

**Product Line:** Express  
**Description:** System and Remote Interface software, Version 3.02  
**Engineering Change Order (ECO):** 4202  
**Effective Date:** July 2, 1998

Version 3.02 system software supersedes versions 2.0 and 3.01 system software for consoles and remote interface units in the Express family, which includes the 125, 250, 24/48, 48/96 and 72/144 consoles.

Version 3.02 software code corrects a number of software problems that existed in version 3.01 code (see *Problems corrected in version 3.02*, below). Version 3.02 also adds a new feature, live effects recording, to those made available in version 3.01 code.

This 3.02 upgrade is available in a kit or can be download from the ETC website. The kit contains not only 3.02 system software but also the Expression Personality Editor and a key cap modification to re-label the solo key. Install all software in accordance with the associated installation documents after first making sure that your system meets the compatibility requirements specified below.

## Contents of this ECO release

1. Express console software - 1 diskette labeled: *Express Version 3.02 Software*
2. Express Remote Interface software - 1 diskette labeled: *Express Version 3.02 Remote Interface*
3. These Software Release Notes
4. Installation Instructions (P/N 4131L1008)

## New kit available

Upgrade kit number 4110S1004 is also being released under this ECO. This kit contains the **Contents of the ECO release**, identified above, and the following items:

1. Paper copy of the Expression User Manual Supplement
2. Personality program and its online help file - 1 diskette labeled: *Expression Version 1.0 Personality Editor*. This diskette also contains a computer-readable version of the Expression User Manual Supplement (.pdf extension) and personality files (.prs extension).
3. Expression Personality Editor QuickGuide, Version 1.0 (paper copy)
4. New Feature Announcement (NFA): Live Effects Recording (P/N 4131L1009)

## Compatibility requirements

Express systems upgraded to version 3.02 software require:

- Version 1.8 console software or later
- Version 1.02 boot EPROM or later
- Sensor CEM software version 2.14 or later for ETCLink support

## New features and enhancements in 3.02

Version 3.02 is improved over version 2.0 as follows:

- 24/48 console increased to 96 channels
- 48/96 console increased to 192 channels
- 72/144 console increased to 240 channels
- Astro clock is supported
- Dimmer profiles can be edited
- European dimmer rack support
- Spreadsheets
- Focus points
- LTP (latest take precedence) channels are supported
- 16-Bit fades
- Moving light patch
- Increased channel counts on most consoles
- Expanded effects, including live effects recording
- Selective recall
- Channel mode, submaster solo mode and two scene mode are now stored with the show

## Problems corrected in version 3.02

A-002900	A macro printout will not show region or power up macros.
A-002939	Focus Points fail to print
B-000008	Effects display can fail
B-000080	Sneaking groups that contain certain channel levels will lock the console up.
B-000081	Selecting a non-existing cue in spreadsheet can cause a lockup.
B-000082	Flexi-channel mode will fail to show all channels.
B-000083	The Y-Rate wheel will switch to X-Rate if X/Y is deleted from Encoder setup.
B-000084	Selecting a new cue from blind effects does not reset the softkey bank.
B-000111	Effect cues are truncated to 10 steps and not saved to disk.

## Problems corrected in version 3.01

A-001221	Group [nn] wheel up to any level then press [At]. Results in the upper window showing a level of 0. Press + level jumps to 0 and upper window shows level 1. At - and level jumps to 0 and shows 0 in upper window.
A-001339	Out of Memory Message needs to be added. When you record cues after the memory limit it appears to record the cues but they will not run and they disappear when you cycle power.
A-001455	Roll a Channel up on the wheel at 60% and the prompt will display 59%.
A-001575	Release after Link doesn't release both channels. It captures the second or linked channel.
A-001781	In patch, the [Show Labels] button does not apply.
A-001782	When running a loop of cues, press [Hold] and make some changes. The record operation cancels the hold. You cannot continue the loop.
A-001800	When editing or creating a real time event you must exit the Real Time Program display before shutting off the power to the console. Events are only saved when you exit the display.
A-001801	If you accidentally hit the wrong # of Macro when recording a Macro you cannot enter [Clear] and must either re-enter the Macro or press 0 several times.

