EIGHT

LISTS
Evolution Panels Version

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CHAPTER 8:
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For this chapter, references to the "Add" key include any keystroke that will generate an event, that is "Add", "Start Mix" (when in 'Live') and "Start Mix" "Add" (when in 'Program'). The later will not be repeated, but will assume correct operation to make a dynamic event.
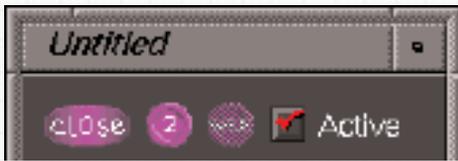
LIST ACTIONS:
Close, Clone, Save and Active. Fig. 62

When Lists are selected in the Vault, tapping on 'New' will make a new one, or an existing list can be opened by tapping on its icon. The size and position of the list window when it opens cannot be saved, neither can its different display options; it will always open in thumbnail view (view options are explained later in this chapter). It has to be manually positioned, and its minimum width is set by the size of the thumbnail images; this cannot be changed.

However, its height can be altered by pressing and dragging on one of its corner markers; when released, it will jump to the nearest size that will fit a thumbnail (even when they are not being displayed). The minimum height fits one thumbnail, the maximum depends on the size of the vdu. It can be iconised with the button at the top right; an iconised list is shown as green arrows in an icon button.

The scroll bar on the right can be dragged up and down to scroll through the list. Other windows can open in front of it; to bring the list back to the front, tap on any visible part apart from a thumbnail (which will put the Pogle in 'Copy'). List windows behaviour cannot be modified .

If no other lists are open, the one just opened immediately becomes active; if another is already active, then tapping on the button next to the word 'Active' (the active window in Unix systems has a red tick in this box, in Linux the box is green) at the top of the list window, will make that the active one. The Pogle can have up to 12 lists open at once, but only one active one. Tapping on a thumbnail in any of the lists will put the Pogle in 'Copy' mode; each list can be scrolled independently, and their display options (see below) set individually. If a new project is created, and there is not an active list, one will be generated. **Active lists can be iconised, but they will still be active**. When a list is opened, the message 'Loading' will appear in the system area while its thumbnails are imported; this may take a few seconds, depending on the number of events in the list.

Fig. 63

At the top of the list window is the 'Close' button Fig. 63. It will close that window; if the list as it is has not been saved, a new window, Fig. 63.5 will appear. There are three options, 'Don't Save','Cancel' and 'Save"; click to select.
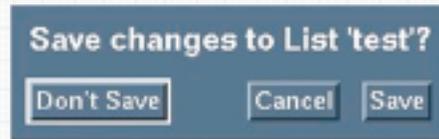
Fig. 63.5

Fig. 65

The next button is a '2' **Fig. 65**; tapping on this will open a clone of the list. This is identical to the original, but it can be scrolled independently, and much faster, and will then stay on the event selected by scrolling; it is unaffected by any scrolling of the main list. Its display options (see below) are the same as the original, but they can be opened and closed separately. Tapping on a thumbnail in the clone will put the Pogle in 'Read' mode, and apply its grading to the current event; this can then be entered, or channels selected for copying with the group keys. If an event in the list is altered, the clone will instantly update to include the change.

Fig. 66

The 'Save' button **Fig. 66** will be highlighted if the current version of the list has not been saved (this does not include backups) and it will be greyed out when it has been; there will also be a * in the name at the top of of unsaved lists. The 'Save' button can be tapped on to save the list. If, for any reason, the Pogle panels are not responding and the "Save" key will not work, clicking on 'Save' with the host computers own mouse left button may store the list. On the right is the 'Active' button; a red tick (green in Linux systems) indicates that the list is the current one, i.e. its information is being applied to the image.

