

SCCLK18 - Synchronous Digital Real Time Clock

User's Manual

- 6 digits 7 Segments LED digital clock
- 1.8 inch digit height for hour and minute display, 0.8 inch for second display
- RS485 connection for synchronizing
- Selectable 12 hours or 24 hours display mode
- Configurable to work as Elapsed Time Clock
- Master or Slave Operation
- Adjustable LED Brightness
- Blinking Colon



General Description

SCCLK18 is a 6 digits LED digital clock module that can be networked to form a synchronize real time clock display system.

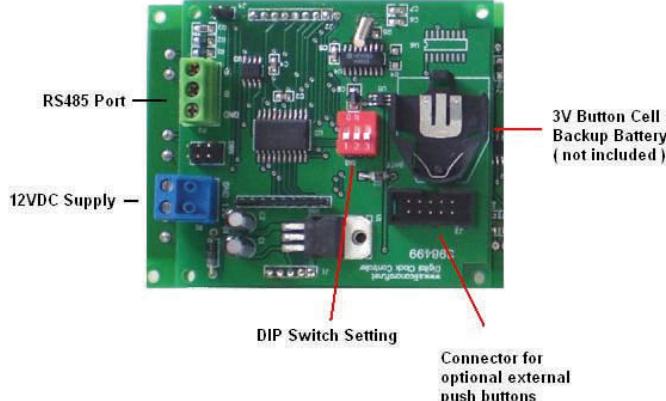
In standalone mode, it can be configure to work as real time clock display or elapsed time display.

In Network mode, one clock has to be set to work as master and up to 32 slave clocks is possible.

Alternatively, use a PC with RS485 connection. Software available.

All settings are through the 3 push buttons on the front and a DIP switch at the back.

Requires 12VDC power supply.



DIP Switch Setting



Switch	1	2	3
On	Clock	12 Hour	Master
Off	Elapsed Time	24 Hour	Slave

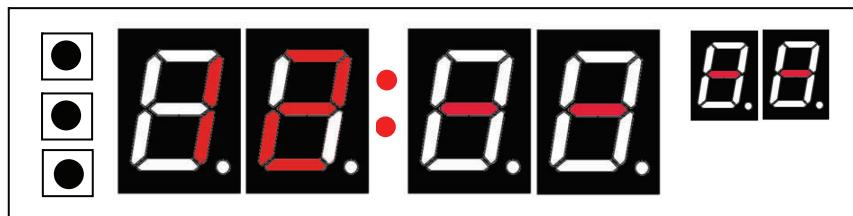
Remove Power and Backup Battery before making changes to the DIP setting

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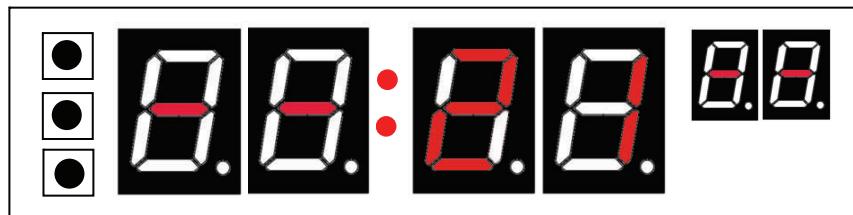
Setting the Time.



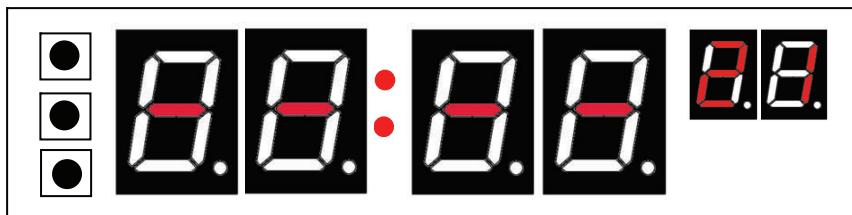
Press Set button, then Decrease or Increase the Hour using the buttons



Press Set button again to set the minute.



