TWO

THE POGLE PANELS

Evolution Panels Version

© Pandora International

2006
(20.01)

CHAPTER 2:
THE POGLE PANELS

CHAPTER 2:
The Pogle Panels

THE QWERTY KEYBOARD.

The qwerty keyboard directly enters text into the system area; there is a limit of 30 characters, they can be a combination of letters, numbers and symbols. Note names (and list labels) can only contain 20 characters each. Numbers entered into the text area will not carry out any command function; the separate numeric keypad, on the transport panel, must be used to enter values into the numeric window in the system area. There is a system window (called 'qwerty') which opens a virtual keyboard on the vdu, which can be used instead of the actual keyboard if preferred.

THE TRANSPORT PANEL.

Several keys on this panel Fig. 24 **require a thorough understanding of how the Pogle works, especially with regard to its use of lists; for this reason, the "Last Trim", "Copy", "Shift" and "All" keys are covered in the section on lists. This also applies to the advanced options available with the "Auto" key, which are fully covered in the section on User Setups.**

The small black buttons next to knobs and roller-balls are usually resets if the function on the knob is variable; pressing it will return the value of that control to its default value. If it is not used as a reset with a particular function, its use will be described in the text; it is sometimes a switch. The round white buttons are Macro keys. There are several keys of different types that are un-named; these are for possible future use. The black keys will be described first, starting at the bottom left.

Fig. 24
Transport Panel

TRIM.

If the Pogle is in 'Program' or 'Live' mode, and any control that will change the stored data for the current event is altered, the Pogle will go into 'Trim' mode. This is shown by the word 'Trim' appearing on a red background in the bottom centre of the vdu. Pressing the "Trim" key will put the Pogle in 'Trim Off', and it will now show the existing, stored values for the current event; press "Trim" again to see the modified version. To store the modified version in the list, press "Enter".

The Pogle must be in 'Trim', not 'Trim Off', to enter the altered grading. To remove the trim and leave the stored event unchanged, press "Clear". The "Trim" key will always toggle between the grading information stored for the current event and any selected alternatives, be they other events in the current list (or another one), or notes. The message at the bottom of the screen will again change from either 'Copy' or 'Read' to 'Copy Off' or 'Read Off', and the settings from them cannot be entered in this mode, as with 'Trim'. Copied or read information can be trimmed directly before being entered, but, in this case, the vdu will not change to 'Trim' when the 'Copy' or 'Read' is trimmed. "Trim" works with the Group keys (described later in this chapter)

If the source transport that the grading list is derived from is in 'Play' mode and inside the list (i.e. the current source code is lower than the highest code number in the list), the "Trim" key must be pressed to go into 'Trim' mode. This is to prevent accidental changes being made. It is possible to make it always necessary to press the "Trim" key to go into "Trim' mode; this is selected in the User Setup window.

ENTER.

Stores the currently displayed data in the list. **If the Pogle is in 'Trim', Copy' or 'Read' when an event boundary is crossed, the information as displayed will be carried forward,** If "Enter" is then pressed, the data will be entered on the current event, not the one on which the displayed mode was selected. "Enter" is also used to confirm some other commands, as mentioned in relevant sections.

ADD.

Will immediately generate an event at the current code, storing the currently displayed grading, regardless of what mode the Pogle is in. If a (valid) number is entered in the system numeric area, "Add" will put an event at that number instead of the current one. If the number in the numeric area is preceded by a + or - sign, an event will be entered at that distance from the current code. The two "Add" keys have exactly the same function. In 'Live', "Add" only enters points in the list; any existing grading information will be carried forward into the next event. If "Add" is pressed inside a list, the new event generated will take the currently displayed grading, and the next event will retain the grading previously stored for the event.

CLEAR.