The naming of lists is the same as other Vault items; if there is text in the system area when it is saved, that name will be given to the list, both in the vault, and also at the top of the list window. Each time a list is saved, a new file is made, the existing versions are not overwritten; there is no 'Write over list' option in the Vault. Closing a list will immediately dismiss the window if the list as it is has been saved, otherwise the 'Save changes' box will appear. "Delete" "All" "Enter" will delete all events from the active list, **but there is no warning that all data will be los**t. When deleted this way, all controls return to their default settings.

Fig. 67

## DISPLAY OPTIONS
Thumbnails, Event type and Labels.

The row of buttons underneath the action icons select the display options **Fig. 67**; the default is just the thumbnails. There are three types of display, turned on and off by tapping on the buttons. From the left they are thumbnails, the event code and type indicator, and labels; they can be displayed in any combination, but their relative positions cannot be changed. In thumbnails, there are images for each event, stored when either the "Add" key was pressed to first generate the event, or when "Enter" was pressed inside the event (the trim frame).

If a new event is created inside an existing list there will normally be no thumbnail, but a grey space instead. Pressing "Enter" when parked inside the event will generate one.

As the transport will go to the trim frame when cueing, and store it in the cache when one is available, "Enter" should be pressed at a suitable point in the event to store a recognisable or representative image. If for any reason (e.g. to reduce the size of a list for storage) there is is a requirement to make a list without thumbnail images, they can be turned off in the Room Setup window, accessed through the Engineering Menu.

The button labelled 'List Images' (near the bottom left) should be tapped on to deselect it. However, turning this off will not delete thumbnail images from an existing list.
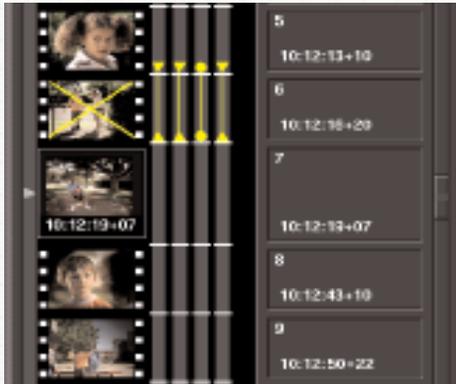
The current code is shown between the two most central thumbnails **Fig. 68** (this cannot be permanently changed, to put the code nearer the top or bottom). In telecine mode only, the type of code displayed can be changed in the User setup window, or temporarily changed by holding down the telecine transport key for a couple of seconds, to toggle through the different options. These are: Filmcode (time and frames); Feet and Frames; Frames only and Timecode.

EVENT TYPES.

The event indicator has a graphic display of the type of event in the list, for each channel it controls (see below). A solid horizontal line in each channel indicates a cut; the grading on one side will change instantly to the grading on the other at that point. If the event is a dynamic, shown by a yellow cross over the thumbnail in the list window, there will also be a vertical yellow line in the channels, between the beginning and end points.

For most channels, each end will have an arrowhead, this indicates that the dynamic is linear. In these, the Pogle calculates the change needed on each frame to make the transition from one grading to another across the length of the dynamic; the change on each frame in the dynamic is the same amount. **For scans only**, the default will be a non-linear change (called an S-curve, or profiled), indicated by a solid circle instead of the arrowhead; in this case, the first and last few frames of the dynamic (depending on its length) will have increasing and them decreasing amounts of the change needed for each frame, so the scan change will speed up and slow down through the dynamic.

This emulates camera moves and zooms, where it is not (usually) possible to go from stationary to moving, and then to stationary again, without some acceleration and deceleration. How to change these scan dynamic types is covered later in this chapter; the other channels are fixed as linear profiles, and cannot be altered.

EVENT LABELS.

The label display has a space in which there is always the event number, but into which labels, strings of up to 20 characters, can be entered Fig. 69. If there is text in the System area, pressing "Enter" will put that text in the label area. If in the live event, any text will be entered when "Add" is pressed, even if is no longer in the System area (it can already have been stored already by a press of the "Enter" key). If a note with a name is read, then "Enter" will put the note name into the label; this also works with the live event. If the note has no name, then 'Note' will be put in the label. However, if there is an existing label, this will not be overwritten when reading a note. To delete a label, press the space bar on the qwerty panel and then "Enter"; the text will be overwritten by the space (but this space will then be treated like any other label).

