

CORMACH[®]
CORREGGIO MACHINERY PRESENTS
HANDY SCAN

QUICK USER GUIDE

**3D HAND HELD SCANNER
FOR TYRE TREAD DEPTH
MEASUREMENT AND
DEVICE FOR VEHICLE REGISTRATION**



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1. WARNINGS

Always store Handy Scan in its special case if not in use. Do not expose Handy Scan to shocks and vibrations and use the wrist lanyard to avoid falls. Avoid continuous exposure to dust, direct liquid splashes and aggressive substances such as chemicals and cleaning agents.

The laser light is dangerous for eyes: we advise to protect eyes with special protections during use.

The product contains a lithium-ion battery. Do not heat or burn the device and do not charge it at temperatures below 0 °C or above 45 °C.

Only use fingers only to select controls on the touch display in order to avoid any display damage.

Handy Scan can be repaired by an authorized service center only. Do not try to open the device as product warranty will be voided.

2. INTENDED USE

HANDY SCAN is suitable for measuring the tire tread depth of passenger cars and light commercial vehicles.

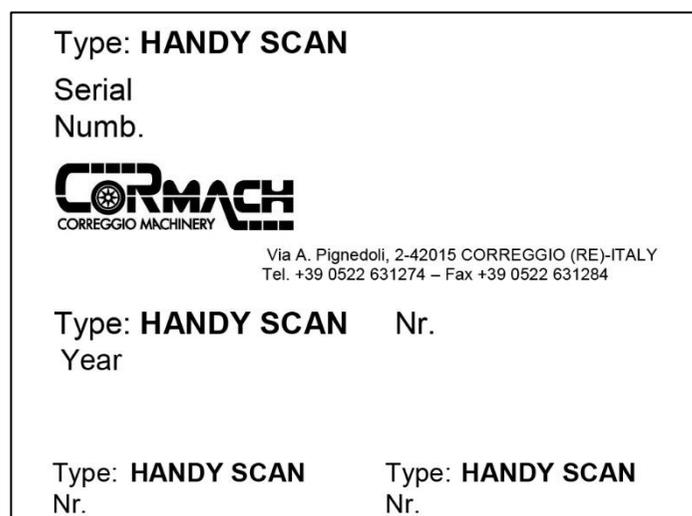
HANDY SCAN is also a vehicle pre-check tool (operator's choice).

3. LIMITATION OF LIABILITY

CORMACH SRL declines all responsibility for the improper use of Handy Scan and for applications other than those ones, which Handy Scan is designed for. It is the responsibility of the driver or vehicle owner to ensure that the tires have sufficient tread depth and are roadworthy.

4. LABEL AND SERIAL NUMBER

The following label can be found on the back side of the device:

