PORSCHE MISSION R

USER MANUAL

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Dear iRacing User,

Congratulations on your purchase of the Porsche Mission R! From all of us at iRacing, we appreciate your support and your commitment to our product. We aim to deliver the ultimate sim racing experience, and we hope that you'll find plenty of excitement with us behind the wheel of your new car!

One of the automotive industry's premier brands steps into the future with the Porsche Mission R, Porsche's first all-electric GT racing car and the first-ever electric car to come to iRacing. Designed to match the established Porsche 911 GT3 Cup car in terms of performance, the Mission R is a preview of what the future of customer motorsports will look like as the racing industry continues to evolve with the embrace of electrification efforts.

Generating more than 800 kilowatts of power from its dual electric motors, the car accelerates from 0-100 kilometers per hour (0-60 mph) in under 2.5 seconds. Its fast-charging capabilities allow the car to recharge up to 75% of its battery life in just 15 minutes between races. And in perhaps its most relevant innovation of all to the sim racing world, the Mission R's self-contained, monocoque-type driver cell can be used outside of the car as a simulator—giving drivers an opportunity to test in the virtual world in the same environment they'll utilize in the real one.

The following guide explains how to get the most out of your new car, from how to adjust its settings off of the track to what you'll see inside of the cockpit while driving. We hope that you'll find it useful in getting up to speed.

Thanks again for your purchase, and we'll see you on the track!

CHASSIS

DOUBLE WISHBONE INDEPENDENT FRONT,
MCPHERSON STRUT REAR

LENGTH	WIDTH	WHEELBASE	DRY WEIGHT	WET WEIGHT WITH DRIVER
4326 mm	1990 mm	2560 mm	???? kg	1572 kg
170 in	78 in	100 in	???? lbs	3465lbs

POWER UNIT

DUAL PERMANENT-MAGNET ELECTRIC MOTOR

DISPLACEMENT	TORQUE	POWER	RPM LIMIT
4.0 Liters	585 lb-ft	1073 bhp	27000
576 Nm	793 Nm	800 kW	

ALL-WHEEL DRIVE WITH REGENERATIVE BRAKING SYSTEM

Introduction

The information found in this guide is intended to provide a deeper understanding of the chassis setup adjustments available in the garage, so that you may use the garage to tune the chassis setup to your preference.

