

Users guide

FOCUS
AMPLUS Co., Ltd.
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Introduction

The intent of this guide is to familiarize you with the basic capabilities of FOCUS and to provide some important information that you should know before using your FOCUS.

To ensure safe use of the product

Class A device: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING

Electric Shock and Fire Hazard / Risque de choc électrique et d'incendie
Unapproved power supplies can cause electric shock and/or fire. These represent a risk of death or serious injury.

CAUTION

About LED Light Sources.

- *When performing adjustment work, do not look directly into the laser/LED light source in a nearly vertical position for more than 60 seconds.
- *When checking the lighting of the laser/ LED light source, be sure to do so from a distance of at least 2m.
- *Leaving the ball in place for an extended period of time may cause the light to malfunction. Never leave the ball within range when not in use.

Operating the camera at temperatures outside of the range given in the camera specification causes the following problems:

- *The camera housing gets hot and may cause burns when touching it.
- *The camera itself may get damaged.
- *The camera's lifetime reduces.
- *Image quality may degrade.

Voltages outside of the specified range may damage the camera.

*FOCUS Camera: Camera power must comply with the Universal Serial Bus 3.0 specification.

Dust on the sensor may impair the camera's performance.

- *Never apply compressed air to the camera.
- *Do not remove the camera lens.

Observe the following:

- *Don't open the camera housing. Touching internal components may damage them.
- *Prevent ingress or insertion of any foreign substances into the camera housing. If operated with any foreign substances inside, the camera may fail or cause a fire.
- *Don't remove the camera's serial number label.
- *Don't operate the camera in the vicinity of strong electromagnetic fields. Avoid electrostatic charging.
- *Transport and store the camera in its original packaging only. Don't discard the packaging.
- *Don't use aromatic oils in the same room.

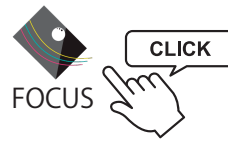
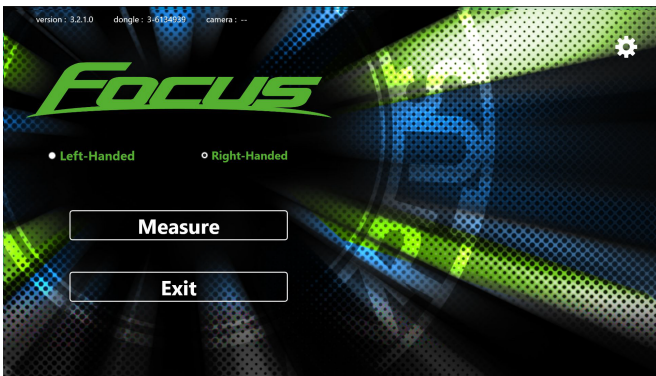


for Europe

In principle, the USB HUB should be installed inside the wall.
If installation outside the wall is unavoidable, protect the HUB with a cover that cannot be opened by bare hands.

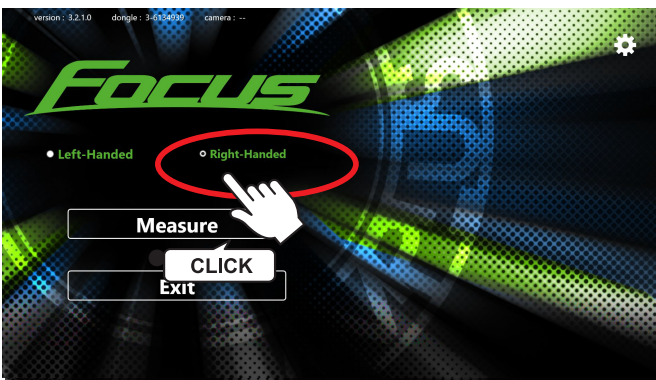
How to start FOCUS

① Make sure that the power of the FOCUS is turned on before operating the unit.



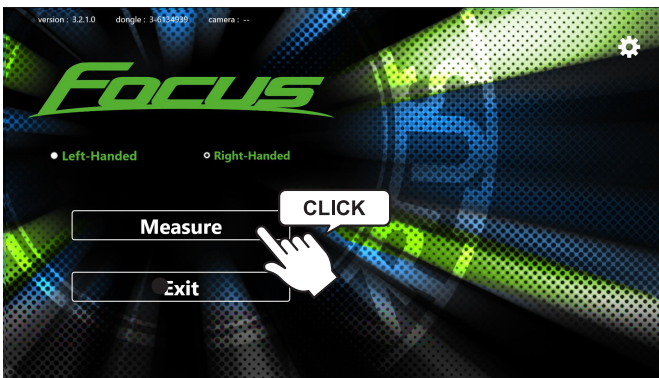
Double-click the FOCUS icon to start FOCUS.