The extreme bottom left and right-hand buttons are both "Clear". This will discard any trims, or return to program or live mode from 'Copy' and 'Read' (if either of these are being trimmed, "Clear" will return immediately to either 'Live' or 'Program'). It will also empty the system text area, and remove any host computer generated warning messages. It carries out these various functions in a fixed order, so several presses of the key may be needed to set everything back to normal and remove all messages. It first clears any host computer warnings; then the numeric area (the numeric keypad also has its own "Clear" key, which removes one charater at a time); next any text in the text area and lastly either 'Trim', 'Copy' or 'Read'. The two lower "Clear" keys have exactly the same function.

Preview and Perform (plus In, Out, Duration, Restore, Recall and Transport) are editing functions. Their function is covered in that section of this manual.

LAST TRIM. SEE NOTE AT START OF CHAPTER.

AUTO.

If fitted, will turn an external scene detector on and off; there is a box in the system area that will highlight when "Auto" is selected. To use inside an existing list, hold down the "Auto" key until the word 'Auto' in the system area appears in red. It also works with the "Trim" key to allow automatic entering (and other options) of trimmed gradings. This is covered in more detail in the section on User Setups.

NOTE.

Will make a snapshot of all the current programmable settings, and store them in the current project. If there is text in the system text area, the note will take that as a name. The number of notes that can be made is limited only by the host computers available storage.

READ.

Reads notes from the current project, in reverse time order. So the first press reads the most recent note and the next press the second most recent, and so forth. If the notes have names, and there is text in the system text area, "Read" will look for that text among the named notes first. If there are no matches, no note will be read. It basically conforms to most similar search functions; the more characters in the search box, the fewer results will be returned. If the note has a name, reading it and then pressing "Enter" will put the name in the list (see the chapter on Lists for more details) along with the grading. "Read" works with the group keys (see below).

CUE.

To send a transport to a selected code or event. If a valid code is entered into the numeric area and "Cue" is pressed, the currently selected transport will shuttle to that code and stop. Thus 01:09:10:20 "Cue" will cause the transport to go to that point. If a + or - sign is entered before a value in the numeric area, the transport will move by that amount. So if the transport is already cued to the above point, -10:00 "Cue" will then move the deck to 01:09:00:20. There is a second "Cue" key near the top of the panel; the two keys have exactly the same function.

If the source deck is selected, and "Up" or "Down" are pressed to select an event from a list, "Cue" will then send the transport to the point in that event that the "Enter" key was pressed on (the trim frame). "Up" "Up" "Up" "Cue" will send the transport back three events, but "3" "Up" "Cue" will send it to event 3. Although the Pogle doesn't usually mind in which order keys are pressed, in this instance the correct sequence must be followed.

If there is a number in the system numeric area, that is always used by any subsequent commands. "3" "Up" "Cue" will send the transport back 3 events, but "3" "Cue" "Up" will try to send it to code 00:00:00:03, as "3" "Cue" is a command; the "Up" will be ignored. "47" "Cue" will have no effect, regardless of what keys are pressed next, as 47 is not a valid frame number. If the "Alt" button (the bottom white button to the left of the transport keys) is held down as "Cue" is pressed, it will park on the last frame of the selected cue event, rather than the trim frame.

So "3" "Up" "Alt"(held down) "Cue" will stop the transport on the last frame of event 3. If an event is selected (say "3" "Up") and then a number with a + or - sign (say +400) followed by "Cue", the transport will then cue to that distance from the event; in this case 4 seconds after event 3's trim frame. "Cue" "Cue" will send the transport to its last cue point; this is shown in the transports own vdu window. "Cue" also works with "All" and some editing functions; these functions are described in detail in the appropriate sections of this manual.

UP, DOWN and COPY.

To scroll through and display gradings from the existing list in the screen direction; thus lower numbered events are reached with the "Up" key. Using either key will put the Pogle into 'Copy' mode. If a valid event number is entered in the system numeric area, "Up" or "Down" will jump straight to that event, regardless or whether it is a higher or lower event number than the current one.

