

# www.Kama-Labs.com

## Wi-Fi \*\* Anufa \*\* v5

(Assembly instructions and latest firmware you can find on my website)

Made my own hands 

## Thanks for purchase!!!

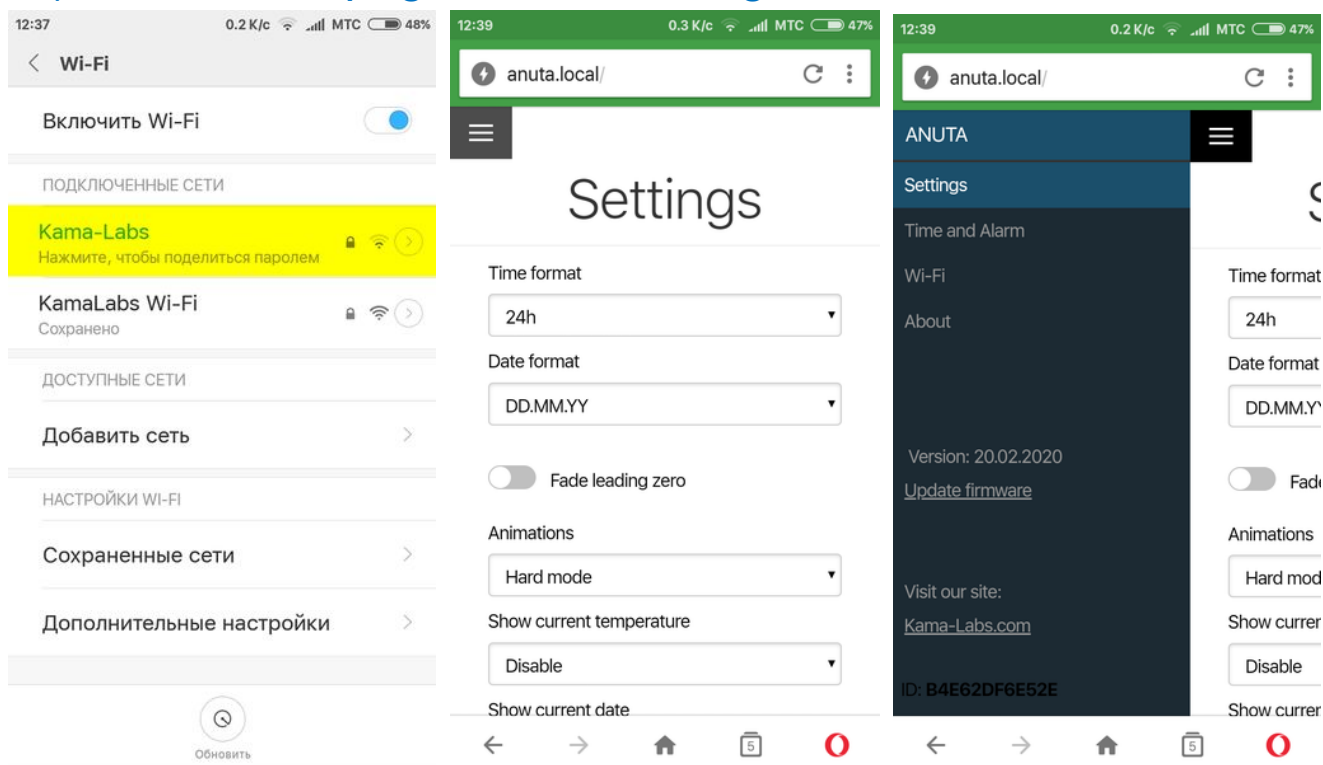
### Features:

- \* 24x Soviet IVLM1-1/7 VFD tubes (made in 1983)
  - \* Full remote control
  - \* Full control of clock via Wi-Fi
  - \* 32bit ESP32 processor
    - \* 12/24h time mode
    - \* Fade leading zero
  - \* Wi-Fi connection to PC or smartphone
- \* Synchronizing time and date from NTP server
  - \* Over-the-air firmware update
  - \* Programmable scrolling line
- \* High-precision onboard time chip DS3231
- \* Unique high effective smooth routing of PCB
  - \* 1 Alarm
  - \* IVLM tubes work in static mode
- \* Double Multicolour adjustable LED backlight
- \* Automatic change color mode for top and bottom backlights
  - \* Temperature / humidity / pressure sensor
- \* Automatic brightness of tubes using light-sensor
  - \* 5 animations for digits
- \* Off clock at night by schedule
  - \* Temperature C° or F°
  - \* Correction of temperature

- \* Accurate to +/- 1 minute/year
- \* Date in format DD.MM.YY or MM.DD.YY or YY.DD.MM
- \* Backup battery. Data is no lost when power off
- \* Power source - DC 12V barrel plug 5.5mm/2.1mm ( "+" inside, "-" outside)
- \* Consuming current - no more 800mA
- \* Noiseless work
- \* Dimensions of the clock - 222mm(W) x 54mm(L) x 95mm(H)
- \* Dimensions of the clock in case – 250mm(W) x 75mm(L) x 110mm(H)

## How connect to Anuta clock via Wi-Fi:

- 1) Turn on clock.
- 2) Connect to “Kama-Labs” Wi-Fi network via your smartphone or PC. Password: **nixieclock**
- 3) Open browser and go to “anuta.local” or 192.168.4.1 or scan QR-code.
- 4) You will see page with all setting of Anuta clock.