②



Select left- or right-handedness on the startup screen.

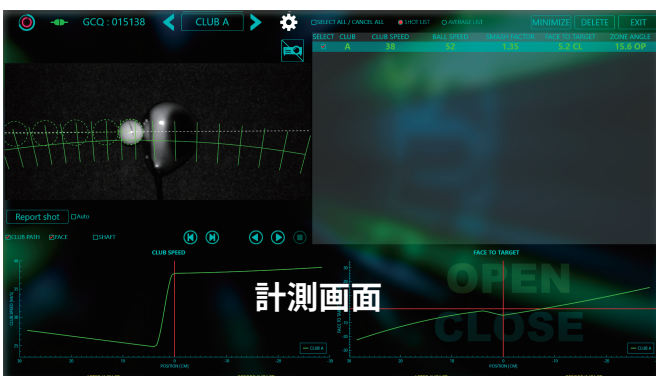
③



Click the "Measure" button to switch to the measurement screen.

That's all to startup.

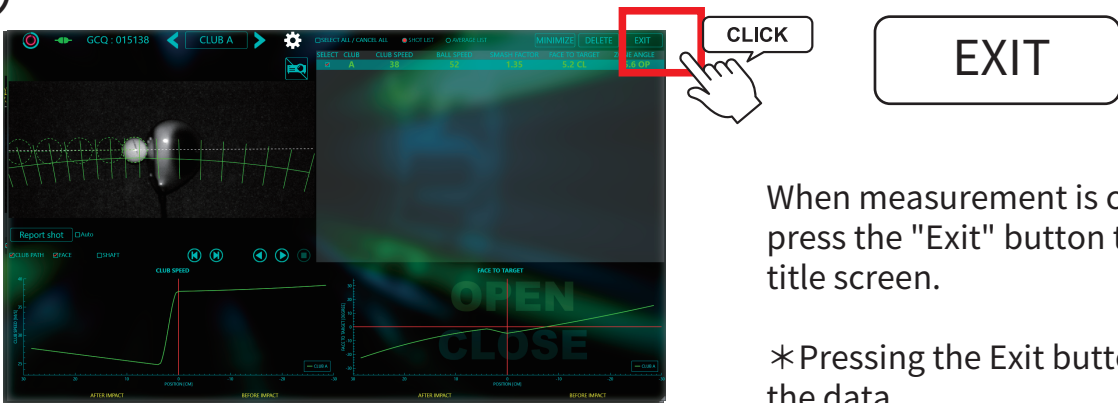
④



Place the ball in the area and start measuring.

How to exit FOCUS

①



When measurement is complete, press the "Exit" button to return to the title screen.

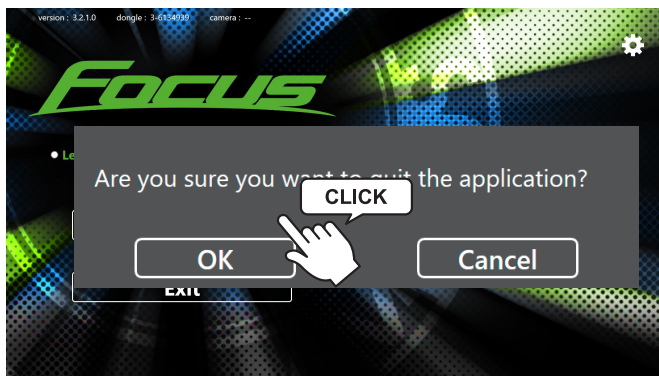
*Pressing the Exit button will erase the data.

②



Click the "Exit" button.

