Installation and use of the CL1 Karting Data Kit

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What's In the Box —
Racepak Vantage CL1 Karting Kit

The CL1 Karting Kit combines the power of mobile technology with Racepak's CL1 data box and external sensors, providing professional level instrumentation and data analysis, all within Racepak's exclusive D3 Circuit app.

Vantage CL1 Data Box	20101-2001
RPM / Temperature Harness	29112-2001
Engine RPM Pickup	28112-2001
USB Charging Cable	28118-2001
Charging Cable Adapter	28118-2002
GPS Antenna	81119-2001
4 Rechargeable AA Batteries	89118-2001
Universal Mobile Phone Mounting Bracket	89180-2001
Rubber Isolation Mounting Feet	89112-2001

Installation and use of the CL1 data kit requires the following items:

CL1 Karting Data Kit

Mobile phone with protective case (not included with standard kit)

17/64" / 6.9mm bit for installation of Universal Mobile Phone Mounting Bracket on steering wheel

#29 / 3.4mm bit for installation of Phone Case Mount Bracket

#8 / 5mm bit for installation of Rubber Isolation Mounting Feet

Phillips screw driver

Before you Begin,
Register your CL1 Data Box

Log onto portal.racepak.com and register your CL1 Data Box by following the step by step prompts shown online. Registration of the CL1 data box is provides a number of benefits, to the customer, and is necessary for use of the CL1 product. There are a number of aspects of device registration that should be reviewed, before the registration process.
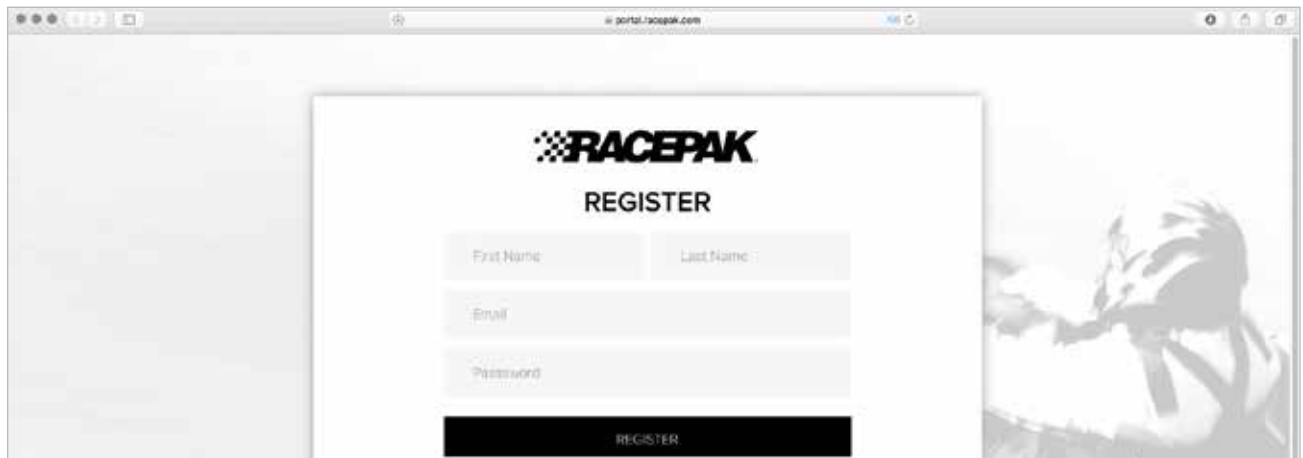
Register Device

1. **Team:** The creation of a team provides a secure location for all cloud based data, related to that particular team and CL1 data box. This action also provides the ability to define the desired Team from the kart mounted mobile device running the CL1 app, for cloud data uploading purpose. Teams are also presented to remote viewers, in order to select the correct team for data review.

2. **Device Serial Number:** 12 digit/letter combination found on the bottom of the CL1 data box.

3. **Subscription:** Available on a monthly or yearly basis, providing the ability for users to remotely view data from any location, utilizing an internet connected mobile device, running the D3 karting app.

My Teams

1. Provides ability to add individuals, for remote data viewing. A valid email address is required for each team member.

2. The team "owner" has exclusive access to the team, and as such is responsible for the addition or removal of team members, in order to provide access to, or remove access from, reviewing remote data.

Step 1. Download and Install the D3 Karting App

Racepak's exclusive D3 Karting app turns a cellular & Bluetooth enabled smartphone into an on-board instrumentation and data analysis device, while simultaneously uploading data via cellular connection to your secure, personal cloud account. Data is stored locally on the mobile phone for instant data analysis, while live or cloud recorded data can be remotely viewed via the same D3 Karting app installed on any web connected tablet or mobile phone.
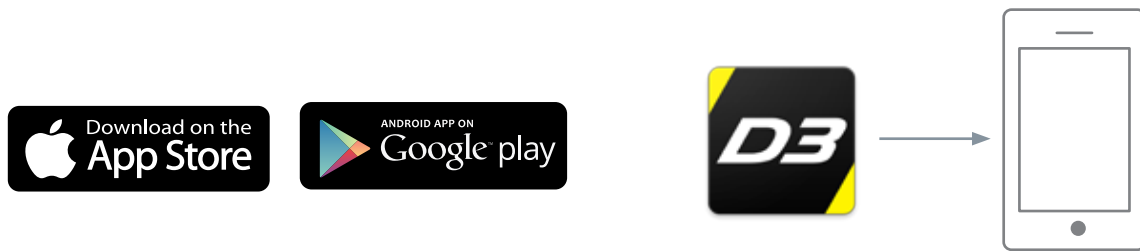
1. Search the term Racepak D3 in the Google Play or Apple store, then download onto the mobile device which will be mounted on the kart.

2. Install the app per your individual mobile device instructions.

Note: Access to cloud data requires a monthly or yearly subscription fee.

