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, <u>How to Create ACT MIDI Controller Presets</u> 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 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.

📾 ACT MIDI Controller - 1	
Presets: Behringer BCF2000	0
Controllers Options Controllers Options Rotaries: Bank 1 Vol Exclude this bank from ACT Siders: Bank 1 Vol Exclude this bank from ACT	
Buttons: Bank 1 V B1 V Transport Hewind V Exclude this button from AL.1	
Comments/Factory prevalued MDI Input prior track Defaults Reset MIDI Learn	
Active Controller Technology Control Group Contro	m r Help.
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")

		"MIDI Learn" cells						
B /	CT MIDI Controller - 1							
Prese	ts: Test 2*	A A A A						0
	Controllers Options							
	Bank R1 1 V T1 Pan C	R2 T2 Pan C	R3 T3 Pan C	R4 T4 Pan C	R5 T5 Pan C	R6 T6 Pan C	R7 T7 Pan C	R8
	Bank S1 1 Vol -31.5 dB	S2 T2 Vol -14.6 dB	53 T3 Vol -14.6 dB	54 T4 Vol 62	\$5 T5Vol 0 dB	S6 T6 Vol 0 dB	\$7 T7 Vol 117	<u>\$8</u>
	Bank Shift B1 1 V Loop On/Off	Shift B2 Insert Marker	Shift B3 Transport Record	Shift B4 ACT Lock Off	Shift B5 ACT Learn Off	Shift B6 Previous Group	Shift B7 PreviousTrackBnk	Shift B8 Next Track Bank
	B1 Transport Rewind	B2 Transport Stop	B3 Transport Play	B4 ACT Enable Off	B5 Rotaries Mode Multi Channel	B6 Next Group	B7 NxtRtrsAndSldrsB	B8 Next ButtonsBank
	Active Controller Technology	[Lock	Mode ulti Channel 🔵 Chi	annel Strip	ol Group Frack O Bus O	Main P	odifier MIDI Learn ress F1 for Help.

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

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:

 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.

- 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).
- 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.

ontrollers	Options						
Bank 1 🕑	R1 T1 Pan C	R2 T2 Pan C	H3 T3 Pan C	Rotaries/Knobs	T6 Pan C	87	RO
ffank 1 💉	51 T1 Vol -2.8 dB	52 T2 Vol 101	53 T3Va -37 d8	TSliders TSVal	56 16 Vol 101	57	58
Bank 1 🔗	Shift + B1 GolEnd	Strift + 02 Transport I Run	Transport I ReSh	ift/modifier + Buttons	STATE BE Previous Group	Shift + 87 Previous Sel Track	SIMIL • BR Next Sel Trac
	Transport Rewind	02 Transport Stop	03 Transport I Play	AC Buttons Next Controlers	RE Next Rotaries Bank	87 Next Silders Bank	BB Next Buttons B

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.