Labels can be searched for using the normal conventions of computer searches; the more characters in a search, the more accurate will be the results. Enter text in the system area and press "Up" or "Down"; if there are any matches, the list will jump to the first one, and subsequent keys presses will then go to any further matches in the direction of the key. If there are no more matches, further key presses will then jump to the first match again. This type of search is only carried out in the direction of the key, it won't look in both directions (up and down) in the list. In the list shown here, "l" "Up" would jump first to the event labelled 'lemon', then 'lime' then 'apple'. "le" "Up" would jump to 'lemon' and then 'apple', and 'lem' would only go to 'lemon', and wouldn't change on further key presses. Searches are not case sensitive.
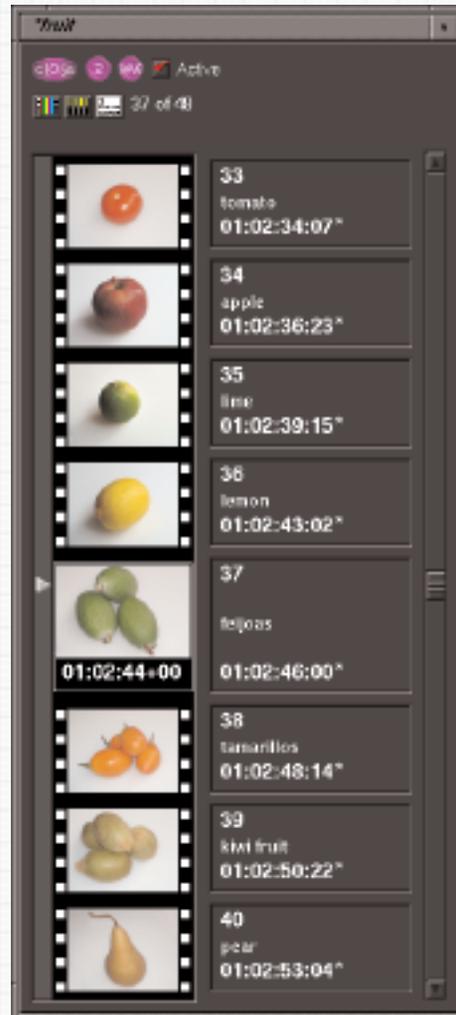
Fig. 69

Fig. 70 **LIST CHANNEL CONTROL**
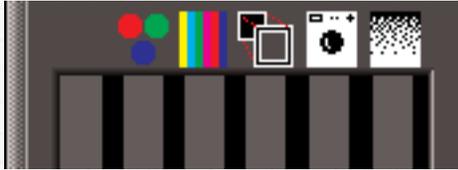
At the top of the event type display are icons showing which channel each column applies to Fig. 70. They are (from the left):

Fig. 71

Telecine primary: normally telecine roller-ball controls and saturation.

Fig. 72

SCC: all the Pixi colour correction (Mega 1, Vignette Card and Mega 2).

Fig. 73

Scans: the telecine size and position.

Fig. 74

Utility: normally the telecine play speed, aperture correction and some switches.

Fig. 75

Noise: any external noise reducer and its options.

The telecine controls may vary with the type of machine, as will any noise reducer (if available). Each of these channels can be programmed separately (see below), but, as well as these, anything that has a group key on the Transport panel also has its own list; they are not displayed as the list would become unmanageable. For example, telecine audio and neg matching (where applicable) can be programmed independently of the other groups. When any group that does not have its own indicator has an event entered this way, the visible channels will show all null events (these are events that have no effect). If the event is a dynamic, the yellow cross will not be superimposed on the thumbnail; this only happens for the five main groups.

