SmartWitness G-Sensor Event Threshold Table
CP1 Applied firmware version: 1.2.0 and up **& KP1-S** (Applied firmware version: 2.4.1 and up)

1a. Pre-Set Settings
(Low Speed Mode)

Smart G-Sensor Sensitivity
- ◉ Pre-set

Sensitivity ⓘ [5 ▾]

X-Axis (Front – Rear) [750]

Y-Axis (Left – Right) [750]

Z-Axis (Up – Down) [ ]

☑ Auto adjust G-Sensor to Vehicle speed

Level	Axis	Shock (impact) G(mg)	Shock (impact) Hz	Accel/Brake setting1 G(mg)	Accel/Brake setting1 Hz	Accel/Brake setting2 G(mg)	Accel/Brake setting2 Hz	Quick Turn G(mg)	Quick Turn Hz
1 (Heavy Duty More sensitive)	X	950	1	450	8	500	5~7	-	-
	Y	950	1	-	-	-	-	350	15
	Z	1050	1	-	-	-	-	-	-
2	X	900	1	420	8	470	5~7	-	-
	Y	900	1	-	-	-	-	340	15
	Z	1000	1	-	-	-	-	-	-
3	X	850	1	390	8	440	5~7	-	-
	Y	850	1	-	-	-	-	320	15
	Z	950	1	-	-	-	-	-	-
4	X	800	1	360	8	410	5~7	-	-
	Y	800	1	-	-	-	-	310	15
	Z	900	1	-	-	-	-	-	-
5	X	750	1	330	8	380	5~7	-	-
	Y	750	1	-	-	-	-	300	20
	Z	850	1	-	-	-	-	-	-
6	X	700	1	310	8	360	5-7	-	-
	Y	700	1	-	-	-	-	280	20
	Z	800	1	-	-	-	-	-	-
7	X	650	1	240	10	-	-	-	-
	Y	650	1		-	-	-	230	20
	Z	750	1	-	-	-	-	-	-
8	X	600	1	190	10	-	-	-	-
	Y	600	1	-	-	-	-	190	15
	Z	700	1	-	-	-	-	-	-
9 (Light Duty More Sensitive)	X	550	1	170	10	-	-	-	-
	Y	550	1	-	-	-	-	170	15
	Z	650	1	-	-	-	-	-	-

SmartWitness G-Sensor Event Threshold Table
CP1 Applied firmware version: 1.2.0 and up **& KP1-S** (Applied firmware version: 2.4.1 and up)

1b. Pre-Set Settings
(High Speed Mode)

Smart G-Sensor Sensitivity

◉ Pre-set

Sensitivity ⓘ	5
X-Axis (Front – Rear)	750
Y-Axis (Left – Right)	750
Z-Axis (Up – Down)	

☑ Auto adjust G-Sensor to Vehicle speed

Level	Axis	Shock (impact) G(mg)	times	Accel/Brake setting1 G(mg)	times	Accel/Brake setting2 G(mg)	times	Quick Turn G(mg)	times
1 (Heavy Duty More sensitive)	X	1350	1	480	10	-	-	-	-
	Y	1350	1	-	-	-	-	420	15
	Z	1450	1	-	-	-	-	-	-
2	X	1300	1	450	10	-	-	-	-
	Y	1300	1	-	-	-	-	410	15
	Z	1400	1	-	-	-	-	-	-
3	X	1250	1	420	10	-	-	-	-
	Y	1250	1	-	-	-	-	380	15
	Z	1350	1	-	-	-	-	-	-
4	X	1200	1	390	10	-	-	-	-
	Y	1200	1	-	-	-	-	370	15
	Z	1300	1	-	-	-	-	-	-
5	X	1150	1	360	10	-	-	-	-
	Y	1150	1	-	-	-	-	340	20
	Z	1250	1	-	-	-	-	-	-
6	X	1100	1	340	10	-	-	-	-
	Y	1100	1	-	-	-	-	320	20
	Z	1200	1	-	-	-	-	-	-
7	X	1050	1	270	10	-	-	-	-
	Y	1050	1		-	-	-	270	20
	Z	1150	1	-	-	-	-	-	-
8	X	1000	1	190	10	-	-	-	-
	Y	1000	1	-	-	-	-	220	15
	Z	1100	1	-	-	-	-	-	-
9 (Light Duty More Sensitive)	X	950	1	170	10	-	-	-	-
	Y	950	1	-	-	-	-	200	15
	Z	1050	1	-	-	-	-	-	-

SmartWitness G-Sensor Event Threshold Table
CP1 Applied firmware version: 1.2.0 and up **& KP1-S** (Applied firmware version: 2.4.1 and up)

2. Custom Mode

When custom mode is selected, you can change each axis to a specific micro G-level and hertz level

When "Trigger High Impact Events Only" is checked, then only the High Impact column threshold will trigger events. Accel/Brake/Turn events will NOT trigger (this applies to both custom mode and pre-set mode).

