug-in property page, selecting the name of your controller/surface in the Presets menu of the ACT MIDI Controller property page, clicking the Options tab, and reading the line in the Comments window that lists the factory preset that your controller/surface needs to use.



Comments window

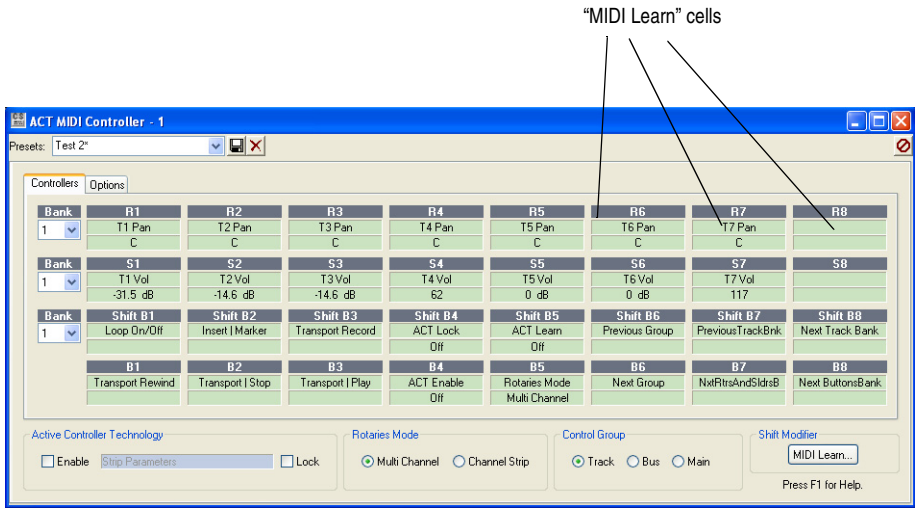
To display the ACT MIDI Controller plug-in property page, use the ***Tools-ACT MIDI Controller*** command. Once you have the ACT MIDI Controller property page open, select the name of your controller/surface in the Presets window. If your controller/surface is not listed, type a name in the Presets window for now, and click the floppy disk/Save button. You can configure this property page later.

After you figure out what factory preset to use, make sure it is loaded into your hardware controller/surface at the beginning of each session.

Step 4: Opening the ACT MIDI Controller property page, selecting the preset of your controller/surface in the Presets window, and enabling ACT

- Display the ACT MIDI Controller plug-in property page by using the ***Tools-ACT MIDI Controller*** command.
- Once you have the ACT MIDI Controller property page open, select the name of your controller/surface in the Presets window.
- Enable ACT by enabling the Active Controller Technology Enable checkbox that's at the bottom left corner of the property page.

Step 5: Configuring the ACT MIDI Controller plug-in to communicate with your hardware controller/surface ("MIDI Learn")

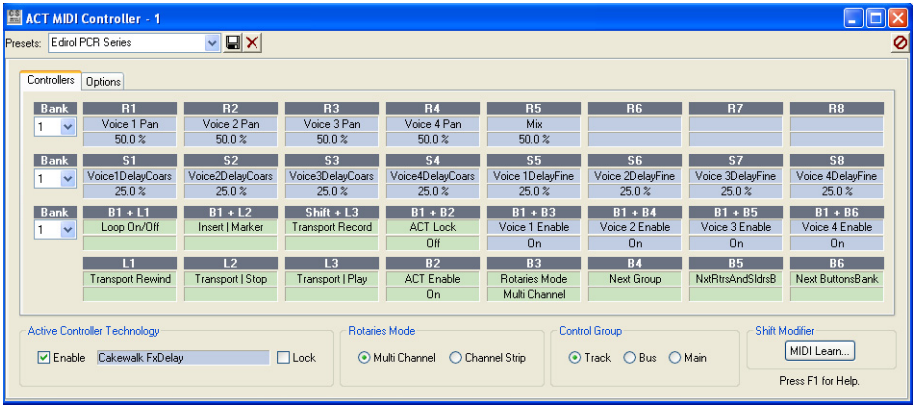


If your controller-/surface doesn't have a Cakewalk preset listed in the ACT MIDI Controller plug-in Presets window, see How to Create ACT MIDI Controller Presets.

