

UniTire Pressure Gauge User Guide

Important safety instructions

PLEASE READ THE SAFETY INSTRUCTIONS CAREFULLY

- Read the instructions.
- Keep these instructions.
- Follow all instructions.
- Do not use the UniTire in water.
- Be careful not to drop it on the ground.
- Do not leave it under heavy objects.
- Be careful not to cut the cable with sharp objects.
- Clean only with a dry cloth.
- Refer all servicing to approved service personnel.

WARNING

TO REDUCE THE RISK OF DAMAGE,
DO NOT EXPOSE THE UNITIRE TO RAIN OR
MOISTURE.

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Copyright and acknowledgements

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DESIGN AND PRODUCTION

Designed and manufactured in Denmark by Unipro ApS.

The UniTire pressure gauge was designed by Palle Schultz, Denmark:
www.Palleschultz.dk

Unipro reserves the right to make changes and improvements to any of the products described in this document without prior notice.

Part numbers:

17-01-001 UniTire (black)
17-01-002 UniTire (dark blue)
17-01-003 UniTire (green)
17-01-004 UniTire (red)
17-01-005 UniTire (silver)
17-01-006 UniTire (light blue)

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ABOUT THIS USER GUIDE

This guide was produced by Unipro ApS.

UniTire User Guide version 1.01

Made for UniTire firmware version 1.0x.

Introduction

This User Guide contains all relevant information about your new UniTire digital tire pressure gauge.

Get started with the UniTire in 2 minutes with the Quick Guide.

Read all about the advanced features and functions in the Reference Guide.

Before you start, please check that your UniTire package contains the accessories described below.

CONTENT OF PACKAGE

The UniTire package contains the following:

- Pressure gauge.
- Pressure handle 0 - 5 bar.
- Two Alkaline AAA batteries installed.
- This User Guide.

If any of these items are missing please contact your dealer.

Note: You should retain the packaging in case you need to transport the unit.

UNIQUE UNITIRE IDEAS

UniTire combines many new ideas not seen before in a tire pressure gauge:

- The pressure sensor is placed directly in the air handle, which is connected to the gauge with a flexible cable instead of an air hose. This makes the measurement very precise because no air is wasted in the air hose.
- The handle has two air valves, which makes it easy to use with right or left hand - and allows you to let out more or less air.
- The handle is angled in a way which allows easy access to any type of tire valve.
- The standard pressure range is 0-5 bar.
- The "Stealth mode" enables you to hide

the pressure values from prying competitors, only showing if your tire pressure is at, above or below target.

- The "Sequence mode" allows you to save tire pressure values in a specified order for later analysis - and do it very quickly!
- The user interface comes in many different languages, including Danish, Dutch, English, Finnish, French, German, Italian, Portuguese and Spanish pre-installed.

EASY TO USE

Even with all the advanced features, the pressure gauge is very easy to use.

The graphical display makes it effortless to see and analyze the tire pressure saved in the pressure gauge.

The unique round shape with 4 gray tones is easy to read, and supports different sizes of text and numbers.

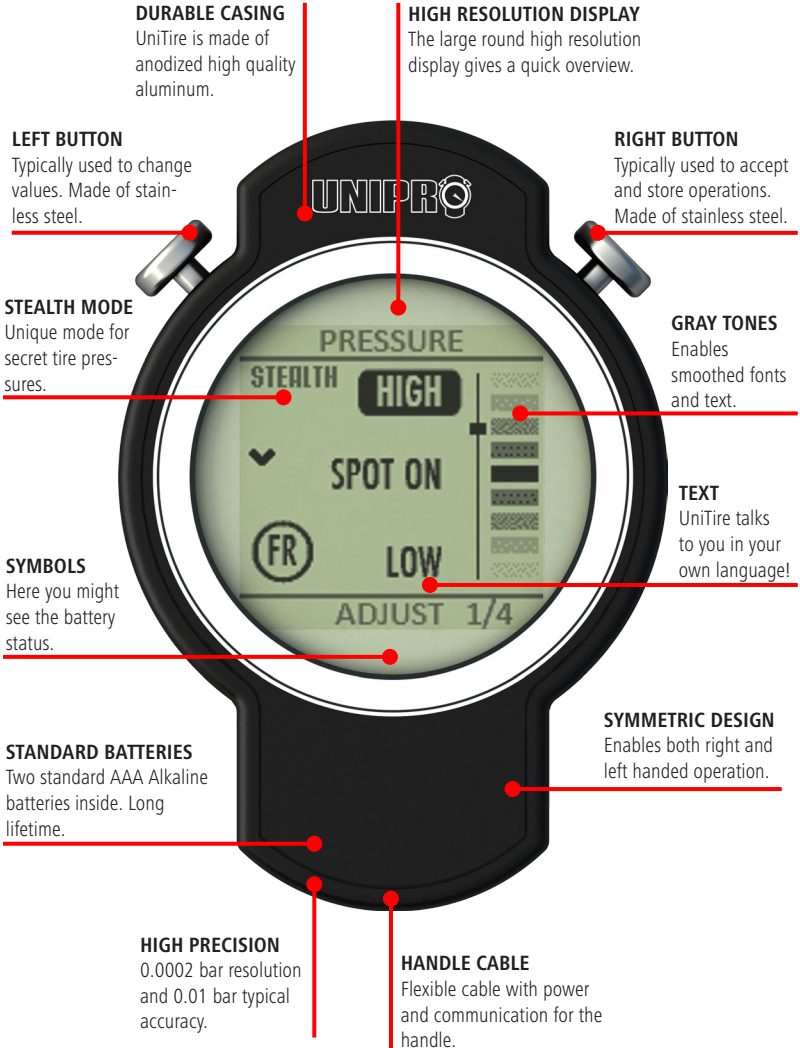
The graphical display also supports a regular analog gauge if you prefer this look over the digital look.

The feedback we get from drivers and teams about UniTire tells us that we have succeeded in making the UniTire easy to use.

Overview

Please note that the functions of the two buttons depend on whether the UniTire is set for right or left hand operation.

This manual assumes that UniTire is set for right hand operation.