3. NOTES

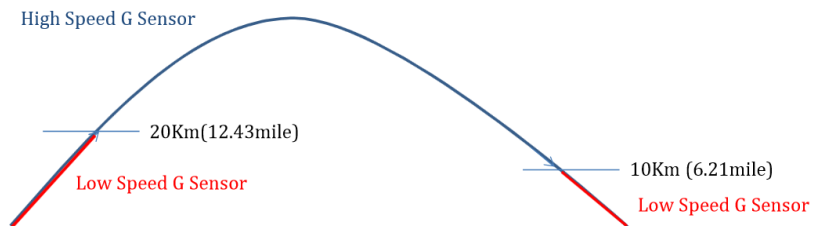**Axis Definitions**

X = Front-Back

Y = Left-Right

Z = Up-Down (Z axis is OFF by default, as it can cause false triggers. Use Z axis with caution) ☐ Turn Z Axis on

Speed Mode

☑ Auto adjust G-Sensor to Vehicle speed

When auto adjust G-Sensor to vehicle speed is checked, G-Sensor threshold will increase to levels specified in table **1b** when the vehicle reaches 20 KMh. The threshold will go back to settings in table **1a** when vehicle goes below 10KMh
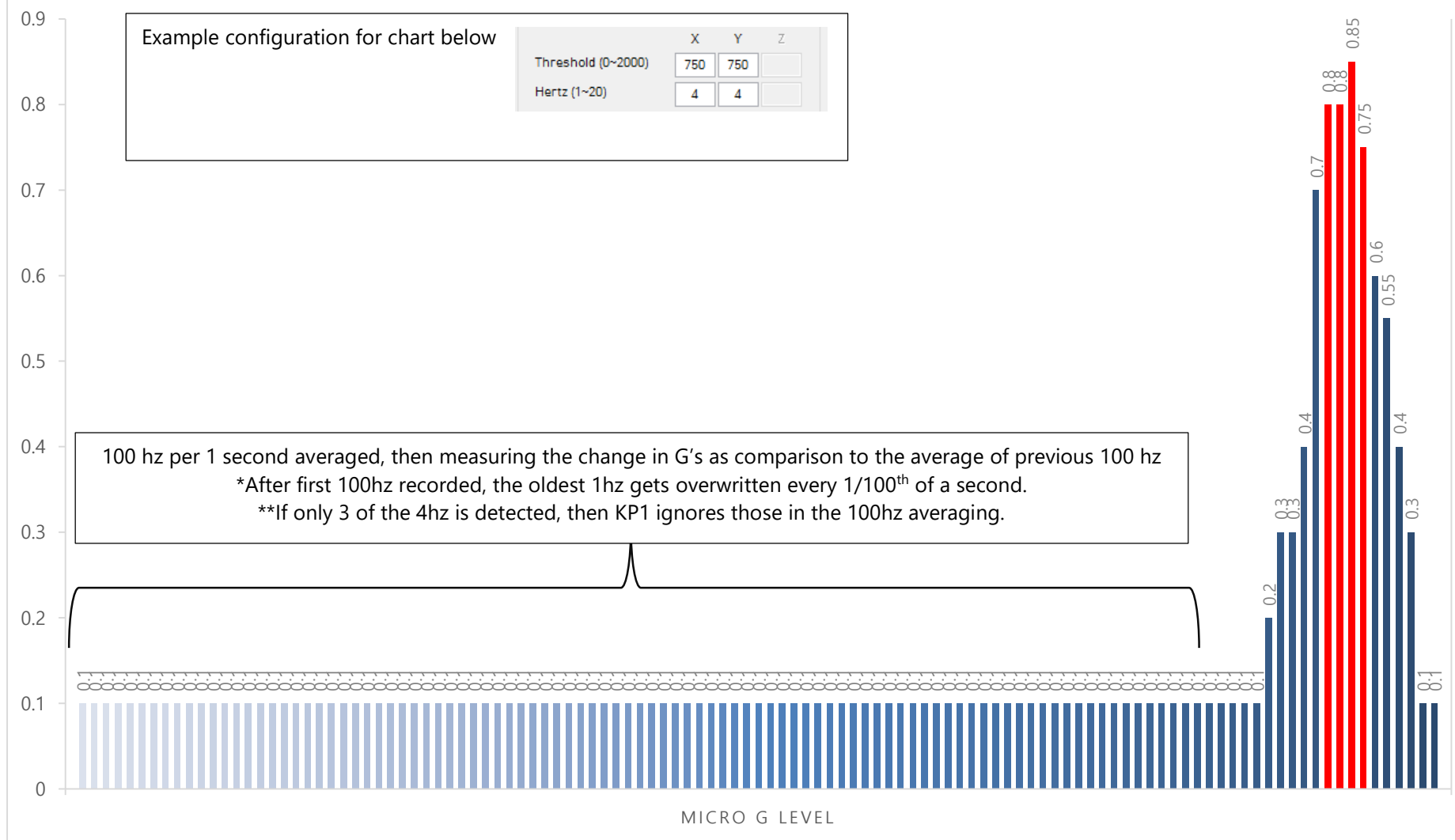
If Speed mode is OFF and pre-set mode is selected, then the table in **1a** is the default

SmartWitness G-Sensor Event Threshold Table

CP1 Applied firmware version: 1.2.0 and up **& KP1-S** (Applied firmware version: 2.4.1 and up)

ACCELEROMETER ALGORITHM EXAMPLE - EVENT TRIGGER

Example configuration for chart below

	X	Y	Z
Threshold (0~2000)	750	750	
Hertz (1~20)	4	4	

100 hz per 1 second averaged, then measuring the change in G's as comparison to the average of previous 100 hz
*After first 100hz recorded, the oldest 1hz gets overwritten every 1/100th of a second.
**If only 3 of the 4hz is detected, then KP1 ignores those in the 100hz averaging.

Chart values: 0.2, 0.3, 0.3, 0.4, 0.7, 0.8, 0.8, 0.85, 0.75, 0.6, 0.55, 0.4, 0.3, 0.1

MICRO G LEVEL