②

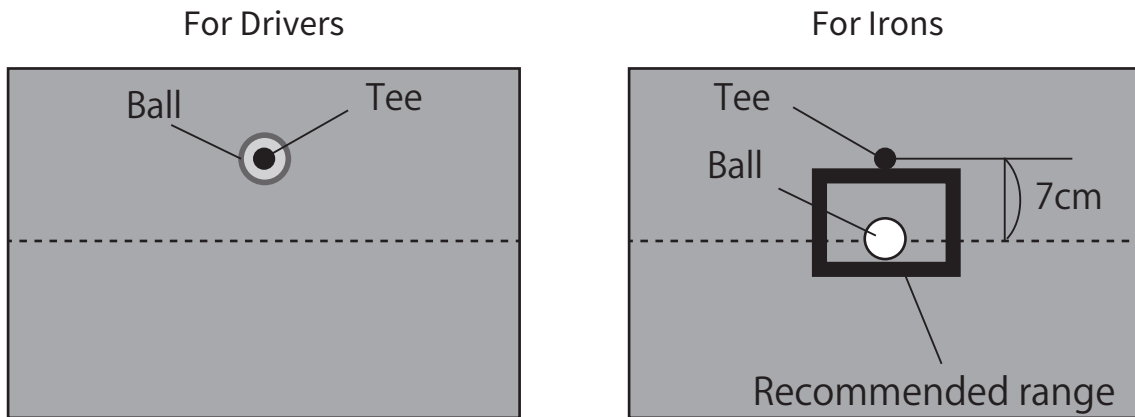


Click the "OK" button on the title screen to exit FOCUS.

*Turn off the power to the FOCUS main unit when finished.

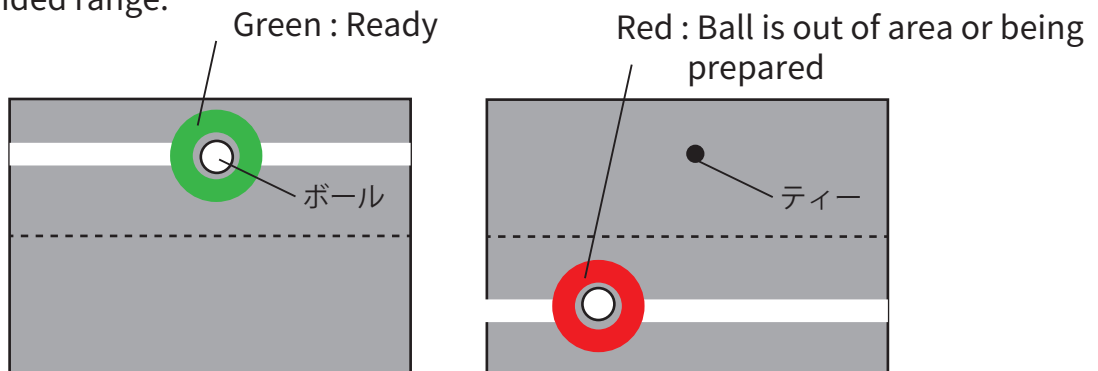
How to measurement

- ① Place the ball on tee when you use driver.
For irons, place the ball within the recommended range as shown in the diagram.



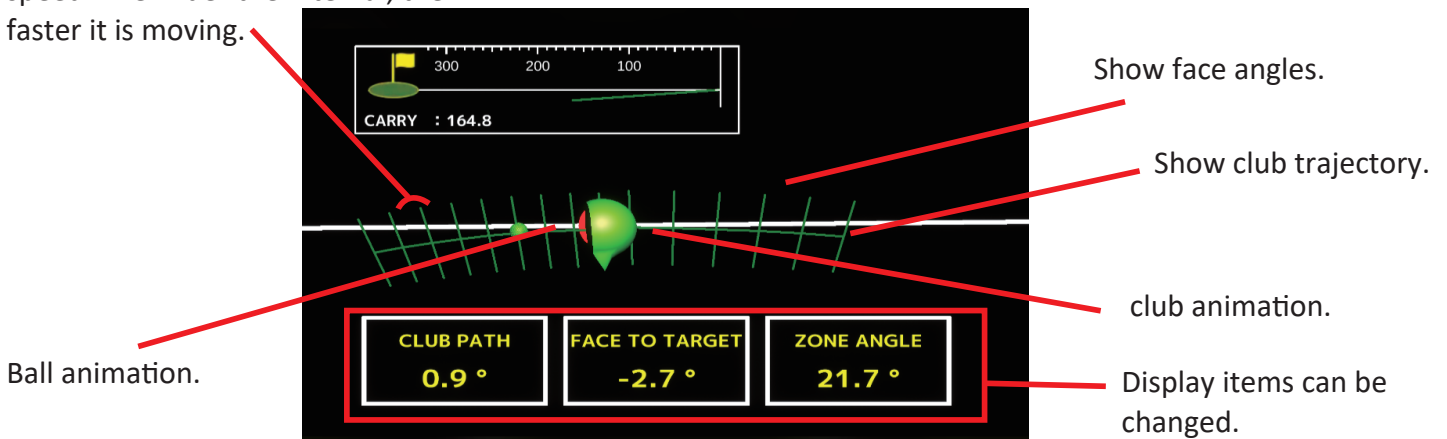
*Please use black Tee.