PROGRAMMING LIST CHANNELS SEPARATELY

The default when making a list is that pressing "Add" will generate an event in every channel. However, if one of the group keys is pressed before the "Add" key, an event affecting only the channel selected by the group key will be made; there will be null events in all other channels. Once the new event is created, the selected group key will deselect itself. So, by pressing group key "Scans", then "Start Mix", and reselecting the "Scans" key before the "Add" to end the dynamic, a scan change can be programmed, but any grading information entered anywhere in the duration of the dynamic event will be applied throughout its whole length.

This process can be used to overlap different dynamic changes in each channel; e.g. colour changes can start and end at different points to scan changes; each event list for each parameter will work at whatever points are programmed.

The list window will show a series of yellow crosses on the thumbnails when programmed this way. To force a group key to stay selected, open the User Setup window and select the channel from the 'Default Group Lamps' buttons at the bottom of the window.

All events now entered will only be in the channels selected, although other group keys can still be chosen on the Transport panel to put event points in for those groups. Where different channels have overlapping dynamics, there will always be an event made at each beginning or end point for each channel. However, each consecutive event, regardless of which channel it is in, will have thumbnail with a yellow cross through it, indicating that it is part of a dynamic.

There is another instance where adjoining thumbnails will have the yellow cross indicating a dynamic on them, and that is if one dynamic event is immediately followed by another. If "Start Mix" has been followed by another "Start Mix" rather than "Add", each channel has the same start and end points (if none of the group keys are selected).

For these, the Pogle will work out the dynamic as usual, but will immediately start another one at the second (and subsequent) start points. If a trim is made in a dynamic, any changes will be applied to the end; the same is true with clustered dynamics.

The most accurate way to trim these is to park on the last frame of each event in the sequence and make any changes there; the trim will be applied to the end of the current event and the start of the next, which is the same thing. It may sometimes be helpful to press "Add" on the frame after one of the dynamic transition points, make any trims required, and then delete the extra point.

MODIFYING LIST GRADINGS
with "All", "Trim" and "Copy" (including "Up" and "Down").

Once a list has been made, it can be modified in two ways. Its contents, i.e. the grading information, can be changed; this is done with trims, by copying other events or reading notes. Or the actual events points can be altered, by moving them, deleting them or changing their type, say from cuts to dynamics. Some of these modifications are done with keystrokes, but some can only be done on the vdu. These two types of modification are dealt with separately.

As a precaution, **lists should always be saved before any use of the "All" key**; extra lists can easily be deleted, but a single incorrect keystroke, or a misunderstanding of what is being asked for, can be very time consuming.

"All" is used to select more than one event; pressing the "All' key will open a window called 'Selection' Fig. 76. At the top of this window, to the right of the label 'Telecine', are a row of channel name buttons; underneath are another row of boxes, to the right of the label 'Pixi'. This buttons can be used to select (or deselect) controls from the "All" command. The bottom row of buttons are for entering start and end event numbers, to select which events will be affected by any following actions.

The default for most modes is to change all events from the current one to the end of the list; these event numbers will be automatically entered in the start and end boxes. (The only exception is 'Delete', when "Delete" "All" will select the whole list, but "All" "Delete" will select from the current event to the end). In any other mode, a quick double press of the "All" key will immediately select the whole list.

Once the 'Selection' window is open, tapping on 'Start' will change the current event number in it to '1'; tapping again will change it back to the current event number. Tapping on 'End' will change the final event number to the current one, and tapping again will put the last event number back again. In this case, the last event number will include the live event, so will appear to be one higher than the number of events in the list. Pressing the "All" key again will close the selection window, and any selected actions will only be applied to the current event.

If there is a valid number in the numeric area, tapping on either 'Start' or 'End' will put that number in the box instead. If a number lower than that in 'Start' one is entered in the end box, nothing will happen with "Enter"; it is not possible to enter a higher number than the last event in the end box. Numbers cannot be copied from events other than the current one; tapping on either the start or end boxes will either enter a number from the numeric area, or toggle back and forth from the current event to the first or last event, as applicable.

