

ADVANCED TECHNIQUES

GROUPING FADERS

UltraMix Pro software allows you to form up to eight subgroups with any number of faders in each group up to 128 (if you're using four Ultra-34s). Note that a fader can only belong to one group. Remember, these are virtual groups, which are not quite the same as the hard-wired groups in your console. With virtual groups, there are no separate buses, no separate gain stages, and no separate outputs.

Instead, you are merely instructing UltraMix to apply the same commands, be they fader moves or mutes, to all faders assigned to that group. In other words, when you move a group fader up 3dB, UltraMix adds 3dB to each fader assigned to that group. As with hardware groups, you don't actually see the individual faders move, but you do hear the results in real time.

For instance, let's say you have five channels of backing vocals on channels 8-12 assigned to a group master and you need to drop their levels about 5dB relative to the rest of the mix. When you pull down the group master fader, each of the channels in that group is affected equally. As your group master is being pulled down, the process of calculating channel output is happening smoothly and invisibly throughout the fader throw.

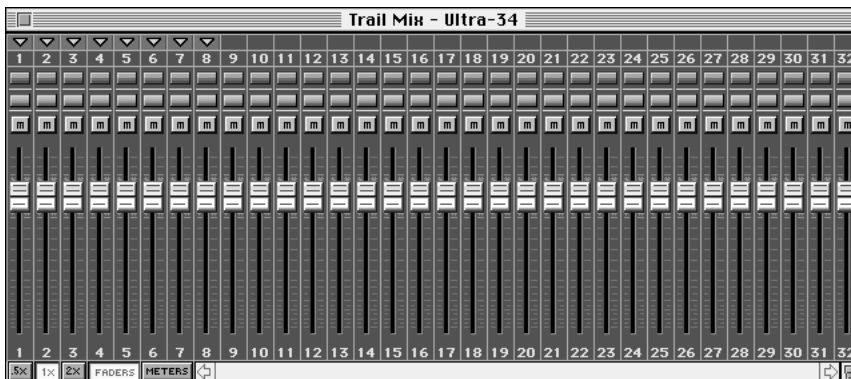
It is important to remember that, because you do not have a separate gain stage, you cannot add gain with a group fader beyond the gain available in each individual fader assigned to that group. Say you have fader 1 at about +4dB (above Unity, roughly MIDI number 110), you assign it to a group, and then try to add 10dB of gain with the group fader. It can't go past +10dB (MIDI 127), so you will run out of headroom.

You can make most of your grouping decisions before you even sit down to mix. For example, you might put all the drum tracks in one group, the horn section in a second group, and the background vocals in a third.

Naming groups is as easy – and basically the same – as naming faders. Rather than duplicating instructions, we'll just refer you to the section on Naming Faders (page 80) to see how to name groups.

 *To group faders using UltraMix:*

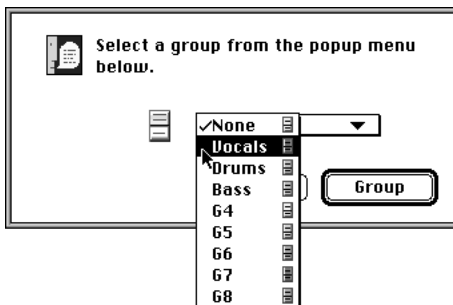
1. Select the channels you'd like to group.



2. Choose Group from the Faders menu.

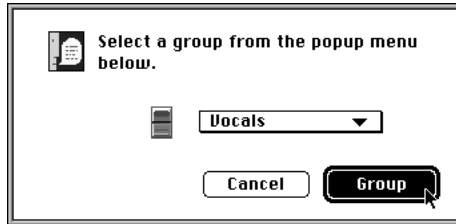


3. Select the group to which the selected channels will be assigned. The color coding will assist you in group differentiation.

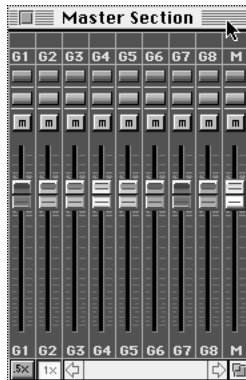


You can also type numbers 1-8 on the computer keyboard as a shortcut. Try it.