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## SOFTWARE RELEASE NOTES

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- A-001802 In Express, The "Position" softkey help message is spelled "postion" in one occurrence.
- A-001816 Cue 1 is channel 1-10 @ 40. Group 1 is channel 4 & 5 @ FF. [Cue 1][Go A/B] [Channel 2-10] [Group 1]. Results: Channel 2 is highlighted in addition to channels 4 & 5.
- A-001818 If the first cue recorded in the show is an effect, you cannot record any Part cues.
- A-001820 Submaster bumps set to Solo should hold if Wait is set to Hold. Currently runs as Manual regardless of setting.
- A-001893 With no Groups recorded, Press [Channel][n][At][n], [Record][Group]
- A-001899 Effect: press [S1] (step) [N] [Enter] [Group] [Cue], since [Cue] is ignored, its LED should not turn on.
- A-002034 Set a cue type as an allfade, in a previous cue take a channel that is at 00, set it to a level, Track Record, Go back and edit that same cue (previous to the Allfade) change the same Channel to another level, Track Record. Result: The 1st level the channel was set to is now tracked into the Allfade cue.
- A-002043 Channels that are put into the default part run in the time set for Part 4, instead of the time for Part 8.
- A-002044 Set the Console for X number of channels and Y number of dimmers, clear show and patch, patch is reset 1:1 and channels and dimmers are reset to their maximum number, you cannot bring any channels greater than X to a level, reset number of channels and dimmers to the same maximum number they are set for and all is OK.
- A-002049 Record a small show with some groups. If you go into flexichannel mode, you end up with some extra channels that are not used anywhere.
- A-002054 Express only - Off Trigger Help Message says "Turn on a Remote Device".
- A-002056 If you use track record to modify a cue, you lose all parts except part 8 which it forces to a 0 count. You then need to delete the cue and start over because it cannot be rebuilt.
- A-002400 Track through a allfade cue with 5 cues written and cue 5 is an allfade. In cue 2 change channel 12, which has not been used yet, to 50%. [Track Cue][2][Enter]. Check cue 5 and channel 12 is at 0%. Go back to cue 2, change channel 12 to 75% and track cue 2. Check cue 5 and channel 12 shows up at 50%. It will change to the previous level if you change that channel again and track it.
- A-002776 Learn a macro from the [Setup] display: If you do not press [Stage] and learn the macro within setup, your operations are recorded, but the display is in mode 0 and gets confused and doesn't take you into the setup menus.
- A-002789 In the sub list]display, there is a problem toggling the dwell time between [Hold] and [Manual].
- A-002794 Background Overrides - In [Stage], any channel level in background will disappear as soon as you press [Background Overrides].
- A-002795 Full Tracking Backup tracking - If you start both consoles and switch to the B unit before pressing [Clear] for the beta software message, the A unit will not respond to any key hits. The message also will not come up on the unit B, only A.
- A-002881 You cannot select a fixture and a focus point without grabbing all channels the focus point uses.
- A-002892 Channels come in by column with effects set at focus point 0. If you have 100 channels that wrap around on 5 steps all set at focus point 0, the first column will run all channels at incoming DMX 1. The second column will run all channels at incoming DMX 2, and so on.
- A-002893 You cannot delete any cues in spreadsheet while tracking is engaged.
- A-002896 The background overrides help message is misspelled "Completes".
- A-002897 Profile 0 can be edited using the [Full] or [Level] keys.
- A-002898 When inserting a subroutine step on top of a [Hold for Go] style step, the insertion writes over the existing step.

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- A-002899 If your stage look is written on one submaster and you try to update the look, it clears out all levels set by the submaster on stage.
- A-002902 A stage display printout will not display focus points and can bring up arbitrary focus points and levels.
- A-002903 If you create link 52 or above, it becomes impossible to add channels to that link.
- A-002904 Record lockout has no effect on editing profiles.
- A-002905 If you [Track] record a cue in [Stage] or [Blind] of a 100 cue show, there is a long delay that halts the system. This causes Full Tracking Backup to fail.
- A-002906 When the user modifies a existing personality in Off-Line, then loads it into the show with a fixture already patched with the same personality name, the modified personality is not updated.
- A-002907 When writing a sub effect, the [Add Channels] softkey is not on the first page.
- A-002910 When programming a effect cue in blind, pressing [About] [Channel] [1] will wipe out effect steps. If the user presses [Clear] they will still not be able to view or create new steps until [Cue] is pressed.  
Result: "Group Recorded" message flashes until you press [n].