They are also used with editing functions, and their application in that instance is covered on the chapter on editing. "Copy" (on the right of the panel), is similar to "Up" and "Down", but is used to select the current event. Its use for that function is described in detail in the sections on editing and lists. Throughout this manual, where 'Copy' is mentioned, **it includes any selection with the "Up" and "Down" keys**, unless specifically mentioned otherwise.

START MIX.

A mix event or dynamic will change the output from one set of values to another over its duration. The "End Mix" key currently has no special function; it works exactly like the "Add" key.

Dynamics consist of 3 events, although it might be easier to think of the actual dynamic existing inside another event (see the illustration opposite, where the long line represents the length of the shot, and the short one the dynamic itself).The first is the Start Mix point; this should be entered on the frame before that that the output needs to start changing on (although often the exact frame is not important).

If the Pogle is in 'Live', pressing "Start Mix" will immediately enter a dynamic into the list; dynamics are shown by a yellow cross in the vdu list window. If a dynamic is be be made inside an already existing list, the **"Add" key must be pressed after the "Start Mix" key**. The transport should then be moved to the point where the output should finish changing, and "Add" pressed again.

Both the Start Mix and the next Add point are best entered **before any alterations are made to the grading**, Lastly, there needs to be an another event at the end of the shot to which the dynamic has been applied; this is the normal event point, at which the grading will change to that for the next shot. Once entered, the Pogle will work out the changes that need to be made over the duration of the dynamic for the grading to be correct at each end.

The Pogle can program overlapping dynamics of different lengths in different channels (e.g. Scans and Mega 1); it will sometimes carry out this function automatically, depending on other factors (for a fuller description, see the chapter on Lists). It is for this reason that it may be easier to always program the beginning and end point of dynamics, in either 'Program' or 'Live', before making any changes to either end.

In the above example Fig. 25, event 5 ends at 01:00:13:09. The longer black line represents the whole length of the following shot; the shorter one is the dynamic. The dynamic itself (events 6 and 7) occurs between 01:00:13:13 and 01:00:16:05, and then the next event (9) starts at 01:00:16:16 (1 frame after the code shown in the list).

Whatever grading is applied to event 6 or 8, the Pogle will nearly always change gradually between the two. The only exception is when a switch control is different at one end of the dynamic event to the other, although this is unusual; where this might occur for particular controls, it will be mentioned in the relevant section of this manual. If the transport is parked inside the event (as shown in the picture), **any changes made will be applied as a trim to the end of the dynamic** (in this case, event 8).

If event 8 (the one following the end dynamic point) did not exist, the grading of what is currently event 9 would then become that at the end of the dynamic, which is why the whole shot with the dynamic in needs to have its beginning and end points marked as normal.

ALL.

Used to change more than one event at a time; its use is described in detail in the sections on editing and lists. It has its own box in the system area.

SAVE.

Will save the list as it is in the current project. If there is text in the system text area, the list will be saved with that text as the name, and the name will appear at the top of the list window. Subsequent presses of the "Save" key will save the list with the same name; **existing versions of the list with the same name will not be overwritten.**

There is also a 'Save' icon at the top of the list window on the vdu; tapping on that will have the same effect. If the icon is greyed out, it means the current version of the list is already saved; whereas a * symbol next to the name means it hasn't been saved in the current version.

VAULT.

If the Vault window is hidden from view, pressing "Vault" will automatically make it visible by putting it in front of all other windows. It is also used as a search function; see the full description of the Vault later in this manual.

DELETE.

If selected when inside a list, "Delete" and "Enter" will delete the current event. In this instance, the current event will take the grading from the next event; this is because it is the existing event that is being deleted. "Up" "Delete" "Enter" will delete the previous event, in which case it would then adopt the grading of the current one.

