

# Expression

***Lighting control systems***

## *User Manual Supplement*

*Version 3.1*

This document supplements the version 3.03 user manuals previously released for Expression, Express, Insight and related lighting control systems. Inside, you will find explanations of the new features found in software release 3.1 for these control systems. This information is also integrated with previously released information in the version 3.1 user manuals for Expression-family products.





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# Real time programs

Part of setting the conditions under when your real time program will run, you were able to specify days of the week. Now, in version 3.1 software, you can specify a particular date instead.

**Set a date or days of the week.**

## Creating real time programs

The procedure and two sub-procedures below replace the two procedures given under **Creating real time programs** under **Control Interfaces** in your User Manual. The following procedure sets specific days of the week and absolute times. If you prefer to cite a specific date rather than days of the week or referencing sunrise/sunset times rather than absolute times, substitute using the sub-procedures provided. Footnotes to this procedure explain where to make those substitutions.

<b>Keystrokes:</b>	<b>Action:</b>
1. Press [Setup].	Selects Setup display mode
2. Press [1][2] [Enter].	Selects Real Time Programs display
3. Press [S1], <b>Select Program</b> , [1] [Enter].	Prompt reads: <b>Enter time (12 hour clock)</b> <b>Press [+] to enter AM or PM</b>
4. Press [8][0][0] [Enter]. <sup>a</sup>	Enters time to run macro. Prompt reads: <b>Enter days of week (1=Mon, 2=Tue, 3=Wed, 4=Thu, 5=Fri, 6=Sat, 7=Sun)</b> <b>or press [Days/Date] softkey again for date</b>
5. Press [1] [And] [3] [Thru] [5] [Enter]. <sup>b</sup>	Enters days to run macro Prompt reads: <b>Enter macro number</b>
6. Press [5] [Enter]. <sup>c</sup>	Creates real time program 1 Prompt reads: <b>Type program label (F6 = clear to end, F7 = previous program label, F8 = next program label)</b>
7. Enter a label, then press [Enter].	Labels the real time program

a) *To reference sunrise or sunset rather than absolute time, substitute the steps under [Referencing sunrise or sunset, page 5](#), for step 4. Then continue in this procedure.*

b) *To reference a date rather than days, substitute the steps under [Referencing a date, page 5](#), for step 5. Then continue in this procedure.*

c) *Labels are allowed in Express showfiles but cannot be assigned there. To assign labels for Express showfiles, see [Express LPC autocontrols, page 8](#).*

## Referencing sunrise or sunset

To reference sunrise or sunset rather than absolute time, substitute the following sub-procedure where called for under [Creating real time programs, page 4](#). This example sets the time to 10 seconds before sunrise.

Keystrokes:	Action:
A. Press [S3], <b>Astro Clock</b> .	Prompt reads: <b>Select astronomical time of day (0 = none, 1 = before sunrise, 2 = after sunrise, 3 = before sunset, 4 = after sunset)</b> .
B. Press [1] [Enter].	Selects before sunrise Prompt reads: <b>Enter time offset (hours/minutes)</b>
C. Press [1][0] [Enter].	Enters time offset before sunrise when the macro runs Prompt reads: <b>Enter days of week (1=Mon, 2=Tue, 3=Wed, 4=Thu, 5=Fri, 6=Sat, 7=Sun) or press [Days/Date] softkey again for date</b>

## Referencing a date

To reference a date rather than days of the week, substitute the following sub-procedure where called for under [Creating real time programs, page 4](#). This example sets the date to 21 March 2000.

Keystrokes:	Action:
A. Press [S4], <b>Days/Date</b> .	Switches to date entry procedure Prompt reads: <b>Enter date (0=all days of month) or press [Days/Date] softkey again for days of week</b>
B. Press [2][1] [Enter].	Selects date=21. Prompt reads: <b>Enter month (#1-12)</b>
C. Press [3] [Enter].	Selects month=3. Prompt reads: <b>Enter last two digits of year or press [Thru] for all years</b>
D. Press [0] [Enter].	Selects year=2000 Prompt reads: <b>Enter macro number</b>

## Editing real time programs

You can edit all settings in real time programs, such as changing the date selected or changing the time reference to sunrise rather than to an absolute time. Select the program you wish to edit in the Time Code Events display and press the appropriate softkey for the setting you want to change. For example, if you wish to change a previous setting of specified days to a date, press [S4], **Days of Week**, and follow the on-screen instructions from there.