### **Problems remaining in version 3.02**

- B-000072 The trackpad X-Y position link is disabled.
- B-000077 Effect Steps should not track into cues.
- B-000085 Adding a group cue with a decimal to an effect will not work.
- B-000086 Setting groups w/ focus points at levels less than full doesn't work.
- B-000087 Part 1 is only allowed to be updated from stage.
- B-000088 Selecting Fixtures using [Thru] can bring up undefined fixtures
- B-000089 Focus Points used in effects are incorrectly tracking.
- B-000090 After canceling an effect cue, recording the next step causes the cue to run.
- B-000091 Bringing in focus point references for Groups and Subs in Spreadsheet doesn't work.
- B-000093 Updating a cue causes the next cue in the list to be itself.
- B-000094 Purge Flexi can cause memory error.
- B-000095 Focus points are arbitrarily copied into cues when changing type in cue list.
- B-000096 The user cannot select fixtures using [Thru][+] in Solo mode.
- B-000097 Focus point at zero track differently in Flexi-channel mode
- B-000100 Non-existing focus points will bring up channels
- B-000101 Except Group will not work with Unpark.
- B-000103 Creating a focus point using Solo in Flexi-Mode will fail to display channels.
- B-000106 The Mac500 and Mac600 have incorrectly flipped bits.
- B-000107 Effect Sub softkeys can lockup when using [+] or [-].
- B-000108 ML fixtures can be patched with no dimmers left on the port.
- B-000109 The wrong softkey bank is displayed in blind..
- B-000110 Going through numerous channels in tracksheet may cause a system lockup.
- A-000517 If you press keys [7] and [8] on the RFU together, all of the keypad LEDs go out. If you press [7] and [9], most of the LEDs come on.
- A-000800 Insight submaster LEDs do not always properly initialize on power-up. Random LEDs turn on, including both LEDs set at the same time.
- A-000844 MIDI devices that constantly transmit running status can overload the console and face panel communications.
- A-000846 Recording an effect with no steps causes it to act like a crossfade cue and display random channels levels when executed.

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- A-000983 Macros are not synchronized between tracking consoles. May terminate in different places.
- A-001069 ETCLink - Never see the Non-AF Rack message on the console when trying to record loads on a Non-AF rack. CEM 2.1. Message appears on CEM.
- A-001073 ETCLink - messages clear with any button press. Easy to miss. Messages use the keystroke to clear the ETCLink message but do not do the action. In a system with a lot of error messages you cannot get anything done. You must unplug ETCLink and then turn it off.
- A-001089 ETCLink with CEM 2.04 reports all racks with Advanced Features. Problem is in CEM code.
- A-001090 ETCLink problem with recording loads. Dimmer list from console may be strange. Reported in 1.6.
- A-001097 Remote Video Interfaces lose a Net Packet during disk operations.
- A-001140 MIDI Show Control sending several MSC non-system commands and one lighting command overloads the buffer and causes the console to execute the wrong command. Several pyro commands and Go123 execute a Hold or a Go on 124. Recovers without locking up.
- A-001142 Erroneous DMX512 signals sent out at shutdown, and sometimes lights are left on or brought up if dimmers hold last look. Happens once every 10-20 shutdowns.
- A-001178 MIDI/MSC - Firing a macro that has Go in it also sends out the Go.
- A-001247 If you capture channels using [+] or [-] with [And] or [Thru], then press [Channel] again, it does not release the [And] or [Thru].
- A-001335 ETCLink Errors System Status sometimes clears errors and updates the display and sometimes doesn't.
- A-001422 ETCLink time out message appears in System status/Dimmer status but not in Rack status or Load status without ETCLink connected.
- A-001432 You can get submasters 50 and 51 stuck on when doing a learn macro submaster bump. 51 is not even in the macro.
- A-001433 ETCLink - Sometimes the console holds in waiting for data does not time out or lock up but the ETCLink information does not come back until you cycle power on the console. Usually after a CEM reset.
- A-001435 ETCLink Changing a CEM address does not update dimmer information stored in the console.
- A-001450 Booting up an Expression console with ETCLink will send back a No DMX message.
- A-001453 Record cue 4, run in A/B fader, press [Enter] three times and all channels change to the level that the highest channel is at.
- A-001457 You can put a subroutine in a subroutine but it stops the cue when it reaches that step.
- A-001482 Printout - Top two border lines are missing from page 2 on Sub List.
- A-001483 ETCLink Multiplex B dimmers will not set. (CEM 2.04).
- A-001484 ETCLink - No message back to the console when a load is OK again. (CEM 2.04)
- A-001485 Load check does something but does not seem to find dimmer load errors. (CEM 2.04).
- A-001486 ETCLink reported a load change error from 0W to -10W. (CEM 2.04).
- A-001487 ETCLink - Clear loads from the console. Dimmers still highlighted as if they had a load error in the Dimmer Status display. CEM still displayed the load error. The loads were erased from the Dimmer Status display. Load errors were erased from the Load Management display. (CEM 2.04).
- A-001495 LPC /ETCLink - If Rack 1 is off-line it is impossible to get rack information with the face panel.
- A-001500 LPC Submaster bump button - if you change rate with the arrow keys, it does not appear on monitor upper right window, but does appear on the LPC's LCD display and on monitor bottom bar.

