Project

"Design of a digital measuring instrument for time, temperatur and relative air humidity as outdoor display, for steam baths and swimming baths" (2004)

Principal:

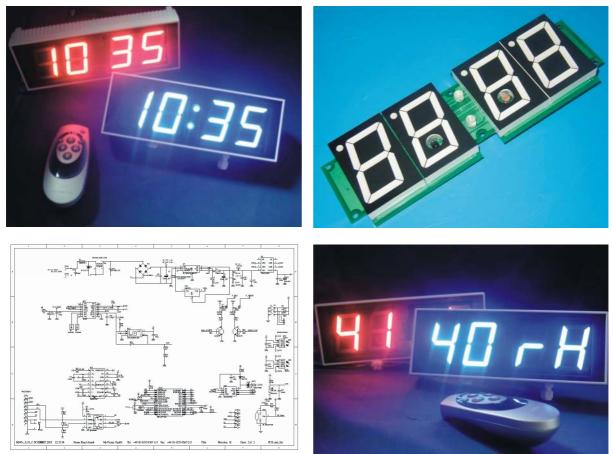
My-Tronic GmbH, Morbach www.my-tronic.com, www.my-led.com

Description:

A CMOS real time clock and a temperatur and humidity sensor reside in a waterproof housing. A 4 digit 7-segment display shows rotational time, temperatur and relative air humidity. A light sensor provides for a constant intensity, independent of ambient illumination. Clock time, display format, brightness, etc. can be programmed by an infrared remote control. Optionally, instead the real time clock, there is integrated a DCF77 radio controlled module, wich adjusts the clock time automatically.

Technical characteristics:

Housing	: plastic casting with inserted nuts and 2mm filter glass
Material	: polyamide -30% glas bowl to armed PA 6 30%G
Protection class	: IP 65 (waterproof)
Dimensions	: ca. 240 x 90 x 46mm³
Power supply	: 12 - 24VAC/ max. 0,8 A
Size of numerics	: 60mm, red oder blue, 4-digits with colon
Temperatur working range	: 0-80°C
Temperature measurement range : -40-+120°C (min./max. displayable Value: -9°C/+99°C)	
Humidity working range	: 0-100% rF (max. displayable Value: 99% rH)
Further options:	: RS 232 / RS 485 Interface, external temperature/humidity sensor



partial schematic diagram