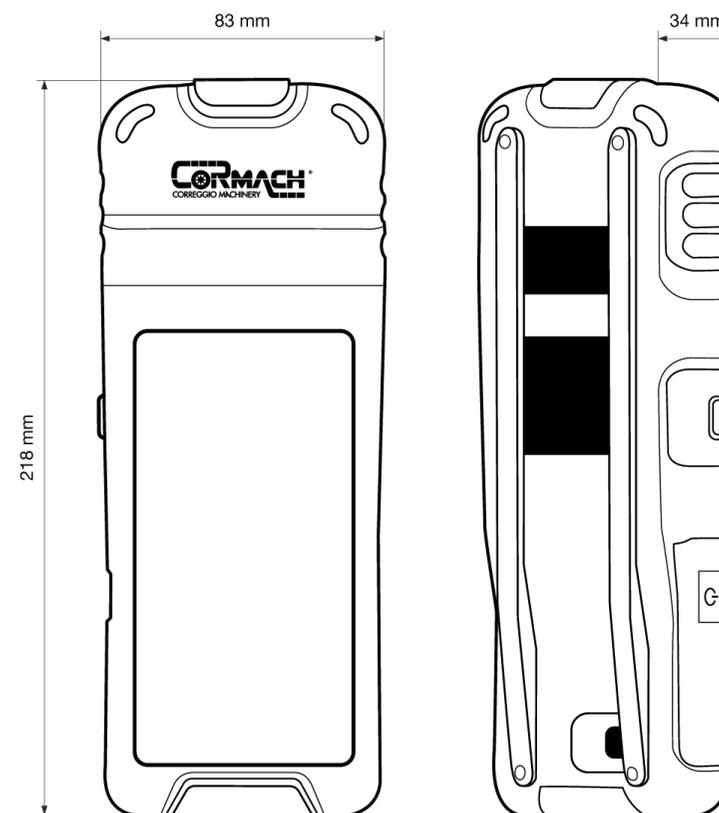


The serial number is necessary to receive updates and require assistance or spare parts.

5. TECHNICAL FEATURES



HANDY SCAN	SPECS
Measuring distance	0-10 mm
Accuracy	0.1 mm
Linearity	0.1 mm
Optical source	laser
Laser safety level	I, IEC class
Camera pixel	113 MP
Display	13,84 cm (4,45) HD+
Battery	Standby 40 h
Dimensions	218 mm x 83 mm x 34 mm
Case material	ABS
Reader	Optical glass
Netweight	415 g
Use temperature range	-10 ~ 50°C



6. SCOPE OF DELIVERY

Handy Scan scope of delivery includes:

1x 3D scanner device

1x USB 3 battery charger

1x wrist lanyard

1x handy case cm. 31x27x11 to hold the device



7. PRODUCT DESCRIPTION

Handy Scan has two buttons only :

- 1) For switching on/off (A)
- 2) For tyre scanning (B)



8. SWITCH ON/OFF & HOMEPAGE

On/Off switch (A) button for:

Power ON → press and hold the button for a few seconds until the screen lights up.

Power OFF → press and hold the button, then select “power off” on the display.

Restart → press and hold the button, then select “Reboot” on the display.

When turned on, the device automatically carries out the available system updates.

• HOMEPAGE

On the top banner:



HOMEPAGE



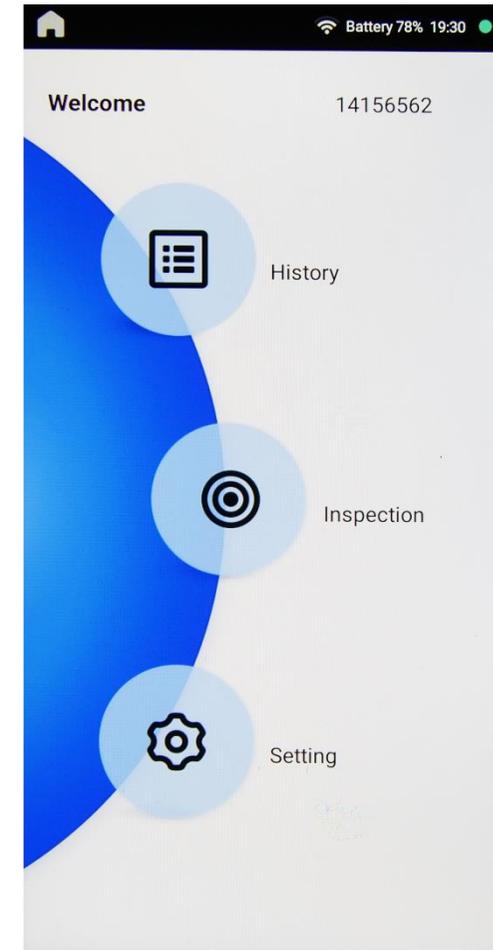
BATTERY LEVEL



= the green light shows the device is ready and all available updates have been carried out
(a red led shows the device is not online)

HOME PAGE MENU

- **HISTORY:** list of the last 100 inspections
- **INSPECTION:** operational session
- **SETTING:** device setting

