



Section 4

Colour Identification



Colour Identification: PPG LINQ™



Sustainable PROCESS:

By implementing our innovative suite of tools, you will work smart and easy, error-free and improve your overall efficiency.



Sustainable PROFIT:

By streamlining processes, reducing waste, cutting down on energy bills and enhancing efficiency, you can achieve sustainable profitability.



Sustainable FUTURE:

PPG LINQ™ is where tradition meets technology, making it an enticing environment for the next generation of talented painters speaking their language - digital, efficient and sustainable. You will also be more attractive to work providers.



Colour Identification: PPG LINQ™



VisualizID™



Visualise colours before mixing

- PPG exclusive technology
- Digital color box - 100,000 colours, variants and specials
- Authentic - realistic digital 3D-colour chips, always up to date
- Simulation of natural light effects, daylight, mode with clearcoat simulation

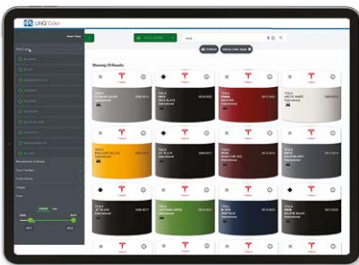


DigiMatch™



Next level of colour reading

- Intuitive, high-resolution 2.8-inch touchscreen with large icons for easy navigation
- Ergonomic design - operation with just one hand
- High-resolution digital camera, measurement can be seen directly on the spectrophotometer
- High-performance camera with 6 reflection angles and 6 camera angles for pigment detection
- Option to send measurements automatically via WIFI or USB cable



LINQ™ Color



The future of digital colour search

- Fast cloud search anywhere
- Accessible from all connected devices
- Always fully updated
- Wireless communication with scales
- No installation required



MoonWalk®



Automate your colour mixing

- 100 % accurate mixing - every time
- Reduce consumption - up to 9% material savings
- Reduce process time, eliminate waste and reduce mess
- Save time - 10 min per mix
- Attract & retain the best talent
- State-of-the-art mixing equipment

Colour Identification:

PPG LINQ™ – How to Prepare a Surface to Take a Colour Reading with PPG DigiMatch™

Proper preparation of the surface to be scanned for colour reading is essential in order to get the best colour match possible. To get an accurate reading the surface area to be measured should be approx. 10 x 20 cms in size. Surface temperature must be between 20° - 25°C

Follow these steps in the correct sequence to get the best possible colour match:



Thoroughly clean the vehicle surface near the repair area. Soiling such as tree resin, tar stains etc must be removed without leaving a residue.



OPTIONAL: For fine scratches or heavily weathered surfaces: sand P3000 – P4000.



Polish with coarse abrasive polish and a firm polishing pad.



Remove polishing residues with a clean microfiber cloth.



Polish with fine, high-gloss polish and soft polishing pad.

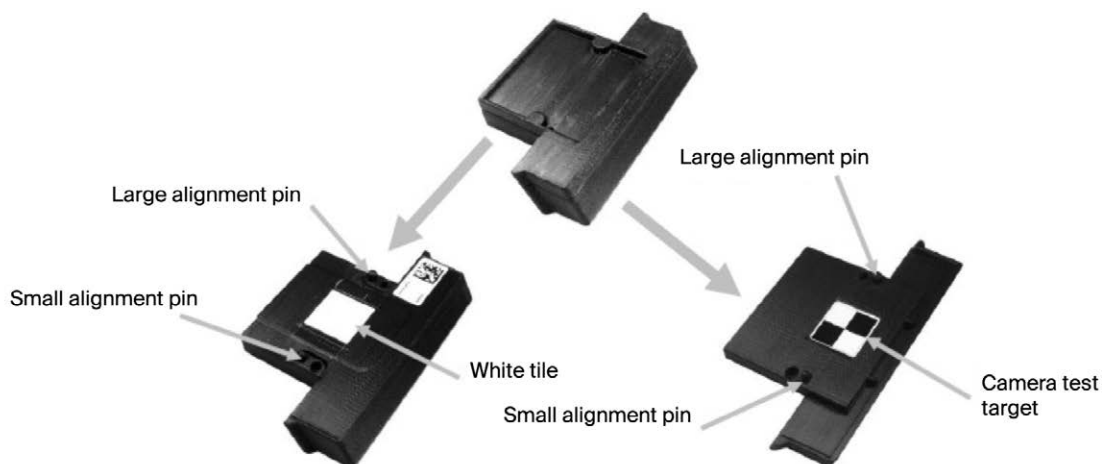


After cleaning wipe the vehicle surface with a clean, soft microfiber cloth. Do not use aggressive cleaning agents.