Before you change any of the default MIDI Learn mappings, try them out:

1. **Make sure you have a project open** (SONAR does not accept any MIDI input until a project is loaded).
2. Make sure that the Active Controller Technology Enable checkbox that's at the bottom left corner of the property page is enabled, patch a Cakewalk effect such as FxDelay into an audio track, and open the FxDelay's property page. Make sure the focus is on the FxDelay's property page, and take a look at the ACT MIDI Controller property page.

3. The ACT MIDI Controller property page should now look like this:



4. The cells that are controlling the FxDelay's parameters are now blue, and each blue cell lists the name of the parameter that it is controlling, and an abbreviation for the name of the knob or slider that is controlling that cell at the top of the cell.

5. If you want to change the knob or slider that is controlling a particular cell, click the cell so that it displays the MIDI Learn label, then move the knob or slider you want to use. The cell will now be controlled by the knob or slider you moved. You can edit the name at the top of the cell by clicking the name, and typing a new name into the Edit Label dialog which appears.

   Note: the MIDI Learn button in the lower right corner of the property page is only used to configure a single Shift/Modifier button. It is **not** used to enter MIDI Learn mode for other buttons, knobs, or sliders.

6. To save any new MIDI assignments you make, type a name in the Presets window, and click the floppy disk/Save icon that's next to the window.

(continued)

Step 6: Mapping the cells in the ACT MIDI Controller property page to various parameters in your effect and synth plug-ins (ACT Learn)

If you want to change the default ACT mappings that Cakewalk plug-ins use, follow these steps:

1. Display the property page of the plug-in effect or synth you want to remap.
2. Make sure that the Active Controller Technology Enable checkbox that's at the bottom left corner of the ACT MIDI Controller property page is enabled.
3. In the Control Surfaces toolbar (or the User 1 toolbar), enable the ACT Learn button. This is how the button looks when it is enabled:  .
4. Now move any parameter controls in the effect or synth property page that you want to map, and also move any knobs or sliders on your controller/surface that you want to use to control those parameters. **Then disable the ACT Learn button**.

   A dialog appears telling you that "n" parameters and "n" controls were touched, and asks if you want to keep these assignments.
5. Click Yes if you want to keep your assignments.

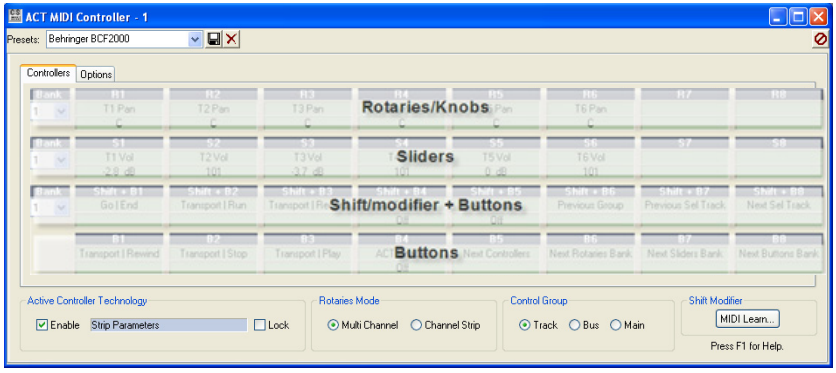
If you clicked Yes, your assignments are saved automatically, and are the same for every instance of the plug-in you just mapped.