This will only work with one press of the "Up" key; it is not possible to scroll up more than 1 event and delete that. "Delete" "All" "Enter" will delete the entire contents of the current list, but will not close it **or give a warning that this action will remove the contents of the list without saving it;** all controls are set to their default values if a lists contents are deleted this way. "All" "Delete" "Enter" will delete from the current event to the end of the list, but leave the events before the current one. "Delete" will not work with "Down" at all. 'Delete' will appear in a box in the system area when selected.

SHIFT.

Used to move the position of events. To move the next event in the list to the current position, press "Shift" then "Enter". To move the previous event to the current position, press "Up", "Shift", "Enter". It is not possible to move one event past another one with "Shift"; "Up" "Up" "Shift" "Enter" will have no effect. "Shift" also works with "All", and with values entered on the numeric keypad. Its use is described in more detail in the section on lists.

THE NUMERIC PANEL.

Numbers entered from this panel **Fig. 26** will only appear in the System numeric area; they are used when commands involving numeric values need to be sent to the Pogle. To include a number in a file name, use those on the qwerty keyboard.

Fig. 26

When numbers are entered (a maximum of 8) they appear without any separators; if needed, + or - signs can be entered before or after the number. The 00 symbol is the same as entering two 0s one after the other; the "Clear" key at top right clears one number at a time, starting with the last one entered. (Unlike other keys with the same name, the two types of "Clear" keys on the Transport panel behave differently in this respect). To clear all the numbers in one go, use either of the "Clear" keys at the bottom of the panel. If an invalid number is entered, any subsequent command will be ignored. Thus "+1234" "Cue" will have no effect, because 34 is not a valid frame number.

The "·" is used to convert a number to feet and frames, rather than code. Whereas "+ 300" "Cue" will cue the transport forward 3 seconds, "+3·00" (which will be displayed as +3+00) "Cue" will move it forward 3 feet. If the "·" key is pressed before the number is entered, the number becomes a frame count (frames are normally represented by a + sign). Thus "-·257" (which will appear on the vdu as -+257) "Cue" will cue the transport back 257 frames.

The * symbol represents fields, and is used when moving their position in a list; it is used both when editing, and manipulating lists. See the relevant sections of this manual.

Restore, Recall, Review and Trans Lock are all editing functions, and are covered in that chapter.

BYPASS.

Will bypass all existing settings of the Pogle, and will display one stored setup. The data from "Bypass" can be entered into the current event by selecting "Bypass" then "Enter"; it will also work with the group keys. If the Pogle is in 'Live' mode and 'Bypass' is selected, any changes made will be stored as the 'Bypass' setting if "Enter" is pressed. These new settings can then be recalled at any time by selecting "Bypass".

SET COUNT.

To set the telecine counter number, enter the required counter value, press "Set Count" and "Enter". As with many other such commands, "Set Count" can be selected before or after the number has been entered in the numeric area. To offset the current value of the counter, enter "+" or "-" followed by the desired offset value in the numeric area, then press "Set Count" and "Enter". If an event in a list is selected with "Copy", "Up" or "Down", "Set Count" "Enter" will take the code from the event selected as the counter value.

So if, for example, a punch frame or any other easily recognisable frame is used to set the counter on, making an event on that frame will allow quick setting of the counter afterwards.

If no number is entered in the numeric area, pressing "Set Count" and "Enter" will set the counter to 00:00:00:00; the Pogle can count backwards from this point, and can enter events into the negative code. This key can only set the counter for telecines, not machines that have existing timecode (vtrs etc). The word 'Preset' will appear in a box in the system area when "Set Count" is selected.

The Pogle cannot remember the counter information if the film is removed from the telecine, or lifted out of the gate. If this happens, the counter needs to be checked before continuing, or events may not occur at the correct point.

There is one additional black key with no legend on it; this is for possible future use.

SHUTTLE WHEEL.

In the bottom centre of the panel is the shuttle wheel. If the white button above and to its right is pressed, the wheel acts as a shuttle control, if the button above and to the left is pressed, it acts as a jog control. How well any particular transport works with the wheel is dependent on that transports own characteristics; discs normally jog well, but shuttle badly, and telecine control from the wheel is sometimes erratic.

