# G-Flight User Manual

(Betas)

G-Flight

The G-Flight is comprised of two components

The component on the left of two shown in the picture is the display component. This component has the "on/off switch", the display screen for jump metrics and a sensor.

The component on the right of the two shown in the picture simply acts as a sensor. As you will see in the upcoming slides, the sensors are quite small and properly alignment is key for best use
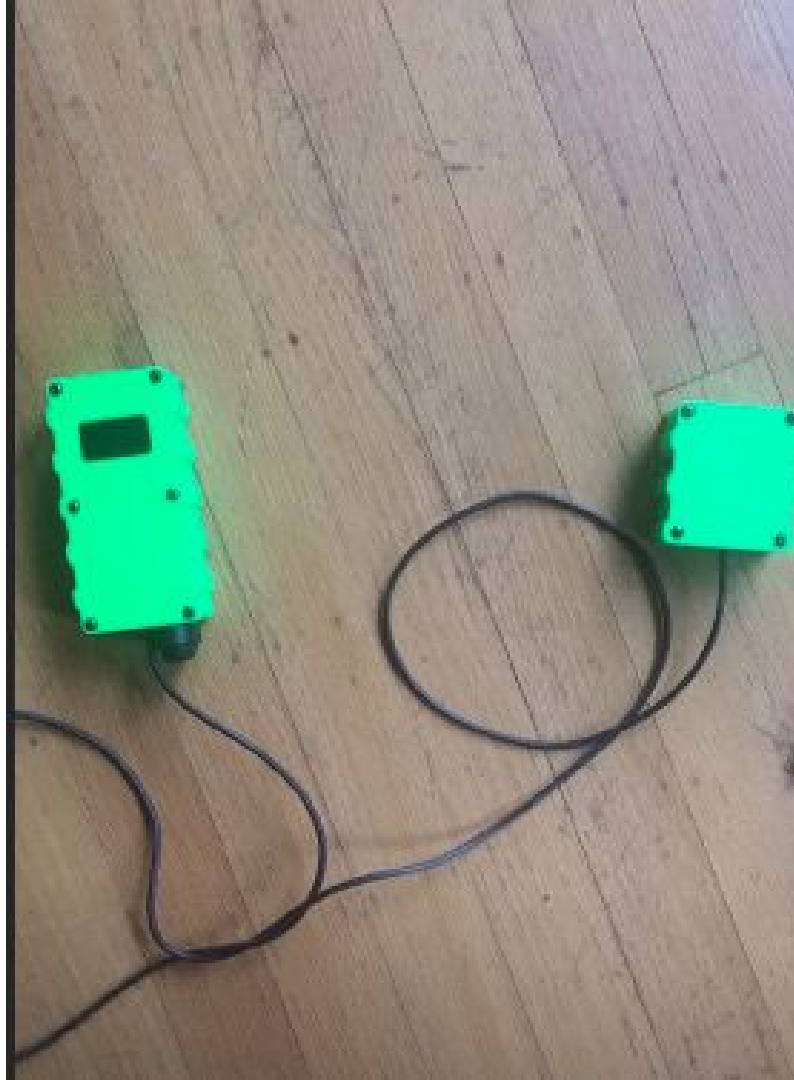
Turning On

The on off switch is located on the back of the display piece (figure 1).

When turned on, the back will light up green and flash red several times before the system is ready to be used (figure 2)

Figure 1

Figure 2

Set up

Make sure sensors are lined up prior to jump testing

Circled on the right is the sensor attached to main piece where the display is placed. When the sensors are properly lined up, simply breaking the beam (tapping your hand, feet or taking a small hop) will register and the metrics will appear on the G-Flight display (as shown)

Foot Placement

Line up your pinky toes with the sensors. You have want to take a small hop before you take your first jump. This will make sure the sensors are lined up

Landing

Landings need to be consistent. If you land outside of the sensors, the jump will not register.

