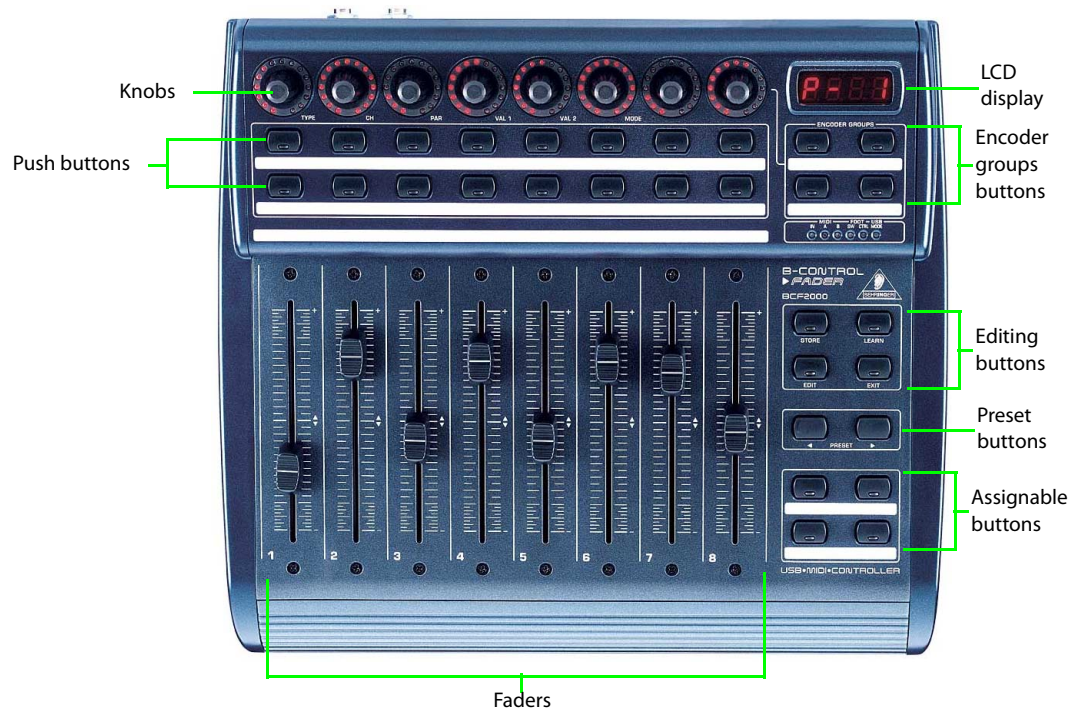# Overview : Using the Behringer BCF2000 with ACID

The Behringer BCF2000 is fully supported by ACID® software and lends a tactile element to your editing sessions.

Knobs

Push buttons

LCD display

Encoder groups buttons

Editing buttons

Preset buttons

Assignable buttons

Faders

Note: *This whitepaper describes using the Behringer BCF2000 only as an emulated Mackie Control Universal device. However, it can also be used as a generic controller. To set up the BCF2000 as a generic controller, please see the full ACID manual or check the online help (from the ACID Help menu, choose Contents and Index).*

Overview

The buttons and knobs on the Behringer BCF2000 perform the following functions:

- *Encoder Groups buttons with Editing buttons*. These buttons control the save function, metronome, track effects display, sound device display, automation mode, downmix output, and bus display. *For more information, see Push buttons on page 5*.
- *Encoder Groups buttons with Push buttons*. These buttons control track functions including mute, solo, track selection, recording, and adding a track to a project. *For more information, see Push buttons on page 5*.
- *Encoder Groups buttons with Assignable buttons*. These buttons control play, pause, rewind, fast forward, record, and home functions. You can also add markers and regions to your project. *For more information, see Knobs on page 6*.
- *Encoder Groups buttons with knobs*. These control panning, busses, sound devices and track effects. *For more information, see Knobs on page 6*.
- *Faders*. These control the track volume level and automation envelopes. *For more information, see Faders on page 6*.
- *Preset buttons*. These controls allow you to move left or right through the BCFview virtual display. *For more information, see Preset buttons on page 7*.

Hardware setup

You can use the Behringer BCF2000 with ACID after you have installed the appropriate USB driver, firmware, firmware update utility, and BCFview virtual display from the Behringer Web site at http://www.behringer.com/.