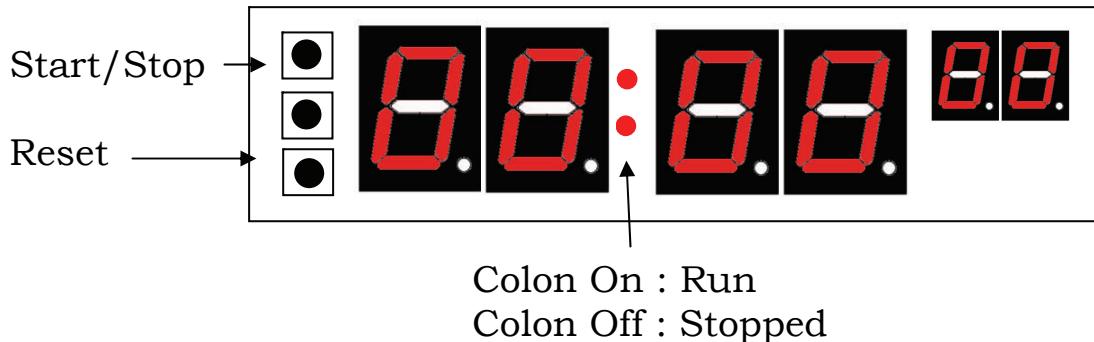
Press Set button again to set the seconds. Press increase button to reset the seconds to 00



Press Set button one more time to exit the setting mode.

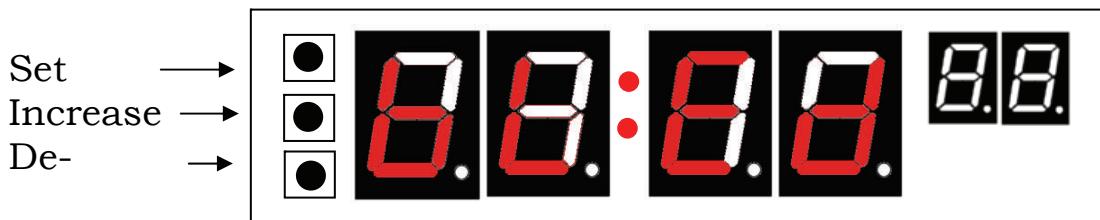
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Elapsed Time Mode



Elapsed time mode count up to 99 Hours , 59 minute , 59 seconds.
After which it will rollover to 00:00:00