- ② When the ball is recognized and ready, a green circle will appear around the ball.
If this circle is still red after a few seconds, place the ball again within the recommended range.



- ③ When the ball is hit, the result is displayed on the shot mat.

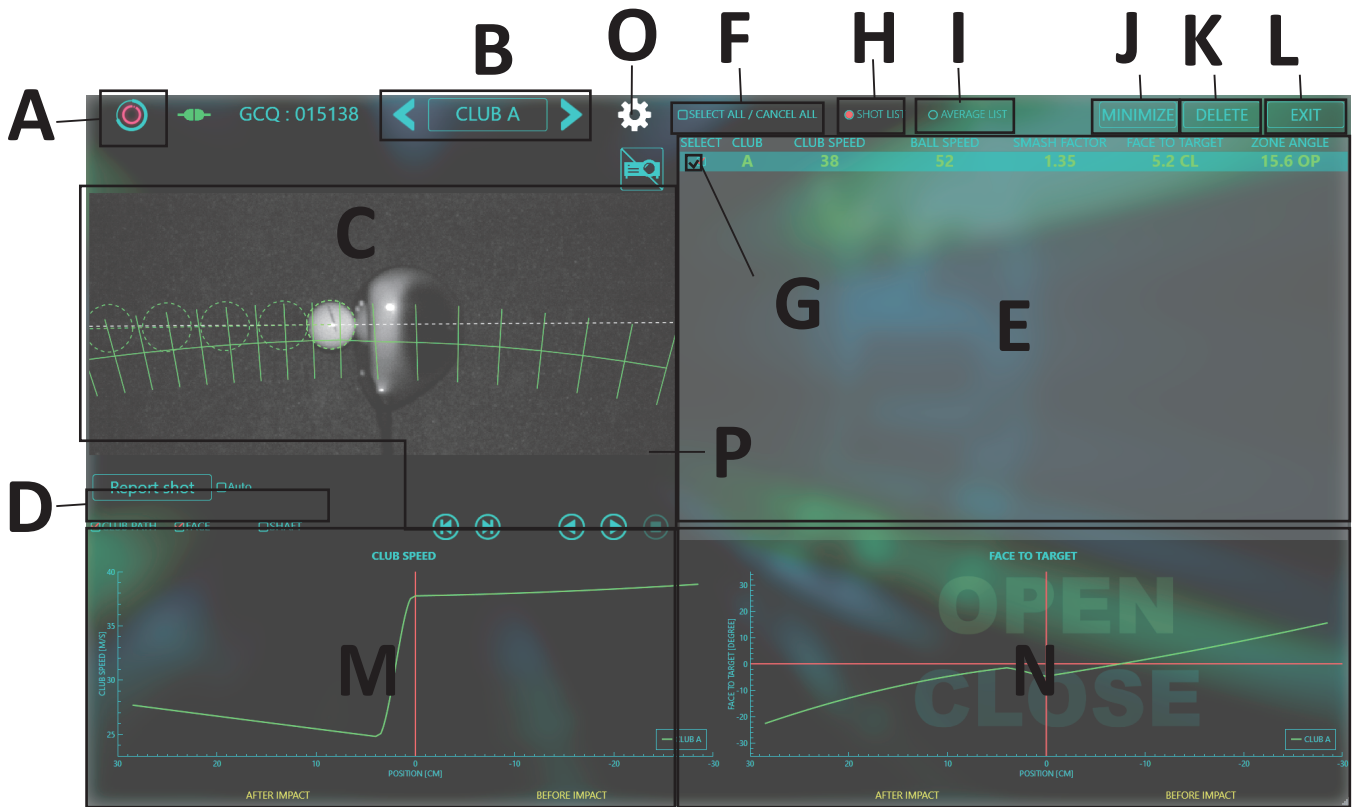
This interval represents the speed. The wider the interval, the faster it is moving.



