ETC Express Basics
Refer to User's Manual for more detailed information

Basic Operation: The switch on all Express boards is located directly under the light on the right side. Also make sure the monitor is connected and turned on. The various models of the Express have different numbers of sliders and submasters, but they all use the same software interface and have similar controls and capabilities.

After the board is turned on, be sure that the grandmaster is up at 100%. If it is not, the board will adjust the intensity of each channel proportionally. If you experience difficulty bringing up channels, ensure that they are patched correctly, that the DMX cable is securely connected to the board, and that the dimmer rack is powered. Finally, check the fixture and see if a burned out lamp is the problem.

Setting The Clock: While it is not a critical function for running a basic show, some find it nice to monitor the passing of time during a show. Fortunately, setting the clock on the Express line of consoles is much less complicated (or so it seems) than doing so on a VCR. Press "Setup", "14" and "Enter" to access the clock menu. Entering the longitude/latitude and time zone of your location is optional, and will give an extremely inaccurate estimate of sunrise and sunset times.

Patching: Hit the "Patch" key, located in the top row of keys on the keypad. A listing of all the current patchings will be displayed. Unless a patch already exists or a show has been loaded from disk, the board will show a default 1-to-1 patch. To unpatch a dimmer, press the "DIM" key and the dimmer number, then "S6" (Unpatch).

To patch a dimmer into a channel, press "DIM", the dimmer/circuit number, "ENTER", and the desired channel number. The board should automatically select the correct unit (Dimmer/Channel), but if it does not, press the corresponding key. You cannot patch a dimmer into more than one channel. As an alternative with similar results, use a submaster or group.

Bringing Up Channels: There are a number of ways to bring up a channel, including using a submaster or group. To bring up a single channel, use the slider or keypad. To bring up a channel using the keypad, press "Chan" and the desired channel number. Pressing "Enter" or "At" will allow you to specify a level for the channel. For 100%, press the full key. The track pad (the top button to the left of the pad sets coarse adjustment, the bottom fine) can also be used to make adjustments to the selected channels.

Bringing up a channel using the keypad (for a single channel or group) will override the channel's current level displayed on the screen. This level is displayed in red. Using a submaster or channel slider will only alter the channel level if the slider is brought up to a level greater than the current level. This level is displayed in yellow. To take out a channel that you brought up using the keypad, type the channel number and then "Rel" to release it. Pressing this button twice will release all channels not defined by a slider, submaster or cue preset.

Submasters: Submasters can be used to bring up multiple channels at the same time. You can specify a desired level for each channel, and the board will raise the level proportionally to the submaster's overall level. A submaster can be recorded in either the "Stage" or "Blind" mode. Submasters are useful for grouping lights or making it easy to access a preset, where using a cue doesn't make sense. (Such as the preset before the house opens, or for work lighting)

Bring the channels up to their desired levels, then press "Record", "Sub", and the submaster number you want. Submasters can only be brought up using the sliders for this purpose. On the Express 24/48, the submasters are the second row of sliders (but only if the board is the "One Scene with Subs" mode). If a submaster is recorded, the green LED on its bump key will be lit. Channels can be recorded into multiple submasters.

Groups: Groups are similar to submasters, but are not represented with a slider. Record a group in the same manner as a submaster, using the "Group" key instead of the "Sub" key. Groups can only be brought up using the "Group" key, and then "Enter" or "At" to enter the desired level. Groups are useful for recording cues, where a cluster of channels will often be used together. Channels can be recorded into multiple groups, without affecting single-channel operation.

Recording Cues: To write a cue, bring all channels (or bring all channels down to record a blackout) to their desired levels. Remember that using the keypad to set an individual channel's level will override a cue preset, group, submaster or slider. Then press "Record", the desired cue number and "Enter." The board should automatically select the "Cue" unit when you hit "Record." For each cue you record, you can specify the upfade and downfade times. If you do not, pressing enter when prompted will use the default value.

Cues can be recorded from cue 0.9 to 999.9, but the board's memory will only hold 600 cues. For shows that require more than 600 cues, save the parts of your show to a disk, and load each disk during intermission or other such break.

"Stage" Mode: The default mode. The channels and levels displayed on screen are the actual levels being sent to the dimmers/fixtures.

"Blind" Mode: Blind mode allows you to edit submasters, groups or cues without affecting the output on stage. Any changes made here will not immediately show up on stage, but will take effect the next time you run the cue, or use the submaster/group.

Show Backup/Running Multiple Shows: The Express line of consoles is equipped with a 3.5" floppy disk drive. Use only 1.44MB High-Density disks, with the write-protect tab disabled. To enable you to use Expression Off-Line on your PC, all disks must be formatted for DOS. To format a disk, press "Setup", "3", "Enter", "4", "Enter." If a show is recorded on the disk, its name and/or timestamp will be displayed onscreen. Press "Enter" again to confirm that you want to format the disk. Formatting will erase all data currently on the disk.

To save a show to disk, press "Setup", "3", "Enter", "1", "Enter". If a show is already recorded on the disk you insert, its name and/or timestamp will be displayed onscreen. Press "Enter" again to confirm that you want to overwrite the show on the disk. To load a show from disk, press "Setup", "3", "Enter", "2". The name of the show on the disk and/or its timestamp will be displayed on screen. Press "Enter" to confirm that you want to overwrite the show recorded in the board's memory. Using option 3 instead of 2 when loading a show will also load the system configuration saved on the disk.

For shows that require more than 600 cues, save each part of the show to a different disk. Load the next disk during intermission or during another convenient break. Loading a show from disk will not affect the current cue or levels onstage, unless the patch list in the show you are loading is different. Saving a second backup copy is a good idea, in case your primary disk is lost, used by someone else, or if the disk goes bad.