MACROS.

There are macro keys (the round white buttons) on each panel. These are used to store sequences of key presses; some of them are pre-programmed. Their use is covered in the chapter User Setups. Several of those on the Transport panel have dedicated functions assigned to them, and should not be reprogrammed; their use is described here.

ALT KEY.

The white button nearest to the bottom left of the shuttle wheel. When it is held down and either the play or reverse transport key is pressed, the currently selected transport will then move at about 20% of its play speed in that direction; if it is held down and the key pressed twice, the transport will now shuttle in that direction at about 5 times its play speed.

This is useful for tape decks with very high shuttle speeds. The "Alt" key is also used to switch transports between their various editing modes. Holding it down and pressing a transport control will step through the different modes available. Telecines can be either wild (ignored by any editing commands) or players; tape machines and discs can be either wild, players or recorders; to make a machine a recorder, hold down the "Alt" key and make a quick double press of the transport key for the that deck (this only works in the machine is currently in 'Wild' mode).

If a transport that normally moves a field at a time is selected, holding down "Alt" and pressing an inch key will move it one frame in the selected direction. The "Alt" key works with several other functions, so its position should be remembered.

CONTROL KEY.

The white button nearest the bottom right of the wheel. This works in conjunction with the orange sub-panel (see below) and the transport controls; holding it down and selecting a transport button will switch that transport from EE to Playback (this depends on the local machine settings).

RACKING KEYS (Telecine framing and Focus).

The two white buttons near the top of the panel, between the two sets of larger white keys, are the telecine racking (or framing).

The left is rack down and the right is rack up. **The Pogle does not store the values set from these keys.** Generally, they are not needed with 35mm film; with Spirit and Shadow telecines, they should not be used at all (use the scan controls to alter the framing if needed).

They are also used as focus controls with some telecines; holding down the "Shift" key (on the qwerty keyboard) and a racking key will drive the mechanical focus of Spirit and Shadow telecines. The extremely slow response of the machine to these controls may make it difficult to use this way. As above, the value of this function is not stored by the Pogle.

THE GROUP KEYS.

These keys are used to select channels for copying; keys with the same name on the SCC Panel are used to select control of the colour correctors.

Across the middle of the panel are three groups of small white keys, which can be illuminated. The outer two sets of 6 are the group keys. These represent the various channels being controlled by the Pogle. They can be used to select or deselect groups of controls; they work with "Trim", "Copy", "Read" and "Bypass". For instance, imagine two events, say 5 and 7, which have different grading and scan information. If the list is on event 7, selecting "Up" "Up" (or "5" "Up") will display all the information from event 5, including the scans; all the group keys will be illuminated.

By pressing the "Scan" key, it is now selected, so the **scan information only** from event 5 is displayed; alternatively, pressing the "Scan" key again and then the "SCC" keys will now show the current grading of event 5 (assuming that the telecines own controls were not used for grading) with the scan information of event 7. To store this combination as the new setting for event 7, press "Enter"; or press "Clear" to return to the current stored parameters.

The groups are (from the left):

PRIMARY: the telecines own colour balance settings (excluding neg matching);

SCANS: the scan (size and position) information of the telecine.

UTILITY: varies slightly with the telecine type, but normally contains tk speed and aperture corrector values.

NOISE: the settings for an external noise reducer, if fitted (the Thomson Scream is not supported as a noise reducer).

ALL: to deselect or reselect all the groups.

The six buttons on the right allow selection or deselection of various Pixi channels, as follows:

SCC: turns all colour channels on or off.
P1: Moore Mega1 Primary ;
M1: Moore Mega1 secondary;
V1: Vignette Card;
M2: Mega 2.

Any of the above can be selected or deselected by pressing the appropriate key. The two blank keys (1 in each group of 6) are for possible future use.

TRANSPORT CONTROL SELECTOR KEYS.

