

# Full Swing Launch Monitor Safety Manual

2021.05.18a

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## **Responsible Party**

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## **Translation Disclaimer**

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## Introduction



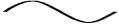


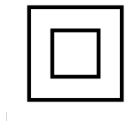

This Safety Manual includes safety guidelines for correct use of the Launch Monitor system, instructions for setting up and using the Launch Monitor system, reference material on Launch Monitor system administrative utilities and diagnostic functions, and a summary of other documentation included with the Launch Monitor system or available from Full Swing.

Note: This Safety Manual is included in the purchase of a new Launch Monitor system. Customers with an existing Launch Monitor system using an earlier software release version should also review this Safety Manual, as there may have been changes in how the software is installed and how it should be used.

## Document Change History

Date MM/DD/YYYY	Section(s)	Description
	All	Initial release

## Explanation of Symbols

Symbol	Meaning	Description
	Caution	This symbol indicates a potentially hazardous situation that could result in minor or moderate injury to the Launch Manager system or operator. The Safety Manual and the safety precautions must be consulted in all cases where this symbol appears.
	Warning	This symbol indicates the presence of hazardous voltages inside the cover (there are no operator-serviceable components inside the Launch Manager system). Do not remove the Launch Monitor system covers.
	Alternating Current	This symbol indicates Alternating Current
	Direct Current	This symbol indicates Direct Current
	On/Off (Power)	This symbol indicates the power button
	Class II device	Products marked with this symbol are Class II devices. These devices are not provided with a grounding-type plug (depending on power supply).
	Indoor use only	This device is designed primarily for indoor use (depending on power supply).

## Compliance Statements:

### Federal Communications Commission (FCC) Statement

The equipment described in the Safety Manual generates, and may radiate, radio-frequency energy. If not used in accordance with Full Swing instructions, there may be interference with radio and television reception.

Note: The Launch Monitor system has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The Launch Monitor system generates, uses, and may radiate radio frequency energy, and if not installed and used in accordance with instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in an installation. If the Launch Monitor system does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the operator is encouraged to try to correct the interference by taking one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the Launch Monitor system and receiver
- Connect the Launch Monitor system to an outlet on a circuit different from the one which the receiver is currently connected
- Consult the dealer or an experienced radio/TV technician for help

Modifying the Launch Monitor system without the written authorization of Full Swing may result in the Launch Monitor system no longer complying with FCC requirements for Class B digital devices. In that event, the customer's right to use the Launch Monitor system may be limited by FCC regulations, and the customer may be required to correct any interference to radio or television communications at the customer's own expense.

Note: This Launch Monitor system complies with Part 15 of the FCC Rules, operations subjected to the following two conditions (1) this Launch Monitor system may not cause harmful interference, and (2) this Launch Monitor system must accept any interference received, including that which may cause undesirable interference.



### **CAUTION: Exposure to Radio Frequency Radiation.**

The Launch Monitor system shall be used in such a manner that the potential for human contact is minimized. This Launch Monitor system complies with FCC radiation exposure limits set forth for an uncontrolled environment. This Launch Monitor system must be installed and operated with a minimum distance of 20 cm (approximately 8 inches) between the radiator and the customer's body.

### Industry Canada Compliance Statement

This Launch Monitor system contains license-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### Exposure to radio frequency energy

The radiated output power of this device meets the limits of ISED Canada radio frequency exposure limits. This device should be operated with a minimum separation distance of 20 cm (8 inches) between the equipment and a person's body.

### L'exposition à l'énergie radiofréquence

La puissance de sortie rayonné de cet appareil est conforme aux limites de la FCC/ISDE Canada limites d'exposition aux fréquences radio. Cet appareil doit être utilisé avec une distance minimale de séparation de 20 cm entre l'appareil et le corps d'une personne.

