

GCQuad Training Sheet

✓	ADVICE AND TIPS
	<p>Check components</p> <ul style="list-style-type: none"> The GCQUAD comes with a power supply unit, USB C connection cable, alignment rod, marker dispenser warranty information and instruction manual.
	<p>Read instruction manual</p> <ul style="list-style-type: none"> Please take the time to read the manual and any other instruction sheets provided.
	<p>Battery life</p> <ul style="list-style-type: none"> A new battery should give up to 8 hours of operation, depending on usage (shots hit, backlight, audio etc.). The battery is Lithium Ion which is the same as most modern devices, as such it has no memory. To ensure maximum battery life however please fully discharge the QUAD at least once per month. It is best to not keep the GCQUAD permanently charging (even in simulator set-ups) as this could reduce the expected battery life. The battery in the GCQUAD is removable and can be replaced with a spare during lengthy training sessions. Simply slide the blue toggle either side of the battery and it will slide out of the device (Please note the stand will need to be open to access the battery). Underneath the battery you will find the SN of the device and its Wi-Fi password.
	<p>Charge unit</p> <ul style="list-style-type: none"> If required charge the unit using the charging cable supplied which is 15V 3A. NEVER use any other charging cable as this could damage the GCQUAD. Charge for 6 hours and then run the unit on battery. The battery will give up to 8 hours use in normal operation. The GCQUAD has a charging indicator in the Diagnostics section of the menu, this will let you know the charge level and the expected battery life of the device.
	<p>Identify infra-red flash unit</p> <ul style="list-style-type: none"> Unlike the GC2, the GCQUAD uses solid state IR LED's to illuminate the club face and ball upon impact, as such no flash module is required meaning no consumable components.
	<p>Identify the connection ports</p> <ul style="list-style-type: none"> On the rear of the unit at the bottom of the QUAD is a power port and two connection ports, USB C port and Ethernet port.

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	<ul style="list-style-type: none"> Always unplug cables before moving the unit, and be careful not to tread on the cables as this can damage the cables and the GCQUAD.
	Damage protection <ul style="list-style-type: none"> The GCQUAD has been designed to withstand damage caused by wear and tear with durable materials and its innovative design, however damage can still occur when dropped or hit by a golf ball at high speeds. Please ensure care is taken when operating and moving the GCQUAD to prevent damage for occurring.
	How does GCQUAD work? <ul style="list-style-type: none"> Ultra high-speed quadrascopic cameras image and directly measure exactly what the club is doing at the moment of impact and what the ball is doing at launch. Balls do not need to be marked in any way as the cameras lock onto the dimples.
	Set-Up the unit <ul style="list-style-type: none"> To use the unit simply unfold the rear stand and place it down on the ground next to where you will be hitting balls. The stand has a hole within it which can be used peg the unit in to the ground for security. Turn the unit on and wait for the screen to show a hitting area, move the ball into the hitting area and check that it has identified the ball in the hitting area. Check the alignment of the device by removing the ball and placing the alignment rod down in front of the device aiming in your hitting direction. The GCQUAD will automatically align the data to the alignment stick with a tolerance of ± 10degrees.
	Be careful when moving the unit <ul style="list-style-type: none"> There is a handle at the rear of the QUAD at the top which should be used to carry the device when it is not in its carry case or backpack. The GCQUAD has been created to withstand shock damage, however dropping the device or transporting it without adequate packaging can still result in damage occurring.
	Turn on the GCQUAD <ul style="list-style-type: none"> Press the power button once. The system runs through its boot procedure (including internal self-levelling) and is ready for play after about 30 seconds.
	Turn off the GCQUAD <ul style="list-style-type: none"> Press the power button once. It only take a few seconds to turn off.