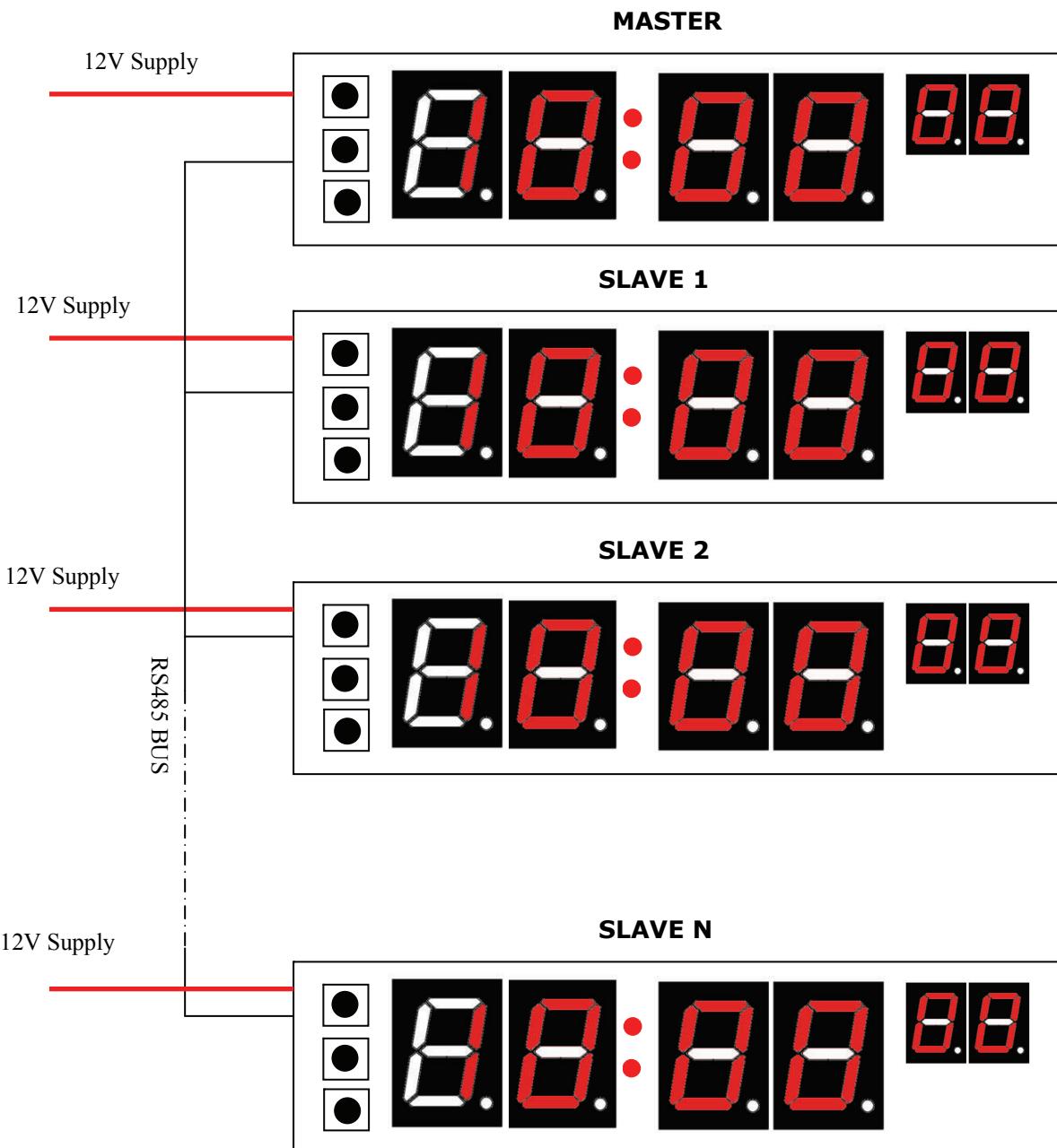
Adjust LED Brightness



Press "Set" and "Decrease" buttons simultaneously until "bLED" appears.
Adjust LED brightness by "Increase" or "Decrease"
Press "Increase" and "Decrease" buttons simultaneously to exit.

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Synchronous Clock Network (Configuration 1)