Note: Cellular service is not required to utilize the D3 Karting app on a mobile phone for on-board vehicle instrumentation and data analysis, but is necessary in order to upload data to the cloud.

Note: For suggested mobile phone, tablets and protective cases, please see www.racepak.com.

Step 2. Battery Installation

The CL1 arrives from the factory without the rechargeable batteries installed in the unit. Installation of the batteries is a quick and simple process.

1. Locate the four rechargeable batteries found in the CL1 Data Kit.

2. Remove batteries from packaging.

3. Using a small Phillips screwdriver, completely loosen each of the four screws found on each top corner of the CL1 data box.

4. Turn the CL1 upside down.

5. Grip the mounting pads and gentle wiggle, while pulling the base from the housing.

6. Once removed, install each battery, ensuring the battery + and – are oriented as shown on the battery pack case.

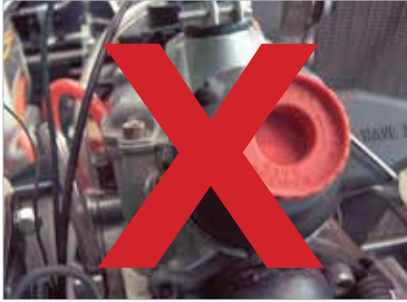# Step 2. Battery Installation

7. Replace the base.

8. Reinstall the four screws, taking care to not overtighten.

9. Charge the batteries following the Charging the CL1 Data Box Batteries section of this manual.
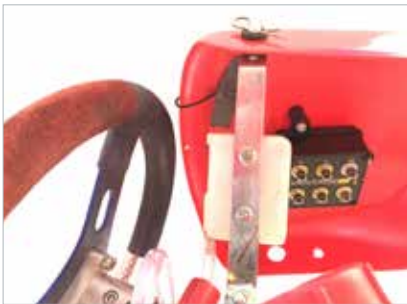
Step 3. Mounting the CL1 Data Box

1. Avoid mounting near excessive heat and noise sources.

2. Mounting location of the CL1 data box is determined by the length of the GPS antenna cable.

3. The GPS antenna will be mounted horizontal and in view of the open sky.

4. Racepak suggests mounting the CL1 under the top of the front panel.

5. Racepak suggests mounting the GPS antenna on the top of the front panel.

6. The CL1 Data Box can be mounted in any direction, via the three rubber isolation mounting feet.

Continued

Step 3. Mounting the CL1 Data Box

7. Ensure the Power / LED Status Indicator and sensor ports are in view and accessible.

8. Using a number #8 / 5mm drill and the base of the CL1 data box as a template, drill three mounting holes.

9. Locate the three rubber mount feet.

10. Remove the supplied locknut from the rubber mount stud, drop into the recessed hex mount tab on the bottom of the CL1 housing.

11. Thread the rubber mount stud through the bottom of the mount pad, and tighten by hand. Repeat the process for the remaining rubber feet.

Step 4. Connecting the GPS Antenna

1. Locate the GPS antenna and route from mounting location to the CL1 data box.

2. Connect the GPS antenna cable to the GPS connector on the CL1 data box.

Step 5. Connecting the Charging Cable Adapter

1. Locate the Charging Cable Adapter.

2. Connect Charging Cable Adapter to the PWR port.

3. If possible, secure the charging port cable to an accessible location via tie wraps, as this will simplify charging of the CL1 Data Box batteries.

Step 6. Installation of Temperature / RPM Harness

The Temperature / RPM harness provides input for both the engine RPM wire and optional temperature sensor (available from Racepak).

1. Locate the Temperature / RPM Harness and the Tach Signal Wire.

2. Connect the five pin connector to Channel 1 of the CL1 data box.

3. Snugly finger tighten the cable connector to the CL1.

4. Route the opposite end of the cable, containing the molded temperature and engine RPM connector, to a location as close as possible to the motor.

Step 7. Installation of Tach Signal wire

1. Locate the 72" / 2 meter, 20 gauge tach signal wire and spark plug wire clip.

2. Observe the top of the molded connector that includes the Racepak logo.

3. Route the 20 gauge wire through the molded horizontal opening, turn 90 degrees and route through the second horizontal opening.

4. Ensure a portion of the end of the 20 gauge wire is exposed, as shown.

5. Route the tach signal wire to the spark plug wire.

6. Locate the clip on tach wire mount.

7. Route the 20 gauge tach wire through the clip on tach wire mount, turn 90 degrees and route back through a second time.

8. Clip the mount onto the spark plug wire.

Step 8. Charging the CL1 Data Box batteries

1. Locate the USB charging cable and adapter, if the adapter was not attached to the CL1 data box during installation.

2. Connect the short adapter cable to the PWR port of the CL1 data box.

3. Connect the mating single pin male and female on the charging cable and adapter.

4. Power down the CL1 data box.

5. Plug the USB connector into any commonly available USB charger. NOTE: 110v wall adapter is not included with this kit. Shown for illustrative purposes only.

6. Power up the CLI data box then observe the flashing red LED on the end of the CL1 data box, which indicates charging.

7. When charging is complete, LED flashing will cease and unit will power OFF.


8. IMPORTANT: Remember to power CL1 back ON, before use.

Step 9. Installation of Universal Mobile Phone Mount - 4 Bolt

The Universal Mobile Phone Mounting Bracket is designed to mount to most commercially available mobile phone protective cases, with a single M8 stud utilized to secure the phone/mount combination on the kart steering wheel. The mount should be installed on the vertical spoke of the kart steering wheel or a location where information on the dash can be easily viewed. Most kart steering wheels include a series of holes in each spoke of the steering wheel.

⚠️ NOTE: The "home" button of the phone should always be on the right, as viewed from the driver's position, as this displays the D3 app correctly for the driver.
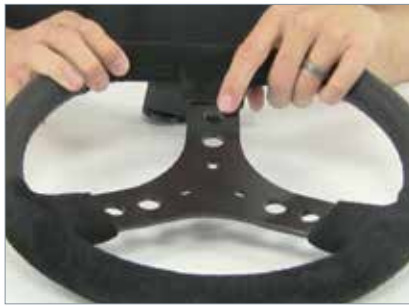
1. If the steering wheel does not have predrilled mounting hole, a 17/64" or 6.9mm drill can be utilized to drill a mounting hole.