## *Subroutine jump-to-cue*

Previously, when your subroutine performed a jump-to-cue command, the jump acted like a blocking cue, causing all LTP channels running in the background to fade out. That meant that all background cues ended upon the execution of a jump-to-cue command.

Now, if you choose a jump-to-cue style for your subroutine, you can specify whether you want the execution of that command to cause blocking or not. The default condition is blocking.

**Select blocking or no blocking for jump-to-cue commands.**

## *Configuring DMX512*

Changes to DMX512 port settings are made in the Output Configuration display. In that display, you can reset each port's mode of operation (normal or Dimmer Doubled), DMX512 starting address and signalling speed.

In version 3.03 code, the softkey used to change the DMX512 starting address was labeled *DMX512 Start*. It has been relabeled *Starting Dimmer* in version 3.1 code with no change in function.

**Softkey S3 in the Output Configuration display has been relabeled with no change in function.**

## *About Dimmer display*

You can use the About Dimmer display to reveal information about dimmer patching and dimmer settings. If using ETCLink at the same time, About Dimmer also displays rack assignment and load information.

New for the About Dimmer displays is a field that identifies the port and port address to which a dimmer is patched.

**About Dimmer identifies the port and port address to which the dimmer is patched.**

# *Recording using Solo*

The version 3.03 manual shows you how to record cues, groups and focus points with Solo that works with independent channels, such as the intensity channel of moving lights. But you can also use Solo to isolate channels for recording in the presence of independent channels. Since the object is not to darken the intensity of some channels but to de-select channels of any type, this additional use of Solo is as a pre-recording filter.

Below are two examples of using Solo as a pre-recording filter, one to record channels into a cue and the second to record only the color attributes of selected moving light fixtures into a focus point. Stage levels are unaffected by these procedures, which can be performed using analogous steps in Blind as well.

## *Using Solo to record into a cue*

### **Keystrokes:**

1. Press [Stage].
2. Press [Cue] [1][0] [Go].
3. Press [Channel] [2][0] [Thru] [3][0] [Full].
4. Press [Record] [Cue] [7] [Solo].

### **Action:**

- Selects the Stage display mode
- Plays cue 10 in a fader pair to set a look on stage
- Selects channels 20 through 30 and sets them to full
- Records selected channels into cue 7

## *Using Solo to record into a focus point*

### **Keystrokes:**

1. Press [Stage].
2. Press [S8], Fixture, [1][0] [Thru] [1][5].
3. Press [Only] [Color].
4. Press [Record] [Focus Point] [7] [Solo].

### **Action:**

- Selects the Stage display mode
- Selects moving light fixtures 10 through 15
- Restricts the selection to the color attributes of these fixtures
- Records the color attribute settings into cue 7

# Express LPC autocontrols

Many new autocontrols have been created for the Express LPC. Autocontrols enable you to access to software displays and make settings. With the new autocontrols, you can set or change all but the astronomic settings of the real time clock and ensure the compatibility of remote interface devices used in a network with your LPC. Information about each of these operations is given in the version 3.1 *Express LPC QuickGuide*.

**New autocontrols allow you greater access to system software functions.**

All autocontrols are executed with a 4-step procedure. For detailed information about using autocontrols, refer to the *Express LPC QuickGuide*.

An Express LPC with version 3.1 system software contains the following autocontrols.