4. Click the Group button and the channels are assigned.



The grouped channel faders will be the same color as the group master faders. To see your handiwork, select Master Section from the Windows menu (⌘/Ctrl-M).



If the group fader colors don't blend with your studio decor, we apologize. The colors cannot be changed, so you may need to consult your decorator on reworking your studio color scheme.

To group faders using the UltraPilot:

1. Make sure the session window is frontmost by using the mouse, keyboard, or UltraPilot to select it.
2. On UltraPilot, press the Group Select/Group Assign button to light the Group Select LED. This button is used to toggle between choosing a sub group (from the group master window) and choosing the faders to be assigned to that group. The UltraMix Soft LEDs will illuminate to display group master status. A solid LED

means that the group has channels assigned to it. A blinking LED means that the group does *not* have channels assigned to it. The first time you assign groups from UltraPilot, all the first eight soft LEDs will blink (because nothing has been assigned to them yet).

3. In Select mode, press one of the first eight Soft buttons on the UltraPilot to select a group for assigning or editing faders. The Group/Master window comes forward. (The first time, press the group number you want to select.)

The Soft LED for that group will go solid, and the red and green channel LEDs on 1-32 will show which of those channels had been previously assigned. (This is assuming, of course, prior group encounters.) You can press another Soft button to view another group at any time while in Select mode.

4. On UltraPilot, press the Group Select/Group Assign button again. The Group Assign LED will light, and now the Soft switches are used to assign new faders to the group or edit the group members. Use the Bank button 1-16/17-32 to change the UltraPilot bank from which you add or subtract group members.

5. If you want to edit or view any other groups, press the Group Select/Assign button so that Group Select is lit. Otherwise press the Mute/Solo button to drop out of Group Assign mode.

NOTE: Grouping affects only the fader level and mutes, so, for example, one group master can control a stereo drum mix without changing the panning. You can control up to eight stereo group masters with UltraMix software, versus 8 mono (or 4 stereo) subgroups with your mixing console.

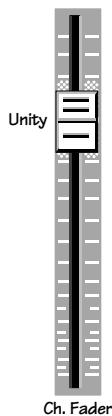
More On Groups

When channels are assigned to one of the eight group masters in UltraMix, the fader position data from each channel is calculated against the group master data. It is then sent back through each of the original channel gain paths.

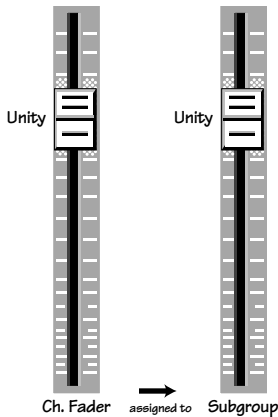
For instance, you have five channels of backing vocals on channels 8-12 assigned to a group master and you need to drop their levels about 5 dB relative to the rest of the mix. When you pull down the group master fader, each of the channels in that group is affected equally. As your group master is being pulled down, the process of calculating channel output is happening in a smooth and invisible manner throughout the fader throw.

The following diagrams help to illustrate.

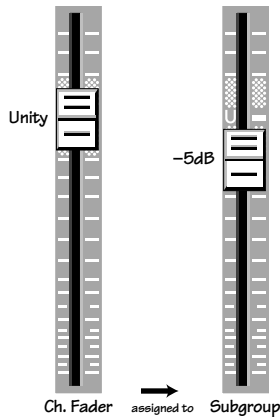
Channel input = 0dB
Channel output = 0dB

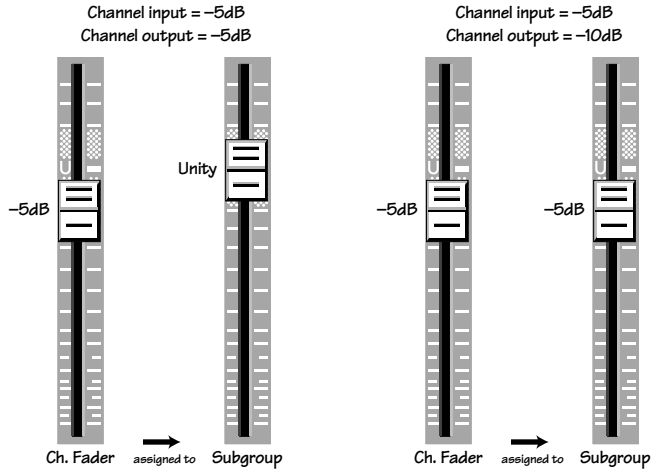


Channel input = 0dB
Channel output = 0dB



Channel input = 0dB
Channel output = -5dB





UNGROUPING FADERS

If you are short of group masters, you can remove channels from any group, and reassign the other channels to that group.