🔛 АСТ	MIDI	Controller - 1							
Presets:	Behring	ger BCF2000							9
Cont	rollers	Options							
В	ank	R1	R2	R3	R4	R5	R6	R7	R8
1	~	Voice 1 Pan	Voice 1 Feedback	Voice 3 Pan	Voice 4 Pan	Mix			
		50.0 %	50.0 %	50.0 %	50.0 %	50.0 %			
В	ank	\$1	\$2	\$3	S4	S5	S6	S7	58
1	~	Voice1DelayCoars	Voice2DelayCoars	Voice3DelayCoars	Voice4DelayCoars	Voice 1DelayFine	Voice 2DelayFine	Voice 3DelayFine	Voice 4DelayFine
		25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %
В	ank	Shift + B1	Shift + B2	Shift + B3	Shift + B4	Shift + B5	Shift + B6	Shift + B7	Shift + B8
1	~	Loop Un/Ult	Insert Marker	I ransport Hecord	AUT Lock	Voice 1 Enable	Voice 2 Enable	Voice 3 Enable	Voice 4 Enable
					nu	Un	Un	Un	Un
		B1	B2	83	B4	85	B6	B7	88
		Transport Rewind	Transport Stop	Transport (May	ALT Enable	Hotalies Mode Multi Channel	Next Group	INXTHUSANGSIGISB	Next ButtonsBank
					01	in our charmen			
Activ	e Cont	roller Technologu		Botarie	s Mode	Cont	ol Group	Shitt	lodifier
~~~~	Obino	outer room rology		Trotano		Com	or on one op	Shirth	HIDLLANN
	Enable	e Cakewalk FxDela	y [	Lock 💿 M	ulti Channel  🔿 Cha	nnel Strip 📀	Track 🔘 Bus 🔘	Main	mitri coant
								F	ress F1 for Help.

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.

CS mu	😫 ACT MIDI Controller - 1						
Pre	sets:	Behrin	ger BCF2000	✓ 🔲 ×			
	Con	rollers	Options				
	B 1	ank	R1 Voice 1 Pan 50.0 %	New label <del>Voice 1 Feedback</del> 50.0 %			
	B 1	ank 🗸	S1 Voice1DelayCoars 25.0 %	S2 Voice2DelayCoars 25.0 %			

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.

 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>".

Controllers	Options							
Bank	R1 T1 Pan C	R2 T2 Pan C	R3 T3 Pan C	R4 T4 Pan C	R5 T5 Pan C	R6 T6 Pan C	R7 T7 Pan C	R8
Bank 1 💙	51 T1 Vol 0. d8	S2 T2 Vol 0. dB	53 T3 Vol 0. dB	54 T4 Vol 127	55 T5 Vol 0. dB	S6 T6 Vol 0. dB	\$7 T7 Vol 117	<u>\$8</u>
Bank 1 🗸	Shift + B1 Lcop On/Off	Shift + B2 Insert   Marker	Shift + B3 Transport Record	Shift + B4 ACT Lock Off	Shift + B5 ACT Leam Off	Shift + B6 Previous Group	Shift + B7 PreviousTrackBnk	Shift + B8 Next Track Bank
	B1 Transport Rewind	B2 Transport   Stop	B3 Transport   Play	B4 ACT Enable On	B5 Rotaries Mode Multi Channel	B6 Next Group	B7 NxtRtrsAndSldrsB	B8 Next ButtonsBank
Active Con	troller Technology		Rotarie	s Mode	Contr	ol Group	Shift M	lodifier

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.

Controllers	Options							
Bank	R1 T1 Pan	R2 T2Pan	R3 T3Pan	R4 T4 Pan	R5 T5 Pan	R6 T6 Pan	R7 T7 Pan	R8
Bank 1 💌	51 T1 Vol	52 T2 Vol	S3 T3Vol	54 T4 Vol	S5 T5 Vol	S6 T6 Vol	57 T7 Vol	<u>\$8</u>
Bank 1 💌	Shift + B1 Loop On/Off	Shift + B2 Insert   Marker	Shift + B3 Transport Record	Shift + B4 ACT Lock	Shift + B5 ACT Learn	Shift + B6 Previous Group	Shift + B7 PreviousTrackBnk	Shift + B8 Next Track Ban
	B1 Transport Rewind	B2 Transport   Stop	B3 Transport   Play	B4 ACT Enable On	B5 Rotaries Mode Multi Channel	B6 Next Group	B7 NxtRtrsAndSldrsB	B8 Next ButtonsBan
Active Contr Enable	oller Technology Strip Parameters		Lock	Mode ulti Channel 🔿 Cha	annel Strip	ol Group Track O Bus O	Main F	Iodifier MIDI Learn tress F1 for Help.

MDI Lean 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

	ACT MID	Controller -	1					
Pre	sets: Behrin	nger BCF2000	~					0
	Controllers	Options						
	Rotaries:	Bank 1	▶ Pan	~	Exclude this bank from ACT			
	Sliders:	Bank 1	Vol	~	Exclude this bank from ACT			
	Buttons:	Bank 1	► B1	*	Transport   Rewind		Exclude this button fro	m ACT
	Select ACT fo Defau	thighlights track blows context ults Reset N	(Channel Strip 11DI Learn	mode only)		Comments: Fac MID Shi	tory preset used D I Input port used It modifier used	
	Active Cor	itroller Technolog	<b>av</b> eters		Lock Rotaries Mode	O Channel Strip	Control Group Track O Bus O Main	Shift Modifier MIDI Learn Press F1 for Help.

The following is an example for the EDIROL PCR series:

Comments:	Factory preset used: "Memory #1" MIDI Input Port used: "EDIROL PCR 2" Shift Modifier used: "B1"
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- 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

🔛 ACT MIDI Controller - 1	
Presets: Behringer BCF2000	
Controllers Options	
Rotaries: Bank 1 💌 Pan 💌 🗆 Exe	clude this bank from ACT
Sliders: Bank 1 🔽 Vol 💌 🗆 Exe	clude this bank from ACT
Buttons: Bank 1 💌 B1 🔍 Trans	sport   Rewind 🕑 Exclude this button from ACT
Select highlights track. (Channel Strip mode only)     ACT follows context	Comments: Factory preset used MIDI Input port used Shift modifier used
Defaults Reset MIDI Learn	
Active Controller Technology	Rotaries Mode       Control Group       Shift Modifier         Multi Channel       Channel Strip       Track       Bus       Main         Press F1 for Help.       Press F1 for Help.

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 <u>Step 6: Mapping the</u> cells in the ACT MIDI Controller property page to various parameters in your effect and synth plug-ins (ACT Learn) for directions.