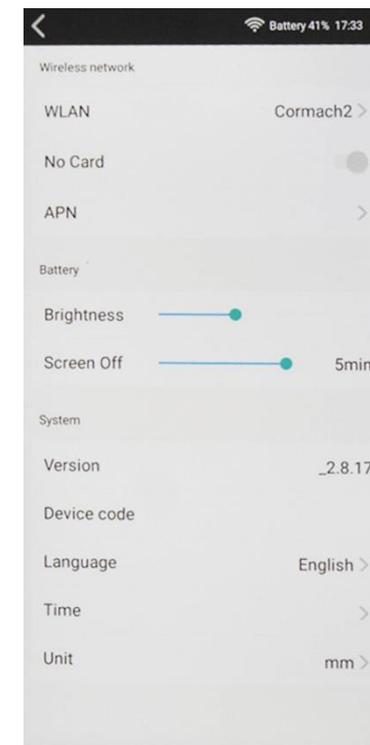
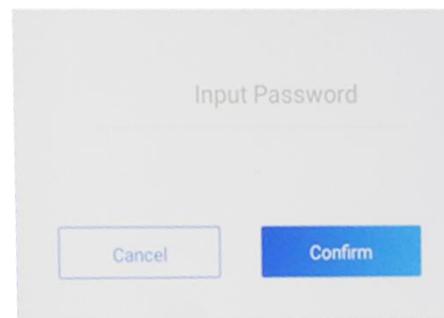


9. SETTING

• WIRELESS CONNECTION

From the homepage, enter *Setting* and select *WLAN*.

Search and set the password.



In addition to the wireless connection, it is also possible to adjust screen brightness and standby mode duration, and change the device unit of measurement.

In this section you can view the software version of the device and the license number: these are essential data for all assistance requests.



VIDEO (SETTING)

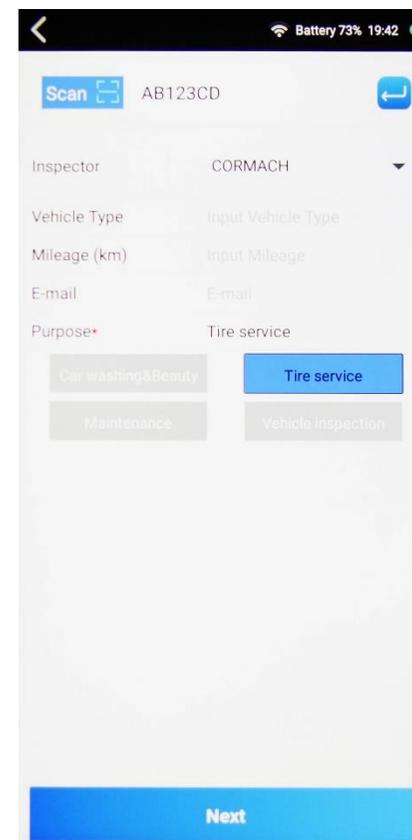


10. INSPECTION

a) VEHICLE REGISTRATION

Select *Inspection* from the main menu to enter vehicle registration form.

Enter vehicle registration number



Handy Scan can identify the license plate number and automatically enter it in its database: simply select SCAN box for license plate scanning. The code number will be identified and immediately associated to the vehicle.

The license plate number must be clearly visible.



[VIDEO \(LICENSE PLATE IDENTIFICATION\)](#)



The input of other information with regards of the inspector/vehicle model/mileage and @ address, are optional but recommended for the best traceability of contacts and works.

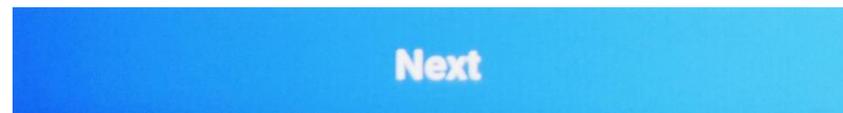
Inspector	CORMACH	▼
Vehicle Type	Input Vehicle Type	
Mileage (km)	Input Mileage	
E-mail	E-mail	
Purpose*	Tire service	

← entering an e-mail address, Handy Scan will automatically send the final summary report at the end of the vehicle inspection session.