We have found that a couple of practice jumps or adding a visual landing marker can help limit the error

Metrics

The G-Flight will provide you with four metrics
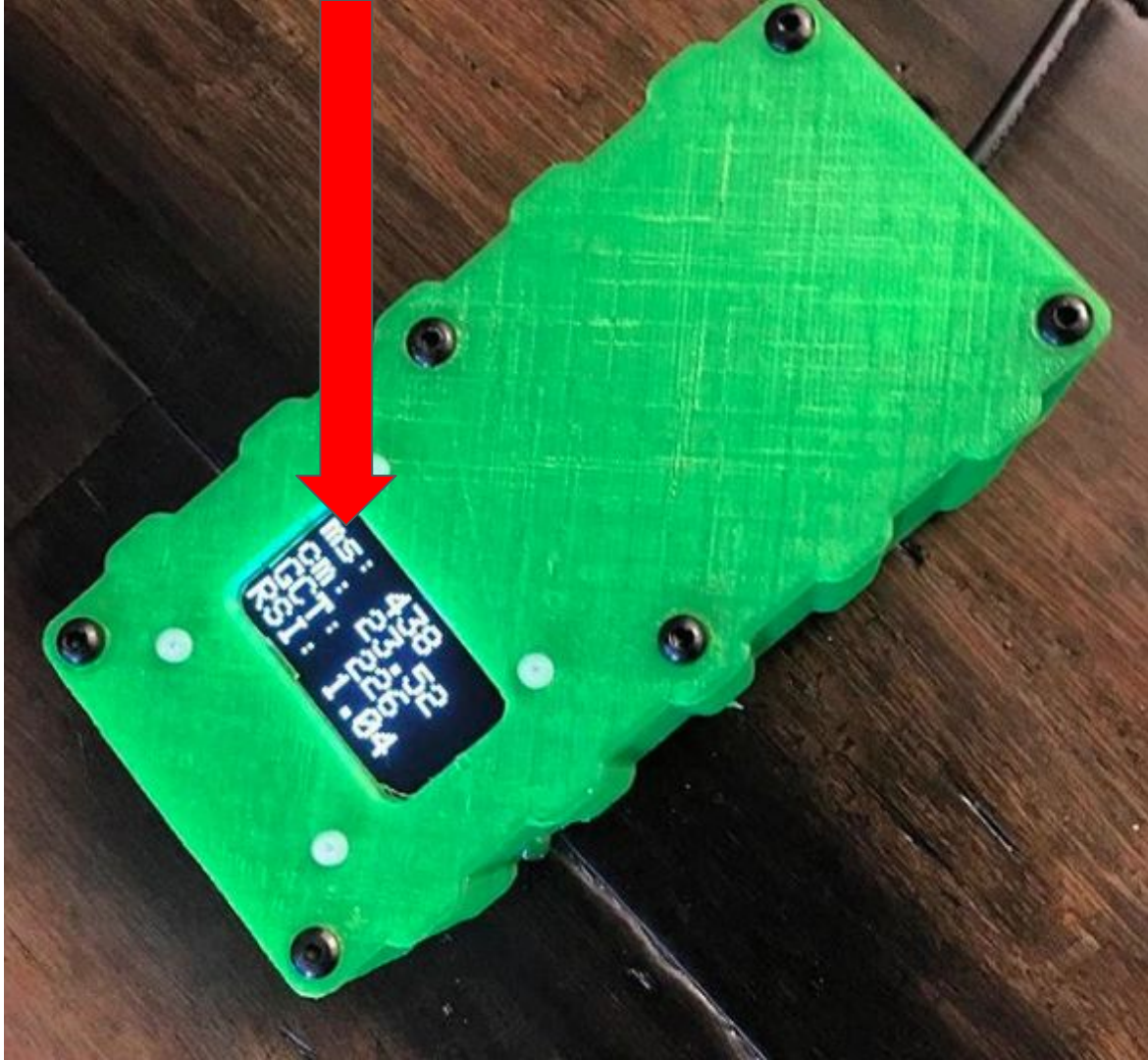
-ms