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- A-001507 When releasing parked dimmers, DMX Port A fails but then returns to normal.
- A-001511 ETCLink/Tracking - Sometimes gets out of sync. Master - No Errors, Slave - Errors.
- A-001513 No error message with ETCLink set/unset dimmer.
- A-001514 ETCLink Load Check in progress on Master but not Slave.
- A-001517 An ETCLink record loads message does not show up on another console at a different address, even though that console can't do anything until the record loads is finished.
- A-001518 ETCLink/Tracking can get two Record Backup Look Complete messages on the console it was done on.
- A-001526 ETCLink console reports Look Complete before the five second fade is complete.
- A-001534 MIDI - Non-programmed submaster sends out a Note-On message but not a Note-Off message. A timed submaster running sends no Note-Off.
- A-001611 Help message for Record Loads " Requires Dimmers be set at level." We also allow a list which is much easier to use.
- A-001676 Cycle power on MIDI sending gear may send out a signal that causes the Expression 2x to ignore MIDI until the you cycle power on the console.
- A-001754 When in dimmer monitoring, the switch mode level of a fluorescent dimmer appears as a boost value.
- A-001785 There is no "Out of Memory" message for groups.
- A-001786 The Dimmer Check box will clear with most key presses.
- A-001787 Using [Except] when selecting cues in tracksheet causes the previously selected cues to be released. [And] and [Thru] do not get you out of [Except].
- A-001788 Press [Dim] [N] [S6] [Park] and the upper right window disappears. The prompt line doesn't ask for a level, whereas if you press [S6] [Dim] [N] it does.
- A-001792 During the cue record process, if the decimal point is accidentally pressed, you cannot clear it without starting the record process over.
- A-001793 ETCLink- Change the rack address on the CEM, ask for ETCLink information on the console, Console tends to hold in "Waiting for Data". Rebooting the console clears it up.
- A-001797 Tracksheet: a channel is at a level, there is a bunch of effect cues, after the effect cues the channel is at the same level but it is displayed in blue. If you change the level before the effect cues and record to Track, the change does not Track after the effect cues. If the Channel is not at a level and you set it at a level before the effect cues and record to track the level will track past the effect cues but will be displayed in blue in the first cue after the effect cues.
- A-001803 After a 789 deep clear the first time you change polarity on a Express, the twisted pair options setting does not initialize the relay.
- A-001804 Tracking consoles can get out of sync when running continuously looped cues, macros and ETC Link.
- A-001805 Creating a subroutine by selecting a range cues restricts either all whole number or all point cues in the subroutine.
- A-001807 ETCLink- Recording a Backup Look sometimes produces two messages back that it has recorded the look. (Tracking System)
- A-001856 If a sub bump is pressed while changing all bumps to disable in system setup, that bump gets stuck on and will not release.
- A-001857 X-Y channel links fail to work properly.
- A-001872 If you are in sub list, pressing [Sub] [1] [Thru] [7] [Label] [Clear], the [Clear] hit adds sub 8 to the list and each subsequent [Clear] hit adds the next higher sub number.
- A-001894 After running real time program 1, if you try to reassign it for a later time it will not run. It runs when entered as program 2 with a later time or the original program is recorded again with a new time.
- A-001895 Pressing [Setup] while a macro is running can cause a macro to freeze momentarily until you press [Stage], having skipped the steps that it would have run while in Setup.