Actual size
1:1

Specifications

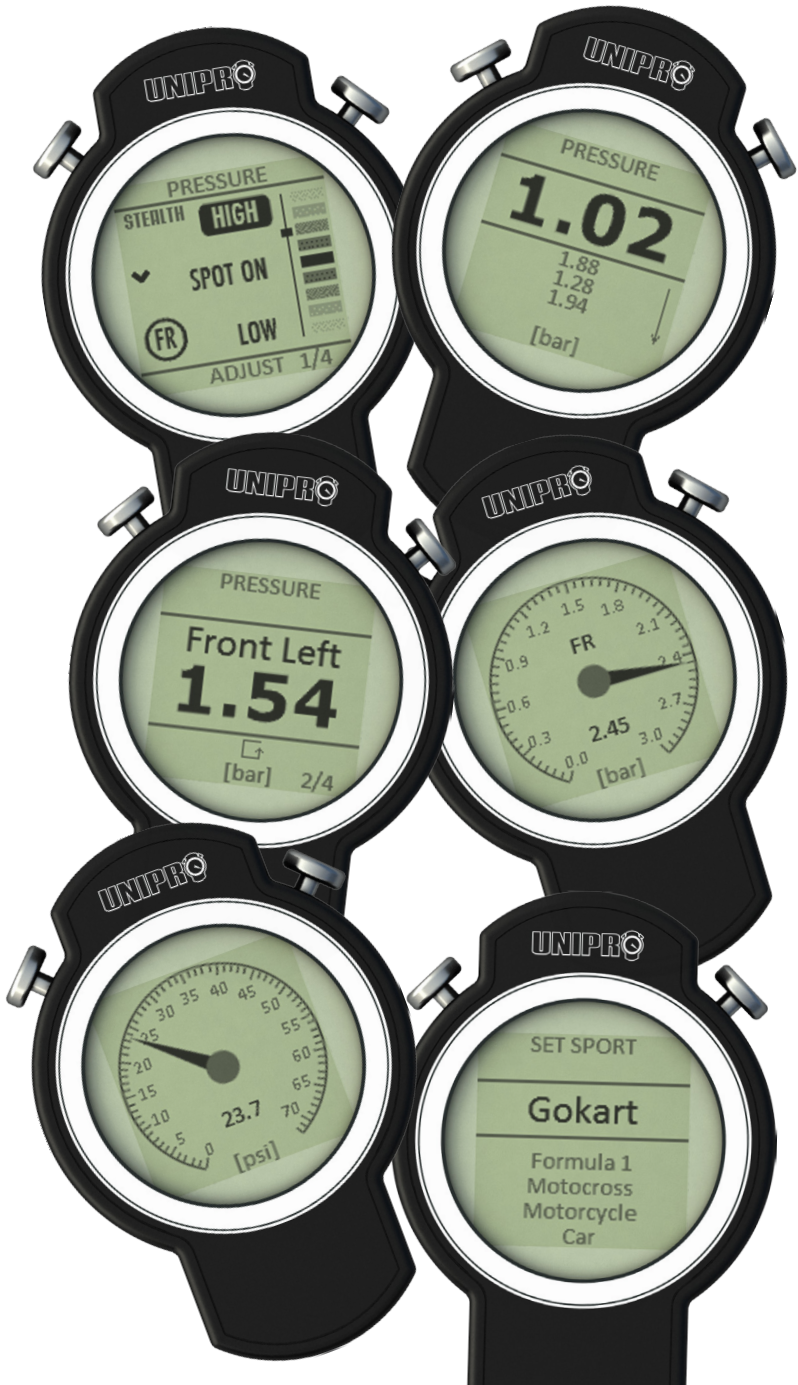
Pressure range	0 - 5 bar (72.5 psi)
Resolution	< 0.0002 bar (0.0029 psi)
Typical accuracy	< ± 0.01 bar (0.145 psi)*
Proof pressure	10 bar (145 psi)
Wasted air	0.8 cm ³ (0.05 inch ³)
Power supply	2 x AAA Alkaline batteries
Battery lifetime	~ 150 hours**
Pressure units	bar, mbar, psi, HPa, Torr
Languages	DEN, ESP, FIN, FRA, GBR, GER, ITA, NED, POR
Memory	20 tires sets
Dimensions	72.5 x 104.3 x 19.0 mm (2.85" x 4.11" x 0.75")
Weight	300 g (10.58 ounces)***
Controls	Two buttons in stainless steel
Display	128 x 128 pixels, 4 gray tones, bottom view (6 o'clock)
Calibration	Auto calibrate offset after power on

* **Typical accuracy:** Typical error when used in steady temperature for a limited time.

** **Battery lifetime:** Measured in pressure mode with new Duracell Alkaline batteries.

*** **Weight:** Includes gauge, batteries, cable and handle.

Examples



Quick Guide

Read the Quick Guide and learn how to use the basic functions of the UniTire:







Turn UniTire on and off, view current tire pressure, save the pressure values for all tires and recall them later.

You will be ready to go in 2 minutes...

3 WAYS TO PRESS BUTTONS





To use UniTire, you need to know how to press the two buttons in 3 different ways:

1. A short press -  
2. A medium press - ¹ ¹
3. A very long press - ³ ³

For the general use of UniTire, it is only necessary to use the short press ( ) and the very long press (³ ³). Only secondary features are operated with the medium press (¹ ¹).

TURN UNITIRE ON

There are 3 different ways to turn UniTire on:

1. Keep pressing the **right** button (³) if you want to measure and view the current pressure (**Pressure mode**).
2. Keep pressing the **left** button (³) if you want to measure and save the pressure values of all tires in the predefined sequence (**Sequence mode**).
3. Press both the **left** and **right** buttons at the same time (³ + ³) if you want to change settings (**Setup mode**).


UniTire starts by showing the startup screen, and will show this screen as long as you keep


pressing the button(s). After that you will be on either the pressure screen (1), the pressure sequence screen (2) or in the Setup mode (3).

MEASURE AND ADJUST THE PRESSURE IN PRESSURE MODE

If you start in "Pressure mode", the screen will show the current tire pressure. The pressure value is constantly updated to allow for quick pressure adjustments.

Use one or both of the air valve buttons on the pressure handle to reduce the pressure.

If the **right** button (³) is pressed, the current value will be stored in the history list under the current pressure value. The history list shows the last four values stored, even after the UniTire is turned off.

If you want to clear the history list, just press and hold down the **left** button (³) until the list disappears.

The pressure unit (bar, psi etc.) is chosen in the setup menu, which is described later in this manual.

Quick guide

SAVE THE MEASURED PRESSURE VALUES

If you start in "Sequence mode", the screen will inform you about which tire you are supposed to measure.

Measure the tire pressure on the first tire and press the **right** button (➡) to save the value.

Use one or both of the air valve buttons on the pressure handle to reduce the pressure.

Then move on to measure the pressure on the next tire in the sequence.

The tire sequence is defined in the Setup mode. This is described in "SEQUENCE SETUP" on page 18.

RECALL STORED VALUES

From "Sequence mode" press the **left** button (⬅) to recall the saved tire pressure values in "Recall mode".

The screen will list 4 sets of tires. Depending on the selected sport, there will be either two or four tires in each set.

The tires are listed in the same sequence as selected in Setup mode.

The bottom of the screen will show the current page and the total number of pages.

UniTire can store values for up to 20 sets of tires.

Press the **right** button (➡) to go to the next page and the **left** button (⬅) to go back to "Sequence mode".