2. Remove the nylock nut and washers from the stud and insert the stud through the hole. The mount should face upwards, with the four quick release slots facing the driver.

3. Place one rubber washer over the stud and slide the stud through the mounting hole. Next place a rubber washer on the backside, then the stainless washer and finally the nylock nut. Tighten the nut securely, while holding the mount vertically to prevent it from turning.

Continued

Step 9. Installation of Universal Mobile Phone Mount - 4 Bolt

4. Locate your quick release phone case mount and the Racepak mounting hardware package. IMPORTANT! –The quick release mount is designed for use with hard shell protective cases, so ensure one is available before proceeding with the installation.

5. The Racepak mounting hardware package contains four M4 nylock nuts along with two different length mounting screws. Select the appropriate length screw based on the thickness of the shell of your particular protective case.

6. Next, carefully note the bolt pattern when the quick release mount is locked in place on the steering wheel mount. This will be important when drilling mounting case holes.

7. Now, with two fingers on the quick release mount, press downward until the mount stops, then rotate counter clockwise 45 degrees. This will release the mount.

8. Note the four tabs on the mount. The mount is keyed with the widest tab at the top. Rotate the mount 45 degrees clock wise and place it centered on the hard shell phone case.

9. Mark each drilling location on the hard shell case. If a rubber liner is included with the hard shell case, remove it and then drill four holes with a #29 / 3.4mm drill.

Continued

Step 9. Installation of Universal Mobile Phone Mount - 4 Bolt

10. Insert the appropriate length mounting screw through both the hard shell case and quick release mount into the mating nylock nut in the mount.

11. Gently tighten the screw. Repeat the above step for the remaining three screws.


12. Replace any rubber liner and phone into the hard shell case, following the manufacturer's instructions.
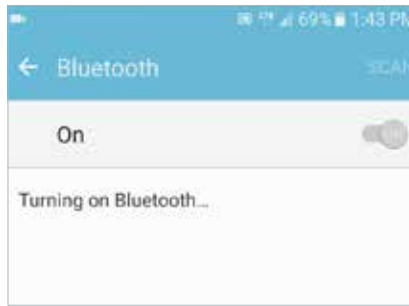

13. Finally, orient the phone with the widest tab at the top, slip into the four receptacles. Press down until you feel the tabs bottom out. Turn the phone clockwise 45 degrees to securely lock into place.

Step 10. Pairing of the D3 karting app with the CL1 Data Box - Android

Keeping in mind that the D3 app not only transforms the mobile device into on track instrumentation for the driver, but also functions as the data recorder and uploads data to your optional cloud account, it is necessary to pair the mobile device with the CL1 before use.
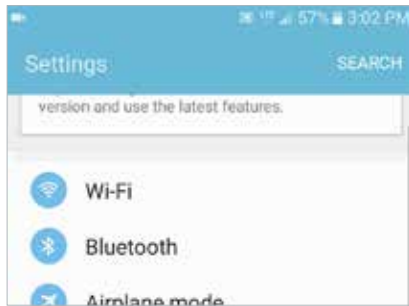
1. Locate Settings in your mobile device, then Bluetooth. For iOS devices, Settings are typically found on the home screen. For Android, Settings are typically found in Apps on the home page.
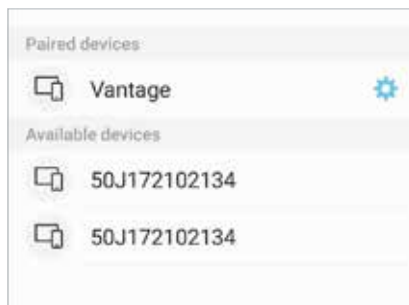

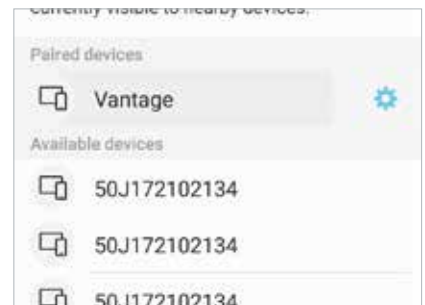2. Turn Bluetooth ON and remain on the Bluetooth screen.

3. Press the power button on the CL1 data box and hold until the LED turns PURPLE

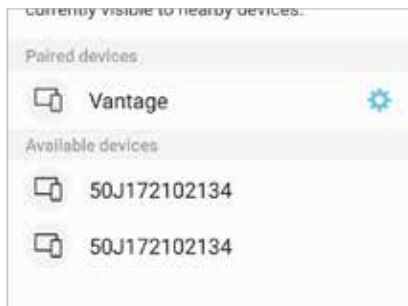4. Return back to the Bluetooth settings in the mobile device.

5. Vantage should now appear as a device connection option.

6. Tap on the Vantage text.

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Step 10. Pairing of the D3 karting app with the CL1 data Box - Android

7. The CL1 will pair with the mobile device.
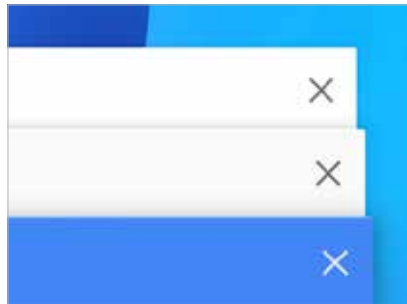
8. Close out all open pages on the mobile device.

9. Open the D3 karting app.

10. The top three icons (Race Dash, Pit Dash and Lap Times) will now change from GRAY to GREEN. This indicates the mobile device and CL1 are now paired.

11. The status LED on the CL1 will now alternate between green and blue, indicating the CL1 data box and mobile device are paired and ready for use.

