

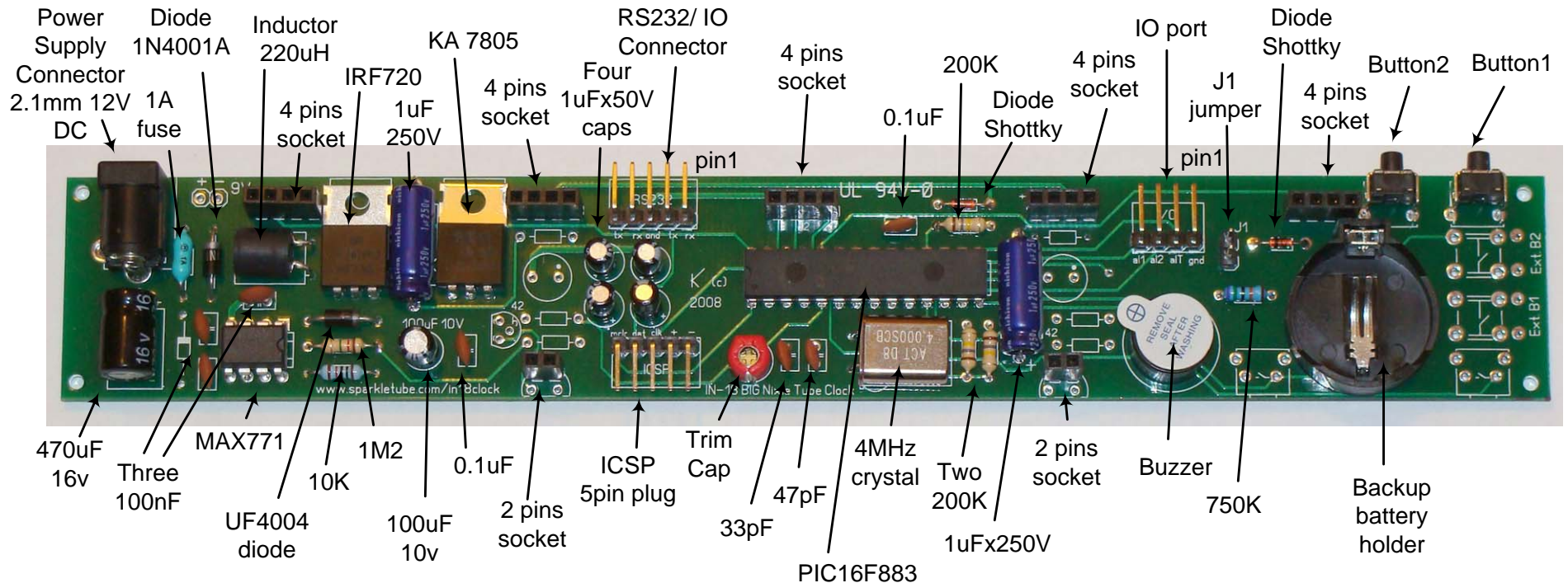
IN-18 BIG Nixie Clock assembling microcontroller main board v.01

Warning!

- Do not mix polarity, as your IV-18 Clock will not work
- Use only approved and certified Wall Plug Power Supply module
- Power supply with less than 300mA output is not recommended.
- 12V DC REGULATED power supply is the best choice.

Rs232 connector (from right to left):

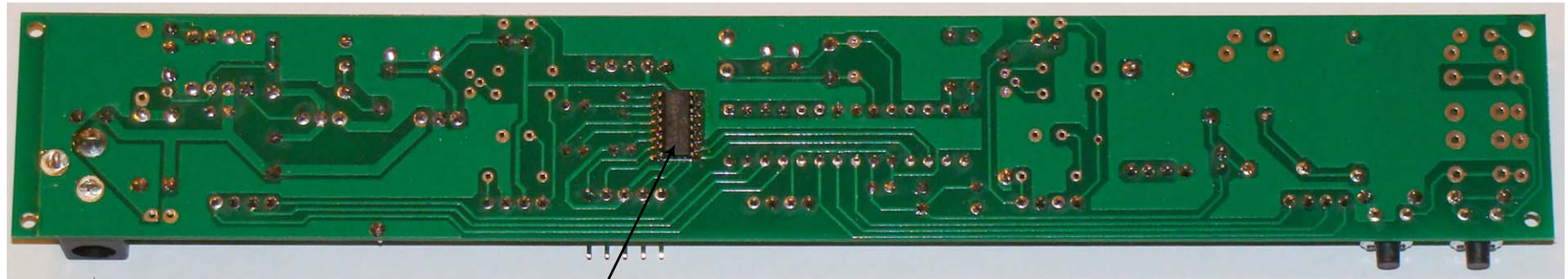
- Pin1 - Clock RX for TTL serial port connection
- Pin2 - Clock TX for TTL serial port connection
- Pin3 - Ground Contact
- Pin4 - Clock RX for Rs232 serial port connection
- Pin5 - Clock TX for Rs232 serial port connection



Note

- Electrolytic capacitors should be soldered with correct polarity, search for + signs on the PCB
- UF4004, 1N4001 diodes silver rings should match white line of its drawing on the PCB
- Shottky diodes have black ring sign, which should match white line of its drawing on the PCB
- Buzzer polarity is not marked on the PCB, but it should be inserted and soldered as shown
- Pin number one is clearly marked on the PCB and IC pin number one should go to square solder pad

IN-18 BIG Nixie Clock assembling microcontroller main board v.02



Power
Supply connector
Note1*

Rs232 serial
interface SMD chip
ST232 or MAX232
Note 5*

Button 2

Button 1

Note 1.
Please use 2.1mm DC round power connector.
+12V is inner contact, -12V is outer contact

Note 2.
Rs232 serial interface connector, 5 pins from the right
as shown on the picture on Page 1:
Pin1 - Clock RX for TTL serial port connection
Pin2 - Clock TX for TTL serial port connection
Pin3 - Ground Contact
Pin4 - Clock RX for Rs232 serial port connection
Pin5 - Clock TX for Rs232 serial port connection

Note 3.
Input/output connector, 4 pins from the right,
as shown on the picture on Page 1:
Pin1 - Ground Contact
Pin2 - Clock/Counter test frequency TTL level output
Pin3 - Clock/Counter Alarm 2 external TTL level output
Pin4 - Clock/Counter Alarm 1 external TTL level output

Note 4.
Put Jumper 1 (J1) on to activate Battery backup protection.
To reset the Clock, disconnect it from the Main and remove jumper

Note 5.
Pin 1 on ST232 SMD chip is close to ST chip logo.