CLEAR THE STORED PRESSURE VALUES

If you want to clear the stored values, just press and hold down the **left** button (⬅) from "Recall mode".

SETUP MODE

To change settings, press and hold the **left** and the **right** button (⬅ + ➡) at the same time to go to Setup mode - either when turning UniTire on or during normal operating.

For more information about Setup mode, please see "ENTER SETUP MODE" on page 18.

TURN UNITIRE OFF

Press the **right** button (➡) and hold it down to turn UniTire off. When you see "POWER OFF" in the display, you can release the button again.

UniTire will also turn itself off if no button is pressed and no pressure is detected after a preselected time.

BUILT-IN HELP

When you turn UniTire off and "POWER OFF" is displayed, you can press the **left** button (⬅) before you release the right button, to display the built-in help.

In help mode, the **right** button (➡) will show the next help page, and the **left** button (⬅) will show the previous help page.

To leave help mode, turn UniTire off.

That's how easy it is! If you are ready for some more advanced features, then read the Reference Guide in the following section of this manual.

Also check www.uniprolaptimer.com for news and updates.

Reference Guide

In the reference guide you can find detailed information about all features and functions of the UniTire.

To get the most from your UniTire, we recommend that you read this guide in full.

The UniTire is optimized for ease of use, while also incorporating many useful, advanced features.

BASIC INFORMATION

Batteries

UniTire uses two standard AAA cell batteries. The software is optimized to be energy-efficient for long battery life (typically more than 100 hours).

Please help us in our effort to protect the environment:

1. Do not change the batteries before UniTire tells you to do so.
2. Always turn in your used batteries for recycling.

Low battery symbol

When the batteries reach 2.2 V, the low battery symbol will be shown at the bottom of the display:

2.2 V:  **1.7 V:** 

You can continue to use the UniTire until the last of the 4 'cells' in the battery symbol has disappeared. At 1.5 V UniTire will turn off automatically.

Pressure handle

The pressure handle is equipped with two air valve buttons. Use one of the buttons to let out air, or both buttons to let out more air.

Communication and power cable

The cable which connects the pressure handle with the pressure gauge carries the power and communication between the gauge and the handle.

The cable is very flexible and durable, but be careful not to cut or squeeze the cable with sharp or heavy objects.

Display, casing and buttons

The UniTire has a custom made, 128 x 128 pixel graphical display with 4 gray tones and adjustable contrast.

The casing is made of high quality aluminum and the buttons of stainless steel.

To maximize the lifetime of your Unitire:







- Do not put it directly in your tool box.
- Be careful not to drop it on the ground.
- Do not put it under heavy objects.
- Do not use it in rain.

Operating UniTire

3 WAYS TO PRESS BUTTONS





To use UniTire, you need to know how to press the two buttons in 3 different ways:

1. A short press -  
2. A medium press -   ¹
3. A very long press -   ³

For the general use of UniTire, it is only necessary to use the short press ( ) and the very long press (  ³). Only secondary features are operated with the medium press (  ¹).

TURN UNITIRE ON

There are 3 different ways to turn UniTire on:


1. Keep pressing the **right** button ( ³) to measure and view the current pressure (**Pressure mode**).
2. Keep pressing the **left** button ( ³) to measure and save the pressure values of all tires in the predefined sequence (**Sequence mode**).
3. Press both the **left** and **right** buttons at the same time (  ³) to change settings (**Setup mode**). This is not often used, but you will need to set up UniTire at least once.

UniTire starts by showing the startup screen as long as you keep pressing the button(s). Then you will see the pressure screen (1), the pressure sequence screen (2) or the setup screen (3).




Startup screen with software version and serial number.

TURN UNITIRE OFF

Press the **right** button ( ³) and hold it down to turn UniTire off. When you see "POWER OFF" in the display, you can release the button again.

UniTire will turn itself off if no buttons are pressed and no pressure is detected after a predefined time.


When you turn UniTire off, you will have access to the built-in help. Just press the **left** button () when the power off screen is shown.



Power off screen with access to help.

HELP MODE

UniTire has a built-in help feature, with pages showing which buttons to press to use the different functions.

In help mode you go to the next page by pressing the **right** button () and to the previous page by pressing the **left** button ()

To leave help mode, turn UniTire off.

Operating UniTire

PRESSURE MODE

The regular tire pressure gauge simply shows the current tire pressure and continuously updates when air is released by pressing one or both of the valves on the pressure handle.

Keep pressing the **right** button (➡) at startup to go directly to Pressure mode.

In Setup mode you can choose if you want to have the pressure values shown as digital numbers or as a classic analog gauge.

Also in Setup mode, you can choose if you want to show the pressure value in bar, psi, mbar, HPa or Torr.

The chosen unit is shown in the square brackets in the bottom line of the display.

Digital gauge mode

The digital gauge mode can show both the current pressure value and a "history list" with the last 4 saved pressure values.

To save a current pressure value in the history list, simply press the **right** button (➡).



Digital view with large current value and small history list values.

Each time a new pressure value is put in the history list, the oldest one drops off the list. The newest value is at the top. This order is also indicated by the arrow in the right side of the display.

The history list will be saved even when UniTire is turned off.

If you want to clear the history, press and hold down the **left** button (⬅) until the history list disappears.

Analog gauge mode

Because of the graphical display, it is possible to emulate a classic analog gauge. The scale goes from 0 to the maximum value defined in Setup mode ("MAX RANGE SETUP" on page 19).



Analog view with 1 bar chosen as max range, and a current pressure of 0.57 bar.

Depending on the maximum range, a number of lines divides the scale to make it fast and easy to see the current pressure. The current pressure value is also shown as a precise number in the display.

Make the maximum range value as low as possible to make the scale as detailed as possible. This gives a better resolution between the lines, making it easier to adjust the pressure while using the analog scale.

Operating UniTire

SEQUENCE MODE

In Sequence mode you measure and save the pressure on all tires in a predefined order (2 or 4 tires depending on which sport you have chosen in setup).

You need to define the order of the tires in Setup mode ("SEQUENCE SETUP" on page 18) before you can use this mode.

Your choice in setup of digital gauge mode or analog gauge mode will also be used in Sequence mode.

You can save up to 20 sequences in the memory so you have easy access to the actual tire pressure values from a full day of racing without having to write anything down.

Keep pressing the **left** button (↶) at startup to go directly to Sequence mode.

Digital gauge mode



Digital view with large current value for Front Left tire, an arrow to show the sequence direction and numbers in the corner showing that you are measuring tire 2 of 4.

Press the **right** button (↷) to save the value and move on to the next tire.

If you make a mistake and want to clear the measurements in the current sequence, press and hold the **left** button (↶) down until the text shows the first tire again and the progress is showing either 1/4 or 1/2.