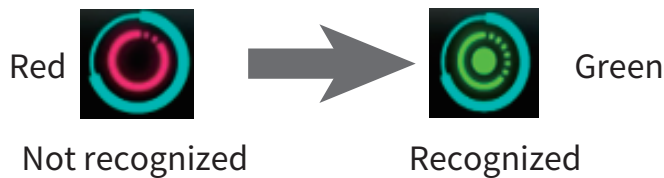
▶▶ P 10

* the ball is set before the * display appears, it will move on to the next measurement.

Description of measurement screen



A Ball recognition mark changes red to green when the ball is recognized.



B Club Selection

By pressing the arrow buttons, the display can be divided by A to E. Each A to E has its own color to distinguish data and face lines.

C Video Zone
In the video zone, you can see the video immediately after you hit the shot. Playback, reverse playback, frame advance, and reverse frame advance are available. Clicking the "Stop" button returns to the first frame. When the next shot is made, the previous shot is overwritten (deleted).

- D**
- CLUB PATH Club Path Checkbox Face
 - FACE Face Checkbox Face
 - SHAFT Shaft Checkbox

Checked items will appear in the video zone.

E Measurement Data List.

Shot data is listed and displayed in colors according to club A through E.

F Select All / Cancelall / Cancelall Checkbox.

Data can be selected in batches. Data can be displayed in graphs, deleted in batches,

G Select Individual Selection Checkbox.

You can select the data you want to display and display it in each Video Zone graph and shotmat. This function can also be used to delete individual data.

H Shot list Shot List Display.

List all shots.

I Average list Average data display.

When selected, the average data of clubs A to E will be displayed.

J Minimum display button.

When selected, the average data of clubs A to E will be displayed.

K Eelete button.

Data with a check mark will be deleted. If you want to delete only one data for a miss shot, etc., check the data you want to delete and click the "Delete" button.

L Exit button.

Pressing the "Exit" button will erase the data.

M Head speed graph

You can check the change of the head speed before and after impact.

N Face to target graph

Check the changes of the face angle before and after impact.

O Display setting button.



You can change measurement items and units.



P10

P Projector blank button.






The floor projection can be temporarily displayed/hidden.

Used in conjunction with GC series instrumentation

FOCUS can be used in conjunction with Foresight Sports products such as GC3/GCQuad/GCHawk to display data.

Measurement Items

The data that can be displayed varies from model to model. Please check the table below.

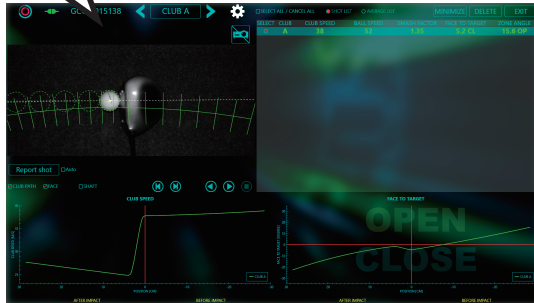
		GCH/GCQ	GC3	Focus
		 ※club addon	 ※club addon	
Item name		Measure	Measure	Measure
BALL DATA	1 ボールスピード	●	●	○
	2 打出角	●	●	-
	3 打出左右角	●	●	○
	4 バックスピン	●	●	-
	5 サイドスピン	●	●	-
	6 トータルスピン	●	●	-
CLUB DATA	7 ヘッドスピード/クラブスピード	●	●	○
	8 クラブパス	●	●	○
	9 フェース角(TG)	●	-	○
	10 ゾーン角	-	-	○
	11 フェース角(パス)	●	-	○
	12 アタック角	●	●	-
	13 ライ角	●	-	-
	14 ロフト角	●	-	-
	15 打点(左右)	●	-	-
	16 打点(上下)	●	-	-
	17 ミート率	●	●	○
FLIGHT DATA	18 キャリー	●	●	○
	19 ラン	-	-	○
	20 総飛距離	-	-	○
	21 左右ブレ (オフライン)	●	●	-

*A dedicated marker must be affixed to the club to display club data.

*If no GC device is connected, the display will automatically show the measured values of FOCUS alone.