TRIM and COPY: the difference.

When working on a single event, 'Trim' will simply alter the current grading by any offset applied with the controls; 'Copy' will take a grading from another event and show that on the current one. However, when working with more than one event by using the "All" key, the difference between the two is more complex. 'Trim' alters events by an offset; with 'All', **that same offset is applied to the events chosen**. 'Copy' will take the fixed value of an event and apply **that fixed value to the events chosen**. Technically, 'Trim' is relative and 'Copy' is absolute.

Imagine a list of five events; the first has a saturation value of 30%, and each subsequent event has an increase of 10%, so the last event has a saturation value of 70%. If a trim of 10% is made and applied to all events, the first event would now have a saturation level of 40% and the last, 80%. It would not matter which event the initial trim of 10% was made to; the effect would be the same. However, if 'Copy' were used instead, the saturation level in each event would be dependent on which event was copied.

So if event 1 were copied, every event would then have a saturation level of 30%; if event 5 were copied, it would be 70%. If any event has its saturation set to its default (50%) by resetting it, which would put the Pogle in 'Trim' mode, and then that applied to every event with the "All" key, the new values would depend on which event the reset was made. If it was the second, then the change would be +10% on all events; if it was the third, there would be no change, because event 3 already has a saturation level of 50%. Lastly, if event 5 has its saturation reduced by 40% and this applied to all other events, both events 1 and 2 will now have a saturation of 0%, as that is the minimum value.

If 'Copy' is selected and trimmed, then applied to the other events with "All", **the trimmed value of the copy will be applied to all events**. So if, from the list above, event 4, with a saturation level of 60%, is copied, then trimmed to a saturation level of 65% and copied to all the events, they would now all have a saturation level of 65%.

'Trim' and 'Copy' must be selected in the right order; if in 'Trim', any 'Copy' will remove the trim and select an event dependent on the actual copy command; whereas a copied event can be trimmed directly, although the Pogle will stay in 'Copy' mode. In 'Copy', if an event is selected, it can then be copied with the "All" key directly; it doesn't need to be entered in the list first. So "Up" "Up" "All" "All" "Scans" "Enter" will copy the scan value from two events up the list to the whole list.

'Read' is not the same as 'Copy'; if a note is read, its information cannot be applied to more than one event with the "All" key; it must be entered first, and then 'Copy' and 'All' used to transfer the grading to other events as required.

COPYING INDIVIDUAL COLOUR CHANNELS.

To copy either Mega 1, Vignette or Mega 2 channels from another event or a note, select it and then press the key representing the required corrector on the Transport panel (from the right-hand group of keys). Then select the colour or Vignette channel to copy by pressing its selector key on the SCC panel. The selected channel can then be directly copied to other events with the "All" key. Pressing the "SCC" key on the Transport panel will reselect all the colour correctors.

LAST TRIM.

This will apply the **last entered trim** to the current event. If an event has a parameter with a value of 62%, which is then trimmed to 70% and entered, pressing "Last Trim" and "Enter" on the same event will make the new value 78%. If the transport is moved to the next event, in which the same parameter value is 55%, and "Last Trim" and "Enter" are pressed, its value will become 63%. If a dynamic is trimmed at one end, the same trim can be applied to the other end this way. If several shots, intercut with others, have been balanced to match, and then each one needs to be altered by the same amount, "Last Trim" can be used. As with all such trims, how successful this is will largely depend on how much previous correction has been applied to the shots, as the effect of trims to any event with gamma correction will vary from event to event with the amount of the correction.

"Last Trim" can also be used if a trim is entered on one event, when it should have been applied to all or some of the list with "All". First, make a note of the event that has had the trim applied. Then press "Last Trim" "All "All" (or selecting events as required) and "Enter". The trim has now been applied to the selected events, and the note can be read back to reset the current event.

THE SHIFT KEY:
MODIFYING THE TIMINGS OF THE EVENT LIST.