**Proposition 65****STATEMENT OF CALIFORNIA PROPOSITION 65**

The Safe Drinking Water and Toxic Enforcement Act (Act) of 1986 is intended to protect the U.S. State of California citizens and State of California drinking water sources, as well as inform citizens about exposure to the presence of specific chemicals. This Act, commonly known as Proposition 65 (Prop 65), establishes a list of chemicals that the state of California's risk assessment process has determined to be a present risk of cancer, birth defects, or other reproductive harm. The Proposition 65 chemical list can be found at:

<https://oehha.ca.gov/proposition-65/proposition-65-list>

Some products supplied by Full Swing may contain chemicals included in the Act. Full Swing products are not designed to release or expose operators to any of these chemicals. Full Swing products are articles as defined by Occupational Safety and Health Administration (OSHA). Under normal conditions of use, Full Swing products do not release more than very small quantities or trace amounts of a hazardous chemical and do not pose a physical hazard or health risk to employees or customers. However, the parts and components that Full Swing manufacturers and markets may be incorporated directly or indirectly into various consumer products.



**WARNING:** This product can expose the customer to chemicals, including nickel, cadmium, antimony oxide (antimony trioxide), which are known to the State of California to cause cancer.

For more information, see <https://www.p65warnings.ca.gov/>.

FCC ID: 2AY26-FSKIT1

Contains FCC ID: VPYLBEE5HY1MW

IC ID: 27175-FSKIT1

Contains IC ID: 772C-LBEE5HY1MW

Full Swing does not accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification or non-recommended use of the Launch Monitor system.

Any unauthorized changes or modifications without written permission from Full Swing will void warranty and the operator's authority to operate the Launch Monitor system.

## Safety Precautions

These instructions facilitate safe use of the Launch Monitor system.



**CAUTION:** It is important that these instructions be read, kept, and understood by the operator. The instructions and safety requirement protect both the operator and the Launch Monitor system.



**WARNING:** The Launch Monitor system contains hazardous voltages and can produce other emissions that can cause injury to the operator or others.

Never operate the Launch Monitor system without all its covers securely in place. It contains no operator-serviceable parts. The Launch Monitor system should be returned to Full Swing for any hardware-level repair, hardware upgrade, or other maintenance. Evidence of unauthorized removal or unauthorized attempted removal of the cover(s) terminates the Launch Monitor system warranty.

The Launch Monitor system may tolerate very light residual wetness, such as what is normal to slightly damp grass, but otherwise must always remain dry. Only use a dry cloth to clean the Launch Monitor system. Do not rinse or immerse any element of the Launch Monitor system or other accessory. Do not use cleaning product of any types, including but not limited to soaps, detergents, ammonia, alkaline cleaners, or abrasive cleaning compounds or solvents. These substances may damage coatings and electronic circuitry.

Do not store liquids on or near the Launch Monitor system. If a spill occurs, immediately remove then dry the Launch Monitor system.

The charger plug is used as the power disconnect for the charger. To disconnect all power from the charger, unplug the charger plug from the wall outlet. While charging, the charger plug should always remain easily accessible.

The charger is designed for indoor use only.

The Launch Manager system is rated IP54.

- (Particles) IP with the 5 in this position indicates the Launch Manager system is Dust Protected. There is limited ingress of dust permitted, and dust will not interfere with operation of the equipment over two-to-eight hours.
- (Water) IP with the 4 in this position, indicates the Launch Manager system is protected against water splashed from all directions. Limited ingress is permitted.

Do not expose the Launch Monitor system to laser beams as laser beams may damage the internal camera.

Do not expose the Launch Monitor system to strong vibration or impact (shock) as the internal mechanisms may be damaged by shock. Do not drop the Launch Monitor system.



Do not pinch, step on, drive or ride over the Launch Monitor system cables. Immediately replace any power cords suspected of sustaining damage due to crushing or other forms physical damage.

Do not operate or store the Launch Monitor system near any heat sources, including but not limited to radiators, heat registers, stoves, or any other apparatus that produces heat. Store in a protected, level, and well-ventilated place.

When storing, avoid exposure to extreme temperatures, damp, severe vibration, strong magnetic fields, direct sunlight, or local heat sources. Do not store or otherwise leave the Launch Monitor system in a car as temperatures in parked cars can exceed the storage range.