Running Cues: For a board in one scene mode (default), you must use the "Go" button to move between cues. The board will default to the first recorded cue when you turn it on or load a show, and will run in successive order. To go to a specific cue, type "Cue" and the desired cue number. Use only one of the "Go" buttons (The one paired with Fader A/B by default) at a time; using both will cause your cues to pile up on top of each other. A channel level in purple indicates that the level has not changed since the last cue. A level in green indicates that the level has changed, or is currently changing. Hitting "Clear" will get out of the current cue, and go to blackout unless channels are brought up by other means.

Light Check: The easiest way to do a light check is with the channel sliders. It is OK to bring the grandmaster down to 80%, to prevent excessive strain on the lighting instruments. Perform a light check in the desired manner, but be sure to bring the grandmaster back up to 100% before running a show or checking fixtures and accessories that use a raw DMX level for control (such as moving lights and color scrollers).

Manual Board Operation: For concerts or other single-run shows where writing cues is not necessary, it is easier to run the board using the sliders and manual crossfader. The downside to this is that manual operation will appear fluid when in the transition between scenes. To put the board into two-scene mode, press "Setup", "1", "Enter", "15", "Enter", "2". For the Express 24/48, two-scene mode is option 3. The Express 125 and 250 do not allow for manual two-scene operation.

Now you may use the two rows of channel sliders to create your scene. Fading between the two scenes is achieved with the crossfader sliders. The left slider is the downfader; the right is upfader. When moved together, they will switch between the two scenes. You can experiment with timing by running one faster than the other. Only use one pair of crossfader sliders (usually A/B) at a time. Using both will cause your scenes to pile-up on top of each other.
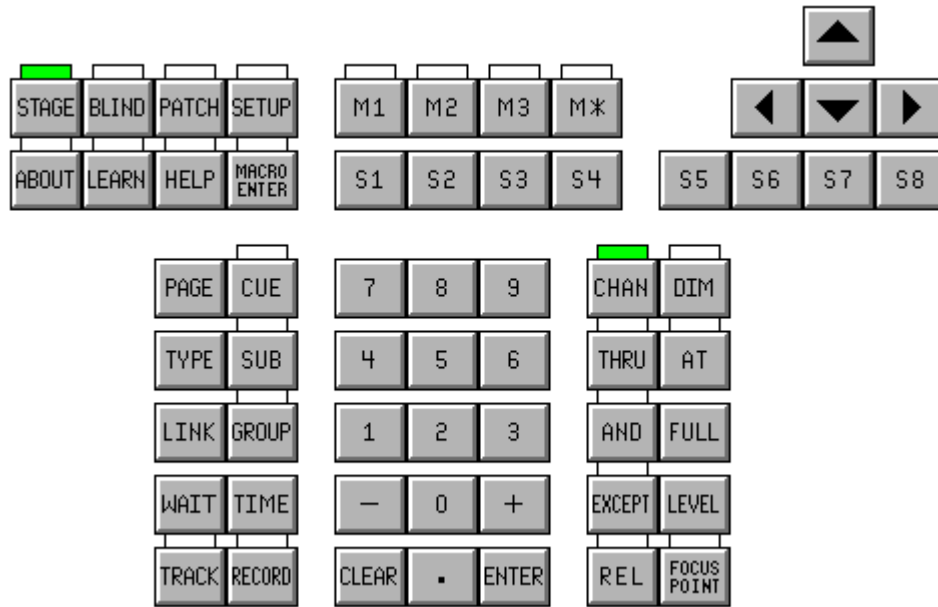
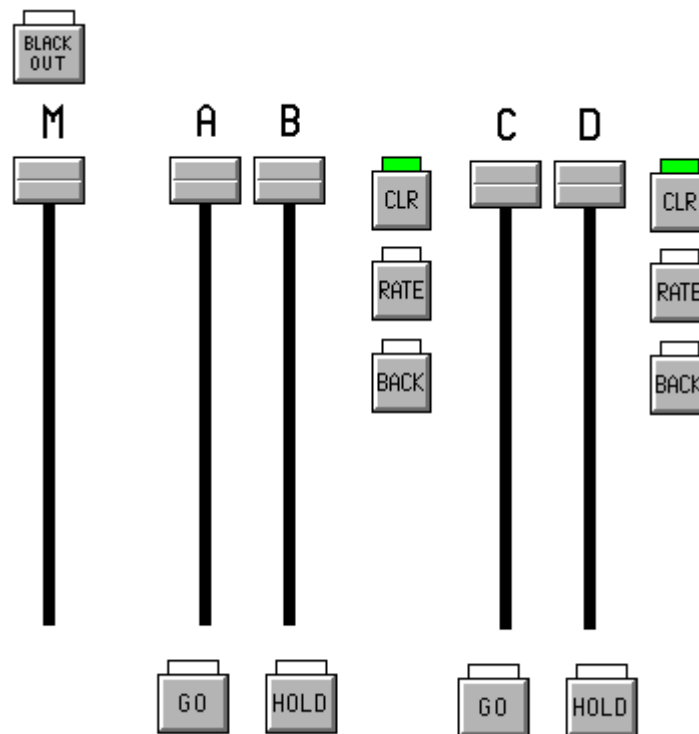**Figure 1: Layout of the Express keypad.**

Figure 2: Layout of the Crossfaders

(Images Courtesy of ETC Expression Offline 3.1)

Written by Greg Bennett, 2/14/03. Contact info and PDF available online at:
http://www.hsiprodsvcs.com/
Distribute freely, but please keep everything intact!