The "Shift" key changes the actual position of events; that is, it changes the code that events happen on. "Shift" "Enter" will move the next event to the current code; "Up" "Shift" "Enter" will move the previous event to the current code. **It is not possible to move any other events this way**, as the Pogle cannot move the intervening events. If there is a number with a + or - sign in the numeric area, "Shift" will use that; "+200" "Shift" "Enter" will move the next event forward by 2 seconds.

"Shift" works with the "All" key to move more than one event. "Shift" "All" "Enter" will move all the events from the current to the last by the difference between the current code and that for the event it occurs in. "+1" "Shift" "All" "Enter" will move all the events codes from the current event to the end forward by one frame. "-1000000" "Shift" "All" "All" "Enter" will move the entire list to a code one hour lower than the current one, **as long as this will not make any of the list codes negative values**. But "Shift" "All", where the current code is negative, will allow this. Like any other use of the "All" key, the list should be saved before it is used.

DELETING LIST EVENTS.

Single events can be deleted by selecting "Delete" and "Enter"; this will delete the current event, so the grading from the next one is then applied to the current image. The previous event can be deleted with "Up" "Delete" "Enter", but it is not possible to select more than one event in each direction this way. To delete dynamic events, the fastest way is to do the same thing twice. If the transport is parked before the dynamic, "Delete" "Enter" "Delete" "Enter" will remove it; select "Up" each time if the transport is parked after the dynamic. A note should be made of each end before deleting it, or the list saved, in case information from either end of the dynamic needs to be restored.

COPYING TO EVENTS
OTHER THAN THE CURRENT ONE.

It is possible to copy from one event to others without moving the transport. Put the telecine in 'Slide' mode and other events can then be cued to instantaneously. The original event (or a note) can then be copied into it; however, the screen image will stay at the original event, as the transport itself does not move. The same technique can be used with 'Last Trim', although it should be born in mind that, generally speaking, it is not a good idea to change a grading without seeing it applied to the actual image. If configured correctly, changes could be previewed on the cached frame, if available.

ON-SCREEN MANIPULATION.

By tapping on the right part of the event type display on the vdu, ordinary events can be made dynamics, and existing dynamics can have their beginning and end points changed; scans can be changed from S-curve to linear. The side button on the pen is used for some of these functions; its use requires considerable practise. However, the right mouse button can be used instead.

To make an existing event into a dynamic, position the cursor just above the event marker in the column for the group which will have the dynamic. **The exact position of the cursor is critical**. A tap will now make the event the start point of a dynamic for that group; the end point will be the next event. Another tap in the same place will turn off the dynamic, **for all groups except scans**. A side button press, also just above the event marker, will extend any existing dynamic starting before it to finish at that event; if there are no existing dynamics in that channel, there will be no change.

Fig. 77. For scans only, tapping will step through a series of options. The first tap on an ordinary event will make a profiled dynamic event, the default type. Another tap will change this to linear at both ends; another will make the start linear and the end profiled; another will reverse that, and another will make both ends null events. As with other channels, pressing the side button above an event marker will extend any existing dynamics before it to finish at that point.
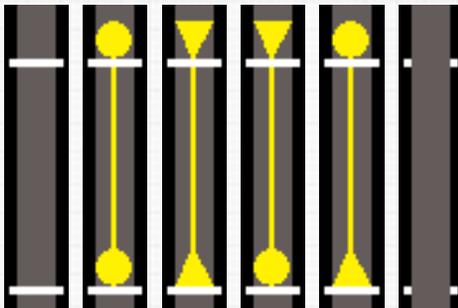
To extend a dynamic so it starts at an earlier event, first tap on the event that is to be the start point of the new dynamic; this will make two clustered dynamics. Then turn off the second one by tapping at its start point, and finally side button press at the end point to extend the dynamic to finish there.

With scans only, it is possible to make null points by tapping, which will make both ends of the dynamic null events; the other channels events cannot be turned off this way. One workaround is to program a dynamic in a channel with no actual changes, when then the other channels will then have null events in them.

