Pinout for 10 pin Nixie headers

HH:MM:SS HHL HHM MMH MML SSH SSL (label PCB)

Socket pin #1	Digit	IN-1 pin (anode: pin 11)	IN-12A/B pin (anode pin 1)
1	1	7	11
2	2	6	10
3	3	3	9
4	4	4	8
5	5	2	7
6	6	5	6
7	7	9	5
8	8	1	4
9	9	8	3
10	0	10	2
170 V	Anode	11	1

Dekatron pinout (OG4) 5 Pin connector / solder pads

PCB pin	A	B	C	D	E
CW rotation (OG4)	4	8	6	Gnd	1
CCW rotation (OG4)	6	8	4	Gnd	1

Parts list

- IRF 740 mosfet x 3 (dekatron only)
- 1 mohm resistor x 3 (dekatron only)
- 51 kohm resistor (dekatron only)
- BlueSMiRF Bluetooth modem (for wireless communication. Currently the only way to communicate with the board. You can of course use the the UART directly (exposed via the solder pads for the BlueSMiRF)
- 74141 Nixie driver IC x 6 (or Russian K155ID1 equivalent)
- 10 pin IDC header x 6 (or you can solder the wires from the nixie tube directly onto the board)
- 10 pin IDC header for ISP programming of the microcontroller
- 7805 Voltage regulator
- AtMega8515 microcontroller
- 40 pin IC socket
- 16 pin IC socket x 6

- LED
- 1 k resistor
- 11.0592 MHz crystal
- 0,1 uF electrolytic capacitor
- 0,33 uF electrolytic capacitor
- 22 pF capacitor x 2
- OG-4 dekatron (optional)
- IN-12 / IN-1 Nixie tube x 6

Client Command Set (from example firmware)

To set clock: send the following bytes over the UART:

“1 <hours> <minutes> <seconds>”

To display custom data:

“2 <value1> <value2> <value3>”