Specification:	TCS8400	TCS8401
Channels/outputs:	8	8
Output connections:	via twin terminal blocks	via twin terminal blocks
Output levels:	off, dim, brighter, full on	off, dim, brighter, full on
Output extras:	random 'real fire' flicker at any output level (*not off!*), on any channel, pattern or sequence	random 'real fire' flicker at any output level (*not off!*), on any channel, pattern or sequence
Output drive:	1 output500mA 4 outputs 300mA per ch.@ 50˚C 8 outputs 180mA per ch.@ 50˚C	all outputs6A @ 50°C
Input supply:	5V - 30V DC through 2.1mm std. jack or terminal block	5V - 30V DC through terminal block only
Sequences:	8	8
Patterns per seq:	63	63
Indicators:	14	14
Push buttons:	12	12
Size:	130mm x 80mm x 25mm	
Fixings:	4 x 3mm holes/rubber feet	4 x 3mm holes/rubber feet

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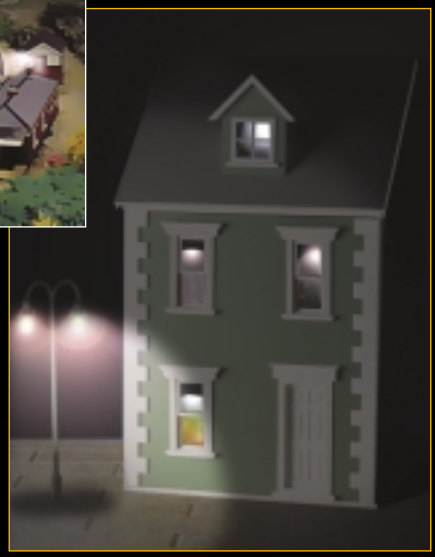
TC MINIATURE LIGHTING SYSTEMS

PRESENT

The Ultimate Modellers' Lighting Controller

Introducing the TCS840X programmable miniature lighting sequencer/controller...



Control your doll's house, diorama, R/C or railway model lighting with the *ULTIMATE* controller.

- ***INCREDIBLE real fire flicker effect on any circuit***
- ***Dim and/or flicker any circuit at any time***
- ***Connect up to 8 lighting circuits***
- ***Set-up to 8 different sequences***
- ***Each sequence can have 63 pattern steps***
- ***Each pattern step can be set from 1 second to 4 minutes 15 seconds***

The TCS840X can switch, dim and flicker your lighting circuits in any combination you like. You can program 8 different sequences, each of which can have 63 different pattern steps. You decide how long each pattern is displayed for, in 1 second increments.....

Control your doll's house, diorama, R/C or railway model lighting with the TCS840X controller.

A typical doll's house scenario might be –

It's early evening and a fire has just been lit in the fireplace – it flickers and slowly catches alight.
In the dusk outside a street lamp comes on.
A little later, the hall lights up, followed by the stairs and landing lights, just as if somebody is moving around the house. The fireplace is starting to look like a raging fire now, as the landing lights and hall light go off and the lounge lights are switched on dimly, ready for a relaxing evening in by the fire.
Later the fire slowly dies down, the lounge lights go out, and on go the hall and stairs light as the occupants head for bed. The house ends in darkness, with just the porch light on and the hot embers in the fireplace glowing for a while.
The options are endless…

Introducing the TCS840X programmable miniature lighting sequencer/controller...

The principles of the controller:

The unit has 8 independent channels for connecting to 8 different circuits using miniature screw terminals.

A pattern is set up where each of the channels is set to off or 1 of 3 levels of brightness; there is also the option of any of the channels randomly flickering with a 'real fire' effect.
This pattern is then set for a period of 1 to 255 seconds, decided by you.

The next pattern is then set up, and again the time associated with it. This is done for as few or as many patterns as you want, up to a maximum of 63 patterns, each with a unique time associated with it, from 1 to 255 seconds. This set of patterns is called a sequence, and the TCS840X can have up to 8 different sequences, each selected at the touch of a button.

What's really neat is that the controller remembers everything even with the power off, and starts up with the sequence that it was running through next time you turn it on.

You can edit any pattern in any sequence whenever you wish, in fact the unit is so flexible and easy to operate that you'll be inventing things that you can do with it!

NB: All photographs illustrate the TCS840X controller.

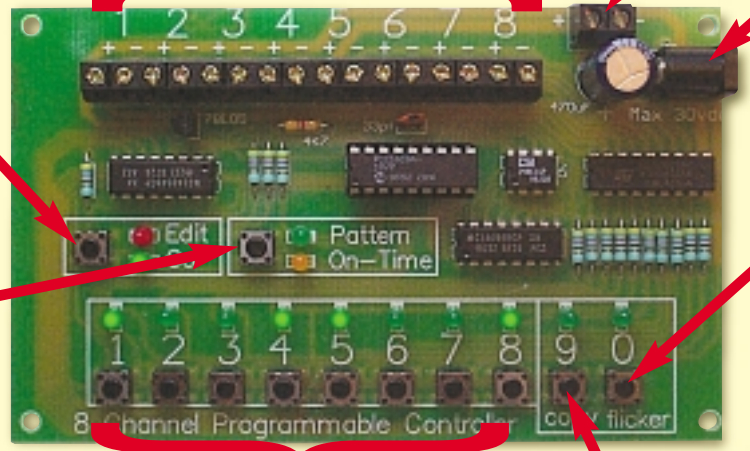
What everything does...

8 Channel Outputs
Up to 8 independent circuits can be connected to the controller via the screw terminals.
(For devices other than light bulbs, watch the polarity).

Power Input or Output
This connecter can be used as the power input to the controller or as an auxiliary power output.

Power Input
Standard 2.1mm power input jack.

Mode Select
This button toggles between EDIT and GO modes.



Pattern Step/On-time
Works in edit mode only.
When setting the PATTERN you can use the number buttons to set your desired pattern.
When setting the ON-TIME you may use any three of the number buttons to set the pattern on-time in seconds (up to 255 seconds).

Flicker/ Pattern Check
When in GO mode this button allows you to set the programmed on-time to 1 second, to enable quick viewing of your sequence - press again and it reverts back to your programmed on-times.

8 Channel/Number Buttons
These buttons are referred to as channel buttons and form the first 8 number buttons.
In EDIT mode they are used to set the pattern, the channel brightness and the on-time for each of the 63 pattern steps per sequence.
In GO mode they are used to select the sequence required.

Copy/Sequence Check
When in EDIT mode this button copies the previous pattern and all its channel effects to the current pattern.
When in GO mode this button stops the sequence and displays a single channel LED to indicate the current sequence number.