MERGING LISTS.

Lists can be merged in two ways. If there is an active list, one of the options avilable in the drop-down menu for lists in the vault is: 'Merge with active list'. This option will add any event codes from the selected list to the active one; however, it will also attempt to merge grading information, so should be used carefully. If the codes don't overlap (e.g. when adding separate film rolls together) there will be no such problems.

Non-active lists can also be merged. If there is an open non-active list, dragging the icon for another list from the vault and droppping it anywhere on the list display will cause the two lists to merge.

Fig. 77

Fig. 77.5
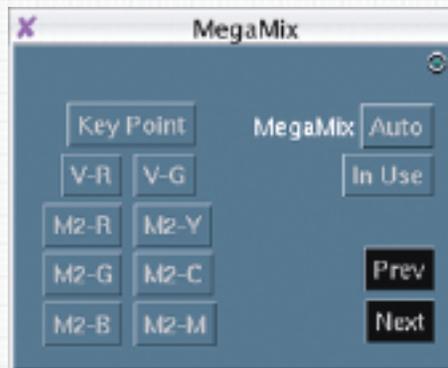
MEGAMIX.

MegaMix allows every one of the Pogles commands to be programmed individually on its own timeline. Because this represents a huge amount of data being transmitted and received, there are currently some limitations as to it's use with Unix systems. However, it does let the operator program dynamic moves for each channel at different speeds, and track erratically moving objects in a way that ordinary dynamics can't. Although designed mainly for use with discs or servers, it can be used with telecines and tape decks. The transport dynamics of both, and the positional accuracy of telecines, may well limit it's usefulness with them.

To use MegaMix, first locate and open its window from the Vault; it can be treated like any other user window Fig. 77.5.

With Unix systems, a new list must be made to contain the MegaMix events, and there must be events both before and after where the MegaMix sequence will be; warning messages will appear if this is not done. It should be possible to program MegaMix events inside normal lists with Linux systems (although the same conditions regrading lists as above apply), and the MegaMix events won't be counted in the list window, or when the list is saved.

Set the overall grade for the event as normal and press "Enter". Highlight the 'Auto' button in the MegaMix by clicking on it (the "Auto" key will not turn MegaMix on); the Pogle will now remember every parameter each time either "Play" or "Inch" key is pressed. When alterations are made the Pogle will go into 'Trim' mode but **do not press "Enter"**; the new setting will be stored automatically when a transport key is pressed. When the sequence has been finished, click on 'Auto' to turn it off; the events will then play back as normal. The Pogle will spline the points where changes were made; that is, it will smooth out the transitions as they occur.

If the 'Auto' button is not highlighted, any trims made will be applied to the whole event; if it is highlighted, the trim will be applied to the Megamix event that the altered parameters occur in. New Megamix events will be made if 'Auto' is highlighted and any of the relevant transport keys are pressed. If the Pogle is in 'Trim' and the "Enter" key is pressed, any changes will be applied to the whole of the normal event, not to the MegaMix one.

The top left button (Key Point) in the MegaMix window will be highlighted when the timecode passes any frame on which the transport keys were pressed, even if no changes were made to the Pogles settings; below it are buttons that illuminate when Vignette or Mega 2 events occur. These are currently the only separate channel indicators, although the 'Key Point' button will highlight for any change. To delete any key point, click on it when it is illuminated; individual Vignette and Mega 2 channel events can be deleted this way. The 'Prev' and 'Next' buttons will cue the deck to the previous or next key point; on the Transport panel, the small white buttons at the bottom left will do the same thing. The left button, above the "Clear" key, cues to the previous point and the right one, above the "Perform" key, the next.

To avoid entering unwanted points when programming the MegaMix sequence, use either the jog or shuttle functions to move the transport, or write macros that move it by a fixed number of frames. MegaMix lists can be saved as normal, but, for Unix systems, additional events should not be programmed before or after the sequence as this may cause a system crash.