Analog gauge mode



Analog view with current value for Front Right tire (FR above the needle) shown as numbers (below the needle) and as value on the analog scale.

Also when using the analog gauge mode, you press the **right** button (↷) to save the value and move on to the next tire.

Of course it is up to you to decide if you want to save the pressure value before or after you make adjustments to the pressure.

Advantages of the digital gauge mode

As you can see in the description on this page, the digital gauge mode shows more details than the analog gauge mode:

- Current tire shown with full name.
- Pressure value in very large text.
- Numbers to show where you are in the sequence.
- Arrow to show the direction to move in the sequence.

If you use the Sequence mode, we recommend that you also use the digital gauge mode to take advantage of the extra features.

Operating UniTire

STEALTH MODE

Stealth mode is an alternative way of using the Sequence mode.

The purpose with Stealth mode is to make it impossible for your competitors to see your tire pressure when you are measuring.

When Stealth mode is turned on in setup, you will see the "Stealth screens" instead of the regular "Sequence screens".

You will still be able to use the simple pressure mode to see the actual pressure values when Stealth mode is turned on - only Sequence mode is affected.

In Stealth mode, you define a target pressure for each tire in setup, and then UniTire shows if you are on target, above target, or below target, instead of showing the actual values.

Otherwise, Stealth mode works in the exact same way as Sequence mode:

To start in Stealth mode, turn UniTire on by holding the **left** button (↵).

Measure the tire pressure in the defined sequence order, and save each value by pressing the **right** button (➡).

If you want to start over with the current sequence, press and hold the **left** button (↵) down until the circle shows the first tire again.

When you save the measured values in Stealth mode, the actual values are stored in the memory, so you will be able to see them in Recall mode.

Stealth mode works both with digital and analog gauge mode.

Read more about setting up Stealth mode and Gauge mode in the Setup section of this manual.

Digital gauge view in Stealth mode



Based on the target tire pressure for each tire, as defined in setup, the Stealth mode screen will show if the current pressure is HIGH (as in this example), SPOT ON or LOW. The small circle will show which tire you are supposed to adjust (FR = Front Right in this case).

At the right side of the display you will see the bar graph showing how close you are to the target.

If you are too low, LOW will be highlighted, and if you are too high, HIGH will be highlighted.

When you are within 2% of the selected target, SPOT ON will be highlighted.

The small square to the right on the bar graph will show how far you are from the defined target.

The range of the bar graph is +/- 20%.

To the left you will see between zero and three arrows pointing up or down. These arrows are a rough indication of how far away from the target the pressure is.

They are pointing in the direction you need to go. If they are pointing up, you need to add more air, and if they are pointing down, you need to let more air out.

Operating UniTire

Digital gauge view in Stealth mode



Three arrows means more than 100% away, two arrows means more than 50% away and one arrow means more than 10% away. If you are within 10% of the target, no arrows will be shown.

Analog gauge view in Stealth mode



The analog gauge view has less information than the digital gauge view. Here it shows a limited area of the scale, the actual tire (FL = Front Left) and no actual value as a number.

The analog gauge view in Stealth mode has the same functions as in Sequence mode:

To start in Stealth mode, turn UniTire on by holding the **left** button (↵).

Measure the tire pressure in the defined sequence order, and save each value by pressing the **right** button (➡).

If you want to start over with the current sequence, press and hold the **left** button (↵) down until the circle shows the first tire again.

When you save the measured values in Stealth mode, the actual values are stored in the memory, so you will be able to see them in Recall mode.

Use Stealth offset in pressure mode

When Stealth mode is enabled, an offset can be added to the current pressure value in "Pressure mode". This is to confuse prying competitors.

For example:

If the offset is entered as -0.20 bar (see "STEALTH OFFSET SETUP" on page 20) and the real pressure is 1.65 bar, the value shown in the display is 1.45.

Pressure mode view in Stealth mode



If a stealth offset is entered in Setup mode, the pressure value shown is not the actual pressure value. If no pressure is applied, a question mark is shown to avoid the stealth offset being visible.

The values in the history list are the real values. It is only the current pressure value with the large digits that is affected.

Operating UniTire

RECALL MODE

The Recall mode is where you view the tire pressure values you have saved in Sequence mode / Stealth mode.

You can store up to 20 sequences with either 2 or 4 tire pressure values in each sequence (depending on the chosen sport).

To enter Recall mode, press the left button (←) from either Sequence mode or Stealth mode.

RECALL			
FR	FL	RL	RR
1.26	1.01	1.19	1.37
1.18	1.43	1.50	1.22
1.65	1.12	1.39	1.28
1.22	1.16	1.08	1.42
[bar]		1/2	

The recall screen will show either two or four tires, listed in the sequence you selected in setup. In this example you see page 1 of 2.

The first line will always show the newest saved value.

When you measure more than 20 sets of tires, the oldest one will be erased and the new one will be stored.

Each page in Recall mode can show four different sequences with either 2 or 4 tires in each.

In the bottom right corner you can see which page you are on, and how many pages there are in total. This example is showing page 1 out of a total of 2 pages. The maximum number of pages is 5.

The pressure values use the unit selected in Setup mode. The unit is shown in square

brackets at the bottom of the screen.

Navigating the pages is easy

To go to the next page just press the **right** button (→). When you reach the last page, a press on the **right** button (→) will bring you to the first page again.

If you want to go back to the first page before you reach the last page, you can press a little longer on the **right** button (→).

If you want to clear the memory, press and hold the **left** button (←).

To go back to either Sequence mode or Stealth mode, press the **left** button (←) again.

Setup mode

ENTER SETUP MODE

You enter Setup mode by pressing both the **left** and **right** buttons at the same time (**↶** + **↷**).

You can also do this to go directly to Setup mode when turning UniTire on.

GENERAL FUNCTIONS

In Setup mode you use the **left** button (**↶**) to scroll through choices, and to change or adjust the current setting.

You use the **right** button (**↷**) to accept the value, store it in the memory and move on to the next setup screen.

When you are finished with the setup, you can return to the previous mode by pressing and holding both the **left** and the **right** buttons (**↶** + **↷**) or turning UniTire off by pressing and holding the **right** button (**↷**).

All settings are stored and will not be cleared, even if you remove the batteries.

SPORT SETUP

UniTire can be used for all sports where tire pressure measurements are needed. Choose your sport - or a sport with the same number of wheels as your sport.



The "SET SPORT screen" will list the pre-defined sports.

Scroll between choices by pressing the **left** button (**↶**). Select and move to the next setup screen

by pressing the **right** button (**↷**).

When the sport is changed, overwriting values needs to be confirmed on the next screen.

SEQUENCE SETUP

This is where you define which order to measure your tires in.



The "SET SEQUENCE screen" will list all the possible combinations of tires.

