What is the Richta Competitor app, and why do I Need it?

In TSD road rallying your arrival is timed at numerous checkpoints along the rally route. Your score at each checkpoint is based upon how close you come to the rallymaster's calculated perfect arrival time for that checkpoint. Rich Bireta, an avid TSD rallyist and professional software developer, has developed a suite of applications that leverage smart device and GPS technologies to time arrivals at a checkpoint location based upon the checkpoint's GPS location coordinates. This eliminates the need for the rallymaster to recruit

workers and manage the resources for manually staffing checkpoints, plus adding the benefit of providing competitors with instantaneous timing and scoring information as the competitor passes the checkpoint.

To compete in a TSD road rally using the Richta timing and scoring system you must use the competitor app from the Richta suite, the Richta GPS Checkpoints Competitor app, available for both Android and IOS devices. Running the app on a device while you are running the rally is required for you to be scored at the rally's checkpoints. If you're not running the Competitor app during the entire duration of the rally you will not be timed and scored at some or all of the checkpoints.

How does the Richta Competitor app work?

When the rallymaster lays out his or her rally course they use the Richta Rallymaster app to record the locations of the checkpoints they want to use. That checkpoint location data, along with other event data, is stored in a cloud-based database. Prior to running the rally you install the app, if you haven't done so previously, then launch it and connect to the name of the rally event you're running. The Richta Competitor app downloads the checkpoint locations from the cloud-based database and stores that data on your device.

As you run the rally the app uses your device's internal GPS to track the current location of your vehicle. When the app detects that your vehicle location matches the location of one of the stored checkpoints it records your arrival time for that checkpoint and displays that arrival time and your score for that leg. When your device has network connectivity, via either wi-fi or cell data, the app will upload your checkpoint arrival times and scores to the cloud database, where that data can then be retrieved for scoring and results.

Note that network connectivity is NOT required to record passage of checkpoint locations, as this requires only the device's GPS. However, it is essential that the app be up and running on your device – if it's not running, your checkpoint passages will not be detected and recorded by the app.

What do I need to do prior to running a rally with Richta Competitor?

If you haven't already done so, you must download and install the free Richta Competitor app on the Android or IOS device you'll use for timing during the rally.

- Go to the Google Play store on Android devices or the App Store on IOS devices and search for 'Competitor Richta' in the app store. Or, if you're viewing this on your device, use these direct links:
    - Richta Competitor for Android devices
    - Richta Competitor for IOS devices
- Download the Richta competitor app to your device and install.
- When installing the app you may get a prompt to grant the app access to your device's location services – you must grant this for the app to work.

Once the Competitor app is installed on your device you will need to register the app for each rally you run using the Richta timing and scoring system. The rallymaster for your rally will provide you with the event name to register with and a password for access to that event's registration. Here are the steps:

- If your Competitor app is still registered for a rally you ran previously you'll need to clear it before registering for this rally. You can either:
    - Delete and re-download and install the Competitor app, or
    - Launch the Competitor app and unregister your device from the previous event:
        - In the app on IOS devices, go to Settings, then tap 'Unregister Device' at bottom of page.
        - In the app on Android devices, press and hold the 'Unregister' link at the lower left corner of the page.

- Launch the Competitor app if you haven't already done so.
- You'll be presented with a list of rallies. Select the rally you're running in.
- You'll be presented with a prompt to enter the event password. This will be provided to you be the rallymaster. Enter that password and tap the Continue button (IOS version) or the Check Password button (Android version).
- You'll be prompted for a car number and password.
  - In the car number text box enter the car number you've been assigned for the rally.
  - In the password text box enter a password of your choosing. This password is to prevent someone else from accidentally registering using your assigned car number. Do make a note of the password you've assigned here.
  - Tap the Continue button (IOS version) or the Save button (Android version).
- Your device should now be registered with the rally and ready for use. You should see the main Competitor display, with the rally name and your assigned car number at the top.
- Now that you have your device set up to use the Richta app for the rally, close the app on your device and **don't relaunch it until the start of the rally!**. This will prevent unintended triggering of control passages before the rally if you happen to pass by a control location. Once a control location has triggered in the app it will not trigger on subsequent passages.

How do I run the rally using Richta Competitor?