1. First open and run the USB MIDI driver .zip file (v1.1.1.1) for BCF2000.

Note: *After installing the MIDI driver, the B-Control Rotary/Fader 2000 (12/23/2004,1.1.1.1) will be visible under Sound, video and game controllers in your system's Device Manager.*
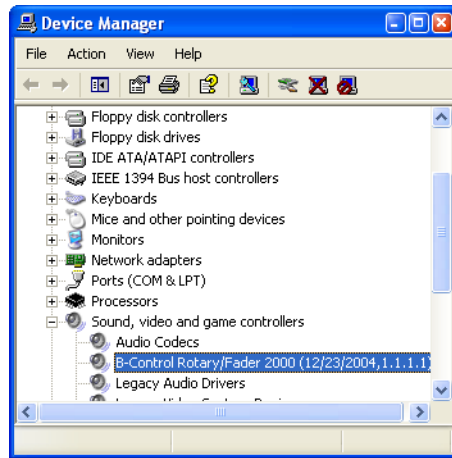
2. Open and run the BCF2000 Version 1.10 firmware .zip file.

3. Open and run the firmware update utility .zip file.

4. Turn off the Behringer BCF2000 and turn it back on after a few seconds. The LCD display should quickly flash 1.10 to indicate that the firmware has successfully installed. Then the LCD display should read P-1.

   If P-1 is not displayed, turn off the Behringer BCF2000. Press and hold the first push button in the top row of buttons (under the first knob) and turn the unit back on. The LCD display should now read P-1.

5. Plug the USB cable into the back of the Behringer BCF2000 and into your computer's USB port.

Note: *In addition to USB mode, you can also use the Behringer BCF2000 in MIDI mode. For more information about MIDI connections, refer to the documentation on the Behringer Web site at* http://www.behringer.com/.

6. Press and hold the **Edit** button and press the **Store** button at the same time. The LCD display should read EG (edit global mode).

7. Turn the first rotary encoder (labeled **Type** on the Behringer unit) clockwise slightly until the LCD displays U-1. U-1 indicates USB mode. In the LCD display, U-1 will flash for just a moment and then read EG again.

8. Press the **Exit** button to exit the edit global (EG) mode. The LCD display should read P-1.

9. Turn off the Behringer BCF2000.

10. Press and hold the second push button in the top row of buttons (under the channel knobs) and turn the unit back on. The LCD should now display NC C (Mackie® Control for Cubase).

11. Open and run the BCFview virtual display for BCF2000.

12. Right-click the virtual display and choose **BCF2000**.

## Configuring ACID to use the Behringer BCF2000

1. Open your ACID project.

2. From the Options menu, choose **Preferences** to display the Preferences dialog.

3. Enable your MIDI input and output ports:

    a. Select the **MIDI** tab in the Preferences dialog.
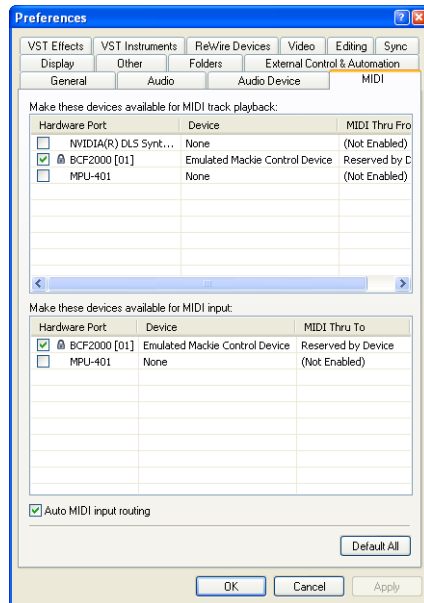
    b. In the **Make these devices available for MIDI track playback** box, select the BCF2000 check box.

    c. In the **Make these devices available for MIDI input** box, select the BCF2000 check box.

    d. Click **Apply**.

Note: *MIDI ports that are in use by the Behringer BCF2000 display a* 🔒 *icon to indicate that they are not available for MIDI track playback or input.*

4. Choose your control surface:

    a. Select the **External Control & Automation** tab in the Preferences dialog.

    b. From the **Available devices** drop-down list, choose **Mackie Control** and click the **Add** button to load the default profile.