Scroll between choices by pressing the **left** button (**↶**). Select and move to next setup screen by pressing the **right** button (**↷**).

GAUGE MODE SETUP

UniTire can display in either digital or analog gauge view. The digital view has more details, while the analog view is more simple and has the looks of an old fashioned analog pressure gauge.



The "GAUGE MODE screen" gives you the choice between Digital and Analog view.

Setup mode

Scroll between choices by pressing the **left** button (←). Select and move to next setup screen by pressing the **right** button (→).

MAX RANGE SETUP

If UniTire is set to operate in analog mode, it is necessary to set the maximum pressure value you wish to display.

You want to have the maximum range value as low as possible to make the scale as detailed as possible. This provides resolution between the lines and easier pressure adjustment while using the analog scale.

UniTire can measure pressure values up to 5 bar even if the max range is set to a lower value.



Scroll between choices by pressing the **left** button (←). Select and move to next setup screen by pressing the **right** button (→).

STEALTH MODE SETUP

This is where you choose if you want to use the Stealth mode when measuring and storing tire pressure in Sequence mode.

Set Stealth mode to On if you want to hide pressure values.



Scroll between choices by pressing the **left** button (←). Select and move to next setup screen by pressing the **right** button (→).

STEALTH TARGET SETUP

When Stealth mode is enabled, 2 or 4 more screens are shown, depending on the chosen sport.



This is the hidden target pressure value for each tire.

Increase the target value by pressing the **left** button (←). If you keep pressing the **left** button (←), the value will increase faster.

To change between increasing and decreasing the pressure target, just press the **left** button a little longer (←). The direction is indicated by the small arrow.

To start from zero, press the **right** button a little longer (→).

Select and move to the next setup screen by pressing the **right** button (→).

Setup mode

STEALTH OFFSET SETUP

When Stealth mode is enabled, it is possible to offset the value shown in Pressure mode.



Increase the offset value by pressing the **left** button (←). If you keep pressing the **left** button (←), the value will increase faster.

To change between increasing and decreasing the offset value, just press the **left** button a little longer (←¹).

The direction is indicated by the small arrow. To start from zero, press the **right** button a little longer (→¹).

Select and move to the next setup screen by pressing the **right** button (→).

LANGUAGE SETUP

UniTire supports many different languages.



The abbreviation for each language is always the same three letters; for example, "DEU" is always the abbreviation for Deutsch/German, whether the device is set to German or English. To set the language to English, press the **right**

button a little longer (→¹).

Scroll through the choices with the **left** button (←). Select and move on to the next setup screen by pressing the **right** button (→).

CONTRAST SETUP

Here you can set the screen contrast - that is the contrast between the screen and the text / numbers on the screen.



The contrast can be set to a value between -5 and +5. Increase the contrast by pressing the left button (←). You will see the contrast change at the same time.

To reset the contrast to zero, press the **right** button a little longer (→¹).

Save and move on by pressing the **right** button (→).

PRESSURE UNIT SETUP

Select between commonly used pressure units.



Scroll between the choices by pressing the **left**

Setup mode

button (↩). Select and move on to the next setup screen by pressing the **right** button (→).

AUTO OFF TIME SETUP

UniTire will automatically be turned off after not being used for a preselected amount of time.



Scroll through the choices by pressing the **left** button (←). Select and move on to the next setup screen by pressing the **right** button (→).

OPERATION SETUP

Choose between right hand and left hand operation.



Use the **left** button (←) to shift between Right hand and Left hand and press the **right** button (→) to select and move on to the next setup screen.

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Troubleshooting

We expect a smooth and pleasurable experience when using UniTire.

If you have any problems, either with the setup or with daily use, please check the following pages for suggested solutions.

If you don't find the answer to the problem here, please contact your Unipro dealer for further assistance.

Weak and hard to read text

The contrast is set too low.

- Adjust the contrast to a higher value.

I want to hide the pressure values

Sequence mode can either work with visible values or hidden values.

- Set Stealth mode to **On** in Setup mode to hide values.

NOTE! You can't hide pressure values in Pressure mode, but you can offset the value.

Water entered the box

The two buttons are not water tight.

- Unscrew the two screws and remove the rear part of the box. Place it with the opening facing upwards to dry.

The gauge was dropped and a button is bent

The two buttons are made from stainless steel, but can still be damaged.

- Contact your dealer to order a new button as a spare part.

The value is not zero after power on

UniTire calibrates the pressure after power on.

- Make sure no pressure is applied when turning UniTire on. You can power off and on again to re-calibrate.

Pressure value is showing "---"

The handle is not detected.

- Make sure the handle is correctly attached.
- Turn UniTire off and on again.

UniTire is not turning on

Batteries might be empty.

- Press and hold the **right** button (➡) for at least 5 seconds. Then try to turn UniTire on again.
- Or change the batteries.

Some of the scale is missing in analog mode

It is supposed to be this way in Stealth mode with analog gauge view.

- Change to normal Sequence mode by setting Stealth mode to **off**.

Pressure value is showing "?" without pressure or the value does not look correct

A Stealth offset is programmed.

- Adjust the Stealth offset to zero in Setup mode.
- Change to normal Sequence mode by setting Stealth mode to **off**.

Maintenance

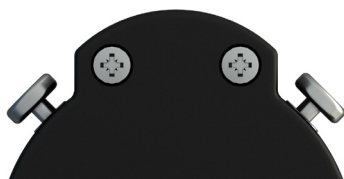
Battery change

To replace batteries

When the batteries reach 2.2 V, the low battery symbol will be shown at the bottom of the display:

2.2 V:  **1.7 V:** 

You can continue to use the UniTire until the last of the 4 'cells' in the battery symbol has disappeared.



The batteries are located inside the box. Put UniTire on the table with the rear side up.

Unscrew the two screws and remove the rear part of the box by lifting the end with the two screws. Here you will see a battery holder with two standard Alkaline 1.5 V AAA batteries.

Please replace them with two new ones of high quality.

Please properly dispose of the used batteries.

Insert batteries with the right polarity. If you should by accident put them in the opposite direction, you will not hurt UniTire or the batteries.

When assembling UniTire again, slide the rear part into the front part and center it before closing it.

Do not over tighten the two screws.

Cleaning

To clean the case, display, and buttons

The exterior surfaces of UniTire products are made from solid anodized aluminum, plastic overlay, and stainless steel.

They are designed to be easily wiped clean with a dry, lint free cloth.

Greasy marks should be removed by light rubbing with a slightly damp cloth and a trace of proprietary glass cleaner.

Do not use any other solvent or abrasive based cleaners.

Ensure that no liquid enters the box and that the product is completely dry before reuse.

Service and guarantee

Service

The Unipro UniTire pressure gauge has been carefully designed to give you many years of untroubled use. There are no parts inside the case which need service, nor do the units require any form of maintenance besides battery change and cleaning.