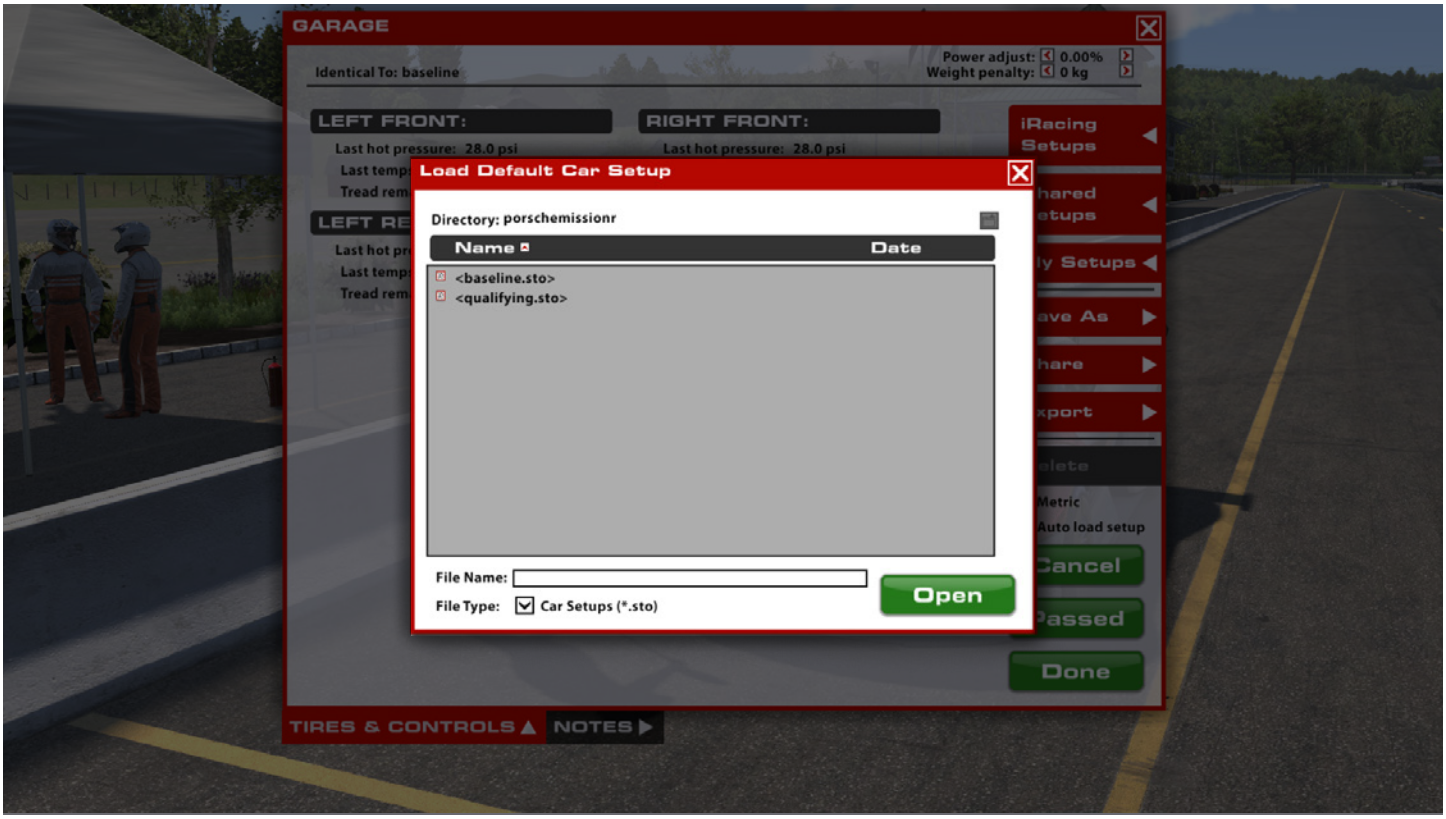
Before diving into chassis adjustments, though, it is best to become familiar with the car and track. To that end, we have provided baseline setups for each track commonly raced by these cars. To access the baseline setups, simply open the Garage, click iRacing Setups, and select the appropriate setup for your track of choice. If you are driving a track for which a dedicated baseline setup is not included, you may wwselect a setup for a similar track to use as your baseline. After you have selected an appropriate setup, get on track and focus on making smooth and consistent laps, identifying the proper racing line and experiencing tire wear and handling trends over a number of laps.

Once you are confident that you are nearing your driving potential with the included baseline setups, read on to begin tuning the car to your handling preferences.

GETTING STARTED

Starting the Mission R is very simple thanks to the electric powertrain. Pressing the Ignition button will turn on the vehicle, powering the steering wheel and dash display. To start the motors, simply press the Start button and the powerrain will be activated. The Mission R only has a forward and a reverse gear, so shifting up to 1st gear and applying the throttle will send you out on track. Once running there is no shifting required.

LOADING AN iRACING SETUP



Upon loading into a session, the car will automatically load the iRacing Baseline setup [baseline.sto]. If you would prefer one of iRacing's pre-built setups that suit various conditions, you may load it by clicking Garage > iRacing Setups > and then selecting the setup to suit your needs.

If you would like to customize the setup, simply make the changes in the garage that you would like to update and click apply. If you would like to save your setup for future use click "Save As" on the right to name and save the changes.

To access all of your personally saved setups, click "My Setups" on the right side of the garage.