The last mandatory step for registration is purpose selection (type of activity) :

Purpose*	Tire service
<input type="button" value="Car washing&Beauty"/>	<input checked="" type="button" value="Tire service"/>
<input type="button" value="Maintenance"/>	<input type="button" value="Vehicle inspection"/>

After registration, move forward selecting



b) VEHICLE PRE-CHECK

Before carrying out the inspection it is recommended to check the pressure for all 4 tyres of the vehicle that should match the manufacturer indications.

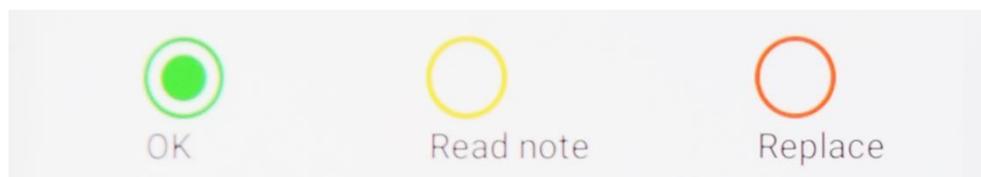
The measurement system may detect unreliable depths due to incorrect tyre pressure.

See example:



Handy Scan provides a list of recommended checks to carry out on the vehicle to verify its conditions.

For each check, the operator can indicate the efficiency and the good conditions, enter notes or recommend a replacement or some maintenance.



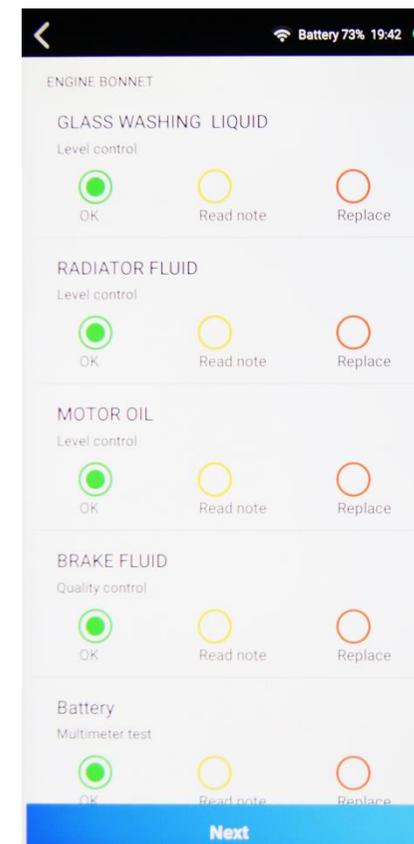
Some checks may require to enter more detailed information:

AIR CONDITIONER

Last recharge

MM / DD / YYYY

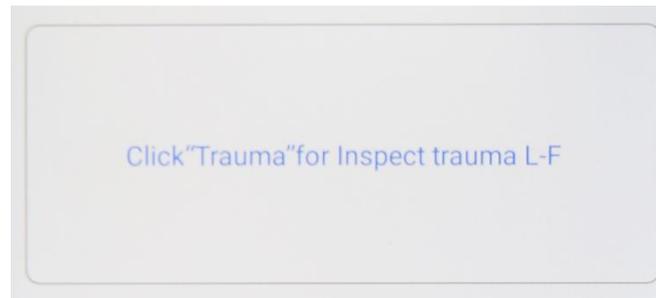
After data entry move forward selecting



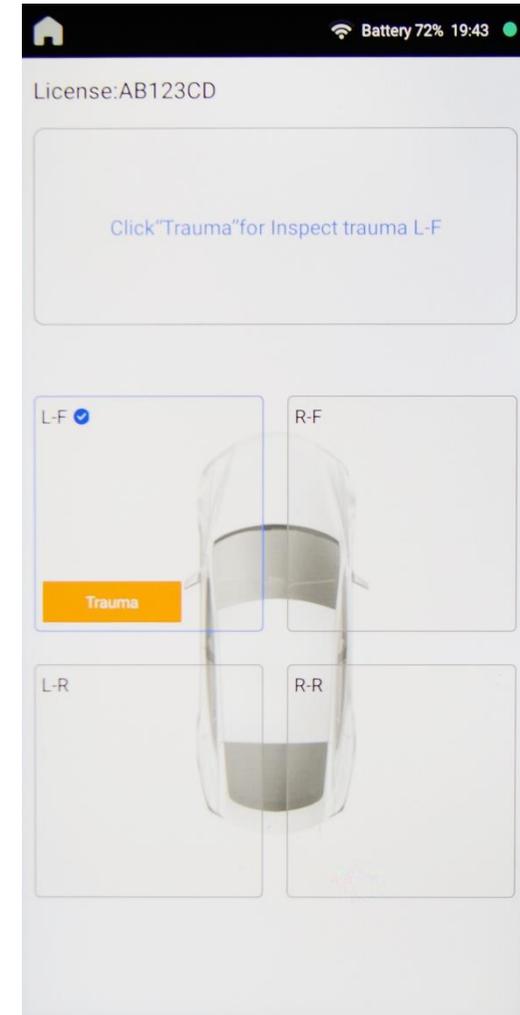
c) TYRE TREAD DEPTH SCANNING

Handy Scan guides the operator through all the steps by providing clear instructions on the procedure to follow.

The system asks the operator to start tyre scanning of the front left tyre

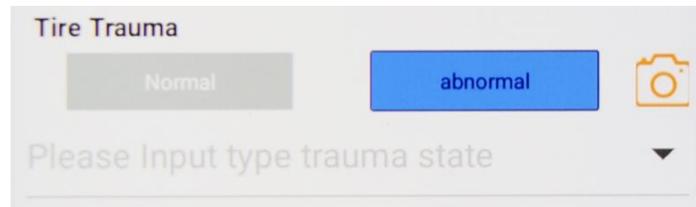
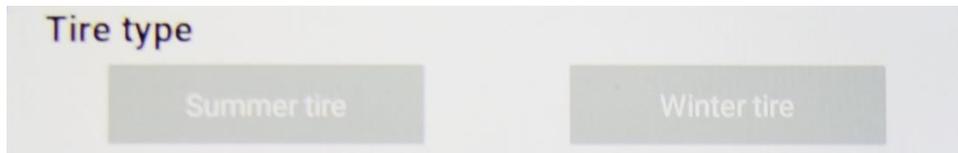


Select **Trauma** to carry out scanning



In these pages the operator can enter and document important information about possible defects found on the tyre.

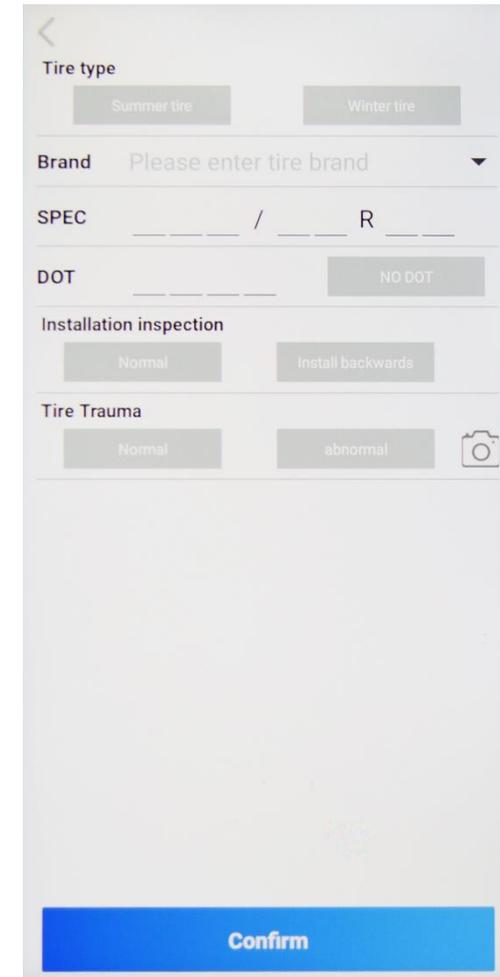
Select tyre type:



Select *abnormal* if an anomaly or defect is found.