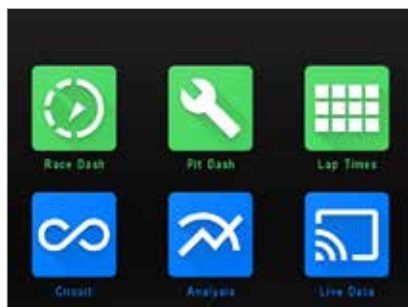# Step 10. Pairing of the D3 karting app with the CL1 Data Box - iOS

Keeping in mind that the D3 app not only transforms the mobile device into on track instrumentation for the driver, but also functions as the data recorder and uploads data to your optional cloud account, it is necessary to pair the mobile device with the CL1 before use.

1. Locate Settings in your mobile device, then Bluetooth. For iOS devices, Settings are typically found on the home screen. For Android, Settings are typically found in Apps on the home page.

2. Turn Bluetooth ON and remain on the Bluetooth screen.

3. Press the power button on the CL1 data box and hold until the LED turns PURPLE.

4. Open the D3 app in IOS devices.
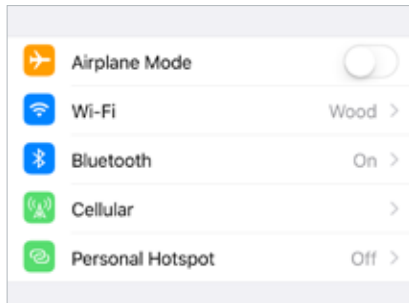

5. Wait for the Bluetooth Pairing Request message.

6. The top three icons (Race Dash, Pit Dash and Lap Times) will now change from GRAY to GREEN. This indicates the mobile device and CL1 are now paired.

Step 10. Pairing of the D3 karting app with the CL1 data Box - iOS

7. The status LED on the CL1 will now alternate between green and blue, indicating the CL1 data box and mobile device are paired and ready for use.

Step 11. Firmware Auto-Update feature

The CL1 data box contains an automated firmware update feature, utilizing the vehicle mounted mobile device. No action is required from the user. Instead, when powering up the mobile device and the CL1, if new firmware is available, the mobile device connects to the server, retrieves the latest firmware and loads to the CL1. The user is alerted to this action by a message on the mobile device display. Once updated, the display on the mobile device will return to the D3 home page indicating the CL1 is ready for use.

Note: Do not power down the CL1 or the mobile device during the update process.
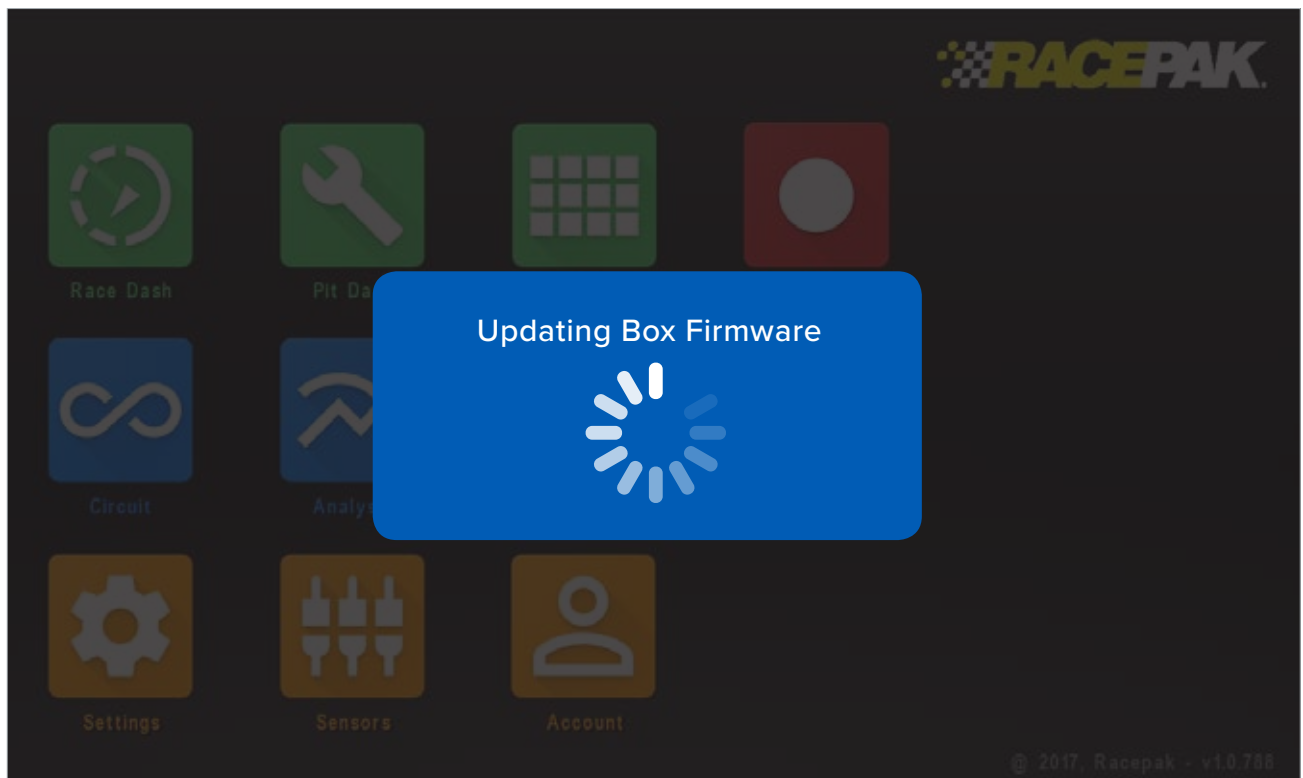
Step 12. CL1 data box status LED patterns

A single LED, adjacent to the external GPS connector, provides the current status of the CL1, through a variety of colors and flashing sequences.