-cm

-GCT

-RSI

Each will be elaborated on i the following pages
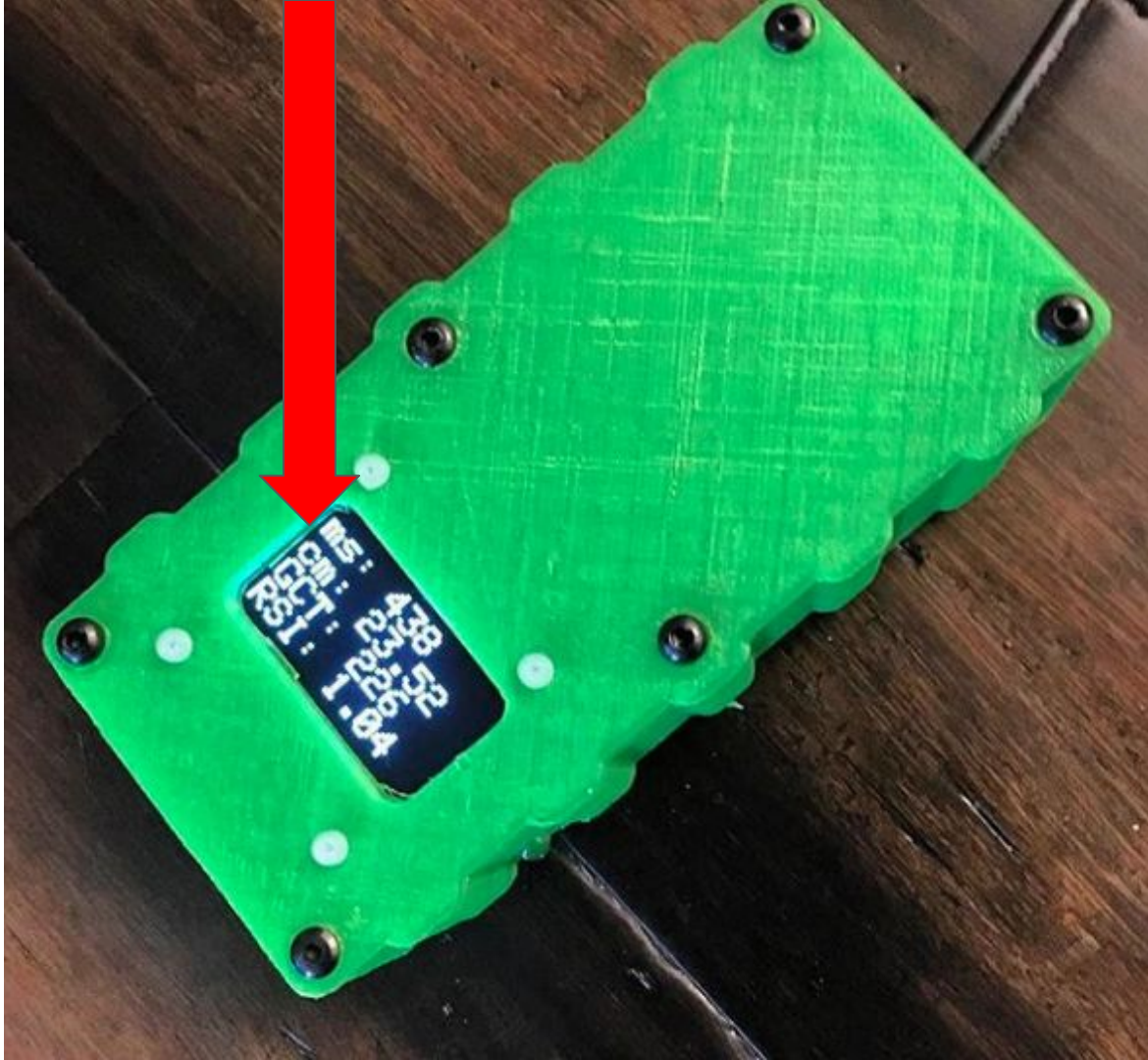
Time in air

Time in air is measured in milliseconds. This metric is used to help calculate jump height

Jump Height

Jump height is measured in centimeters. Jump height is derived from the time in air metric (ms).