This way camera will be ON and it is possible to take a picture to add in the final report. (Some defect options are already entered in the system and can be selected to provide a caption to the picture taken).

After data entry move forward selecting



As shown on the display, Handy Scan is now ready to scan front left tyre.

TREAD SCANNING PROCEDURE:

- Place Handy Scan on the tyre inside edge
- Start scanning holding scan button

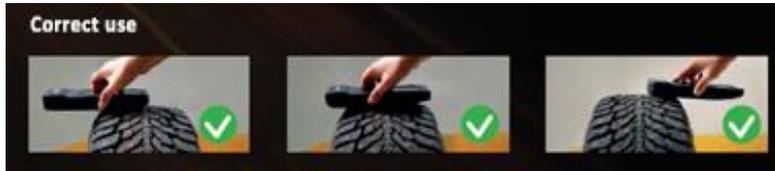


In the beginning the scanner vibrates.



- Slide the device across the tread face from inside to outside of the tyre while pressing scan button.

Hold scan button for the whole duration of the operation.



Incorrect use



Tyre scan should be repeated for all 4 tyres in the order indicated by the device:

1. Front left tyre
2. Front right tyre
3. Rear right tyre
4. Rear left tyre



[VIDEO \(THE PERFECT TREAD SCAN\)](#)



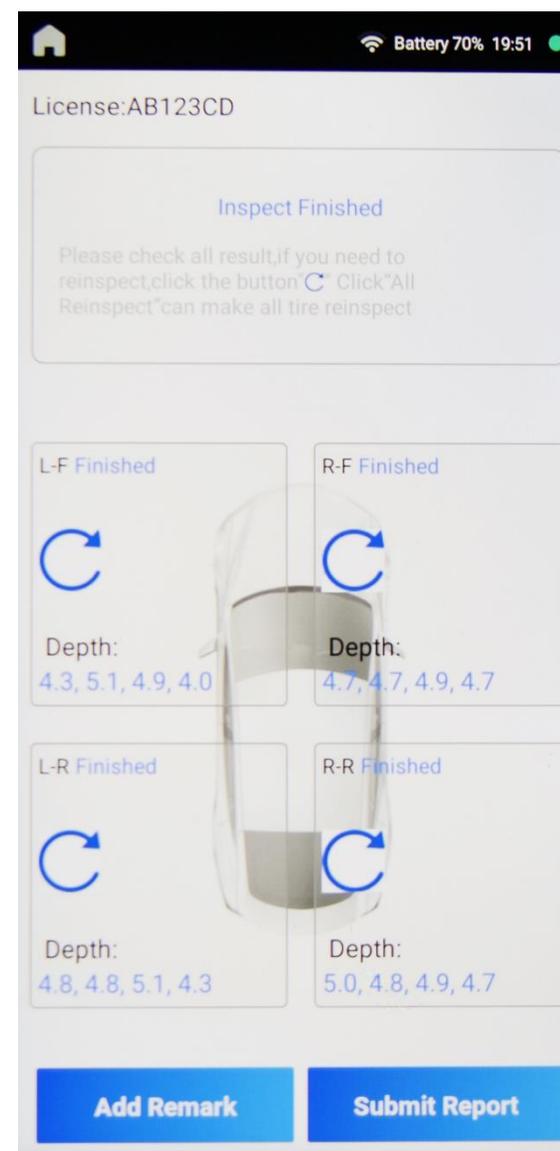
<https://www.handyscan.it/video/manuale-scansione-battistrada-en.mp4>

If the scan is valid, scan data will be shown.

In case of invalid readings, the device requires to repeat the operation.