However, at this point, you need to make a decision: Did you like how the grouping affected those channel levels, or do you want to keep the original channel fader settings? If you remove a fader from a group, all changes made while it was part of that group will be lost. As a reminder, the *software* will prompt you every time you ungroup.

NOTE: UltraPilot will not warn you before ungrouping. If you ignore the software's prompt and remove a fader from a group, you'll lose any superimposed group master moves you once had. However, you can easily regroup a fader, as long as it is not part of another group.

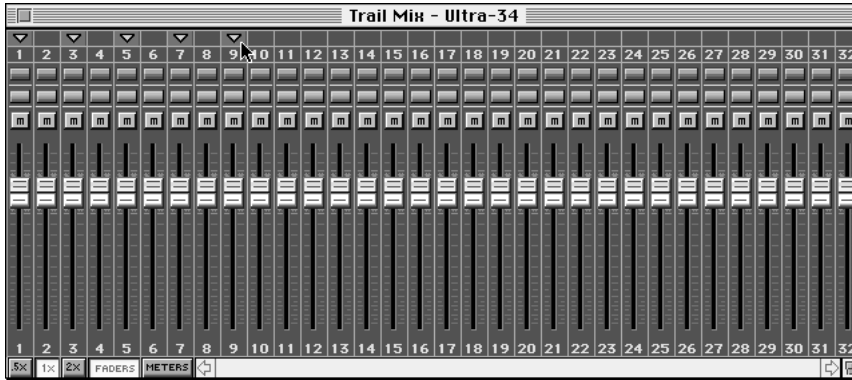
Removing A Fader From A Group

Select the channel(s) that you'd like to remove from the group and choose Ungroup from the Faders menu.



Using Multiple Selected Faders

You can form a ninth “insta-group” by selecting the faders you want to perform specific operations on and simply leaving them selected without assigning them to a group.



With this method, you don't have a single group fader that will make the common level changes. But there are a lot of other neat tricks you can do with your “insta-group” of selected faders by using computer keyboard commands:

- Put them all in Record/Ready by pressing W.
- Take them all out of Record/Ready by pressing E.
- Mute them all by pressing M.
- Unmute them all by pressing “,” (comma), or Shift-M.
- Toggle mutes by pressing T (For details, see Mute Functions, page 107).

- Fade all channels up or down by pressing and holding the up and down arrow keys. The duration of this fade is fixed at about five seconds from off to full on.
- Solo selected channels by pressing S. This allows you to solo several tracks at once, which may sound like an oxymoron, but it comes in handy sometimes. For example, you may want to solo several instruments at once that aren't part of the same group.


Multiple selected faders take care of a number of other functions as well, but these are more specialized and are detailed elsewhere. The above functions are the ones most likely to be useful at any point during your mix.

AUTO FADES AND EDITING FADER CURVES

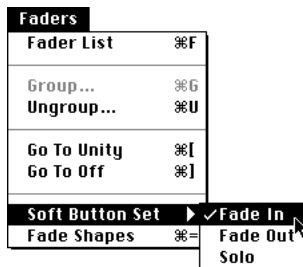
UltraMix includes a special feature that lets you trigger fade-ins and fade-outs of any length, on any faders, and at any point during your mix.

UltraMix also lets you define custom fader curves — a different one for each fader, if you like — that can range from the subtle to the bizarre. You can program a different fader curve and a different fade length for both fade-in and fade-out on all faders.