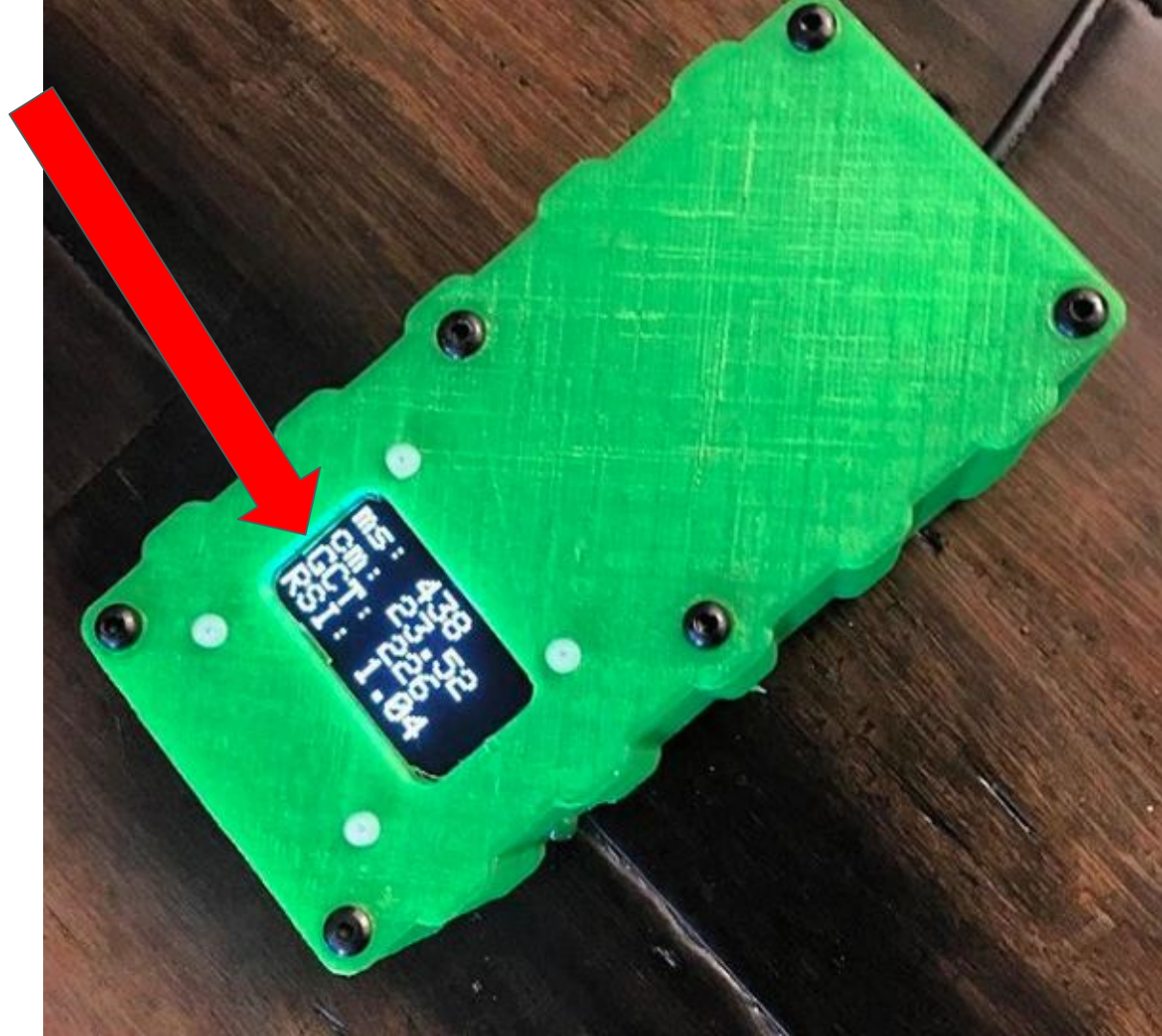It is most accurate when landings are takeoffs are consistent

Ground Contact Time

Ground contact time (GCT)

The length of time one's feet are on the ground preceding the jump

Typically only useful for continuous movements (i.e depth jumps, hops, or bounds)

