Notes.

[1] Values of P1, R4, R7 and P2, R5 and R6 depend on meter being driven. R4, R7, R5 and R6 are parallel combinations of, e.g. T_R4 and S_R4.

[2] Position of solder blobs at SJ1 and SJ2 determine control direction of "preset" potentiometer P1 and P2 respectively.

[3] SJ5 must be connected for the serial commands of the Chronulator software to work. It ist connected a manufacture.

[4] Processor version determines maximum frequency of the alternative X1A: ATmega168V-10AU: 8 MHz; ATmega168A-AU: 16 MHz.

[5] SJ3 and SJ4 allow the current sources to be bypassed for alternative meter drive circuitry. Cut track to disable the sources.

[6] C3A is meant to be an adjustable alternative to C3. A part such as Sprague-Goodman SGCS300, 8...30 pF, may be installed.

[7] Values of C2 and C3 depend on selection of crystal.

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U1 ATMEGA168 [4]

Minutes Trim

Meters

Program

Serial

MINUTES_OUT

HOURS_OUT

Hours Trim

Min Set

Hr Set

Reset