Your rally's rallymaster will provide you with the specific information you need to run the rally using the Richta Competitor app in the rally's general instructions. But here are some considerations to keep in mind regarding using the app to ensure you get correctly timed at the checkpoints:

- Because of processing demands the Competitor app must be the only app running on the device while you're using it. Be sure to close all other apps.
- In order to do its work the app must constantly access the GPS hardware on your device. This requires considerable and constant power consumption. You'd be smart to keep your device externally powered while running the rally.
- Monitor the app – it should always be displaying on your device screen. If the app should crash for whatever reason, simply pull over and stop your vehicle at the earliest safe opportunity and restart the app. None of the GPS location data or your already passed checkpoint data will be lost, and you'll be able to continue on. Take a time allowance if necessary to get back on time (time allowances will be explained in the general instructions). You do want to do this as quickly, safely, as possible – you don't want to pass through a checkpoint while the app is not running.
- Position the device for the best possible exposure to the sky – the GPS in your device needs visibility to the satellites it uses. Up on the dash with as much visibility as is possible through the windshield is good.
- Mount your device in some fashion. You really don't want the distraction of that thing sliding around while you're rallying. One inexpensive and effective solution is a sticky pad, like this Stanley version on Amazon, and will work for most folks. This pad is shown in use in the image at the top of this page. There are numerous variations and vendors of these pads; feel free to shop.
- As you pass through a checkpoint the app will ping, and and a new entry for the checkpoint just passed will appear on the list of passed checkpoints. You can see on the summary line your score and your actual difference in time from the rallymaster's calculated perfect time for the leg. The rallymaster sets a maximum penalty score for the event, so if your time off exceeds the max value, you'll receive the max value – but you can still see the actual time you were off. Tap the checkpoint entry and a dialog box will pop up with detailed information about that checkpoint timing:

📶 Verizon 📶		7:12 PM	🡥 85% 🔋

JB's Jaunt • Car #4

Rally Clock	Score
19:12:47	124.9

GPS Accuracy	Time Allowance
5 meters	00:00

TA-   TA+

Completed Checkpoints

CP	In Time	Difference	Score
#8	15:47:35.8	00:35.2 Early	30
#7	15:46:47.9	00:31.2 Early	30
#6	15:45:00.0	Restart	
#5	15:44:19.5	00:26.6 Early	26.6
#4	15:43:11.4	00:19.1 Early	19.1

Settings   ver. 1.17 (93)

The checkpoint summary line shows both your actual time difference from perfect time plus your score for the leg.
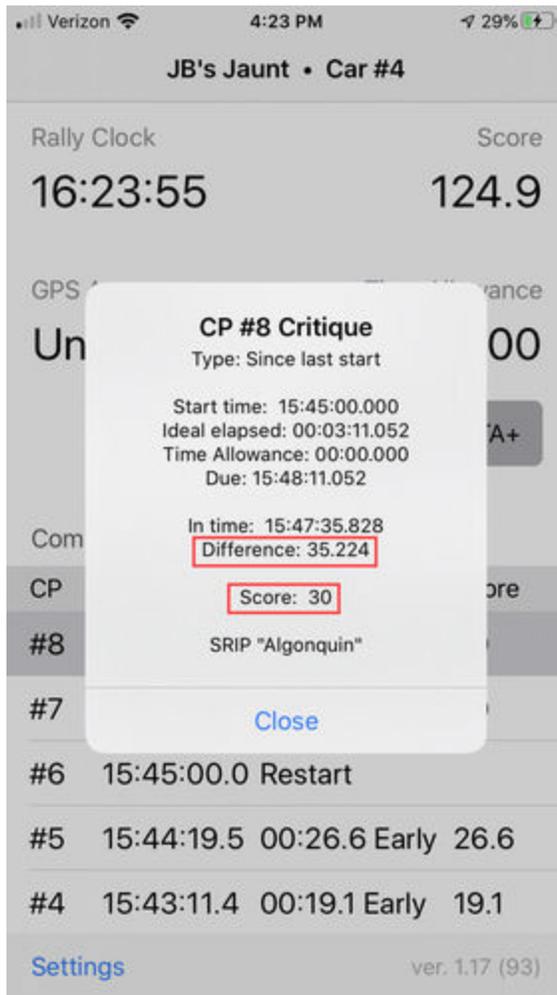
Tapping the checkpoint line pops up the leg critique dialog displaying additional detail.

Interested in learning more about Richta apps? Visit the [Richta Rally website](http://drscca.org/rally/using-the-richta-competitor-app/) for additional info on the Richta family of rally apps.