



Thanks for your NIX labs purchase! For the full user's guide, visit [nixlabs.com.au/support](https://nixlabs.com.au/support).



This product is not a toy – it uses glass tubes and contains high voltage circuitry so must be handled with care. Do not expose to moisture or dew. Do not insert objects into the gaps in the enclosure – risk of electric shock! If a potential hazard arises, unplug from power immediately and contact NIX labs for support. Read the full user's manual carefully before use.

### Getting Started

Check the box for the following items and remove them from their packaging:

- VF4 tube clock
- Australian power adaptor (or Multi-Region adaptor for international orders)

For use in countries other than Australia, remove the AU plug from the power adaptor, and replace with the correct one for your region (US, EU or UK).

Plug the power adaptor's USB-C end into your clock through the hole in the back either way around. Connect the power adaptor to the wall outlet and turn on, your clock should turn on in less than about 3 seconds, and is now ready to use.

When powering from a computer, connect directly to the computer's USB port – avoid USB hubs or extension cables. You can use any good-quality charge & data USB-C to regular USB-A or USB-C to USB-C cable to connect your nixie clock to your computer or phone/tablet.

## Using the Online Web App

Connect your clock to your PC, Mac, Linux, ChromeOS, or Android device using any good-quality cable. Use Google Chrome, Microsoft Edge or Opera browser to go to [app.nixie.com.au](http://app.nixie.com.au), where the complete range of your device's settings can be easily changed for maximum customisation. However, many of these settings can be set using the three built-in buttons, so use of the WebApp is not required.

	Buttons	Web App
Set time	✓	✓
Set date		✓
Start a counter/timer	✓	
12/24hr time format	✓	✓
Leading zero on time display		✓
Show/hide tails on digits 6, 9, 7		✓
Button beep		✓
Colon on/off/flash		✓
Auto-show date and temperature		✓
Mainly show date/temperature and not time		✓
Date format (DD/MM/YY or MM/DD/YY)		✓
Select °C / °F temperature units	✓	✓
Customise LED colour	✓	✓
Randomised LED colour		✓
Rainbow cycling LED colour	✓	✓
Adjust rainbow colour cycling speed		✓
Different LED colour for time, date and temperature		✓
Day and night display brightness	✓	✓
Set LED brightness	✓	✓
Set LED dimming level at night		✓
Set ambient-light night dimming threshold	✓	✓
Select ambient-light or time-based night dimming		✓
Enable dynamic display/LED brightness		✓
Display effects		✓
On-off timer		✓
Options for behaviour after a power loss		✓
Read diagnostic information		✓
Download event logs		✓
Firmware upgrade		✓

## Using the Buttons

The buttons are labelled with SET, ▼ (down), and ▲ (up). When your clock is showing the time, you can briefly press ▲ to show the date and then the temperature. On any screen briefly pressing ▼ will cycle through the LED lighting colours for that screen. If in a settings mode and no button has been pressed for 30 seconds, the display will revert back to the normal time screen without saving.

## Setting the Time

Press the SET button briefly and the display will be changed to only show the hour digits. Press the ▲ and ▼ buttons to set the hour (always 24hr format) and SET to advance to the minutes to do the same. After adjusting the minutes, pressing SET again will save the new time and return to the normal time screen.

## Using the Counter/Timer

When your clock is showing the time, hold ▲ for 3 seconds to start an up-counter. To start a countdown timer, hold the ▼ button on the time screen, and the display will change to showing just the timer hours. Press the ▲ and ▼ buttons to set the hours, then press SET to advance to the minutes, and then SET again to start the timer.

When a counter/timer is running, briefly press SET to pause/resume, or hold SET to cancel. Every minute the current time will be shown for about 3 seconds.

## Changing your Settings

Hold the SET button for 3 seconds and the display will enter the settings menu. The leftmost digit shows the setting number, and the rightmost digits show the current value – use the ▲ and ▼ buttons to adjust. Press the SET button briefly to advance to the next setting, and at the end of the settings list it will save all changes and return back to the normal time screen. The ordering and description of these options are shown below.

Setting	Description	Usage
1	Set day-time tube brightness	Use ▲ and ▼ to set tube brightness from 0 (min) to 7 (max).
2	Set night-time tube brightness	
3	Set night-time light threshold	Press ▲ to use the current ambient light level as the night-time detection threshold. Press ▼ to use existing threshold. “1” = New night-time threshold will be set “0” = No change to threshold level
4	Set custom LED colour	Cycle through LED colours by holding ▲ or ▼ and release on the desired colour. To show the custom colour on the normal time screen, exit the menu and use ▼ to cycle through presets until new colour is selected. No number is shown on rightmost tube.

5	Set LED brightness	Use ▲ and ▼ to set LED brightness, applied to all screens. <i>Note:</i> low brightness will affect the custom colour appearance. No number is shown on rightmost tube.
6	Select 12hr or 24hr time format	Use ▲ and ▼ to choose time format. "12" = 12-hour "24" = 24-hour
7	Select °C or °F temperature	Use ▲ and ▼ to choose temperature units. "F" = °F (Degrees Fahrenheit) "C" = °C (Degrees Celsius)

## Troubleshooting and Warranty

Please refer to the full user's guide for troubleshooting: [nixlabs.com.au/support](https://nixlabs.com.au/support) as well as complete details on the warranty and servicing options offered. For all enquiries, please contact [support@nixlabs.com.au](mailto:support@nixlabs.com.au).

Your NIX labs clock comes with a three year warranty which includes the tubes. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## Specifications

<b>Dimensions &amp; Weight:</b>	117mm x 55mm x 27mm (LxWxH), 115g
<b>Operating Environment:</b>	0°C to +40°C, ≤95%rh non-condensing. Keep dry.
<b>Time Accuracy:</b>	Calibrated to < 0.0003% (3ppm), < 8s per month @ 25°C
<b>Temperature Accuracy:</b>	0.1°C Resolution, ±3°C Accuracy (typ <1.5°C)
<b>Time + Settings Backup:</b>	4-day supercapacitor backup maintains time and date. User settings are saved permanently.
<b>Supplied Power Adaptor:</b>	Input voltage: 100-240VAC 50/60Hz Output: 5.1V at 1A, 5.3V max. RCM compliant
<b>Supply Voltage:</b>	4.8V – 5.5V via Standard USB-C Socket. Rating ≥1.0A
<b>Max Supply Current</b>	140mA (0.7W)



NIX labs products are proudly designed and made in Brisbane, Australia using globally-sourced components.