    c. Under **Active control devices**, double-click **Mackie Control** to open the Configure Mackie Control dialog.
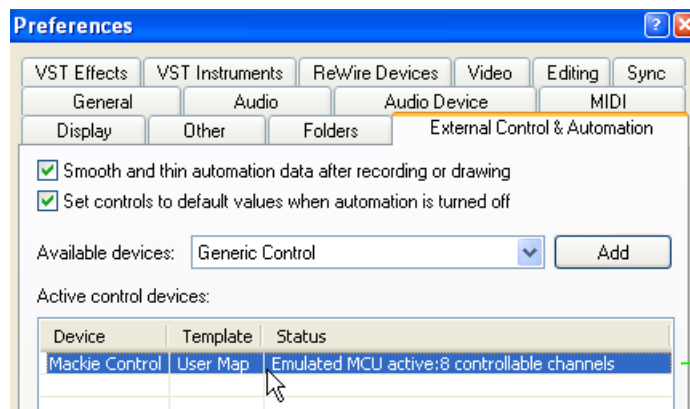
Double-click Mackie Control to open the Configure Mackie Control dialog.

    d. From the **Device type** drop-down list, choose **Emulated Mackie Control Device**.

e. From the **MIDI input** and **MIDI output** drop-down lists, choose **BCF2000**.
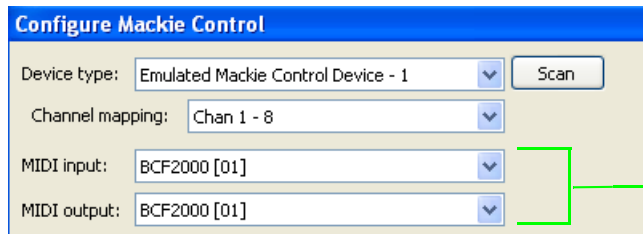
BCF2000 should be selected under MIDI input and MIDI output.

5. Click **OK** in the Configure Mackie Control dialog to close it.

6. Click **OK** in the Preferences dialog to apply your changes and close the dialog.

7. From the Options menu, choose **External Control** to enable the Behringer BCF2000.

Note: *The faders should automatically move into positions that correspond with your ACID settings.*

Using the Behringer BCF2000 with ACID

The following sections describe the default control mapping for the Behringer BCF2000 when used with ACID.

Encoder Groups buttons

The Encoder Groups buttons — when used alone or with Editing buttons, Push buttons, Assignable buttons — or knobs, allow you to change a variety of settings in your project.
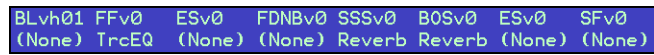

Knobs

Encoder Groups buttons

Upshift

Input

Output

Downshift

Editing buttons

Store
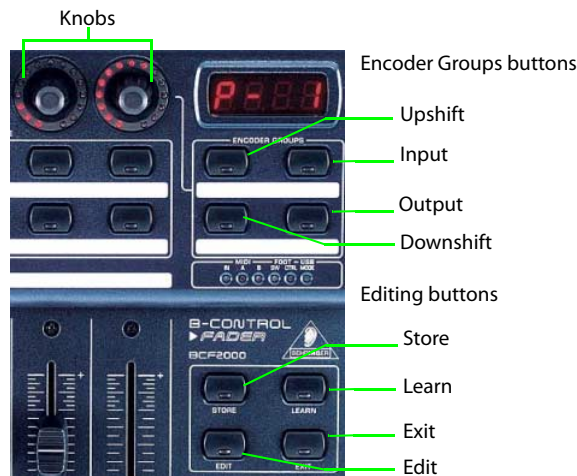
Learn

Exit

Edit

Editing buttons

Items	Description
Upshift+Learn	Saves your project
Upshift+Exit	Turns the metronome on or off.
Input	Displays the sound device in the BCFview virtual display for each track. In this example, Microsoft Sound Mapper (McSnMp) is shown.

Note: Turning the knobs displays other available sound devices for each track. *For more information, see Knobs on page 6.*

Input+Store   Displays the effects for each track.

```
BLvh01 FFv0    ESv0    FDNBv0 SSSv0  BOSv0  ESv0    SFv0
(None)  TrcEQ  (None) (None)  Reverb Reverb (None) (None)
```

Note: Turning the knobs displays what effects are used on each track. *For more information, see Knobs on page 6.*

Input+Edit   Removes the sound device or track information from the virtual track viewer.

Downshift+Store   Bypasses Track FX.

Track FX off

Downshift+Edit   Turns automation mode on or off.

Downshift+Exit   Turns the **Downmix Output** on or off in the Mixer window.

Output   Displays the tracks with their associated busses in the BCFview virtual display. In the example below, the Master bus is shown.

```
BLvh01 FFv0    ESv0    FDNBv0 SSSv0  BOSv0  ESv0    SFv0
Master Master Master Master  Master Master Master Master
```

Note: Turning the knobs displays all busses in your project. *For more information, see Knobs on page 6.*

Output+Store   Displays the effects for each track.