Colour Identification:

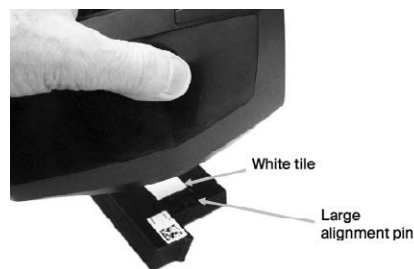
PPG LINQ™ – How to calibrate PPG DigiMatch™

PPG *DigiMatch* must be calibrated every 30 days using the white tile and the camera test target in order to function correctly. The calibration reference is stored in the docking station and is separated into 2 parts when used. Ensure that you are using the calibration reference that was supplied with the *DigiMatch*.



Step 1: Disconnect the device from the USB cable while calibrating the device.

Tap calibrate on the main screen. The calibration menu will appear showing the number of days until the next calibration is required.

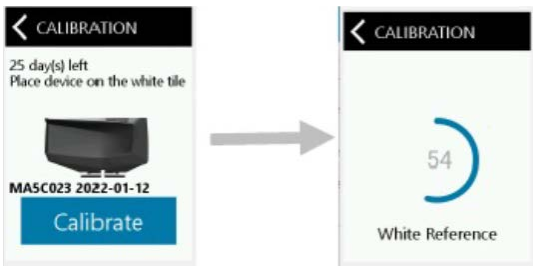


Step 2: Separate the calibration reference and position the device measurement port over the white tile as show. Make sure that the two alignment pins insert into the openings in the white tile reference.

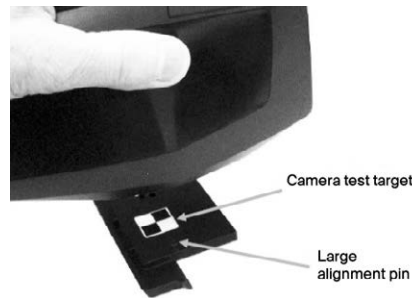
NOTE: the pins will only insert in one direction. Make sure you have the device aligned correctly.

Colour Identification:

PPG LINQ™ – How to Calibrate PPG DigiMatch™

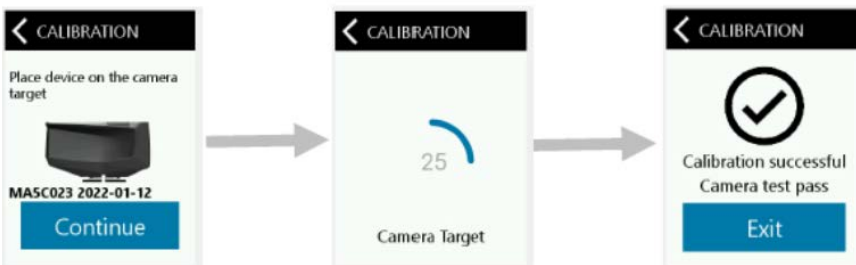


Step 3: When ready, tap Calibrate. Do not touch the device throughout the measurement sequence.



Step 4: After white tile calibration, remove the white tile and position the device measurement port over the camera test target as shown. Make sure that the two alignment pins insert into the openings in the camera test target.

NOTE: the pins will only insert in one direction. Make sure you have the device aligned correctly.



Step 5: When ready tap Continue. Do not touch the device throughout the measurement sequence.

Step 6: The device performs a self-test after the external calibration. Remove the device once the self-test is complete.

Step 7: Combine the two calibration reference tiles together and return to the storage location in the docking station

Colour Identification:

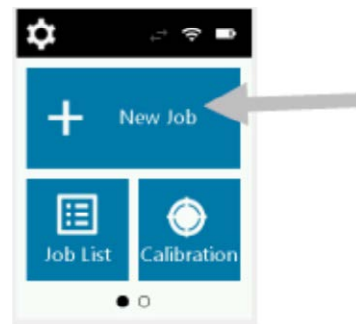
PPG LINQ™ – How to Take a Reading with PPG DigiMatch™ Spectrophotometer

In order to get an accurate colour reading 5 measurements are taken over the 10 x 20 cm area near the repair. The measuring port must be flat with a sample surface to be measured, any movement of the device can cause the measurement angles to vary, greatly affecting the measurements on metallic and pearlescent paint finishes. The pressure sensors ensure the integrity of the measurement data. Hold the device firmly during measurement.

