

# PART FIVE: TIPS AND TECHNIQUES

In this section we've assembled a mixed bag of advice that you can follow or forget as best suits your mixing style. Some topics are all new and found only here, while others amplify on procedures already outlined in the "How To" section. So take a look, try what you like, and then feel free to improvise from there.

We don't detail specific procedures here, so if you're not sure about basic UltraMix operations, refer to the "How To" section for more information.

## QUICK LEVEL-MATCHING

Here's a simple technique that is particularly useful when you have to adjust some levels that don't match. Such mismatches frequently occur when you go back later and punch in something on an overdub. You get exactly the performance you wanted, but the levels are a bit off. You can fix this problem.

### *To quickly match levels:*

1. Put UltraMix Pro into Rehearsal/Replace recording mode, arm your tracks and Master Record, and roll the mix.
2. Using UltraPilot or the mouse to move the fader, use your ear to set the level where it should be for a seamless transition. What you hear now is what you will get.
3. Stop and roll the mix back to before the point where the level change should happen.
4. Click on the Rehearsal button to drop out of Rehearsal mode.

***NOTE: The controller positions are now preset for the correct levels. The rest of the procedure is punching them in.***

5. Arm the Record/Ready button(s) on the track(s) to be punched-in.
6. Roll the mix.

7. At the point where the level change should occur, hit the Master Record button to punch in the level change. The solid faders will instantly jump to your preset glass fader positions.

8. At the point where the levels should revert to where they were before (end of the original tape punch-in), punch out of record by hitting the Master Record button again.

***NOTE: You can do the same thing by arming the Master Record button to start with and then punching in using the individual track Record/Ready buttons. Whichever works best for you.***

That's it! Quick and easy, and the old level mismatch should be seamlessly erased.

If you have to make an extremely precise level adjustment for a very short period, you might have to do some tweaking in the Event Editor. But, for most scenarios like this, the method above will do the job quickly and cleanly.

## COMPING TRACKS

This technique is standard procedure on most hit records you hear today. It allows you to get the best possible recorded performance on key tracks like lead vocals and non-sequenced instrumental solos. You do it by compiling (“comping”) a single track from multiple takes.

It works like this (using the lead vocal as an example): Record one vocal take all the way through. Now, likely there will be parts that you like better than others. But rather than punching in fixes here and there, just go back and do another complete take. Still not dead perfect? Do another. Three takes are probably the practical maximum, since any more will be confusing. If you still don't think you have all the pieces for a perfect track, then go back and record over the least favorable track so far.

Next, listen back and take note of which parts of which track have the best performances. Then, using automated mute functions, you can compile a single vocal take in your final mix by muting the parts of the tracks you don't want, leaving only the preferred track for that section of the vocal in the mix.

Of course, recording three separate vocals eats up tracks, so you may want to use the automation to do a comp submix ahead of time, bouncing the three tracks down to one as you comp them. That way, you get your two tracks back for additional overdubs before final mixing.

## EFFECTS AUTOMATION

Because UltraMix is not physically built into your console, you have exceptional flexibility in setting up effects automation. You can go about it in basically three ways:

### 1. Automate Effects Using Dedicated Effects Channels

This is the way they go about it in the big-time studios. In this case, you patch your effects outputs back into channel inputs on your main mixer or on a submixer. If it's a stereo effects unit, you use two mixer channels. This gives you access to all channel EQ, panning, and routing controls. Level and mute automation for the effects is accomplished by the Ultra-34 channels plugged into those particular mixer channels. This is probably the best way to go if you have oodles of automated channels. But since most of us don't, there's always...

### 2. Automate Your Effects Return Path

This is the basic method shown in Hookup Diagram 3 on page 29 and the signal flow diagrams 5 and 6 on pages 201 and 202. Essentially, what you are doing here is automating the gain on your Effects Returns, which you leave set at Unity gain. If you have a Mackie 24•8 console, you can automate all your channels and all your aux returns as well with one Ultra-34.

Either way you go about it, adding UltraMix automation to your effects allows you to automate any level changes on effects units you may want for different sections of the mix, and even make rapid dynamic level changes to add interesting variations to the effects.

### 3. “Wildcard” Automation of Effects

There’s no law that says you have to start with a signal coming out of the console’s aux buses. You can automate any effects signal simply by patching it through the Ultra-34 VCA circuits, using any combination of front or rear panel connectors you like. Signal flow diagram 7 on page 209 is the most obvious way, but diagrams 5 and 6 (pages 207-208) also apply because there’s no reason that input to the effects unit has to come out of the console. With UltraMix, you can use your imagination. If there’s a will (and a patch cord), there’s a way!