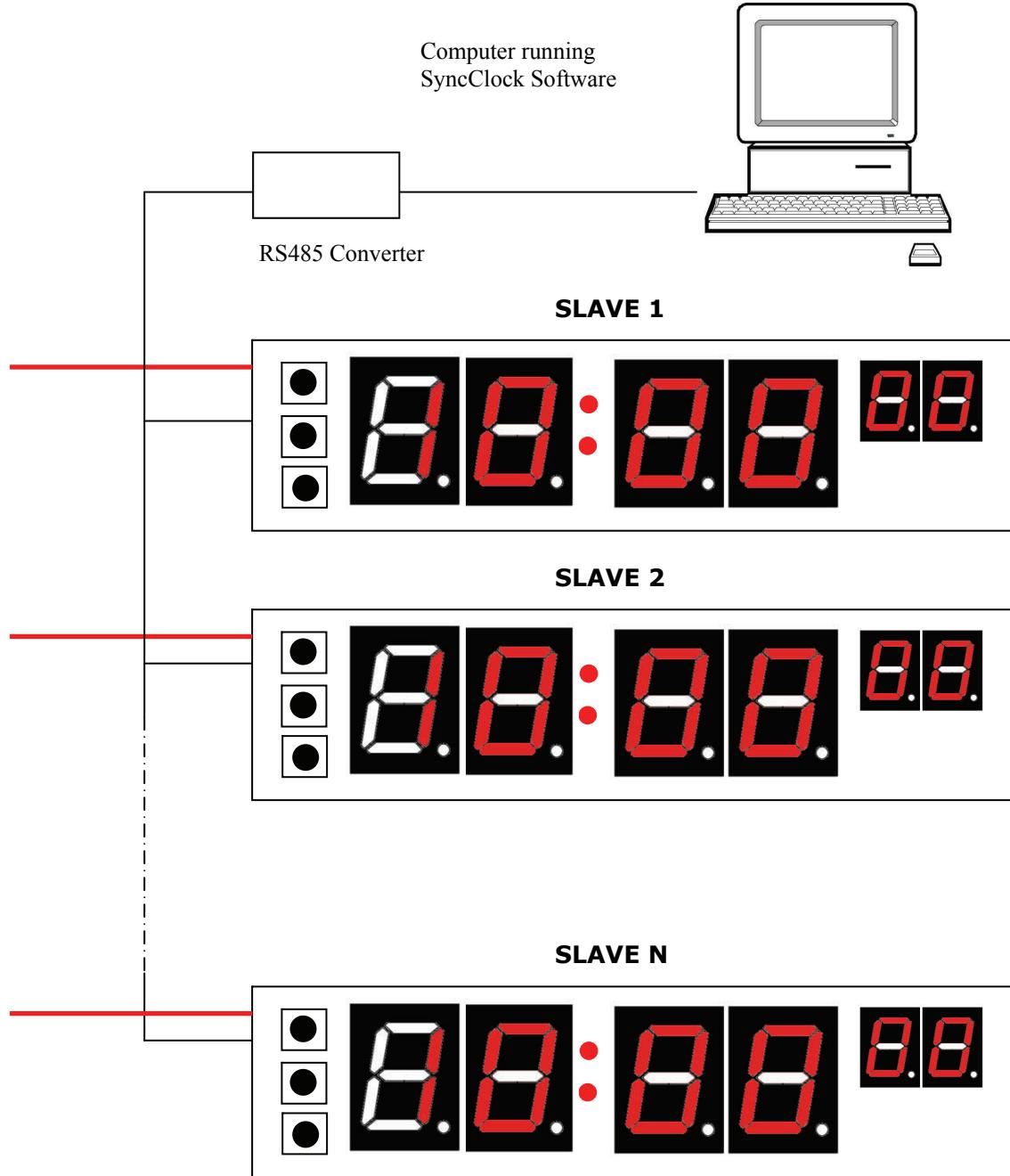


The MASTER Synchronize the time of all the slaves on the network.
Up to 31 slaves can be linked with this configuration.

The MASTER Clock send synchronize time every 60 seconds.

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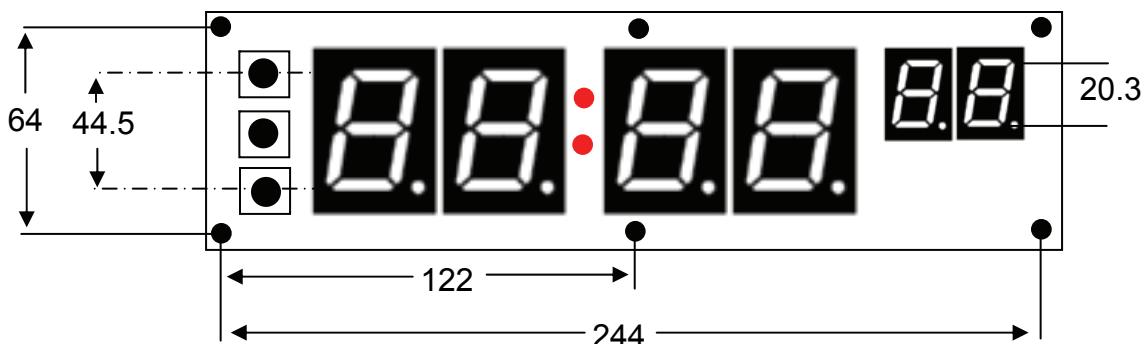
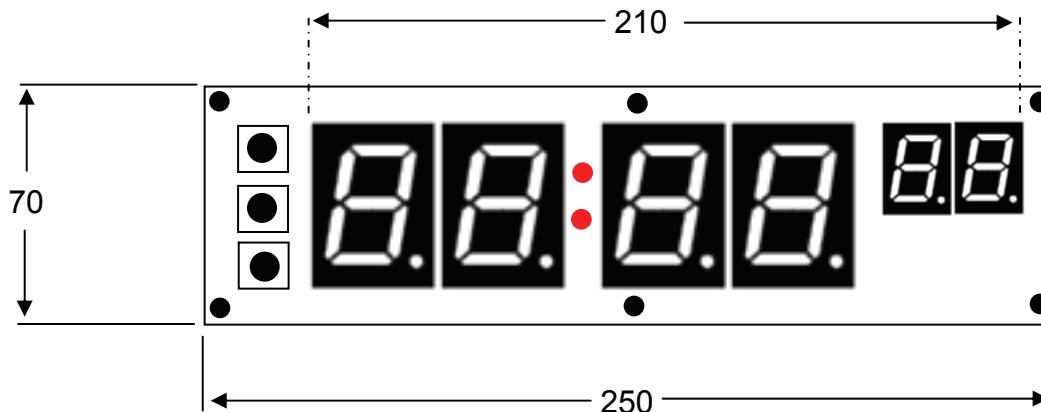
Synchronous Clock Network (Configuration 2)



SyncClock Software available for download at www.siliconcraft.net/download.htm

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Mechanical Dimension (in millimeter)



Mounting Holes Diameter : 3 mm

Electrical Specifications:

Power Supply : 12VDC @ 1A

Average Current Consumption : 300mA

Backup Battery : 3V Lithium Button cell size 2025

Communication : RS485 , 8 N 1 , 9600 bps

Maximum cable length : 1000 m

LED color : RED

Operating Temperature : 0C to 70C