Output+Edit   Removes the bus or FX information from the BCFview virtual display.

Push buttons

Knobs

Top row of push buttons

Bottom row of push buttons

Encoder Groups buttons

Items	Description
Push buttons (top row)	Turns mute on or off for each track.
Upshift+push button (top row)	Turns the solo on or off for each track.
Push button (bottom row)	Selects the track.
Upshift+push button (bottom row)	Arms the track for recording.
Downshift+push button (bottom row)	Adds an audio track to your project.

Assignable buttons
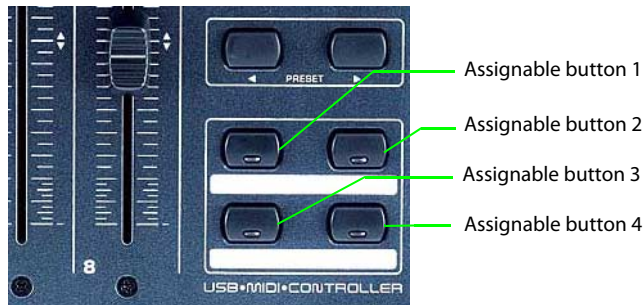
Assignable button 1
Assignable button 2
Assignable button 3
Assignable button 4

Items	Description
Assignable button 1	Rewind. Press and hold to move backward through the timeline.
Assignable button 2	Fast forward. Press and hold to move forward through the timeline.
Assignable button 3	Stop. Press to stop playback and return the cursor to its position before playback started.
Assignable button 4	Play/Pause. Press to start playback. Press again to stop playback and leave the cursor at its current position.
Upshift+assignable button 1	Inserts loop region to the cursor position.
Upshift+assignable button 2	Home. Moves the cursor to the beginning of your project.
Upshift+assignable button 4	Record. Adds a track to your project and arms it for recording.
Downshift+assignable button 1	Inserts a marker to your project.
Downshift+assignable button 2	Inserts a region marker into your project.
Downshift+assignable button 3	Turns selected loop region on or off.
Downshift+assignable button 4	Creates a loop region from the cursor position.

Knobs

| Items	Description
Rotating knobs	Controls panning, busses, sound devices, and track effects for each track. The knobs are velocity sensitive, so rotating quickly changes values.
Pressing knobs	Chooses a selection.

Faders

The faders control the following in your project:

• The track volume level.
• The automation envelope on the track (when in automation mode).

Preset buttons

The Preset buttons allow you to move left or right through the BCFview virtual display to expose all the tracks in your project. The virtual channel view will display 8 tracks at one time.
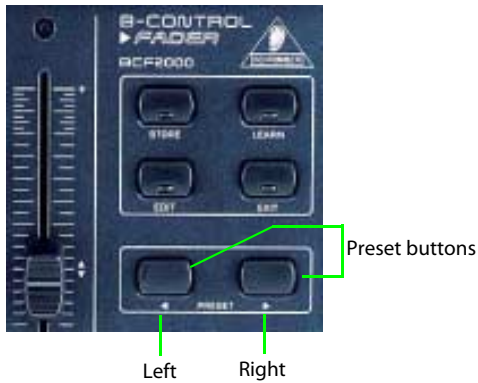
Trc1	Trc2	Trc3	Trc4	Trc5	Trc6	Trc7	Trc8

Tracks 1-8 of your ACID project in the virtual view.

Trc9	Trc10	Trc11	Trc12	Trc13	Trc14	Trc15	Trc16

If you press the right preset button, the next set of tracks in your project will be exposed.

Pressing the left preset will take you back to tracks 1-8.

Preset buttons

Left   Right

In the real world…

Adding envelopes and automating them

A couple of common questions when using the Behringer BCF2000 is "How do I add envelopes to an ACID track?" and "How do I set up the Behringer to record the envelope's moves?" The following instructions should guide you through that process.

1. Open an ACID project.

2. On the Behringer unit, turn on the automation mode by pressing **Downshift**+**Edit**.
   For more information, see Encoder Groups buttons on page 4.

> **Note:** *You can select multiple tracks at one time by pressing the bottom row of buttons for each track.*

3. In the track header, choose **Automation Write (Touch)** or **Automation Write (Latch)** to determine how the automation will be written.