In the unlikely event that your product fails to function correctly, it should be returned in its original packaging to your Unipro dealer.

You can always find the updated list of worldwide dealers on www.uniprolaptimer.com.

No responsibility can be accepted for the product whilst in transport to the factory or dealer. Customers are therefore advised to insure the unit during transport.

When seeking service under guarantee, proof of the date of purchase will be required.

Guarantee

The product is guaranteed against defects in material and workmanship for two years from the date of purchase.

The guarantee is void if the product has been subject to misuse, accident, or negligence, or has been tampered with or modified in any way without the written authorisation of Unipro ApS.

Note: Connecting anything other than the UniTire handle to the cable may cause damage to the product which will not be covered by this guarantee.

Attempted servicing by unauthorized people may also invalidate this guarantee. Labor and carriage charges are not covered unless by local agreement.

Outside Denmark, local warranty liability is restricted to equipment purchased within the territory.

Our agents outside Denmark are only under contractual obligation to service under guarantee equipment sold through them.

Our agents are entitled to make a non-refundable charge for any service carried out on other equipment.

This guarantee does not limit your statutory rights within the country of purchase.

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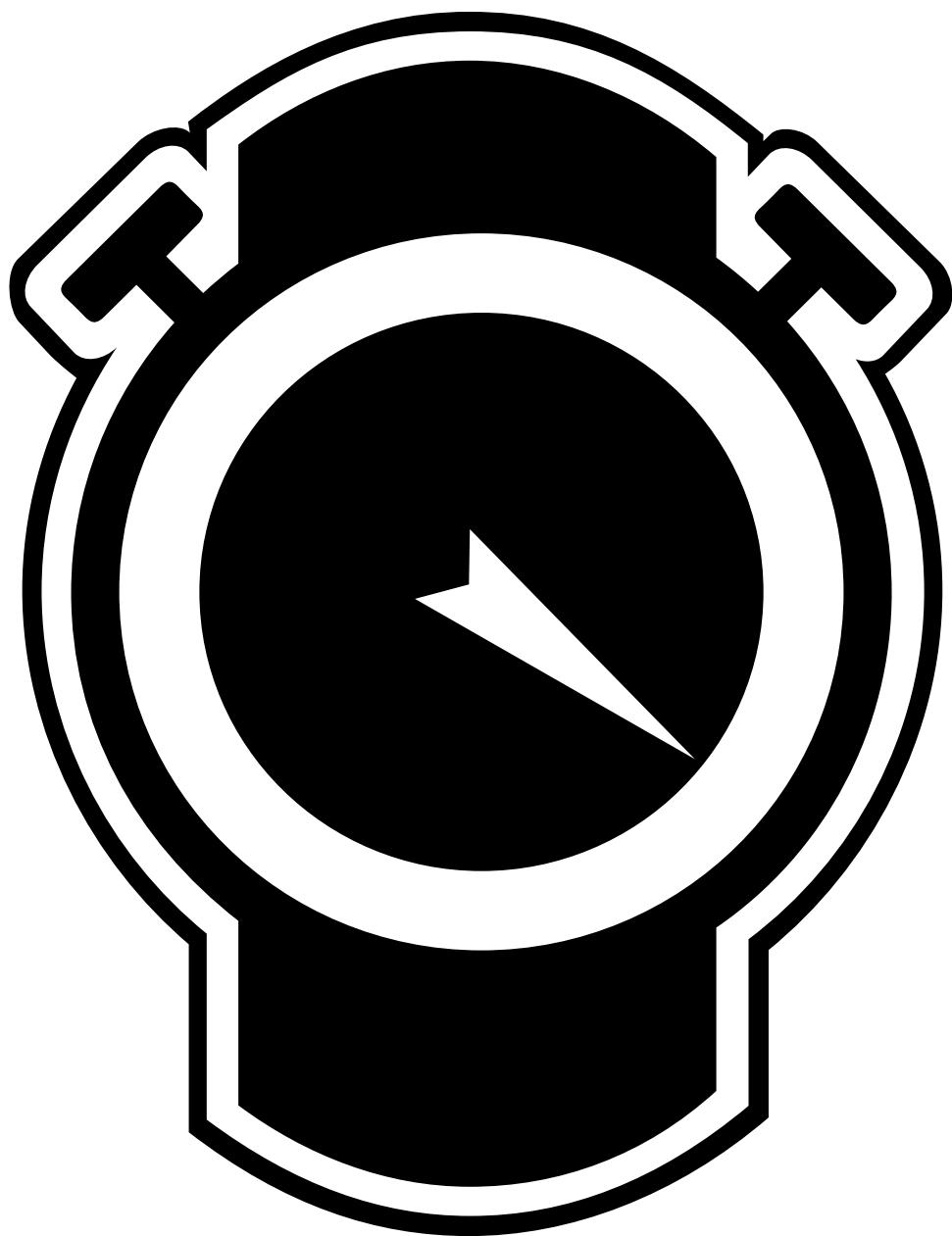
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UniTire Pressure Gauge IR Temperature addendum

Important safety instructions and information

PLEASE READ THE SAFETY INSTRUCTIONS CAREFULLY

- Read the instructions.
- Keep these instructions.
- Follow all instructions.
- Do not use the UniTire in water.
- Be careful not to drop it on the ground.
- Do not leave it under heavy objects.
- Be careful not to cut the cable with sharp objects.
- Clean only with a dry cloth.
- Refer all servicing to approved service personnel.

WARNING

TO REDUCE THE RISK OF DAMAGE,
DO NOT EXPOSE THE UNITIRE TO RAIN OR
MOISTURE.

SALES AND SERVICE IN DENMARK

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INTERNATIONAL DEALERS

You can find our International dealers on the
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www.uniprolaptimer.com

DESIGN AND PRODUCTION

Designed and manufactured in Denmark by
Unipro ApS.

Unipro reserves the right to make changes and
improvements to any of the products described

in this document without prior notice.

Part numbers:

17-01-020 UniTire - IR (black)
17-01-021 UniTire - IR (dark blue)
17-01-022 UniTire - IR (green)
17-01-023 UniTire - IR (red)
17-01-024 UniTire - IR (silver)
17-01-025 UniTire - IR (light blue)

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ABOUT THIS USER GUIDE

This guide was produced by Unipro ApS.

UniTire - IR Addendum version 1.00

Made for UniTire firmware version 1.0x.

Introduction

This User Guide addendum contains all relevant information about your new UniTire digital tire pressure gauge equipped with an infrared temperature sensor.

Get ready to use the UniTire in 2 minutes with the Quick Guide in the main UniTire User Guide. Please read the Quick Guide before reading all about the additional advanced features and functions of the IR temperature sensor in this Reference Guide.