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	<p>Positioning the unit</p> <ul style="list-style-type: none"> Position the GCQUAD in the correct location by placing a ball in the hitting zone. If you have a fixed tee position; set up the unit so that when the ball is on a high tee the ball shows in the top right corner of the hitting zone box. This will ensure that the tee will not interfere with iron shots hit from the turf. Align the GCQUAD roughly parallel to the target line and use the alignment rod provided to accurately determine your hitting line as mentioned above. Ensure the GCQUAD is the same level as the hitting surface.
	<p>Self-levelling accelerometer, Altimeter and Thermometer</p> <ul style="list-style-type: none"> The GCQUAD has a built in accelerometer that accounts for any sloping lie up to an angle of 15 degrees. It takes a few seconds to readjust if you move the unit. All data is then provided relative to a horizontal plane. The GCQUAD has a built-in altimeter to determine the air pressure that it is operating in which affects the characteristics of the ball flight. The GCQUAD also has a built-in thermometer to determine the air temperature that it is operating in which affects the characteristics of the ball flight.
	<p>Position the ball</p> <ul style="list-style-type: none"> Place the ball in the hitting zone. You can see the ball on the LCD screen; avoid the hashed zone when in club mode as the club data will not be recorded. The indicator light on the GCQUAD in the left and right handed selection buttons is typically flashing when looking for a ball and solid when a ball has been found in the hitting area. The light will be green when club data is enabled and blue when club data is disabled. Always ensure the GCQUAD can only see one ball; multiple balls will prevent the unit from tracking. White or reflective golf shoes or reflective markings in the environment could confuse the GCQUAD and prevent it from finding the ball and generating launch data.
	<p>Ball quality</p> <ul style="list-style-type: none"> Balls should be of a good quality. Dirty or worn balls could cause missed shots (and damage impact screens if used). This is because the device locks on to the dimples of the ball during the initial moments of flight to calculate the spin accurately.
	<p>LCD screen</p> <ul style="list-style-type: none"> The LCD screen at the top of the GCQUAD displays the majority of the data harnessed the device. There are touch sensitive buttons either side of the screen and a backlight to illuminate the display in low light conditions.

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	<p>Ball & Club Data</p> <ul style="list-style-type: none"> Once a ball has been struck an information screen will appear on the LCD display with the ball data of the shot, then if club data is enabled the club data screen will appear after a few seconds. If you do not have club data enabled, then the unit can still provide limited data which will appear on a third screen. Ball Data Screen - <i>Ball Speed</i> (MPH), <i>Carry Distance</i> (yds), <i>Launch Angle</i> (degrees); <i>Push Pull</i> (degrees right or left of target line); <i>Side Spin</i> (RPM); <i>Back Spin</i> (RPM). Club Data Screen – <i>Club Speed</i> (MPH), <i>Smash Factor</i>, <i>Club Path</i> (degrees with indication of in-to-out or out-to-in), <i>Face to Path</i> (degrees with indication of open or closed face), <i>Angle of Attack</i> (degrees), <i>Lie Angle</i> (degrees), <i>Club Loft</i> (degrees), <i>Impact Location</i> (graphic). Limited Club Data Screen – Club Speed (MPH), Smash Factor, Club Path (degrees with indication of in-to-out or out-to-in), Angle of Attack (Degrees) All data points are directly measured, except carry distance that is calculated by processing the launch data through advanced ball flight algorithms. For further details refer to the separate document <i>An Introduction to Understanding Ball Launch & Club Data</i>.
	<p>GCQUAD Options</p> <ul style="list-style-type: none"> Access the <i>System Options</i> menu by pressing the OK button once. You will see five options; Club Tracking, Target Alignment, Settings, Diagnostics and About. To enter an option simply scroll using the arrow keys and press OK. The options will auto close after a few seconds, alternatively you can press the < button to escape the menu. Club Tracking – Use this menu to select if you want to display the Club face data. If Club data is turned off then the hitting area will enlarge compared to if club data is enabled. Target Alignment – Use this menu to view the current target alignment and press OK to reset the alignment back to zero. Settings – Use this menu to alter the units used to display the velocity, distance, spin, face angle and alter the air pressure. Diagnostics – Screen 1 shows the battery life of the unit as a graphic and percentage as well as the battery voltage, temperature and expected lifespan. Screen 2 shows the current pitch, roll, device temperature, air pressure, air temperature and estimated altitude as well as the effect of gravity on the unit. Screen 3 shows The network Ethernet IP and Wi-Fi IP address as well as the shots hit in the current session and the total number of shots hit. About – Screen 1 shows the Model, Serial Number, Build (Firmware) hardware version and the current date and time in the manufacturers time zone. Screen 2 shows all the global patents as well as the territories the device is currently registered to operate in. Screen 3 shows the status of the Club data and the number of days until registration is required.