Light Blue, Solid
Initializing

Blue, Solid
Ready to connect

Green, flashing Blue once every second
Connected, transmitting

Green, flashing on and off every three seconds
Connected, waiting (standby)

Red, flashing on and off every three seconds
Charging

Red, solid
Powering off

Purple, solid
Reset pairing

Step 13. First time track use of the CL1 karting data kit

At this time, the CL1 data kit and mobile device is mounted on the kart, with the D3 app installed and paired with the CL1 data box and the CL1 is registered (cloud account not required) to your online account. It is now time to turn our attention to the use of the D3 app. Open the D3 app on the kart mounted mobile device. The icons are group by color, based on their function.

Green:
On-track driver information and CL1 connection status.

Race Dash	Pit Dash	Lap Time

Blue:
Data analysis functions.

Circuit (track mapping)	Analysis (track map and graphing)	Live Data

Orange:
Setup functions.

Settings	Sensors	Account	Teams

Red:
Manual record function.

Manual Record

Step 14. Set Up Prior to First Outing

There are two actions that must be taken, in order to ensure the kart mounted mobile device will transmit data to the correct device and teams cloud account.

Log In:

Log In: From the homepage of the D3 app, tap the Log In icon.

Email and Password: Enter the email and password created when registering your CL1 data box.

Team:

Driver Name: Enter the driver name for the upcoming session. This name is part of the data file naming process, so ensure the current driver name is correct for each outing, to simplify the post run data analysis process.

Team receiving the data: During the CL1 registration process, a team or teams is set up, which provides a specific location to save both local data on the kart mounted phone and to the cloud account. Tap the down arrow to select the correct team for the upcoming outing.

**Live Telemetry:** If a cloud account is in use, tap Yes. If not, tap No.

Cloud Storage: If a cloud account is in use, tap Yes. If not, tap No.

Settings:

The Settings input area is utilized to define a number of CL1 and D3 app features.

Vantage CL1 Data Box: Enables communication between the kart mounted mobile device and the CL1 data box. Tap Yes for the kart mounted and CL1 paired device. Tap No when using a mobile device for remote data analysis, as the device should not be paired with a CL1.
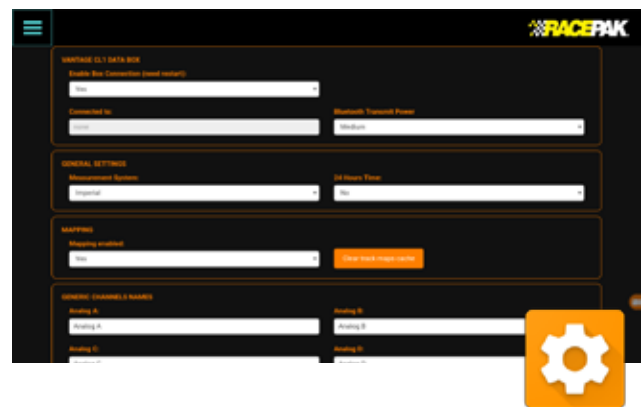
Step 14. Set Up Prior to First Outing

Connected to: When paired with a CL1, the CL1 serial number will appear.

Bluetooth transmit power: Tap and set to Medium. If there are connectivity issues, a higher setting can be selected. Be aware that higher settings will decrease data bandwidth and possible data issues.

General Settings: Defines measurement values (imperial or metric) for sensor data.

24 Hour Time: 24 or 12 hour. Time is used in the data file naming process.

Mapping – Mapping Enabled: Tap Yes to enable track mapping.

Generic Channel Names: Text input areas utilized for naming optional analog and rpm sensor channels, as defined in the Sensors input area of the D3 app.

Engine RPM & Engine Temperature: Min, Idle, Danger and Max settings define the color schemes on the Pit Dash, for each channel, function as "warning" information for the driver.

Engine Hours: Accumulative total based on the start of the engine and first use of the CL1 and D3 app.

Warning: Will reset if the D3 app is deleted from the paired mobile device.

Chassis: Utilized to calculate the Wheel Speed data channel.

Prior to the first outing, it is recommended to start the kart and verify operation of the CL1 data box, kart mounted and paired mobile device and any optional sensors connected to the CL1 data box, as outlined in the Pit Dash section of this manual.

Step 15. Pit & On Track Driver Information

Through the use of Engine RPM and GPS speed, the CL1 data box and D3 app detects and automates the display of driver information based on the drivers needs, at that time.

Pit Dash:

Upon starting of the engine, the Pit Dash will automatically display or can be manually accessed from the home page of the D3 app. This allows the driver or team to quickly verify the real time values and status of the CL1 and mobile device.

BOX: Indicates connection status between CL1 data box and mobile device.
RED – No connection.
GREEN – CL1 and mobile device are paired.

GPS: Indicates GPS status of CL1 data box.
RED – No CL1 data box GPS connection (check antenna connection).
GREEN – GPS satellites are acquired, with number and strength noticed in the GPS Satellites box.

Cloud: Indicates connection between the kart mounted mobile device and user's cloud account.
RED – No connection
GREEN – Mobile device connected to cloud account via cellular service.

Analog A and Analog B: Indicates real time values of external analog sensor inputs.

Digital A and Digital B: Indicates real time values of external RPM sensor inputs.

Engine Temp: Indicates real time values of temp sensor connected to the Temperature / RPM harness. If no sensor is connected, value will display 32°F or 0°C (Based on Imperial or Metric settings).

Exhaust Temp: Indicates real time value of EGT sensor. If no sensor is connected will display 32°F or 0°C (Based on Imperial or Metric settings).

Engine RPM: Displays real time value of Engine RPM.

Battery: Indicates remaining charge of CL1 batteries. NOTE - This is not the status of the mobile device battery.

Continued

Step 15. Pit & On Track Driver Information

Race Dash page:

Now that all functions are verified, the kart can now proceed to the track. When the CL1 detects both Engine RPM and GPS speed above 11 MPH, the Race Dash will automatically display or can be manually accessed from the home page of the D3 app.