Of course, you can also use the MIDI Program Change commands to change effects types and effects parameters along with effects levels. More on that next.

## SPLIT TRACK TRICKS

You can solve some particularly hairy mix problems by splitting a recorded track into two or three different automated mixer channels. This technique is particularly handy if you have sounds or instruments on the same track that need different treatment in the mix.

Let’s say, for example, you have had to put a snare drum and a conga drum on the same track. The snare is there throughout the song, but the conga comes and goes, interweaving throughout the song.

Now, you want separate effects and EQ treatment for the snare and conga, and you want the conga up in the mix on the bridge. You also want different snare volume levels and effects sounds on the chorus and the verses.

To tackle this problem, you split the track into two input channels, one for snare, one for conga. Patch the Ultra-34 send jack from the original track into a free channel on your mixer or a free Ultra-34 return channel. On one channel do a mute pass, eliminating the conga from the snare channel, and vice versa. Now, set your EQs and effects for the conga track. Do the same for the snare for the verse. Then set the desired effects for the snare on the chorus. Make your level

changes to bring up the congas where you want them louder. Finally, enter all the program change commands for switching effects programs on verse and chorus.

That's it. It'll take a few passes, but you have now done what was once practically impossible, automation or not.

## USING THE MODIFY LEVELS COMMAND FOR "COMPRESSION" AND "LIMITING"

We put those terms in quotes because the Modify Level command does not directly react to audio signal levels, as does an outboard compressor/limiter. What Modify Levels can do, however, is set limits on how high or how low your fader levels are allowed to go.

Here's an example. Let's say at a couple points in your mix you made some complex fader moves that you liked, but at a couple points you boosted a level just a bit too high. Or, let's say you did a fade-in that went a bit too far. Rather than go back and punch-in the changes in real time, you can select the track or tracks you want to "limit," choose Modify Levels from the Edit menu, choose Set Maximum, and then enter the highest MIDI volume level you want to allow on that fader. You preserve all the moves you made, but the fader's maximum level will not exceed your preset maximum.

It works the same with Set Minimum, except you are setting a "floor" below which your virtual fader will not go. This is handy if you pulled levels down too far and want to fix it without real-time punch-ins. It's similar to compression in that it limits the dynamic range of your moves, but of course it does not react to or directly affect the incoming audio signal.

Remember, these commands will be overwritten if you go back later and record moves that exceed your maximum and minimum levels.

## USE AUTOMUTE AS A SPECIAL EFFECT?

Like a gating device? Why not. Try various combinations of the three preset thresholds and different input gain settings. (Reroute inputs, if necessary, to get pre-insert gain control.) You can't hear results in real time, of course, so try bits and snatches, then play them back to see if you like the results.

A couple of twists you can try: Offset the Automutes on a track by first filtering only the Automutes in the Event Editor, selecting all and then cutting and pasting at some other time location (a few frames or tics forward or backward, or something radically different). Also, you can copy just the fader's Automutes (using "Copy what?") inside the session window and paste them into another fader that has a totally different sound (percussive muting over vocals or bass?!). You could also lay these Automutes into an effects return track and then subject it to EQ, delay, pre-delay with reverb, or some other effect to produce your own unique blend.

Least of all, you are provided with 32 channels of gating, which can always free up the couple of dedicated devices you might own for their standard purposes. Automute might not make any dynamics processor manufacturers break into a cold sweat (uh!), but there are possibilities here that could turn a few ears.

## NESTED SUBGROUPS AND SPARE GROUP CONTROL

What if you want to have one fader control a number of groups? UltraMix allows you to do so by using the group bussing function on your console along with one or two spare UltraMix/Ultra-34 channels (for mono or stereo nesting, respectively).

If you're using a Mackie 8•Bus console, simply repatch an unused Ultra-34 channel to a sub insert in the console's sub group section, and then re-route all of the UltraMix-grouped channels you want to next through this console group bus. (Unassign the channels from the main bus.)

Then re-route the console group bus to the main outputs and set the console subgroup fader to Unity. Now when you adjust this spare UltraMix channel level, you'll be controlling all the channels/groups routed through that console sub group. You could assign the single spare channel to its own UltraMix virtual group (if you want to think in a "group" mindset), but it's unnecessary. Use two console sub group buses (panned hard left and hard right, respectively) and two Ultra-34 channels for stereo nesting, and then assign those two UltraMix channels to an UltraMix virtual group for single-fader stereo control.

Using an 8•Bus sub group section with eight spare UltraMix channels, combined with the eight UltraMix virtual groups, can allow you to control up to sixteen mono or twelve stereo groups (eight UltraMix and four 8•Bus stereo placed groups). This provides another workaround for people who rather fight than bank-switch.