<b>Autocontrol buttons</b>	<b>Function</b>
M7 / M1	Stage display
M7 / (M1 and M2)	Plus
M7 / M3	Patch display
M7 / (M1 and M3)	Enter
M7 / (M2 and M3)	Minus
M7 / (M1 and M2 and M3)	Clear
M7 / M4	Setup display
M7 / (M1 and M5)	Reboot
M7 / (M5 and M6)	Nothing <sup>a</sup>
M7 / (M1 and M6)	Softkey [S1] <sup>b</sup>
M7 / (M2 and M6)	Softkey [S2]
M7 / (M3 and M6)	Softkey [S3]
M7 / (M4 and M6)	Softkey [S4]
M7 / (M1 and M5 and M6)	Softkey [S5]
M7 / (M2 and M5 and M6)	Softkey [S6]
M7 / (M3 and M5 and M6)	Softkey [S7]
M7 / (M4 and M5 and M6)	Softkey [S8]
M7 / (M1 and M2 and M3 and M4 and M5 and M6)	Record
M7 / Read From Disk	Read system configuration

- a) Convenience that enables you to back out of an autocontrol operation without changing anything.
- b) Softkeys always apply to the existing display, as viewed on your video monitor.



# *Operating with ETCNet2 devices*

In previous releases of system software, you could operate lighting control systems in the Expression family with Remote Interface Unit (RIU) and Remote Video Interface (RVI) devices. Now, you can also operate these lighting control systems with ETC's newest network devices, the ETCNet2™ DMX Node and the ETCNet2™ Video Node. ETCNet2 devices, when used with Expression-family systems, must be loaded with the same system software and configured for ETCNet.

The procedure for performing this configuration is part of the software upgrade procedure for your controller. Follow the installation instructions provided with the upgrade kit, which explain how to set up any remote interface devices using a console or lighting playback controller.

**To use an ETCNet2 node in your network,  
set it to operate on ETCNet.**

## *Expression Off-Line*

As before, the latest version of Expression Off-Line contains the newest features available in Expression-family system software. Use Expression Off-Line to do most of the things you can do in the console except actually run the show.

The *Expression Off-Line QuickGuide* now explains how you can merge shows or parts of shows when one of them is in USITT ASCII format. Merging shows cannot be done in the console, so this merging capability gives you another reason for developing shows in Off-Line.

**Merge a USITT ASCII file with another showfile.**

When installing version 3.1 of Expression Off-Line in your computer, you also simultaneously install the Expression Personality Editor and QuickGuide user documents for both application programs. If ordered in a kit, the Expression Off-Line package comes with a complete set of the new version 3.1 user manuals for the Expression-family consoles and lighting playback controllers. You can also obtain a downloadable version from the ETC website without the new user manuals and then download them separately from the website.

For further information, contact your dealer, go to ETC's website at [www.etconnect.com](http://www.etconnect.com), or get in touch with ETC at one of the offices identified on the back page of this Supplement.

# *Astronomical clock data*

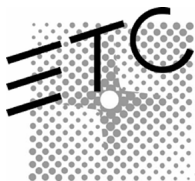
Some changes were made to the Time and Location appendices in the version 3.03 user manuals. This information is needed for those using the astronomical clock feature when creating real time programs. The new list is given below.