Connection method

When a GC device is connected, it is automatically recognized.



Connection completed



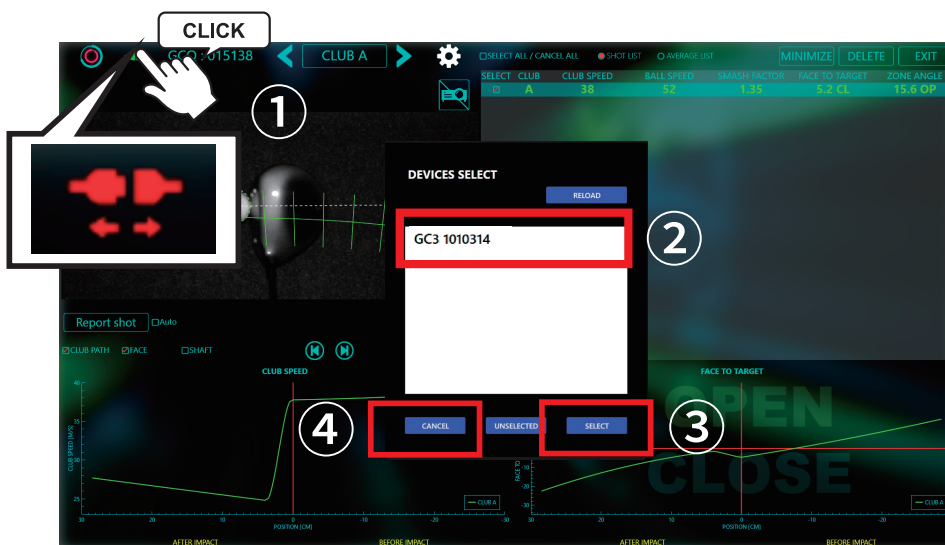
Unconnected



during disconnection

If not recognized automatically.

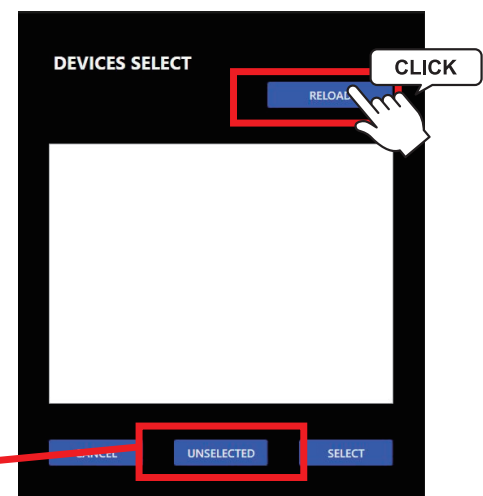
If the connection is not recognized automatically, please make the connection manually.



- ① Click the "Not connected" button.
- ② Click the serial number of the GC device.
- ③ Click the "Select" button to connect the device.
- ④ Click the "Cancel" button to abort the operation.

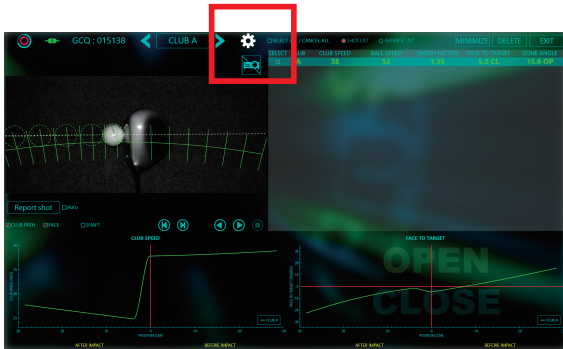
If you do not see anything for the serial of the GC device Click the Reload button. If the display still shows nothing, there may be a problem with the connection. Please check the connection.

If you want to disconnect the GC device and use FOCUS alone for measurement, click the "Unselected" button.