Automation Settings button in the track header
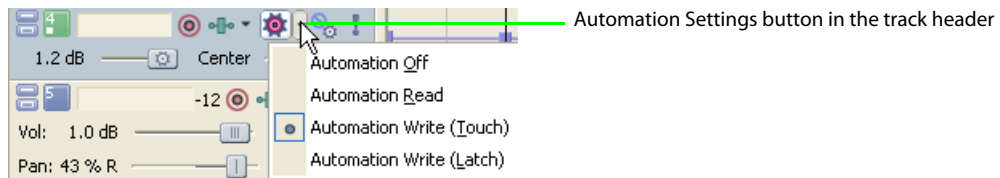
4. To add a volume, pan, or mute envelope, do the following:

   a. To add a volume envelope (purple), move the track fader.

   b. To add a pan envelope (red), twist the track knob.

   c. To add a mute envelope (green), press the top row button of the track..

Twist the track knob to add a pan envelope

Press the top row track button to add a mute envelope

Move the track fader to add a volume envelope

Mute envelope

Pan envelope

Volume envelope
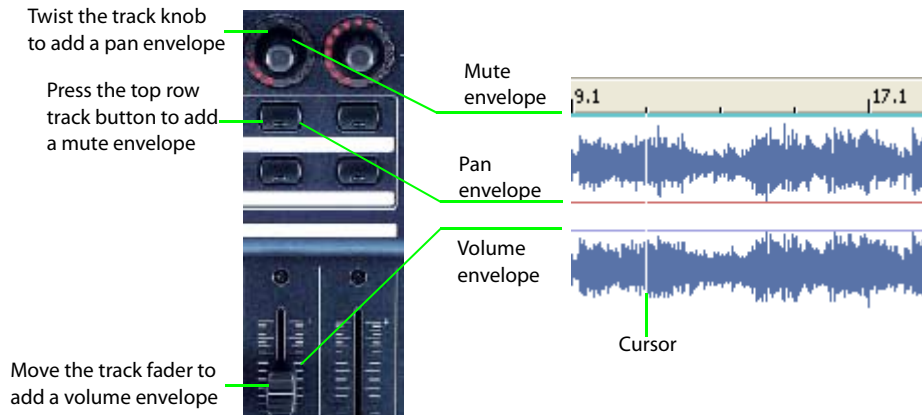
Cursor

Note: *To add envelope points, place your cursor where you want to add the point by twisting the track knob (pan), pressing the top row track button (mute), or moving the track fader (volume).*

Pan envelope

Mute envelope

Volume envelope

Envelope points in the timeline
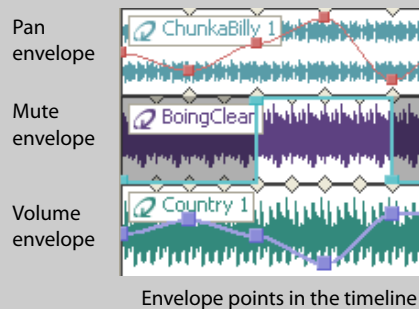
5. After an envelope is added to a track, you can set-up the Behringer BCF2000 to record the volume, pan, and mute envelope's moves in your ACID project.

   a. On the Behringer unit, turn on the automation mode by selecting **Downshift**+**Edit**.

   b. Place the cursor at the beginning of your ACID project.

   c. Use assignable button 4 to play your project. *For more information, see Assignable buttons on page 6.*
   As the cursor moves past the envelope points, the faders will move automatically (volume), the top row button will light red (mute), and the red lights around the track knob will light up (pan).

Tip: *You can add points to the envelope as the project is playing back. For example, by moving a fader, you can add points to a volume envelope.*

Note: *For more information about envelopes, see the full ACID User Manual (available on the application disc or the Sony Media Software Web site) or check the online help (from the ACID **Help** menu, choose **Contents and Index**).*
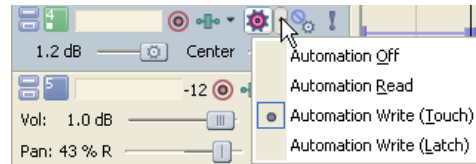
Fader automation

Another question that comes up often is, "Why aren't the faders following the envelopes?" There are two quick answers to this question.

1. The Behringer BCF2000 is not in automation mode. To enable automation press **Downshift**+**Edit**.
   For more information, see

2. On the track header, **Automation Off** has been selected. To enable automation, choose **Automation Read**, **Automation Write (Touch)**, or **Automation Write (Latch)**.
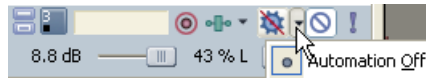
Automation disabled on the track header

Automation enabled on the track header