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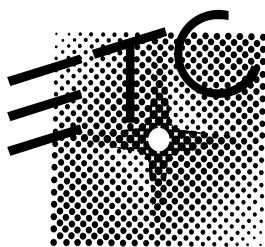
- A-002035 Sitting in a cue on stage, go to sub list, hit [Go], the ">" moves to the top line on the cue list display to point to the previous cue while the current cue is displayed in gold in fader box.
- A-002036 If you are not in a cue when you look at submaster list, hit [Go], the previous cue is not displayed. Press [Go] again and the > points to the previous cue and the current cue is displayed in Gold in fader box and cue List.
- A-002047 Power up Macro "to read Disk" without a disk in the drive behaves differently when run by pushing M\*. Power up flashes "No Disk in Drive" then returns to "Please Stand By" and hangs before returning to message "No Disk in Drive". Running a macro by pushing M# runs normally.
- A-002048 Record some groups and go into flexichannel mode. Now try to put groups into effect steps. Some will go in and some won't.
- A-002051 Express only - When downloading code to nodes, they may need to be rebooted if they are not seen at the console.
- A-002055 ETCLink- Load Management displays faulty characters and the lines are shifted when there are Load Errors. It also will display a actual load of 80 when it should be 800.
- A-002057 Cue List display - When you run a loop of cues in one fader pair and regular cues in another, then clear the faders, you get a cue listed wrongly in the top line. This is the line for the cue you would back into. Sometimes that cue number will stay the same even after running other cues.
- A-002058 ETCLink - Recording Dimmer loads does not work with the list for dimmers above 200.
- A-002110 Express 48/96 - Subs setup 1=1, Press Bump Buttons 23,24,22,21,19,18, together, the respective channels flicker around in level. While holding those buttons, press Bump 17, Flicker stops. also try 16 - 10 = 9, and 8 - 2 = 1.
- A-002125 Real Time Clock - When you change the format of the clock from 12 to 24 or visa versa, real time events do not run.
- A-002386 Manual playback of a cue that has a link to a macro will bring all channels in the fader to 00 (subs unaffected). The fader status box will show a timed fade is running. When time runs out, the faders become inactive and channel levels are locked. Pressing [Go] again will cause the channels to jump to the correct level and start the next cue.
- A-002777 Disabling the blackout key and accidentally pressing it during a cue loop with a linked [Go] macro will stop the loop at that particular cue.
- A-002779 Write a loop of cues and run. A [About][Channel] slows levels and fade in increments of about 5% steps.
- A-002780 When typing in a number using a decimal point and the [+] / [-] keys to scroll through values, you are forced to enter in a whole number or press [Clear].
- A-002781 After you have a certain number of fixtures patched, you can bring up the next consecutive number (the next available fixture slot) in the fixture window and the blue keypad corner which does not exist.
- A-002783 If the only cues recorded are multipart, you can only change part times. Therefore, the [Time] button LED should only be allowed on after the part.
- A-002785 If the user is writing a subroutine and wants to delete a cue from a step they should not be able to have a step or steps highlighted and be able to delete the entire subroutine cue.
- A-002796 Patching fixtures with multiplexing - Found on Insight 3. Certain fixtures will not patch to multiplexed channels even when the patch is reset 1:1.
- A-002825 If you lower the channel count to 50 channels and raise it back to its highest count all while in flexichannel mode, there is no way to see the other channels unless you select them.
- A-002847 In Blind on Express, you cannot use the cue [+] key to scroll up and down the cue box list. It stops at the current cue on stage as the ">" scrolls off the cue list box. It can also leave gaps and miss cues like 1.5.

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- A-002852 When beginning to create a new effect cue, the [And] key will not let the user select steps 1&2 as [Thru] does.
- A-002862 If you try to load a 600 cue Expression show into a Express (48/96), you get an "out of memory" message due to memory fragmentation.
- A-002872 Patch any fixture and bring it up. Now press [Fixture][0] and the fixture box does not update to fixture 0.
- A-002882 If you have a effect running in the background and use the override to knob down to 00, it is not indicated on stage even though the cue continues to run.
- A-002884 When you try to only update a channel, it will bring in the current focus points on stage.
- A-002885 If you start off recording part cue 1 in Stage and go into Blind to modify the same part, you cannot unless you add another part.
- A-002886 A cue linked to a macro that contains a [Go] will clear the Background Overrides display.
- A-002891 When you load in a VL5 16 Ext. personality, the attributes for the extended part Resrv 5, 6, 7, & 8 are not set up in the encoder pages. The user must manually enter those fixture attributes in the [Encoder Setup].
- A-002901 Deleting effect steps - When you delete a effect step, it can leave empty steps that still run.
- A-002908 If you try to park a group that uses a focus point, setting that group at full does not keep the focus point link.
- A-002925 Deleting a group of submasters will not work.
- A-002943 U.S. racks running with Sensor 2.14 will report as European.



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