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	<p>Saving Data</p> <ul style="list-style-type: none"> • The GCQUAD has an on board hard drive which can be used to save ball and club data for review by a technician. • When on the Diagnostic screen in the options menu simply press the OK button three times to save the ball and club data from the last shot taken. • You can then access this data when the GCQUAD is plugged into a computer and send it across to support@foresightsports.eu for analysis.
	<p>Registration</p> <ul style="list-style-type: none"> • The GCQUAD has a security feature to prevent use in non-authorised locations. At the point of sale, the regions in which the GCQUAD can operate are locked into the device. • The GCQUAD then needs to be connected to the internet every 45 days to validate the region in which it is operating. • If the registration expires then the GCQUAD will not be operational until it is connected to the internet. • Simply connect the GCQUAD via an Ethernet cable directly into your internet router to register the device, alternatively if you are using the GCQUAD alongside the FSX software and it is not in offline mode, the GCQUAD will automatically register.
	<p>WI-FI Connection</p> <ul style="list-style-type: none"> • The GCQUAD features a Wi-Fi hotspot which is always-on. • You can connect to this network via a computer or iPad so that the ball and club data can be transferred to either the FSX computer software, or the Performance Fitting iPad application. • The password to connect the GCQUAD is <u>FSSPORTS</u>
	<p>USB connection</p> <ul style="list-style-type: none"> • The USB-C connection enables you to connect your GCQUAD to a desktop PC or laptop to run maintenance or run Foresight software. • Always plug and unplug the cable when the GCQUAD is off. Connecting when the unit is on can cause static shocks to the GCQUAD which can damage internal componentry. • If you want to run the FSX software on a PC please check the minimum PC specifications with your Foresight representative to ensure the software will run properly. • Please note the maximum cable length that the GCQUAD can be connected via USB is 10m.
	<p>Ethernet Connection</p> <ul style="list-style-type: none"> • The GCQUAD can be connected either directly into a computer using an Ethernet cable, or into the local area network.

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	<ul style="list-style-type: none">This functionality allows multiple GCQUAD's to be connected to a switch which can then all be found by multiple computers. This is useful in commercial environments where multiple systems are deployed.
Water	<ul style="list-style-type: none">The GCQUAD is not designed to be used in wet weather. If it starts to rain either cover the unit or stop using it and pack it away.
Basic maintenance	<ul style="list-style-type: none">Clean any dust, mud, sand or grass from the GCQUAD after use. It is also good practice to clean the lens every month with a lens brush and blower to guarantee that the GCQUAD remains in peak operating condition.Take extra care when connecting and disconnecting any cable from the GCQUAD, over time the ports can degrade causing a loss of connection.Always ensure that the unit is powered down when not in use and that it is not kept on charge permanently as this might damage its lifespan.
Basic troubleshooting	<ul style="list-style-type: none">If your GCQUAD doesn't operate normally the first thing to do is check that it is set up correctly as per the advice in the set-up sections above.If this doesn't help then carry out a soft-reset by turning the GCQUAD off and on again.If this doesn't help, try a hard-reset. To do this press the on/off button but keep your finger on it until the unit turns off. Leave the device for 1 minute and then turn it back on again.If this doesn't help, turn the unit off, remove the battery, wait 1 minute, insert the battery and power back on.If there is still an issue refer to the online FAQ at www.foresightsports.com/support/faqs or email support@foresightsports.eu.

For further information please visit www.foresightsports.eu, email support@foresightsports.eu or call us on +44 (0) 1483 779222.