Do An Auto Fade

 *To perform an auto fade-in:*

1. Choose Soft Button Set from the Faders menu, and then choose Fade In.



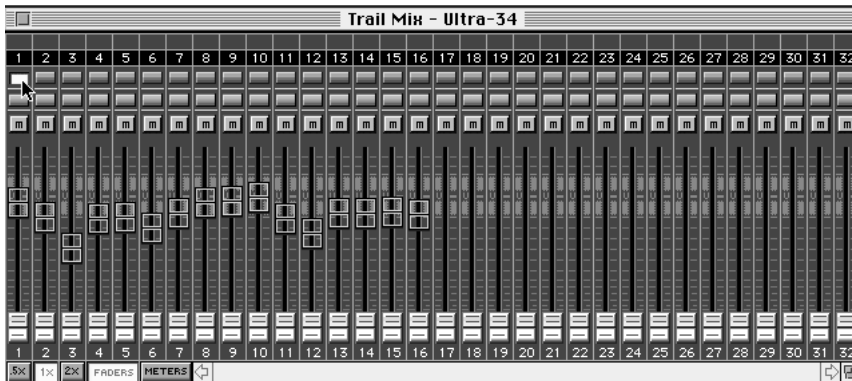
2. Enable either Replace or Null recording mode on the designated fader. Replace will cause the glass fader to become solid as soon as Record is enabled. Null may give you better results by becoming solid as soon as you enable the fade, if the fader was stationary or hadn't crossed the Null point prior to the fade. Try both.



3. Enable Master Record.



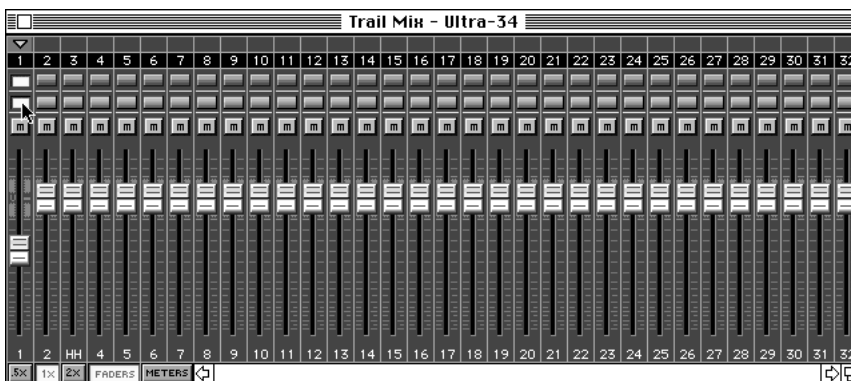
4. Place the fader you want to fade-in in Record/Ready.



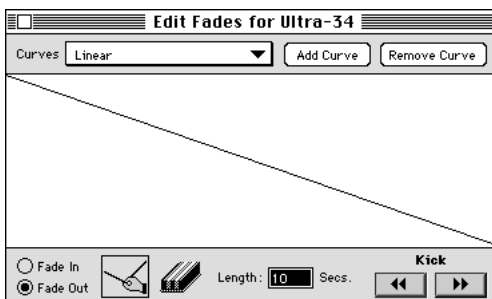
5. Roll the mix.



6. At the point where you want the fade-in to occur, click on the designated fader's soft button or press G on your computer keyboard.




Note that the default duration is 10 seconds and the default curve is a smooth, linear fade (specifically, a fade-out). Important: The duration is 10 seconds regardless of fader position when the fade begins. Take a peek at the fade shape window (\mathbb{R} /Ctrl =).



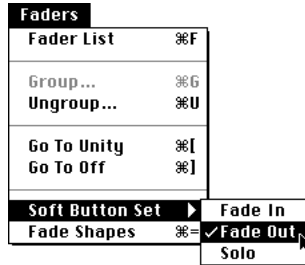
In other words, if your fader is at Unity when you trigger the auto-fade, it will take ten seconds to crawl up to +10dB.

7. To stop the fade-in at any point, click on the screen soft button or press G.

NOTE: You may resume fading in by clicking on the fader's soft button or hitting G again, but this will be a new fade-in, lasting the full preset duration from the current fader position to full on.

 To perform an auto fade-out:

1. Choose Soft Button Set from the Fader menu, and then choose Fade Out.



2. Follow steps 2 through 7 in the previous procedure, except press F on the computer keyboard in both steps 6 and 7.

NOTE: The keyboard commands (F, G) are effective regardless of the setting of the Soft Button Set. You may toggle between fade-in and fade-out by alternately pressing the F and G keys on the selected fader(s). The keyboard command method is the best way to go if you want to trigger auto fades on multiple or non-adjacent faders simultaneously.