## Connecting to home Wi-Fi network:

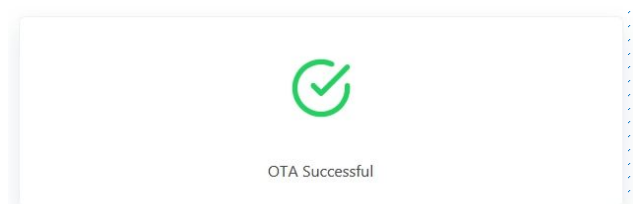
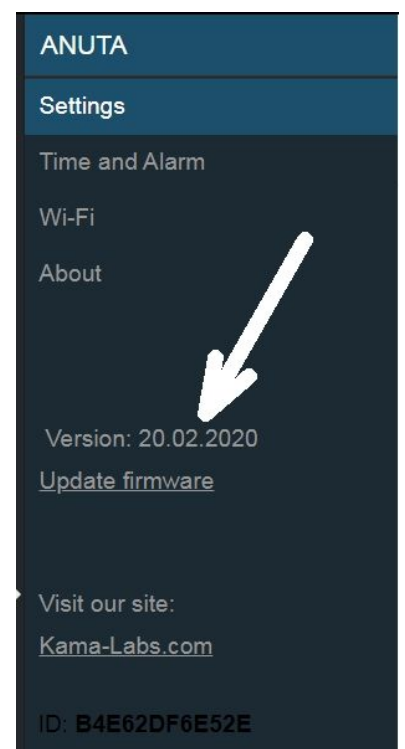
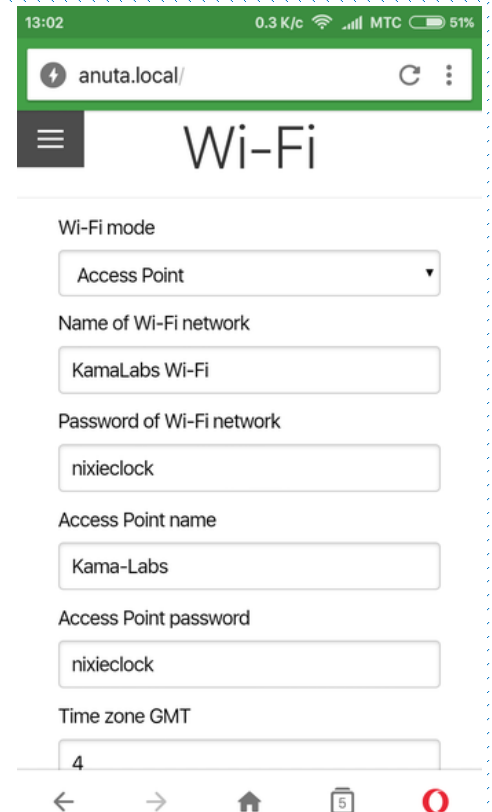
Anuta clock can connect to your home Wi-Fi network and synchronize time from NTP server. Also you will have access to clock from any device connected.

- 1) Go to "Wi-Fi" in menu
- 2) Fill fields "Name of Wi-Fi network" and "Password of Wi-Fi network" of your Wi-Fi network
- 3) In "Wi-Fi mode" choose "Internet connection"

At now clock will connected to your Wi-Fi network. If you will press "0" key on remote control clock will show status and IP-address.

## How to update firmware:

- 1) Go to [https://kama-labs.com/manuals\\_and\\_firmwares](https://kama-labs.com/manuals_and_firmwares) and check for new firmware version. Current version you can see here:
- 2) Click "Update firmware" link
- 3) Choose file with firmware
- 4) Click "Update". Done!



## How to use remote control:

Button	Action
OK	Show message
◀ ▶	Next animation of digits
▲ ▼	Change brightness of tubes
1	
2	Show alarm
3	
4	Show temperature -> humidity -> pressure
5	Show date
6	On/off alarm
7	Brightness of bottom LEDs
8	Turn off LEDs and tubes (clock still works)
9	Brightness of top LEDs
0	Wi-Fi status
*	Change brightness of top LEDs
#	Change color of top LEDs
9 + 1	Set Wi-Fi mode as internet connection
9 + 2	Set Wi-Fi mode as Access point
9 + 3	Reset all settings
9 + 5	Tube test mode

Look at backside of clock and there you will see orange LED. It show Wi-Fi status of clock:

- LED not glow – the clock connected to you home Wi-Fi network;
- LED blink fast – the clock try connect to you home Wi-Fi network;
- LED blink slow – the clock in Access Point mode.