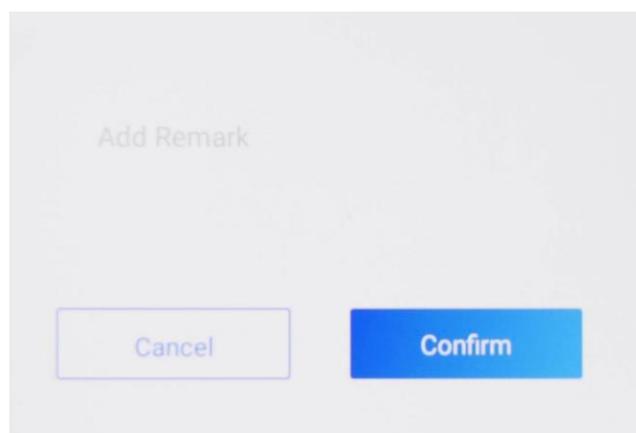
The scan time is approximately 3-4 seconds each tyre.

At the end of the inspection, it is possible to repeat the scan for one or more tyres by selecting the circular arrow.



WHAT OPERATOR CAN DO WHEN SCAN IS COMPLETED:

- **Add a note/comment to the work**



- **Forward the final summary report :**
The operator can enter an e-mail address to send the report in PDF file format.
The file can be saved, printed out or shared according to the operator's needs.

d) FINAL REPORT

The summary report shows the information about the vehicle conditions, all valid tyres scans carried out by the device, pictures and notes loaded by the operator (if any) and the detected tyre tread depths.

Scan results are shown in the final report with colour-coded tread depth measurements (red, yellow and green).

Each color stands for a particular condition:

- Green = good conditions (with regular wear of the tread)
- Yellow = acceptable conditions, but keep under check
- Red = unacceptable. Tyre replacement is necessary.



Some reading examples:

- Example of abnormal wear on one side of the tyre



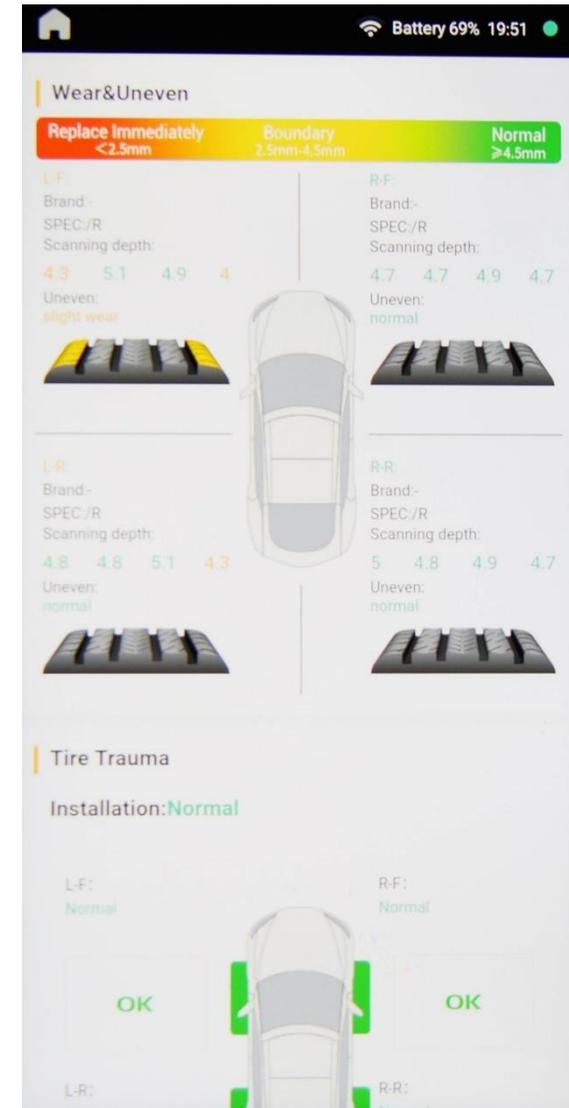
- Example of serious and excessive wear on one side of the tyre



- Example of possible tyre over-inflation



Based on the tread depth scan results, the operator decides the best action to undertake.