The five keys across the middle select which machine will be controlled by the transport controls. If illuminated green, it means a machine is attached to that port, and is either a player or wild. If red, it means the machine is a recorder; see the chapter on editing for a full description of these functions. The currently selected machine will be more brightly illuminated than the others.

The code type as displayed in the vdu list window can be changed (if the source is a telecine) by holding down the telecine transport key for a couple of seconds. It will toggle to each type of display in turn. If the User Setup window is open when this is done, the 'List Display' button will change to show the selected code display type, and closing the window will store that as the default display type.

THE ORANGE SUB-PANEL.

The 8 large white keys, and the eight black knobs and reset buttons to their right, will be referred to as the orange sub-panel Fig. 27, as the display for the knob functions is orange. To distinguish this from the similar (but positionally reversed) display on the SCC panel, that will usually be referred to as the the orange display (SCC), except where references to it are obvious.

Fig. 27

The 8 white keys are for selecting which functions will be controlled by the knobs; the top 4 have preset controls assigned to them. They are: Scans (for telecines); when this is illuminated, the telecines scan controls will appear on the display (the actual controls available will vary with the telecine type and options). The values displayed in the telecine window will also vary with telecine type; the default setting may not be 50%.

The same is true of the other 3 keys; the exact type of control assigned will vary with system configuration. "Noise" is for any external noise reducer (the Thomson Scream is not supported as a Noise Reducer); "Utility" is for various telecine functions not included in other control groups, and "Neg" will be different for tube and line array types of telecine.

If the button for any fully variable control is tapped on on the vdu, it will then be assigned to one of the knobs by the raised display, and its abbreviated name will appear by the knob. Some functions are part of a group of controls, and tapping one will assign all the controls in that group to knobs. The small black buttons next to each knob will always reset whichever control is assigned to that knob to its default value. If a control has its own dedicated knob, it can still be assigned to the orange sub-panel, and its own, normal control knob will continue to function. This is useful if building a group of controls, which can then be stored, as described in the next paragraph.

When a variable control is tapped on in a window, the lower right white key (4) will become illuminated. Position 4 is a temporary position for new controls as they are assigned. Each tap on a control will put it in the next position on the raised display; when all 8 positions are full, any new control will then appear at the top left, overwriting the existing one.

Once groups of controls have been assigned to white key 4, they can be saved into any of the other positions, by holding down the key until it blinks. **These groups of controls are saved by user**, so each user can have 7 sets of preset controls on the orange panel. To return the top 4 keys to their factory presets, hold down "Alt" key and press the appropriate key; this will re-assign that key to its normal function. It can then be made to always have its preset function on it again by holding down the selected key for a couple of seconds.

The controls on the orange display can be ganged together by use of either the "Alt" or "Control" keys. If the "Alt" key is held down and the rightmost upper or lower knob is turned, all the controls currently on that row (across the display) will be varied by the same amount. As groups of RGB controls are normally assigned from the left to the right, the third from left knob (usually the B channel control for RGB groups) will also adjust the three controls (itself and the two to its left).

This only works with the rightmost two knobs, and if there is a function assigned to them. If the "Control" key is held down and any knob adjusted, the one above or below it will vary by the same amount. **Using these keys is the only way to gang different controls**. Pressing any one of the white keys once will temporarily remove control from the raised display; another press will return them to whichever keys function was selected.

All the controls that use knobs, and the roller-balls, are velocity sensitive; the faster they are moved, the more effect they have. This may sometimes account for apparent differences in control sensitivities.

THE ROLLER-BALL PANEL Fig. 28.

Fig. 28

Most of the panel is occupied by the tablet; if a pen is not being used, the tablet can be used as a mouse pad. The roller-balls control the primary balance of the selected colour corrector (where applicable); they are illuminated with different colours depending on which corrector is currently selected. Green is for telecine control; red is for Mega 1 Primary; violet is for Mega 1 secondary (the roller-balls themselves have no function in this mode); blue for Vignette Card and and orange is for Mega 2.