Reactive Strength Index

Reactive strength index (RSI) is derived from ground contact time and jump height. It is a composite score used to measure the level of "reactive strength". It was developed at the Australian Institute of Sport and more information can be easily found on the web
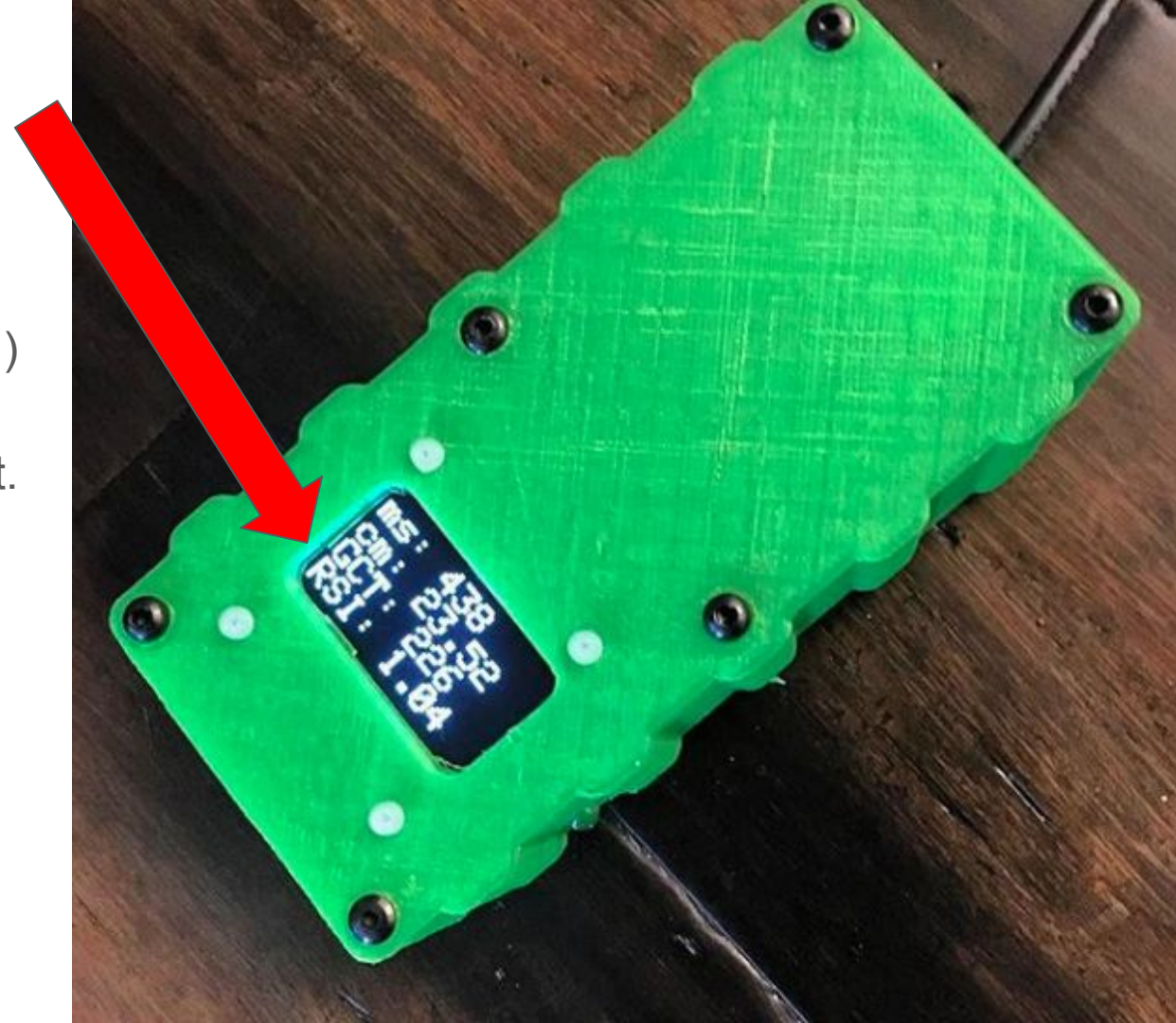
Best practices

The G-Flight is best used indoors (sun interference outside)

The G-Flight needs to be lined up properly (sensors facing each other)

The G-Flights metrics will be best if landings are takeoffs are controlled

The G-Flight does not save data

The G-Flight needs to be fully charged for best readings

The G-Flight's sensors need to be free to obstruction