If you would like to share a setup with another driver or everyone in a session, you can select "Share" on the right side of the garage to do so.

If a driver is trying to share a setup with you, you will find it under "Shared Setups" on the right side of the garage as well.

Dash Pages

The Mission R features two display clusters in front of the driver. The main display is housed within the steering wheel while the secondary display is above the steering wheel on the dashboard.

MAIN DISPLAY

The Main Display shows all information about the car, its current configuration, and data relevant to the current session in two columns on the left and right of the screen. The center of the screen shows the car's current speed.

Left Column	
T Water	Engine water temperature (Celsius or Fahrenheit
V Batt	Battery Voltage (V)
LaptimeDiff	lap time delta to best lap
Speed	Road Speed (km/h or mph)
T Oil	Engine oil temperature (Celsius or Fahrenheit)
T Gear	Gearbox oil temperature (Celsius or Fahrenheit)
Right Column	
ABS	Currently selected ABS map
TC	Currently selected Traction Control map
MAP	Currently selected engine map
Lap Time	Last lap time
Fuel	Remaining fuel (Liters or US Gallons)
1	Selected dash display page

SECONDARY DISPLAY

REAR-VIEW SCREEN

The center of the secondary display cluster features a large rear-view display instead of a conventional rear-view mirror. If the option for Cockpit Mirrors is enabled in the Options/Graphics menu, this screen will show what is behind the car. This screen is disabled if Cockpit Mirrors are not enabled.

ANTI-LOCK BRAKE LIGHTS

If the Anti-Lock Brake system is enabled, heavy braking events may cause the system to intervene to prevent wheel lockups. Whenever this intervention occurs, the horizontal LED strips on either side of the Rear-View display will illuminate in white from the outside towards the inside, with larger amounts of ABS intervention illuminating more lights.

LATERAL-G LIGHTS

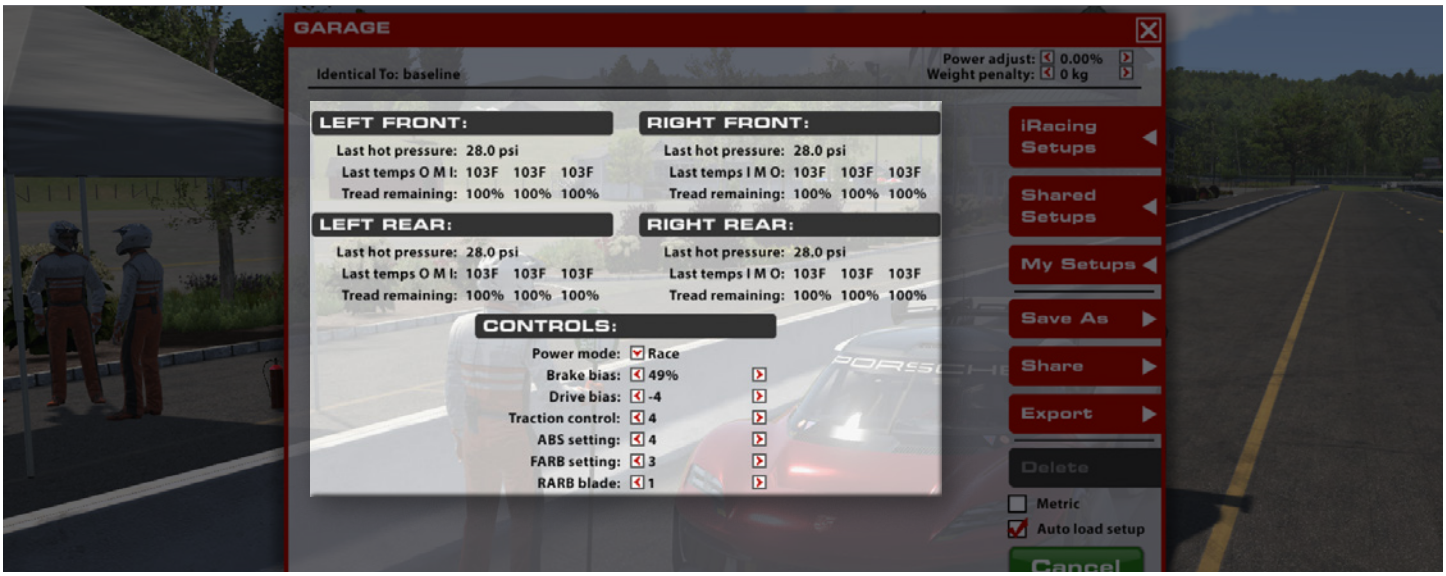
If the car is experiencing any lateral G-forces in a corner the LED strips on the outer edges of the dash will illuminate on the side that is on the outside of the corner. For right-hand corners the left strip will illuminate and for left-hand corners the right strip will illuminate.