## *United States cities*

<u>City, State</u>	<u>Time Zone (Standard)</u>	<u>Latitude</u>	<u>Longitude</u>
Albuquerque, NM .....	+ 7 West .....	35° 03' N.....	106° 37' W
Anchorage, AK .....	+ 10 West .....	61° 10' N.....	149° 11' W
Atlanta, GA.....	+ 5 West .....	33° 39' N.....	84° 26' W
Baltimore, MD .....	+ 5 West .....	39° 11' N.....	76° 40' W
Augusta, ME .....	+ 5 West .....	44° 19' N.....	69° 48' W
Billings, MT .....	+ 7 West .....	45° 47' N.....	108° 32' W
Boise, ID .....	+ 7 West .....	43° 36' N.....	116° 13' W
Boston, MA.....	+ 5 West .....	42° 20' N.....	71° 01' W
Buffalo, NY.....	+ 5 West .....	42° 53' N.....	78° 51' W
Burlington, VT .....	+ 5 West .....	44° 29' N.....	73° 13' W
Charleston, SC.....	+ 5 West .....	32° 47' N.....	79° 59' W
Cheyenne WY.....	+ 6 West .....	41° 08' N.....	104° 47' W
Chicago, IL.....	+ 6 West .....	41° 50' N.....	87° 41' W
Columbus, OH .....	+ 5 West .....	40° 00' N.....	82° 53' W
Dallas, TX.....	+ 6 West .....	32° 47' N.....	96° 45' W
Denver, CO .....	+ 7 West .....	39° 46' N.....	104° 52' W
Des Moines, IA.....	+ 6 West .....	41° 34' N.....	93° 37' W
Detroit, MI .....	+ 5 West .....	42° 22' N.....	83° 06' W
Fargo, ND.....	+ 6 West .....	46° 52' N.....	96° 49' W
Hartford, CT .....	+ 5 West .....	41° 45' N.....	72° 41' W
Honolulu, HI .....	+ 10 West .....	21° 79' N.....	157° 48' W
Kansas City, MO .....	+ 6 West .....	39° 07' N.....	94° 33' W
Las Vegas, NV.....	+ 7 West .....	36° 12' N.....	115° 13' W
Lincoln, NE.....	+ 6 West .....	40° 48' N.....	96° 41' W
Little Rock, AR .....	+ 6 West .....	34° 43' N.....	92° 21' W
Los Angeles, CA .....	+ 8 West .....	34° 05' N.....	118° 24' W
Indianapolis, IN .....	+ 5 West .....	39° 44' N.....	86° 17' W
Madison, WI .....	+ 6 West .....	43° 04' N.....	89° 23' W
Nashville, TN.....	+ 6 West .....	36° 07' N.....	86° 41' W
Miami, FL.....	+ 5 West .....	25° 49' N.....	80° 13' W
Minneapolis, MN .....	+ 6 West .....	44° 57' N.....	93° 16' W
Montgomery, AL.....	+ 6 West .....	32° 21' N.....	86° 17' W
New Orleans, LA .....	+ 6 West .....	30° 03' N.....	89° 55' W
New York, NY.....	+ 5 West .....	40° 46' N.....	73° 58' W
Oklahoma City, OK.....	+ 6 West .....	35° 28' N.....	97° 30' W
Philadelphia, PA .....	+ 5 West .....	40° 00' N.....	75° 08' W
Phoenix, AZ.....	+ 7 West .....	33° 32' N.....	112° 04' W
Portland, OR.....	+ 8 West .....	45° 32' N.....	122° 39' W
Raleigh, NC .....	+ 5 West .....	35° 52' N.....	78° 47' W
Salt Lake City, UT.....	+ 7 West .....	40° 46' N.....	111° 55' W
San Francisco, CA .....	+ 8 West .....	37° 47' N.....	122° 33' W
Seattle, WA.....	+ 8 West .....	47° 37' N.....	122° 21' W
Sioux Falls, SD.....	+ 6 West .....	43° 32' N.....	96° 43' W
Washington D.C.....	+ 5 West .....	38° 54' N.....	77° 00' W