UNIQUE UNITIRE IDEAS

UniTire combines many new ideas not seen before in a tire pressure gauge. One of these ideas is to integrate the infrared temperature sensor. More is described in the User Guide:

- The pressure sensor is placed directly in the air handle, which is connected to the gauge with a flexible cable instead of an air hose. This makes the measurement very precise because no air is wasted in the air hose.
- The handle has two air valves, which makes it easy to use with right or left hand - and gives the possibility to let out more or less air.
- The handle is angled in a way which allows easy access to any type of tire valve.
- The standard pressure range is 0-5 bar.
- The "stealth mode" enables you to hide the pressure values from prying competitors, and just show if your tire pressure is on target or below / above.
- The "sequence mode" allows you to save tire pressure values in a specified order for later analysis - and do it very quickly!
- The user interface comes in many different languages, and is pre installed with Danish, Dutch, English, Finnish, French, German, Italian, Portuguese and Spanish.

EASY TO USE

Even with all the advanced features, the tire pressure gauge and the infrared temperature sensor is very easy to use.

The unique design with access to all functions through just two buttons makes it very quick and easy to measure either the tire pressure or temperature.

The graphical display makes it very easy to see and analyze the tire pressure, tire and asphalt temperature.

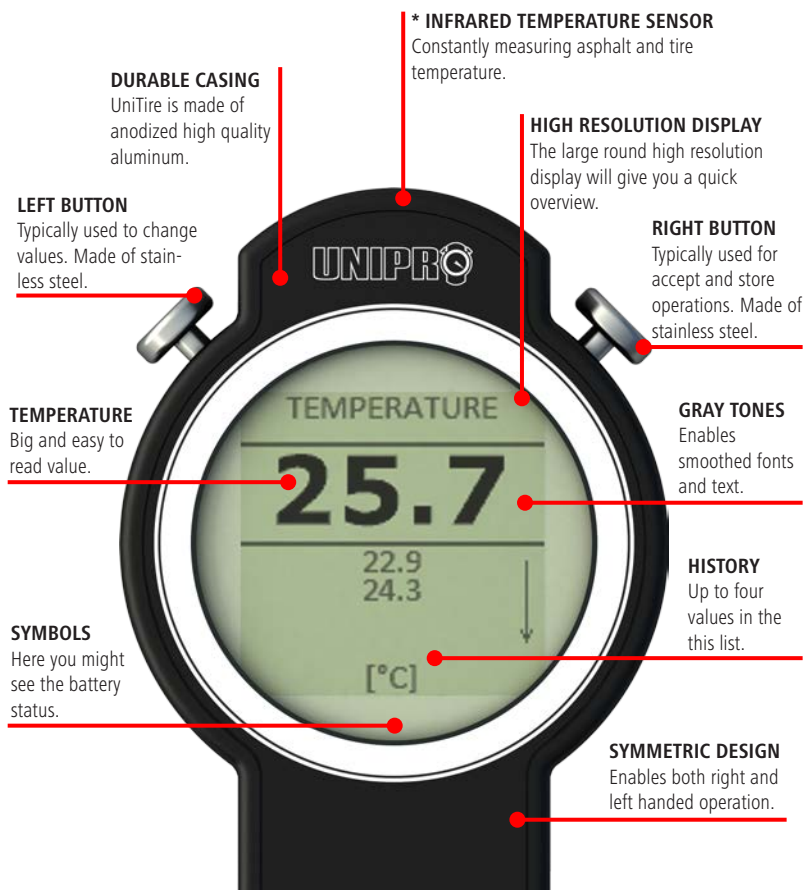
UniTire saves the measured values, so you can measure all your tires very quickly, and look at the values when you are finished.

Specifications and overview

Temperature range	-40 .. +115 °C (-40 .. +239 °F)
Resolution	0.02 °C (0.036 °F)
Accuracy	< ±0.5 °C (0.9 °F) in the range 0 .. 60 °C (32 .. 140 °F)
Accuracy	< ±1.5 °C (2.7 °F) in the range 60 .. 115 °C (140 .. 239 °F)
Battery lifetime	~ 120 hours*
Temperature units	Celsius / Fahrenheit
Memory	20 tires set including asphalt temperature
Emissivity correction	0.94**
Field of view	80°
Calibration	None needed

* **Battery lifetime:** Measured in pressure mode with new Duracell Alkaline batteries.

** **Emissivity correction:** This value is selected for best emissivity from tires and asphalt.



Reference Guide

In the reference guide you can find detailed information about the additional features and functions of the IR temperature sensor in the UniTire.

We recommend that you read this guide at least once, if you want to get the full value of your UniTire - IR.

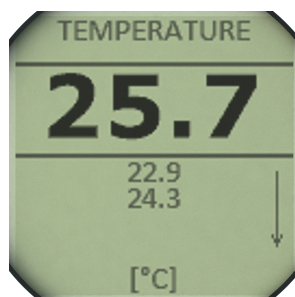
We have done our best to make UniTire really easy to use - but once you know the basics, you will find that we have also put in a lot of really useful advanced features.

TEMPERATURE / PRESSURE

When UniTire is in pressure mode you can switch between pressure mode and temperature mode.

Keep pressing the **right** button (➡) at startup to go directly to pressure mode.

When you are in pressure mode, you can switch between pressure and temperature mode by pressing a little longer on the **left** button (⬅).



Temperature view with large current value and small history list values. In the bottom of the screen your chosen temperature unit is shown.

To save a current temperature value in the history list, simply press the **right** button (➡).

Each time a new temperature value is put in the history list, the oldest one drops off the list. The newest value is at the top - also indicated by the arrow in the right side of the display. The history list will be saved even when UniTire is turned off.

If you want to clear the history, press and hold down the **left** button (⬅) until the history list disappears.

In setup mode, you can choose if you want to show the temperature value in degree Celsius or degree Fahrenheit.

SEQUENCE MODE

In sequence mode you measure and save the temperature on all tires in a predefined order (2 or 4 tires depending on which sport you have chosen in setup). The asphalt temperature is measured as part of the sequence.

You can save up to 20 sequences in the memory - so you have an easy access to the actual tire temperature values from a full day of racing without having to write anything down.

Keep pressing the **left** button (⬅) at startup to go directly to Sequence mode.

Operating UniTire



The first screen in the sequence is the asphalt temperature.

Press the **right** button (➡) to save the value and move on to the first tire.

If you make a mistake and want to clear the measurements in the current sequence, press and hold the **left** button (⬅) down until asphalt temperature is shown again.



Large current temperature for Rear Left tire, an arrow to show the sequence direction and numbers in the corner showing that you are measuring tire 3 of 4.