How to Create ACT MIDI Controller Presets

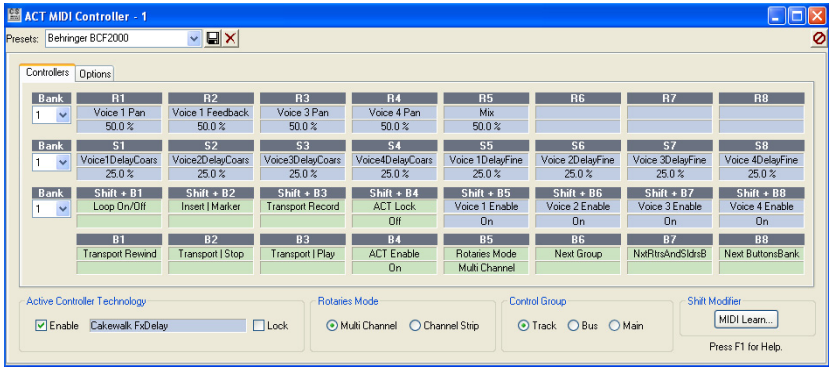
If your controller/surface doesn't have a Cakewalk preset for the ACT MIDI Controller plug-in, you must configure the ACT MIDI Controller plug-in to respond to the specific MIDI messages that are transmitted by your MIDI controller's buttons, knobs, and sliders. This is easy thanks to the ACT MIDI Controller plug-in's MIDI Learn mode.

1. If applicable, make sure the MIDI driver(s) for your MIDI controller is installed properly, and enabled in the MIDI Devices dialog (***Options-MIDI Devices*** command).
2. If your MIDI controller uses multiple MIDI ports, determine which specific MIDI port is used by the MIDI controller's "surface" (sliders/knobs/buttons).

3. Restore your MIDI controller/surface to the default factory settings, and determine which factory preset is best to use.
4. The ACT MIDI Controller plug-in has four (4) rows of controls. The top row represents knobs/rotaries, the second row represents sliders, the third row represents buttons when used in combination with the modifier button, and the fourth/bottom row represents buttons.

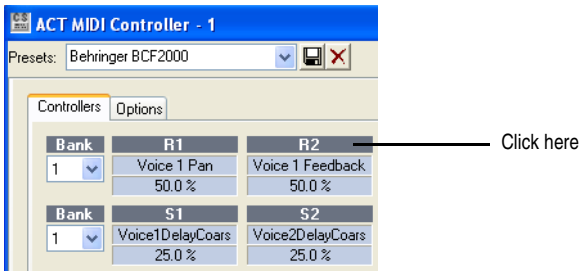


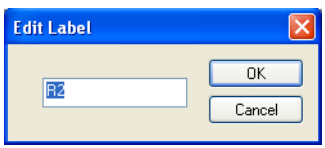
Green cells indicate which controls are controlling host functions, while blue cells indicate which controls are in ACT mode and thereby controlling effect/synth parameters.

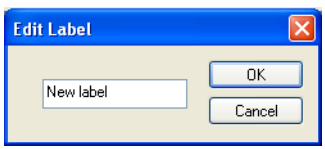


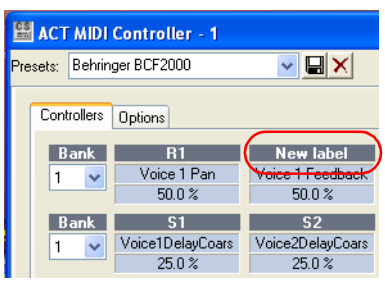
Identify up to 8 buttons plus a modifier button, 8 knobs, and 8 sliders to use on your MIDI controller.

5. Label the ACT MIDI Controller “cells” so they match the button/knob/slider labels on the actual MIDI controller. This is done by clicking directly on the label and typing in a new name.