Edit Your Fade

That's pretty nifty if all you ever need is smooth, linear 10-second fades. But what if you want a 5-second fade? Or a 50-second "Bolero" fade-in? Or some kind of crazy, zig-zag fade? No problem. All this can be done in the Edit Fades dialog box.

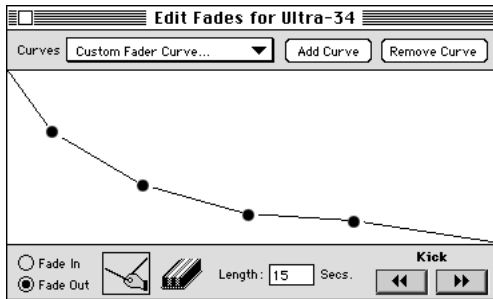
To access the Edit Fades dialog box, choose Fade Shapes from the Fader menu.



Edit Fades Dialog Box Basics

Add / Remove Curve buttons: These will capture or remove sets of fade curves for convenient editing, viewing, or recall. After clicking the Add Curve button, you will be prompted to name the current fade-in or fade-out curve that you have altered from a linear form or edited from a previously defined fade curve. The fade curve sets become available for recall using the Curves menu. To remove a fade curve, first select it and then click on the Remove Curve button.

The Curves menu: Contains the available Fade Curves, as saved with the default session or with the current session. The Curves menu changes from a linear to a custom curve as soon as you add a curve modification point to the line. It is up to you to save and name the curve at this point.



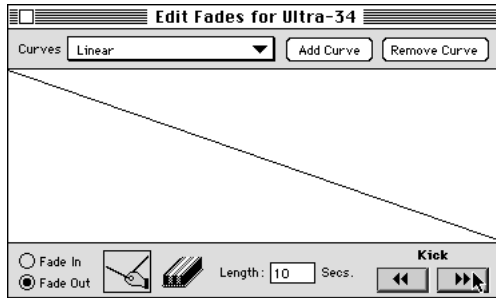
 *To change fade-in or fade-out length (duration):*

1. Choose Fade Shapes from the Faders menu.

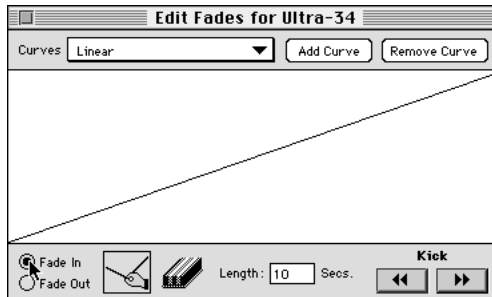


At the upper left corner of the Edit Fades window is the current fader position *anywhere* along the axis; on a fade-out the lower right corner is the MIDI value or fader position (0), which is the minimum level. The diagonal line shows the fader travel path. UltraMix gives a smooth logarithmic taper along that path.

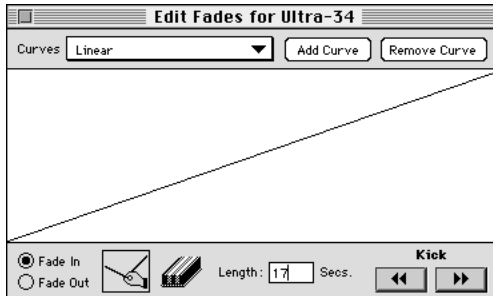
2. Click the >> or << buttons to choose the fader for which you want to change the fade length. (If you select a fader before opening the window, that fader will appear automatically.)



3. Click either the Fade In or Fade Out option. On a fade-in the lower-left corner shows the current fader position anywhere along the fader axis, and the upper right corner shows the maximum level.



4. Click in the Length box and type the desired length (duration) of the fade. Any time from 1 to 100 seconds is acceptable.



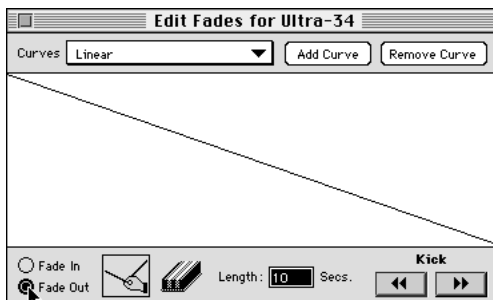
The fade duration will be retained for this fader for as long as your current session is open, or until you change it. You may enter separate times for the fade-in and fade-out curves on each fader.