Taking a measurement

The New Job mode is used to create and measure jobs on the device. The device stores measurements as jobs.

Tap New Job on the main screen. The device automatically goes into targeting mode.



Step 1: Position the measurement port in the bottom of the device over the measurement area while viewing the screen.

Step 2: Gently rock the device until all three positioning indicators on the screen turn green. This indicates that all of the pressure sensors are activated.



Step 3: If the device is configured for automatic measurement, the measurement will be triggered as soon as the device is correctly positioned and all pins are in contact with the surface, with a 1 second delay. If Manual measurement mode is selected, start the measurement by tapping the screen or by pressing the measure and On/Off button.

Step 4: Hold the device steady throughout the entire measurement.

Step 5: Once the measurement is finished, lift the device, move it to a new location and continue with the measurements to complete the job. 5 measurements are required.

NOTE: you cannot start another measurement until the device has been lifted off the surface and repositioned.

Step 6: After the measurement is completed the quality of the measurement is indicated with a 5 star system. These stars indicate the amount of variation between the readings and should be interpreted as follows:

You can remeasure the job if required by tapping the icon and then tapping Yes to start the measurement sequence over.

Measurement result	★ ★ ★	★ ★ ★ ★	★ ★ ★ ★ ★
Solid colors	✗	✗	✓
Metallic, pearl effect colors	✗	✓	✓

If achieving a 4/5-star rating isn't possible - whether due to the panel having been previously painted or simply being unable to exceed a 2 or 3-star rating—then aim for the highest rating achievable within those constraints.

Step 7: You can edit the name of the job if desired. Tap the icon and enter a job name using the keyboard. Tap the ✓ icon to save the job name.

Colour Identification:

Spray-Out Cards

Why it should be considered?

For many operatives the 'best practice' of constructing a spray-out card to assess the match quality of a selected formula plays a pivotal role in ensuring a 'Right First Time' repair is achieved.

With modern colour identification and retrieval tools such as PPG's LINQ™ Digital eco-system including VisualizID™, the need for a physical panel to be produced is dramatically reduced. Additional cost and time implications will also influence the decision or need for a card to be completed.

However in some cases Motor Manufacturer OE paint production processes, spraying equipment and product types will vary across territories and continents.

Paint production techniques and colour matching tolerances between paint manufacturers can also vary in the same way. This can also be exacerbated by with the fact that many vehicles on our roads today may have already had remedial repair work.

These combined factors could mean there is always a chance the colour may not be easily matched with the industry available technology and a sprayed out test card is a necessary and sensible 'go-to'.

Subtle colour variances with a vehicle colour will in the main be taken care of by systems like the RAPIDMATCH™ GO as well as the tried and tested blending techniques available for the operative. As 'fail safe' and often as part of a repairer's mission statement of getting it 'right first time' the best practice of a correctly sprayed out test card should not be overlooked.

It can make the difference and be the 'insurance policy' the bodyshop needs, meaning a quality colour match every time on every repair.

Overtime these test cards can build into an extensive library, a reliable reference point for the operative meaning in the long term significant time savings are achieved, costly reworks minimised and bodyshop repair reputations enhanced.

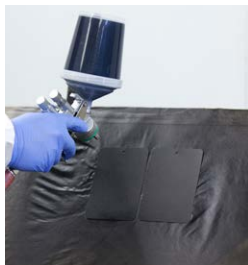
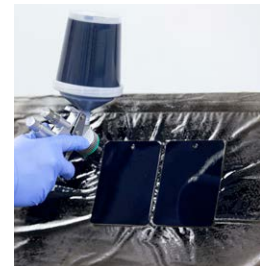
Colour Identification: Spray-Out Cards

Best Practice:

Colour test cards must be sprayed using the same technique and gun set up used when painting the vehicle. Replicating this process will ensure consistent, accurate and reliable results.

Attach the test card panels to a flat surface and not a stirring stick.

Follow the relevant process whether that being Standard Application or OneVisit Application.



Clearcoat the panel, bake dry then record the colour code and variant used, and date as a minimum ready for checking against the vehicle.