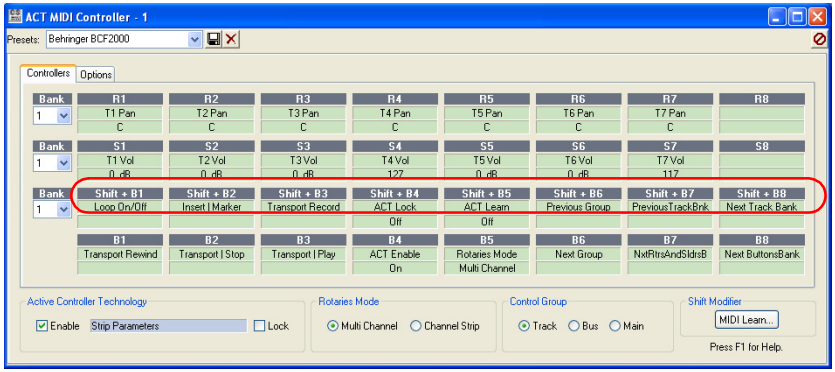




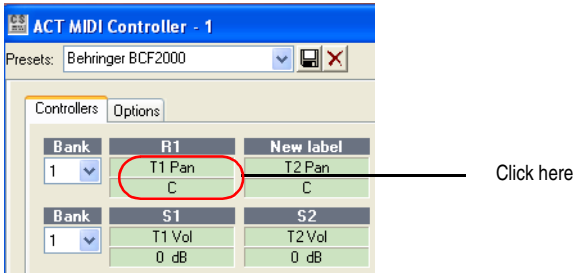
If your MIDI controller/surface has fewer than 8 buttons/knobs/sliders, label the unused cells as “n/a”.

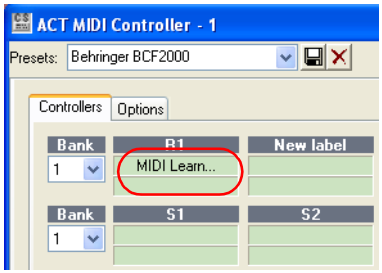
Note: the labels apply to all banks, so it doesn’t matter which bank is selected when you assign labels.

6. Make sure you label the third row with the name of the modifier button AND action button. For example, on the EDIROL PCR controllers, the “B1” key is used as the modifier button, so the labels will read “B1 + <action button>”.



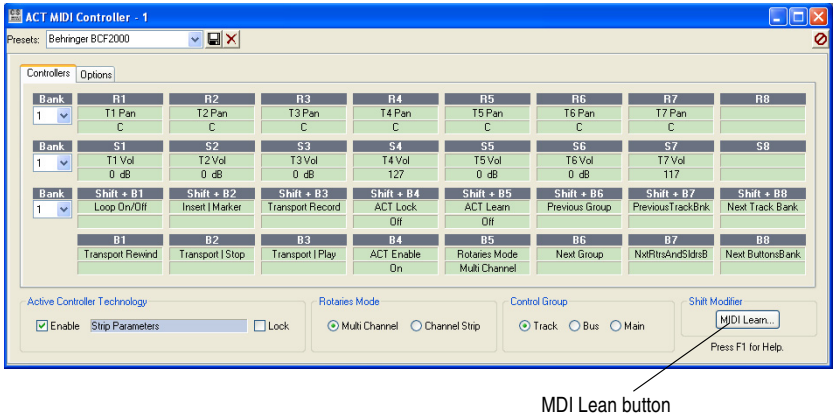
7. It is now time to configure the controls in each row so they respond to your MIDI controller/surface. **Make sure you have a project open**. Depending on what type(s) of physical controls your MIDI controller/surface has (buttons/knobs/sliders), click on the appropriate “cell” to enable MIDI Learn mode for that control. In the examples below, we’re enabling MIDI Learn mode for the first knob by clicking in the first cell in the top row:



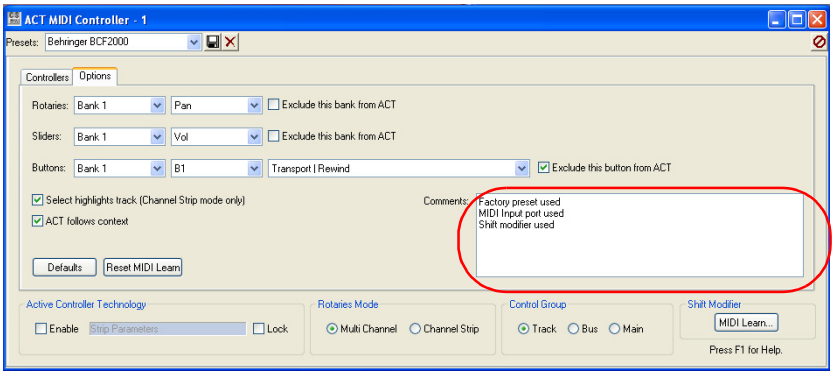


When you see the “MIDI Learn…” text, wiggle the corresponding physical control on your MIDI controller/surface. Once the ‘ACT MIDI Controller’ plug-in receives a MIDI message from your MIDI controller/surface, it will automatically exit MIDI Learn mode. Verify that the physical control actually controls the displayed track or plug-in parameter. Repeat this step for up to 8 different buttons, knobs, and/or sliders on your MIDI controller/surface.

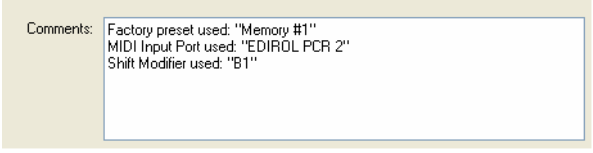
8. There is no “cell” for the modifier button, so instead you must click the ‘MIDI Learn…’ button in the bottom right corner. This will enable MIDI Learn mode for the Shift/Modifier button, so all you need to do is press the physical button on your hardware controller/surface you have decided to use as the shift/modifier button.



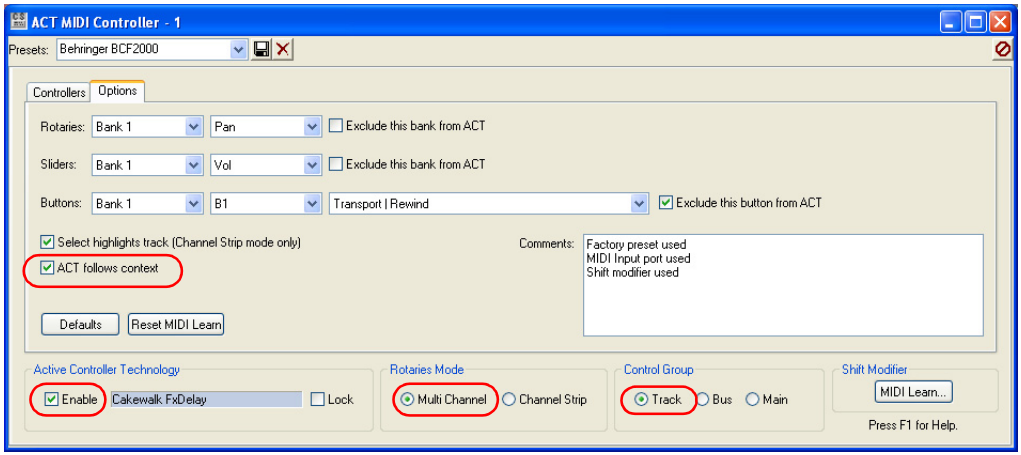
9. Click the Options tab, and type the following information in the Comments text box:
    - Factory preset/template used on you MIDI controller
    - MIDI Input port used
    - Shift modifier button used



The following is an example for the EDIROL PCR series:



10. Before saving the preset, make the following settings:
    - Enable ACT mode
    - Enable ‘ACT follows context’ (Options tab)
    - Set all (3) banks to “1” before saving the preset
    - Set ‘Rotaries Mode’ to Multi Channel
    - Set ‘Control Group’ to Track



11. Type the name of your MIDI controller in the ‘Presets’ box, and click the floppy disk/Save button.

Now that you have configured the ACT MIDI Controller plug-in to respond to the specific MIDI messages that are transmitted by your MIDI controller/surface’s buttons, knobs, and sliders, you can use the ACT Learn feature to start configuring your plug-in effects and synths. See Step 6: Mapping the cells in the ACT MIDI Controller property page to various parameters in your effect and synth plug-ins (ACT Learn) for directions.