RECALL MODE

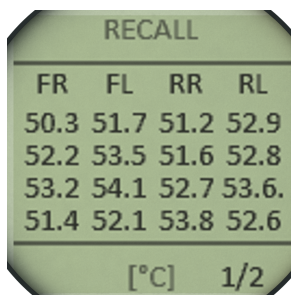
The recall mode is where you view the asphalt and tire temperature values you have saved in Sequence mode.

You can store up to 20 sequences with either 2 or 4 tire in each sequence (depending on the chosen sport).

To enter recall mode, press the left but-

ton (⬅) from either sequence mode or stealth mode.

When you enter recall mode, it will always start with the tire pressures. To change to tire temperature press a little longer on the **left** button (⬅).



The recall screen will show either two or four tires, listed in the sequence you selected in setup. In this example you see page 1 of 2.

The first line will always show the newest saved values!

When you measure more than 20 sets of tires, the oldest one will be erased and the new one will be stored.

Each page in Recall mode can show four different sequences with either 2 or 4 tires in each.

In the bottom right corner you can see which page you are on, and how many pages there are in total. This example is showing page 1 out of a total of 2 pages. The maximum number of pages is 5.

The temperature values are using the unit selected in setup mode. The unit is shown in square brackets at the bottom of the screen.

Navigating the pages is easy

To go to the next page just press the **right** button (➡). When you reach the last page, a

Operating UniTire

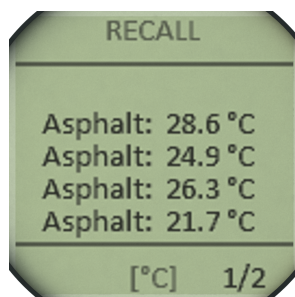
press on the **right** button (➡) will bring you to the first page again.

If you want to clear the memory, press and hold the **left** button (⬅).

To go back to sequence mode, press the **left** button (⬅) again.

Asphalt temperature is stored too

To see the asphalt temperature measured at the start of each sequence, just press a little longer on the **right** button (➡). This will toggle between asphalt temperature and tire temperature.



The recall screen will show the asphalt temperature for each sequence.

Navigation when viewing asphalt temperatures is the same as when viewing tire temperatures.

SETUP MODE

You enter Setup mode by pressing both the **left** and **right** buttons at the same time (⬅ + ➡).

You can also do this to go directly to Setup mode when turning UniTire on.

GENERAL FUNCTIONS

In setup mode you use the **left** button (⬅) to scroll through choices, and to change or adjust the current setting.

Use the **right** button (➡) to accept a value and store it in the memory and move on to the next setup screen.

When you are finished with the setup, you can return to the previous mode by pressing and holding both the **left** and the **right** buttons (⬅ + ➡) or turning UniTire off by pressing and holding the **right** button (➡).

All settings are stored and will not be cleared, even if you remove the batteries.

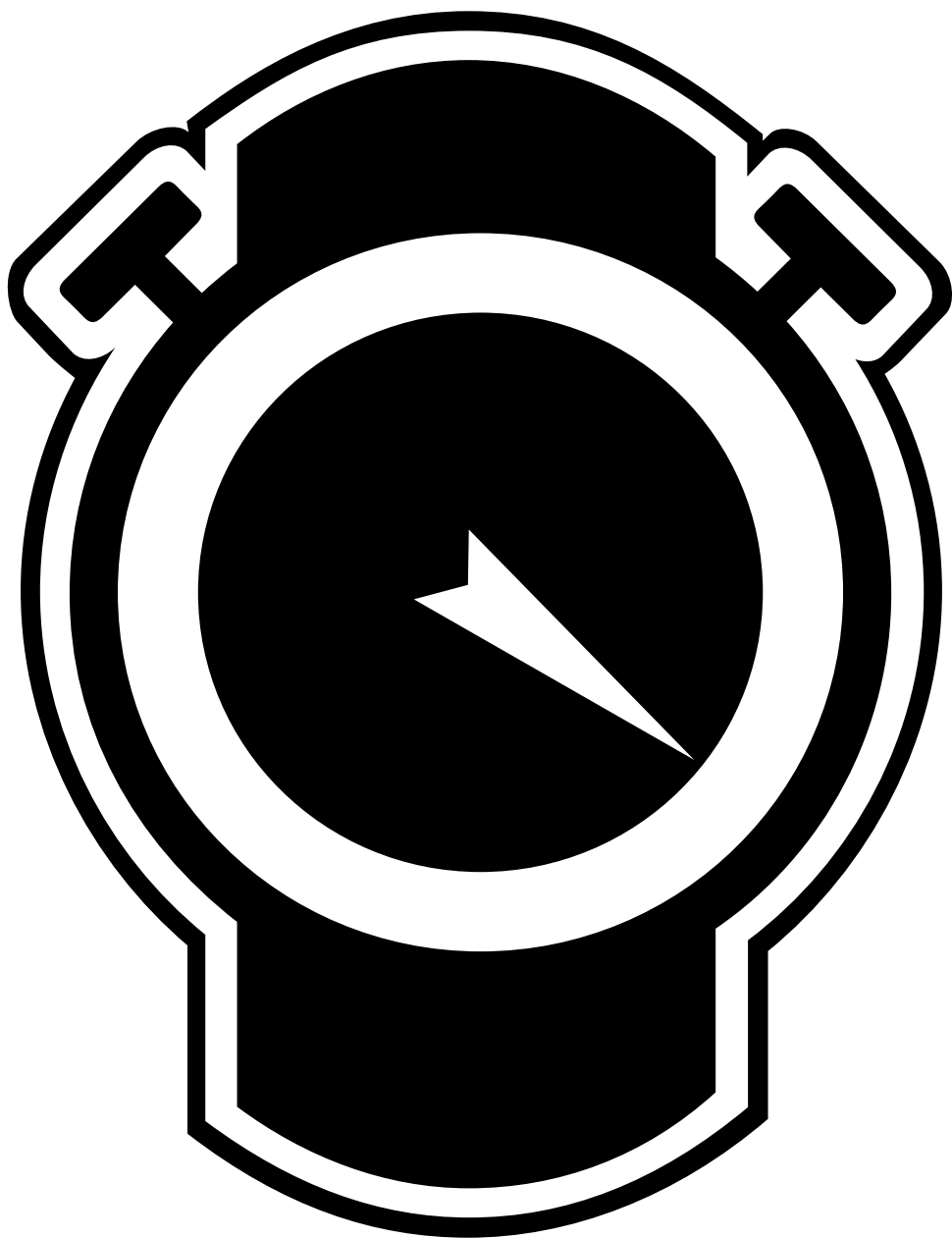
TEMPERATURE UNIT SETUP

UniTire can be set to show the temperature in either degree Celsius or degree Fahrenheit.



The "SET TEMP. UNIT" gives you the choice between Celsius and Fahrenheit.

Scroll between choices by pressing the **left** button (⬅). Select and move to next setup screen by pressing the **right** button (➡).



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