Advanced Setup Options

This section is aimed toward more advanced users who want to dive deeper into the different aspects of the vehicle's setup. Making adjustments to the following parameters is not required and can lead to significant changes in the way a vehicle handles. It is recommended that any adjustments are made in an incremental fashion and only singular variables are adjusted before testing changes.

Tires & Control

TIRE INFORMATION



LAST HOT PRESSURE

When returning from the race track, the Last Hot Pressure section will display the air pressure in each tire when the car is stopped. This is helpful for identifying how the tires are being utilized and how the handling balance may develop and change through a run on the track. For example, if front pressures are building higher than rear pressures, this could be a sign that the front tires are being overworked and/or the car may shift towards understeer as the run progresses.

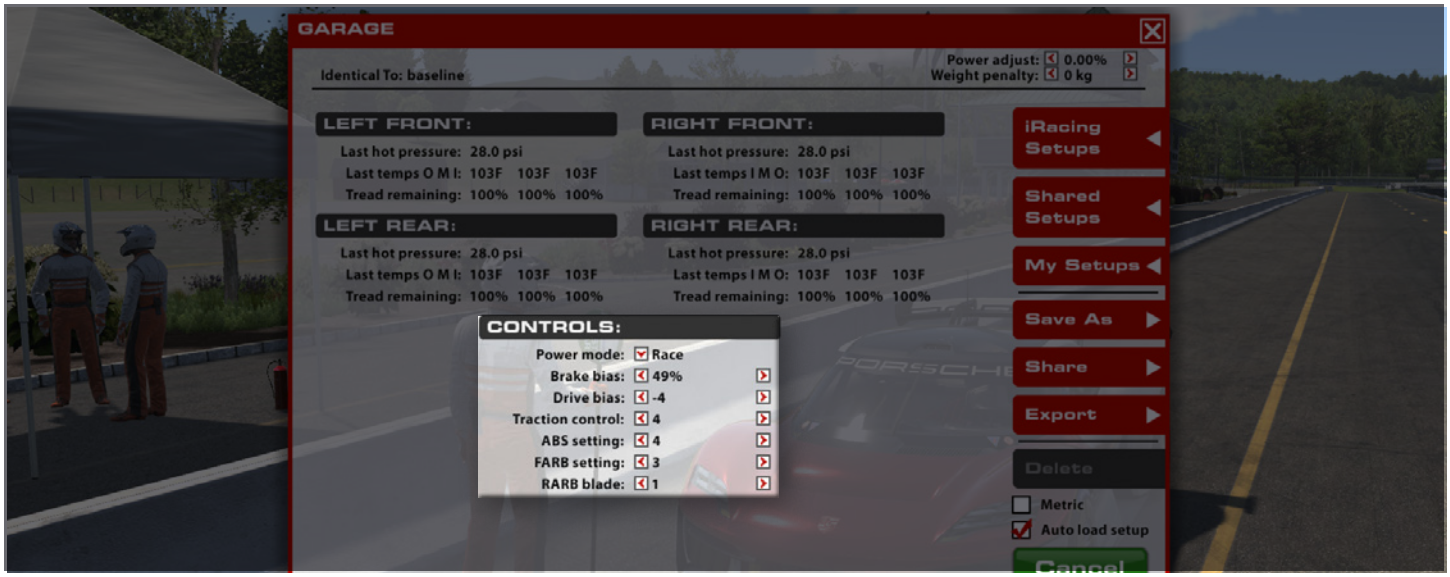
LAST TEMPS OMI

For each tire, temperature is measured at three points within the tire tread after returning from the race track. The Outer and Inner values are measured at the edges of the tire and the Middle value is measured at the center of the tire. These values, like the Hot Pressure values, are a good indicator of how each tire is working while on track. Tires that are under heavy load will read as hotter while underworked tires will show cooler.

TREAD REMAINING

The amount of tread remaining on the tire after a run on track in percentage of a new tire's tread level. Generally this value is used to identify alignment issues or when a tire is close to failure due to excessive wear.

CONTROLS



POWER MODE

The electric powertrain can be run in either Race or Qualifying modes, with Race mode having a lower power and torque setting to help the battery last through a full Race session and Qualifying mode allowing the use of the full 800kW power output but a high drain on the battery. Practice and Qualifying sessions will allow the use of either mode, while Race sessions will be limited to only the Race power setting.

BRAKE BIAS

Brake Bias changes how much of the overall braking force is sent to the front or rear wheels, with the value displaying how much percentage is sent to the front brakes. Higher values will shift braking to the front axle, which can increase stability and understeer under braking but risks front-wheel lockup if ABS is disabled. Lower values will shift the braking force to the rear axle, which will induce oversteer under braking and help with turn-in, but risks a rear lockup and spin if ABS is disabled. This setting is adjustable in the F8 In-car Adjustments black box as a single-digit offset from the garage bias setting. For example, if the garage Brake Bias is 51% and the in-car setting is 2%, the brake bias is 53% to the front.