Engine RPM Sweep Tach: Real time Engine RPM displayed both numerical and on the circular sweep.

Current Lap (Predictive Lap Time): The values displayed represent both the current lap of the outing and the difference between the fastest lap of the outing and the current lap, updated constantly, for the driver.

GREEN: Indicates the driver is FASTER than the current lap of the outing, displayed in 00:00.00 / Minutes / Seconds/ Tenths/ Hundredths.

Best Lap: Represents the FASTEST lap of the current outing, and the lap number.

Engine Temperature: Indicates the temperature of the sensor connected to the Temperature/RPM harness of the CL1 data box. 32°F or 0°C (Based on Imperial or Metric settings) indicates no sensor is connected.

Continued
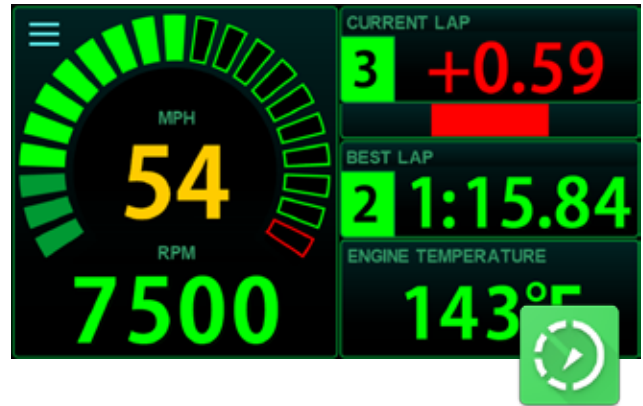
Step 15. Pit & On Track Driver Information

Lap Times:

When GPS speed drops to 0 for 30 seconds, or no Engine RPM detected for 20 seconds, all lap times from the current outing will automatically be displayed to the driver, overriding the current page in view on the dash, or accessed from the home page of the D3 app.

Time: Lap time(s) from the current outing.

RPM Max and RPM Aver: Maximum and average Engine RPM from the current outing.

Temp Max and Temp Aver: Maximum and average temperature of sensor connected to the Temperature / RPM harness, from the current outing.

	Time	RPM max	RPM aver.	Temp max	Temp aver.
1	------	10605	7821	131	119
2	1:15.843	11271	6161	144	139
3	0:58.210	10662	8115	153	147
4	0:56.467	11463	8408	160	155
5	0:57.126	11440	8255	165	162
6	0:56.352	11320	8422	170	166
7	0:56.381	11365	8379	170	

Step 16. Remote Viewing of Live Data

The Racepak D3 Karting App provides both real time, on-track data analysis capabilities, along with post outing data analysis capabilities, utilizing three icons located on the homepage of the D3 app.

Live Data:

The Live Data icon provides access to live, on-track information, through the use of Racepak's optional cloud service. The following is required to utilize Live Data.

1. Active Racepak cloud account.

2. Kart mounted mobile device with active cellular service.

3. D3 app installed on kart mounted mobile device, open and paired with kart mounted CL1 data box and active Engine RPM input from the included Temperature/RPM harness.

4. Kart exceeding 11 mph / 5 ms and active Engine RPM signal OR use of Red Manual Record button on D3 app home page.

5. D3 app installed on mobile device utilized for remote viewing.

6. Active internet connection on mobile device utilized for remote viewing.

7. Mobile device logged into a CL1 account, using the Login icon.

Verification of the remote mobile device connection to the CL1 cloud account is verified by the color of the Live Data icon.

1. Gray indicates no connection to the cloud account.

2. Blue indicates a valid Email and Password was entered using the Log In feature, and the mobile device is ready to receive cloud data.

Note: A mobile device connected to the internet will display a GRAY Live Data icon, if not connected to a valid CL1 account, using the Login icon on the home page.

Continued

Step 16. Remote Viewing of Live Data

Optional Racepak Cloud Service

If an optional Racepak cloud service account was activated during the registration of the CL1 data box, and a cellular enabled mobile device is in use on the kart, all on track data is automatically streamed real time to the user's account. Live data can be viewed on an internet connected Android or IOS device, running the D3 app and logged in with a valid Email and Password, as provided by the owner of the CL1 data box and cloud account.
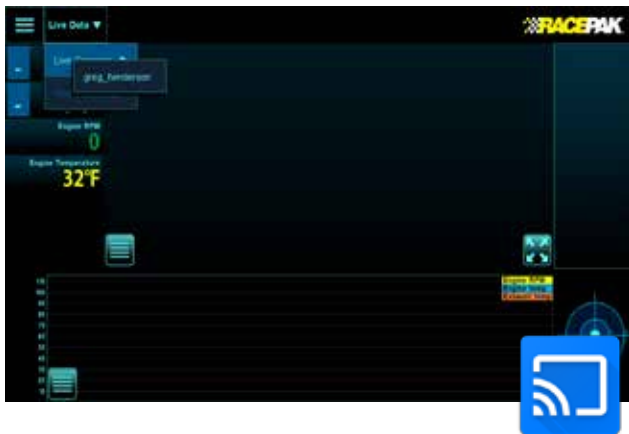
1. Open, the Racepak D3 app, then tap Log in. Log in using the Account information established during registration of the CL1, or as provided by the owner of a CL1.

2. Return to the home page. The Live Data icon will change from GRAY to BLUE, indicating both correct account infor-mation and internet connection.

3. If the Live Data icon remains GRAY, verify all account information is correct and the mobile device is connected to the internet.

4. Next, tap the Live Data, then Live Sessions.

5. If the kart is on the track, you will be presented with the driver Name, Track and Session. Session files are identified by time of day. Select the desired file or files.

6. If the kart is not currently on the track, no driver name will be presented.

7. At this time, live data will automatically stream with Lap, Engine RPM, Temperature and the current position of the kart on the track available for view.