 *To change a fader curve shape:*

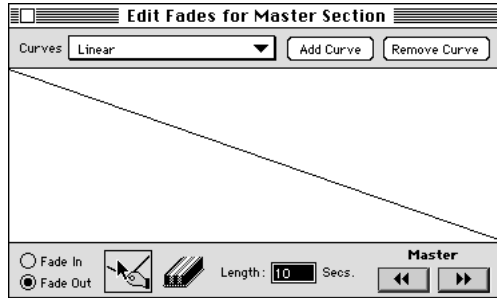
1. Choose Fade Shapes from the Fader menu.



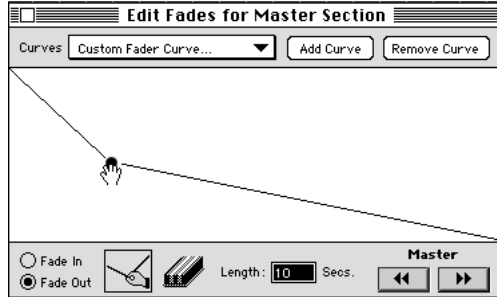
2. Select Fade In or Fade Out.



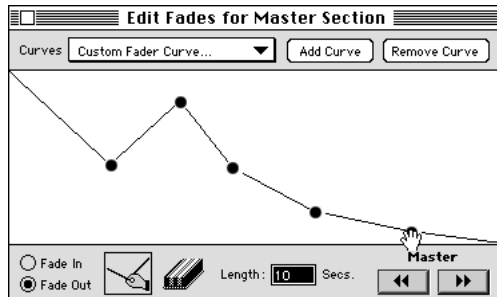
3. Click on the “tugging hand” icon if it’s not already selected. (It is selected if there’s a box around it.)



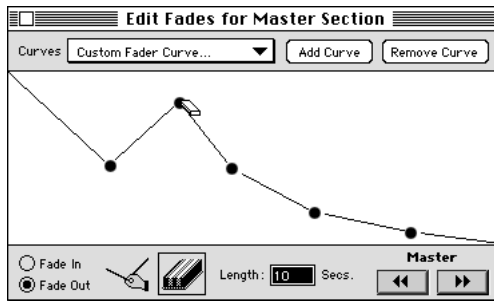
4. Add a point by moving the hand to the curve line and clicking on the line with the fingertips.



Drag the line up, down, left or right. You may add up to fifteen curve modification points to determine the shape of your curve.

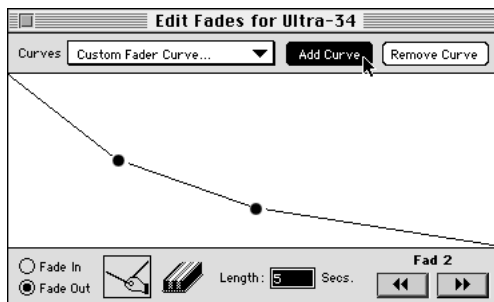


5. To erase a modification point, click on the eraser icon, which will change the tool to an eraser, then click on the point you want to remove.

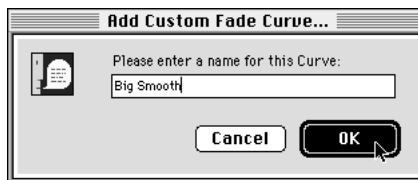


To store a fader curve shape for future recall or use on other faders:

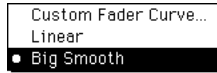
1. At the top of the Edit Fades dialog, click on the Add Curve button.



2. Type a name for the curve in the pop-up box and then click OK.



This curve is now saved in your UltraMix session file. You may use it on any other faders in the current session.



In addition to fade-ins and fade-outs, you can use UltraMix's auto-fade and curve editing features to create crossfades. Simply create complementary fade-in and fade-out curves, and trigger them at the same point. This is a snap with linear curves; if you want to do it with custom curves, it's a little more involved. Record the fade-in moves, then in real time record the fade-out. Next, go into Event Editor and customize the fade-out to mirror the exact timing of the fade-in.

If your automated fader moves went too far, you can do another pass and trim the fades using the Modify Levels commands on the Edit menu. Use Set Maximum to edit fade-ins, and Set Minimum to edit fade-outs to the desired level.