The outer ring of each ball controls the master value, and the ball itself the balance between the colours. The left ball is for the blacks or lifts, the right the whites or gains, and the centre the gamma or mid tones. The Pandora correctors emulate the behaviour of telecine channels, in that there is a natural interaction between each of these controls.

Their responsiveness is set in the 'User Setup' window. Next to each ball is a black reset button; the first press of it will reset the colour balance back to its default setting, and a double press will reset both the balance and master. If any of these buttons is held down for about 2 seconds, all the roller-balls are returned to their default settings. If the cursor is placed over a roller-ball icon on the vdu and tapped, control of it will be assigned to the orange sub-panel, although the roller-ball will continue to function as normal.

Above the gamma roller-ball are two white macro keys. If used with a tube type telecine, and with the telecines own colour controls selected (i.e. with the roller-balls illuminated green), the left-hand key will toggle the centre roller-ball between controlling the telecine gamma, when it will be illuminated green, and the PEC levels, when it will be red.

The three black knobs at the top of the panel control (from left to right) the hue, saturation and luminance levels **at the output of the selected colour corrector** (where applicable; see the sections on each colour corrector). Each one has its own reset button.

Across the top of the panel are two sets of macro keys. These are pre-programmed; those on the left switch between the colour channel of the active corrector, while those on the right select the different correctors. These functions are duplicates of those on the SCC panel itself, and can be over-written by other macro sequences, as described later in the manual. This manual always assumes the keys on the SCC panel will be used (although those on the roller-ball panel can used if preferred).

Like all the knobs, the roller-balls are velocity sensitive. The faster they are moved, the more effect they will have; this may sometimes account for apparent differences in their sensitivity.

THE SCC PANEL Fig. 29.

Fig. 29

The track-balls function varies slightly depending on which colour corrector is active; it will be described in detail in the chapters on each corrector. The black button above and to the left, and white one to the right, are dedicated to the track-ball, and alter its operational mode.

The six large white keys across the bottom select the channel of the active corrector. Although labelled R,G, B, Y, C and M, (for Red, Green ect), these should only be regarded as names, as any colour correction channel can be rotated through 360 degrees to work on any colour. The row of keys above vary in function depending on the current colour corrector; they will be described in detail in the relevant chapters. The basic functions are as follows.

The left-most will switch a colour channel between working inside (not illuminated) or outside (illuminated blue) its shape. The second and thirds keys currently have no function, and are for possible future use. The fourth key (on the immediate right of the track-ball) is Mega 2's Mask function; Show, the fifth key, works with all correctors, to show which areas will be affected by the output controls, and the last key, Expand, will make the current colour channel include all the picture in its selection.

Above these keys are 6 macro keys. The left-hand one (above the R key) **is pre-programmed to be the same as the Shift key on the Qwerty keyboard,** which is used for several different functions. The other keys can be programmed as required.

Across the middle of the panel are three sets of smaller, square white keys. At present, only the group on the right is used, for switching between the colour correctors. They select, from the left: telecine (for the telecines own internal controls); Mega 1 Primaries; Mega 1 secondaries; Vignette Card; Mega 2 and Primary 2 (this may not be labelled). The other two rows of these keys can be programmed as macros.

As the different colour correctors are selected, the functions on the knobs at the top of the panel change accordingly. The eight knobs next to the raised orange display will have the (usually abbreviated) function name shown on the display. For some of these functions, the small black buttons act as switches, not reset buttons; these will be mentioned in the relevant chapters.

The three rows of three knobs at the top right of the panel will have their function displayed in the small panel to their left; the reset for each knob is the appropriate button below that display. The track-ball controls the position of any shape made by any of the different channels, but it works differently with Mega 2 to the other correctors. A full description how to use it with Mega 2 is given in the Mega 2 chapter. The track-ball will be illuminated the same colour as the roller-balls as the colour corrector is changed.