8. To stop the live stream, select Live Data, Stop Receiving.

9. Data can be started and stopped as long as the kart remains on the track.

10. See Analysis section of this manual for use of all analysis features.

Step 16. Remote Viewing of Live Data

Optional Racepak Cloud Service

In addition to viewing live timing data, remote viewers may also view data in a graphical / map format

1. Tap the three bars in the upper left corner of the Live Sessions page to return to the home screen.

2. Tap Analysis. The current live session will now appear in graphical format.

3. To view track map data full screen, simply tap the expanding arrows in the lower right corner of the open page, or return to the Home page and tap the Circuit icon.

4. See Circuit section of this manual, for use of all Circuit features.
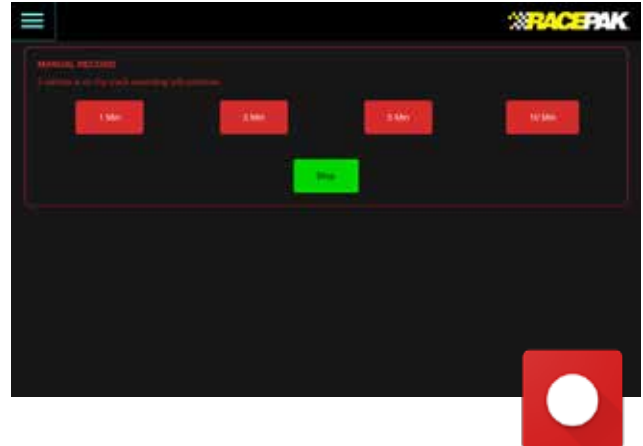
Manual Data Streaming
For pit, dyno or other situations requiring streaming of data to the users optional cloud account, a Manual Record feature is available on the home page of the D3 app icon.

1. Tap Manual Record from the D3 app home page.

2. Tap the desired time to upload data to the cloud.

3. Live data can now be viewed on a remote, internet connected device running the D3 app.

4. To stop, select the Manual Record icon again, from the home page of the D3 app.

Note: Always stop manual recording, before entering the track, for a live session outing.

Automatic Data Streaming
The streaming of data to the users optional cloud account is automatically initiated when the kart exceeds 11 mph along with detection of a working tach signal, by the CL1 data box.

Step 17. Data Analysis Features
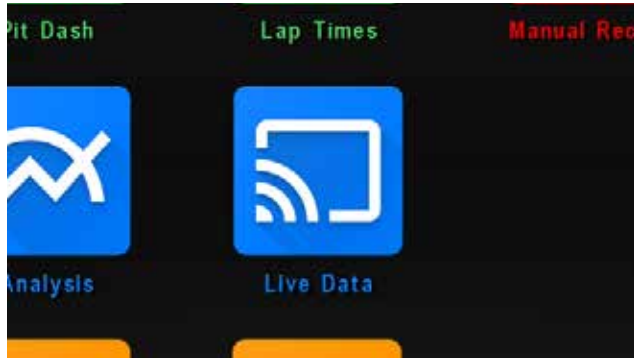
To view data:

1. Tap the Blue Live Data icon to open the Live Data analysis page.

2. Tap Live Data / Live Session / Driver Name / Track Name. At this point, live data created prior to connection, during the current on track session, will load until the current data is in sync with the current position of the kart, on the track.

To change data in graph area:

1. Tap the four bar icon in the lower left corner of the graph area.

2. To add or remove data channels, tap any Channel Selection box to the right of the data channel.

3. To change data channel graph colors: Tap the three bar icon next to the Channel Selection box, then tap the desired color.


Track Map Data:

1. Tap the Four Bar icon in the lower left corner of the track map area.

2 To add or remove data channels, tap any Channel Selection box to the right of the data channel.

4. To add Min Max values, select Min or Max or both, beside the desired White Outline data channel box.
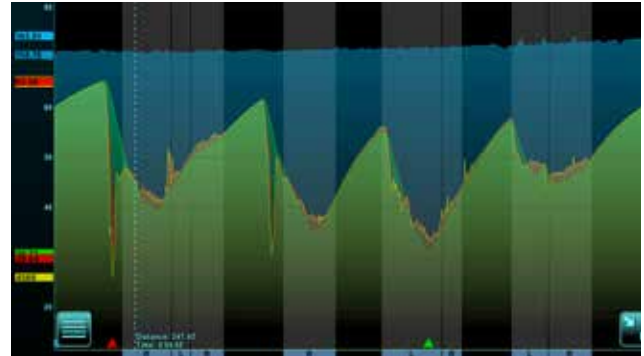
Full Page Track Map:

1. Tap the Four Arrow icon in the lower right corner of the track map window.

2. To return, tap the Two Arrow icon in the lower right corner of the track map window.

Continued

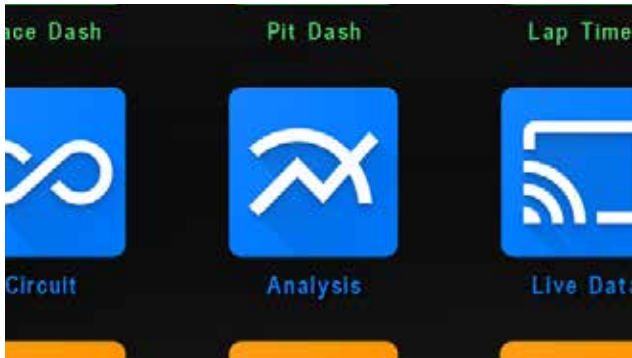# Step 17. Data Analysis Features
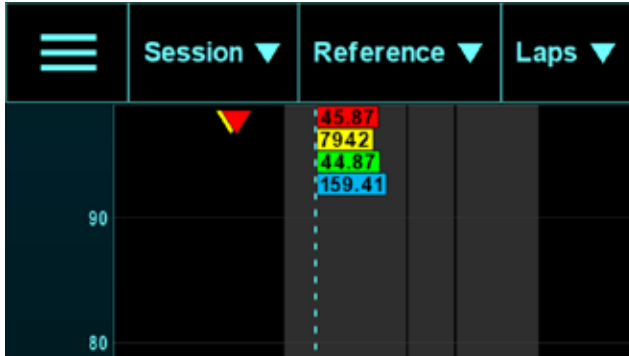
Return to D3 Home Page:

1. Tap the three bar icon in the upper left corner of the Live Data page.

Zoom

1. Touch, hold and pinch graph area with two fingers.

Continued

Step 17. Data Analysis Features

Analysis:

The Analysis page of the D3 app features similar functions of the Live Data page, but with the ability to view live data or recorded data from either a cloud account or data saved to the actual mobile device. To begin, tap the Analysis icon from the homepage of the D3 app.
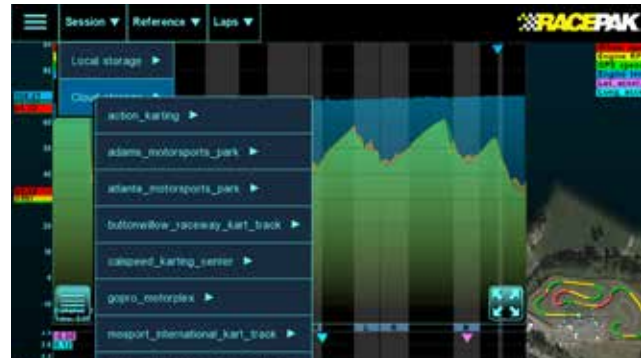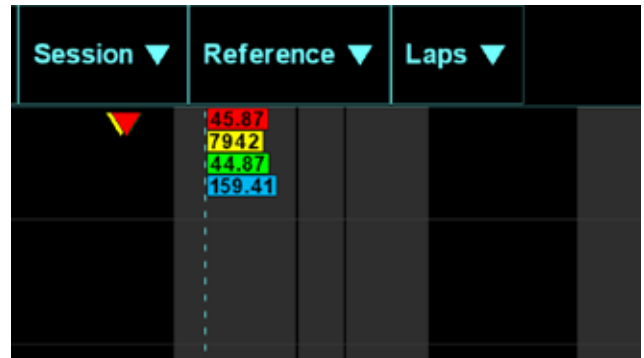
To Open a Data File:

1. Tap Session, then select either either Local or Cloud storage, then Track / Driver Name / Date / Time of the desired data file.

Data Overlay Multiple Laps:

1. Select Laps.

2. To add laps, tap the desired Solid White box for the lap(s).

3. To remove laps, tap the desired White Outline box for the lap(s).

**Current Outing Laps vs Previous Outing Laps**

1. Select Reference, then the desired Track, Driver, Date and Time data file.

2. Select Laps, then Reference. This actions automatically loads data the fastest lap from the selected previous session, over the currently active data.

3. To remove a Datum lap, simple select Laps and tap the Reference box, again.

Continued

Step 17. Data Analysis Features

Change graphed data in upper or lower graph area:

1. Tap the four bar icon in the lower left corner of the graph area.

2. To add or remove data channels, Tap any Channel Selection box to the right of the data channel.

3. To change data channel graph colors: Tap the three bar icon next to the Channel Selection box, then tap the desired color.
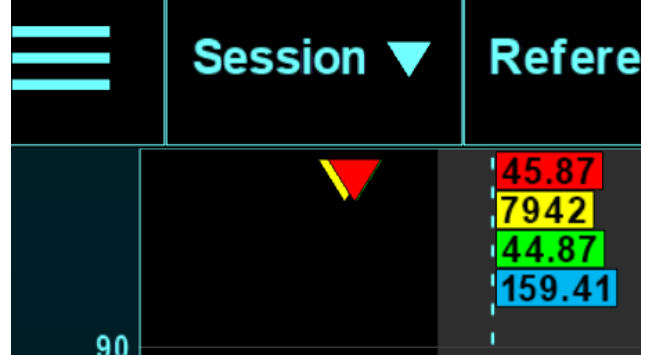
Min Max Values:

1. Minimum and maximum data values for graphed channels are noted by colored arrows in the top and bottom portion of the graph area.

2. Maximum values are noted at the top of the graph area, with the arrow color corresponding with the color of the graphed data channel.

Full Page Data – Single Graph:

1. Tap the Right arrow icon located beneath the track map.

2. To return to the previous page, tap the Track Map icon located in the lower right corner.

Continued

Step 17. Data Analysis Features

Circuit:

The Circuit analysis page of the D3 app provide the ability to view information in a decidedly different, but very intuitive manner, compared to graphed data channels.

1. Select the Circuit icon.

2. Tap Session, then select either either Local or Cloud storage, then Track / Driver Name / Date / Time of the desired data file.

Adding and Removing Data to the Circuit Page:

1. Select the four bar icon in the lower left corner of the track map.

2. Select any Solid White box to enable or disable a channel on the track map.

3D Circuit Map View Controls:

1. Elevation view: Using a single finger, touch, hold and slide UP on the up arrow located on the right side of the Circuit map. The same action can be performed on the down arrows.

2. Rotate: To rotate an elevated map, touch, holds and slide the left arrow left, found at the bottom of the Circuit map page.

Return to Analysis Page:

1. Tap the four arrow icon in the lower right corner of the Circuit page.

Step 18. On Track Alerts

For customers utilizing Racepak's optional cloud account services, alerts are automatically sent to all remote devices, which are logged into a valid user account, any time the CL1 linked to that account, starts streaming data to the cloud account. To turn off alerts

Android:

1. Apps / Settings (from the home screen of the device)
2. Notifications
3. Locate the Racepak D3 Karting app and slide the button to the left.

iOS:

1. Settings (from the home screen of the device)
2. Notifications
3. Locate the Racepak D3 Karting App and tap.
4. Slide the Allow Notifications button to the left.