How to change display items

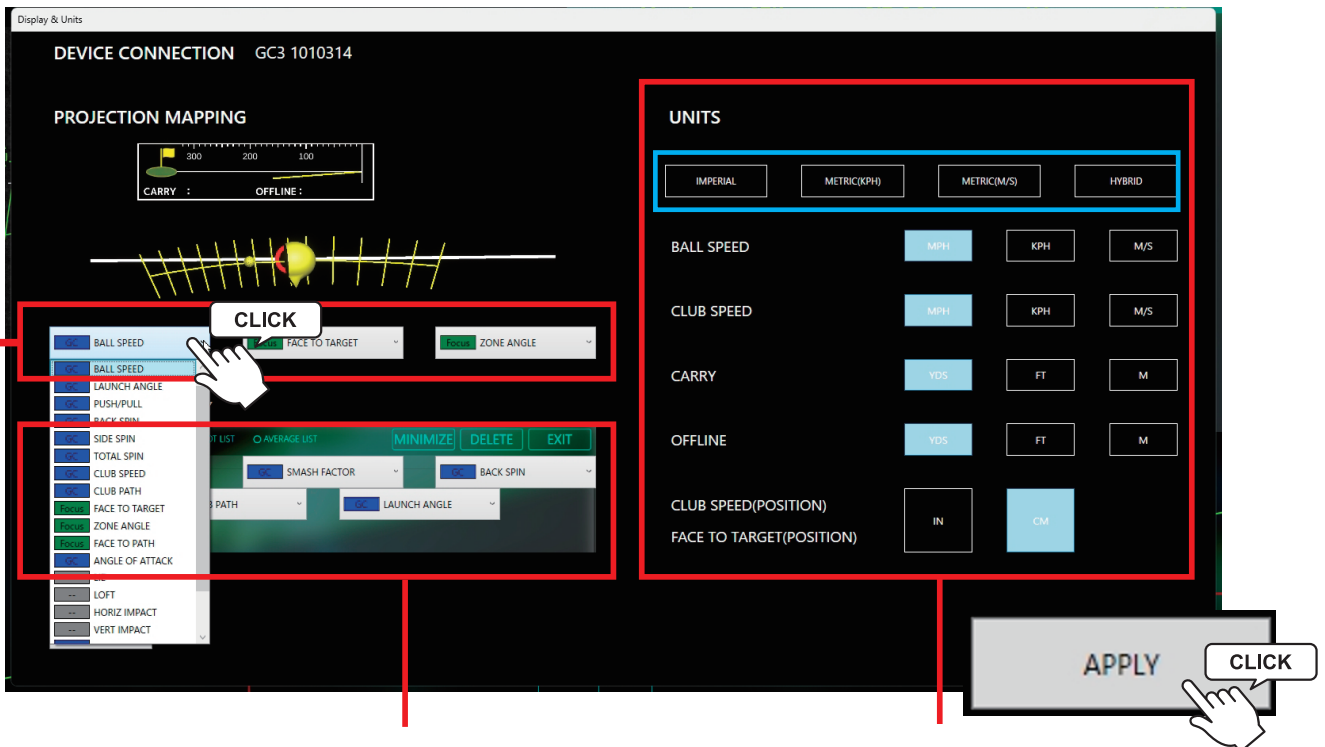
You can customize the measurement items to be displayed.



① Click the "Display Settings" button.



② Select the item you wish to customize from the pull-down menu and click the "Update button" to confirm.



You can customize the items displayed in the list in the upper right corner of the measurement screen.

You can change the unit of measure for each item.

You can also batch switch by clicking the button.

The measurement items displayed on the floor can be customized.

③ To exit, click the "Close" button.

Measurement FAQ

When measurement is not

Are you placing the ball outside the recommended area?	Club recognition may not be possible if you do not hit within the recommended area on P3-①.
Are you installing tees other than black?	If tees other than black are used, they may be misrecognized and measurements may not be taken. Please change to black tees for measurement.
Is there anything in the reflection other than the ball you are hitting?	If there is anything other than the ball to be hit reflected in the range, it will be misrecognized and the measurement may not be possible. Please remove all objects other than the ball to be hit so that they do not appear in the image.
Is it in focus?	See "Focus Adjustment" in the Appendix, [Advanced settings guide].
Is the measurement range that the camera shows misaligned?	Refer to "Camera Position Settings" in the Appendix, [Advanced settings guide].
Is the illumination position of the lighting shifted?	Refer to "LED Position Settings" in the Appendix, [Advanced settings guide].
Is the brightness correct?	See "Brightness Adjustment" in the Appendix, [Advanced settings guide].

When lines or ball marks on the shot mat appear out of alignment

Is the angle of the projector correct?	Refer to "Projector Position Settings" in the Appendix, [Advanced settings guide].
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