11. HISTORY

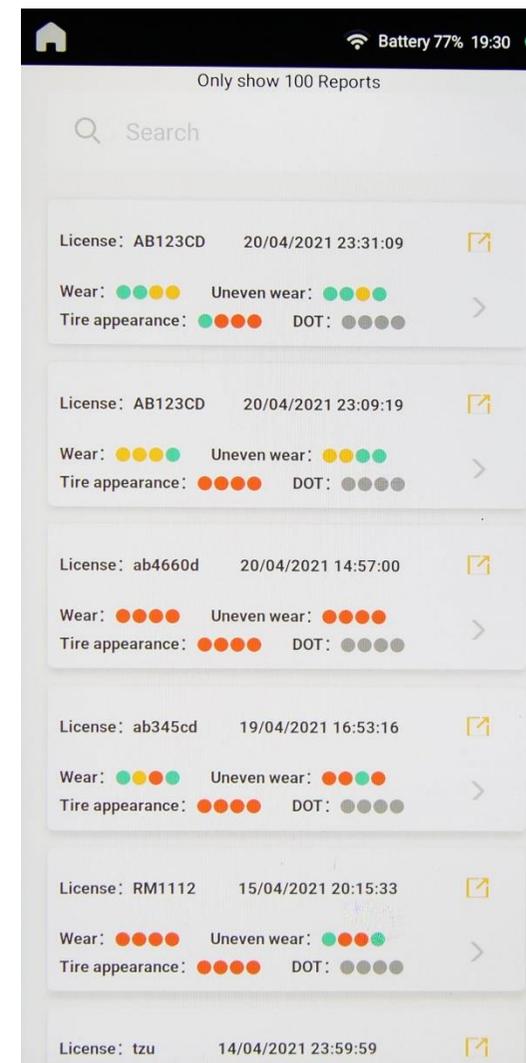
Select *History* from the main Menu to enter the list of the last 100 records (the last 100 inspections). Records are displayed in chronological order starting from the most recent one. It is possible to search for a specific record by entering the vehicle license plate in the Search field.



Each report is recorded with the vehicle's license plate number, date and time of the inspection.

Select icon  to share the report file by e-mail.

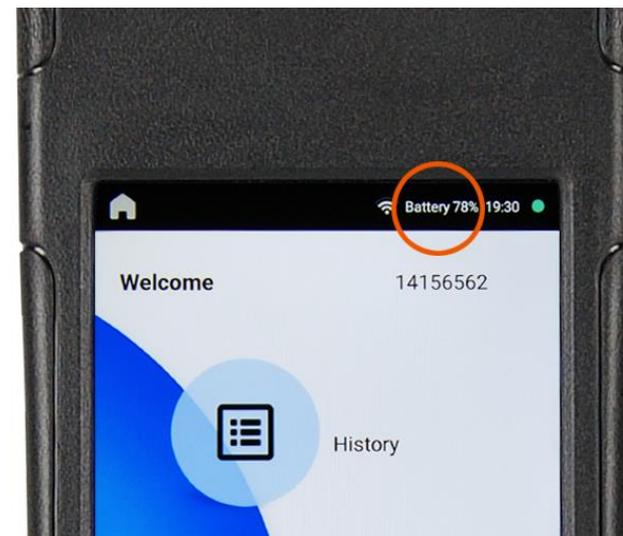
Select the arrow  for the report file view.



12. DEVICE RECHARGING

Battery status is displayed with a percentage on the upper right side of the display. It is recommended to recharge the device battery as soon as the level drops below 30%.

Plug in USB 3 cable into the input port located underneath to recharge Handy Scan.



13. MAINTENANCE & CLEANING

Frequent cleaning of the optical windows is recommended (by simply using a damp cloth). It is possible to use non-aggressive glass cleaning products.

Do not open the device to clean it inside as this could damage it and causes invalidation of the warranty, where applicable.

