EBU & SMPTE LTC Readers

General description

Two similar timecode readers that can be configured for different types of display, 7 segment LED, 7 segment LCD or alphanumeric LCD´s. The circuit boards mainly differ in the onboard power supplies. If a backlit LCD display is chosen the board with a small switch mode power supply should be selected. The nominal DC supply should be 12V.

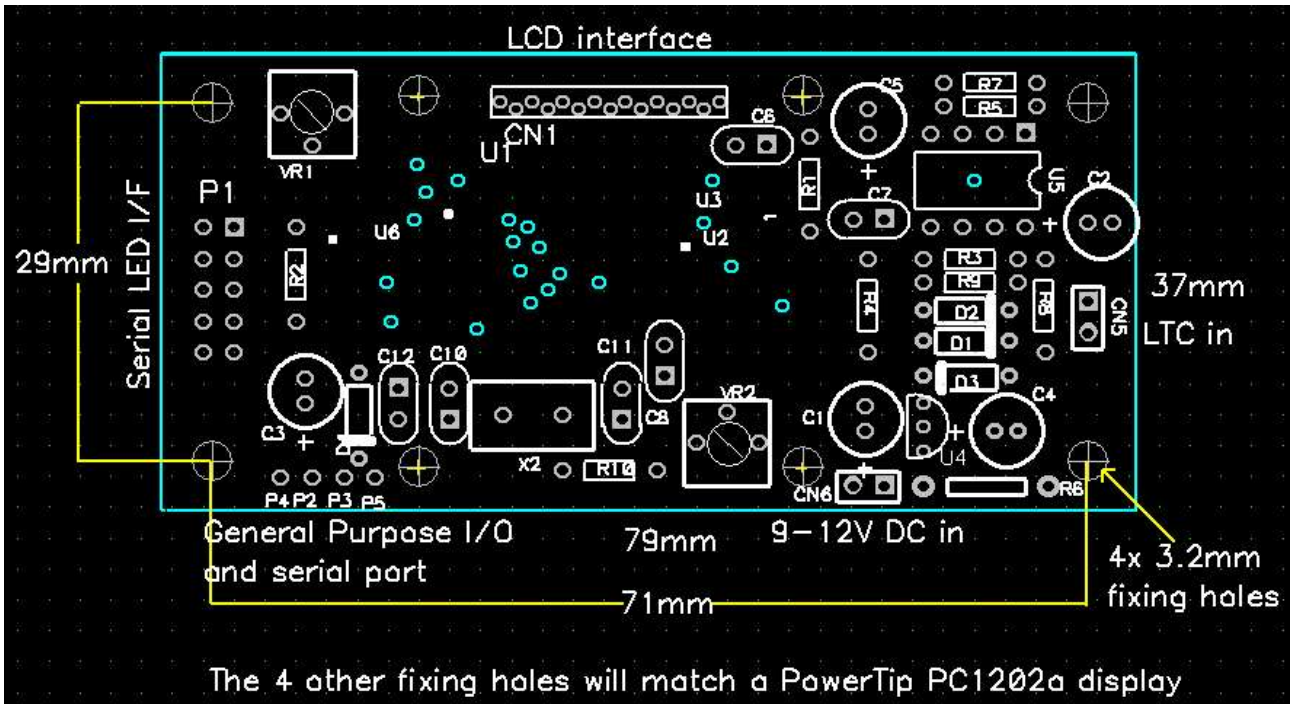
The second board can be run from a 9V PP3 battery, and is suitable for both types of LCD, without backlighting

A third version is a combined reader PCB and integral high brightness LED display that can be use as an electronic slate

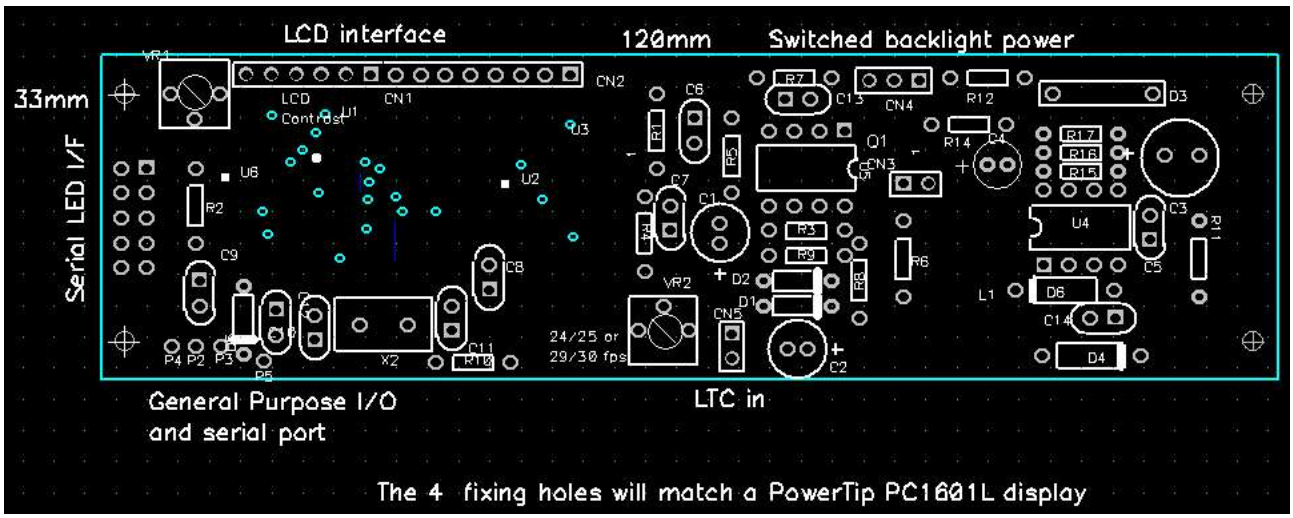
The software is available in several different versions

Specifications

Frame rates: 23 to 30 frames per second. Play speed only.
Sensitivity: 20mV peak to peak to 10V peak to peak.
The input is unbalanced, nominal impedance 10K Ohm.
Sync time: typically 1 complete frame.
Typical current consumption without backlighting 40mA



Low power LCD printed circuit board dimensions



Higher power LCD printed circuit board dimensions

Software versions

All versions will decode dropframe and non-dropframe timecode

1)Basic reader, with freeze/hold function

2)Basic reader, with a RS232 ASCII output. An external RS232 line driver is required. Close contact activated, 9600 Baud rate is standard. Selectable <CR> <CR/LF> or <LF> text terminator.

3)Time code trigger. A time code number is stored by closing a contact, when this timecode number is detected again, a low power external relay can be activated, for one frame.

Displays
These modules should work with any “normal” alphanumeric displays and two Powertip versions PC1601L and the PC1202A were chosen, and will match the mounting holes on the boards. Both are quite inexpensive.

The LED Display is a currently being designed with Avago 7 segment LEDs,HDSP 55xx types