## ***Cities outside the United States***

<b>City, State</b>	<b>Time Zone (Standard)</b>	<b>Latitude</b>	<b>Longitude</b>
Abuja, Nigeria.....	- 1 East .....	9° 12' N .....	7° 11' E
Algiers, Algeria.....	- 1 East .....	36° 47' N.....	3° 3' E
Amsterdam, Netherlands.....	- 1 East .....	52° 17' N.....	4° 57' E
Ankara, Turkey.....	- 2 East .....	39° 56' N.....	32° 52' E
Athens, Greece.....	- 2 East .....	37° 58' N.....	23° 43' E
Bangkok, Thailand.....	- 7 East .....	13° 44' N.....	100° 31' E
Berlin, Germany.....	- 1 East .....	52° 27' N.....	13° 22' E
Berna, Switzerland.....	- 1 East .....	46° 57' N.....	7° 26' E
Bombay, India .....	- 6 East .....	18° 54' N.....	72° 49' E
Brussels, Belgium.....	- 1 East .....	50° 50' N.....	4° 20' E
Buenos Aires, Argentina.....	+ 3 West .....	34° 36' S.....	58° 27' W
Cairo, Egypt .....	- 2 East .....	30° 03' N.....	31° 15' E
Cape Town, South Africa.....	- 2 East .....	33° 55' S.....	18° 22' E
Casablanca, Morocco.....	0 .....	33° 39' N.....	7° 35' W
Copenhagen, Denmark.....	- 1 East .....	55° 40' N.....	12° 35' E
Dublin, Ireland.....	0 .....	53° 20' N.....	6° 15' W
Edinburgh, Scotland.....	0 .....	55° 57' N.....	3° 13' W
Edmonton, Alberta, Canada.....	- 7 West .....	53° 33' N.....	113° 28' W
Fukuoka, Japan .....	- 9 East .....	33° 35' N.....	130° 24' E
Helsinki, Finland.....	- 2 East .....	60° 10' N.....	24° 58' E
Hong Kong.....	- 8 East .....	22° 18' N.....	114° 09' E
Jakarta, Indonesia.....	- 7 East .....	6° 10' S.....	106° 48' E
Lima, Peru.....	+ 5 West .....	12° 03' S.....	77° 03' W
Lisbon, Portugal.....	0 .....	38° 43' N.....	9° 8' W
London, England.....	0 .....	51° 30' N.....	0° 0' W
Madrid, Spain.....	- 1 East .....	40° 24' N.....	3° 41' W
Marseilles, France.....	- 1 East .....	43° 18' N.....	5° 23' E
Mexico City, Mexico.....	+ 6 West .....	19° 24' N.....	99° 09' W
Montreal, Quebec, Canada.....	+ 5 West .....	45° 30' N.....	73° 36' W
Moscow, Russia.....	- 3 East .....	55° 46' N.....	37° 20' E
Munich, Germany.....	- 1 East .....	48° 09' N.....	11° 34' E
Oslo, Norway.....	- 1 East .....	59° 56' N.....	10° 44' E
Paris, France.....	- 1 East .....	48° 49' N.....	2° 29' E
Prague, Czechoslovakia.....	- 1 East .....	50° 05' N.....	14° 25' E
Reykjavik, Iceland.....	0 .....	64° 08' N.....	21° 56' E
Riga, Latvia.....	- 3 East .....	56° 40' N.....	106° 10' E
Rio De Janeiro, Brazil.....	+ 3 West .....	22° 55' S.....	43° 12' W
Rome, Italy.....	- 1 East .....	41° 48' N.....	12° 36' E
San Juan, Puerto Rico.....	+ 4 West .....	18° 29' N.....	66° 07' W
Santiago, Chile.....	+ 4 West .....	33° 27' S.....	70° 42' W
Sapporo, Japan.....	- 9 East .....	43° 04' N.....	141° 21' E
Seoul, Korea.....	- 9 East .....	37° 34' N.....	126° 58' E
Singapore, Malaysia.....	- 8 East .....	1° 14' N.....	103° 55' E
Stockholm, Sweden.....	- 1 East .....	59° 21' N.....	18° 04' E
Sydney, Australia.....	- 10 East .....	33° 52' S.....	151° 12' E
Taipei, Taiwan.....	- 8 East .....	25° 02' N.....	121° 31' E
Tokyo, Japan.....	- 9 East .....	35° 41' N.....	139° 46' E
Toronto, Ontario, Canada.....	+ 5 West .....	43° 39' N.....	79° 23' W
Vancouver, B.C., Canada.....	+ 8 West .....	49° 15' N.....	123° 07' W
Vienna, Austria.....	- 1 East .....	48° 15' N.....	16° 22' E
Warsaw, Poland.....	- 1 East .....	52° 13' N.....	21° 02' E
Wellington, New Zealand.....	- 12 East .....	41° 71' S.....	174° 46' E



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