DRIVE BIAS

To slightly alter the handling characteristics under throttle, the drive distribution can be shifted forward or rearward. Positive values will shift the drive distribution to the front axle, which can induce understeer while on throttle and could cause front wheelspin in very low-grip conditions. Negative values will shift the drive distribution rearward, which will reduce understeer on throttle. This setting is adjustable in the F8 In-car Adjustments black box as the “DB” setting.

TRACTION CONTROL

The amount of traction control assist can be changed to suit various driving styles. A setting of “0” will disable the system, while settings 1 through 11 will increase how much traction control intervention will occur to prevent wheelspin. This setting is adjustable in the F8 In-car Adjustments black box as the “TC” setting.

ABS SETTING

The level of Anti-Lock Brake System intervention can be altered to suit various driving styles. A setting of "0" will disable the system, while settings 1 through 11 will increase how much the system will intervene to prevent wheel lockups under heavy braking. This setting is adjustable in the F8 In-car Adjustments black box as the ABS setting.

FARB SETTING

To fine tune the front suspension's behavior, the Anti-Roll Bar stiffness can be tuned using the FARB setting in the garage. Three settings are available, with 1 being the stiffest setting, 3 being the softest, and 2 being a medium setting. Stiffer settings will induce understeer and increase stability in high-speed cornering while softer settings will reduce understeer. This is not adjustable while driving.

RARB SETTING

Like with the front suspension, the rear suspension's Anti-Roll Bar can be adjusted via the RARB setting. This setting can be one of 7 options, with 1 being the stiffest setting, 7 being the softest setting, and settings 2-6 being intermediate settings with increasing stiffness for higher values. Stiffer RARB settings will induce oversteer while cornering and softer RARB settings will reduce oversteer while cornering. This setting is adjustable in the F8 In-car Adjustments black box as the "RARB Blade" setting.