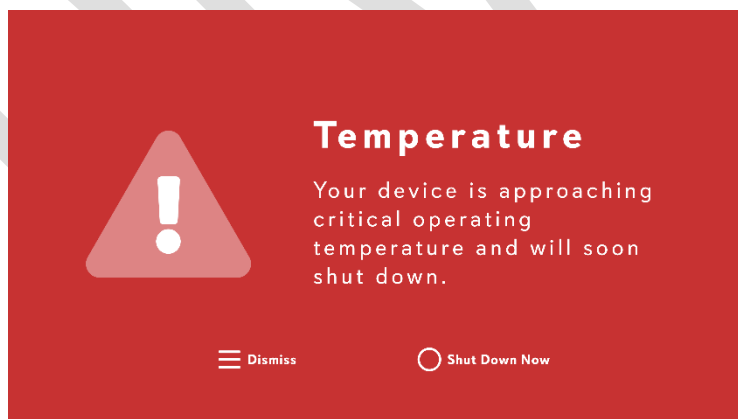
The recommended storage and usage temperatures for the Launch Monitor system are:

- Operating range: 0° C to 40°C (32°F to 104°F)
- Storage Range: -20° C to 60°C (-4°F to 140°F)
  - Stored < 1 month: -20°C to 60°C (-4°F to 140°F)
  - Stored < 6 month: -20°C to 30°C (-4°F to 86°F)
- Relative Humidity: 0% to 85% non-condensing
- Rated altitude: < 2000 meters
- Rated Pollution: Degree 2
- Enclosure rating: IP54/ Type 3
- Recharging time: Approximately 5 hours for a full charge when the Launch Monitor system is not in use.

#### Electrical Specification

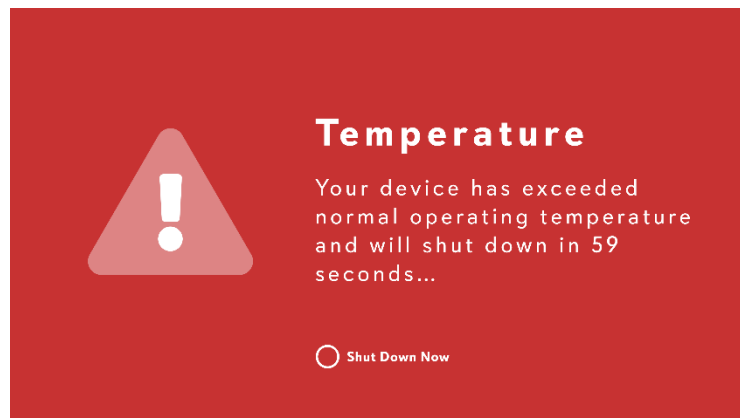
- Input power 100-240V~, 50-60 Hz, 45W Max

If the Launch Monitor system battery exceeds the set temperature threshold of 53°C (127°F), the Launch Monitor system will present a temperature warning screen such as the following:



At a battery temperature of 55°C (131°F), the Launch Manager system automatically performs a thermal shutdown. To resume use of the Launch Monitor system following a thermal shutdown, turn the Launch

Monitor system off, move it to a cooler environment, and keep it turned off until the Launch Monitor system has cooled down to normal use temperatures.



### Damage in Shipping and Handling

When a Launch Monitor system has been received by the operator, new or as part of a return to the customer following an upgrade or repair, carefully examine the shipping container for any signs of physical damage. Notify Full Swing immediately if there are any signs of damage. After unpacking the Launch Monitor system, inspect it carefully for any evidence of physical damage.

- The Launch Monitor system is designed and intended for the purpose and use described in Launch Monitor system documentation.
- The Launch Monitor system may only be used with the equipment and within the operating conditions as described in system documentation.
- All country and industry-specific statutory or otherwise mandatory laws and regulations apply unless stated otherwise in relevant documentation.
- The operator is solely responsible for applications which may exceed the intended use described herein for all parts and equipment of the Launch Monitor system.
- Full Swing does not accept any liability beyond the intended usage. The following applies: Individual Restrictions and product equipment, device specifications in the offer description from the manufacturer (also found in the delivery contract), and applicable warranty terms.
- Intended use also means that all specifications in these instructions must be followed. Any use beyond the designated intended use is considered misuse.

## Battery Care

The Launch Manager system contains a lithium-ion battery. Lithium-ion batteries may be subject to special handling requirements pursuant to federal and local laws. Do not handle the Launch Monitor system if the battery is damaged or leaking. Disposal of batteries must be in accordance with local environmental regulations. Storing batteries fully charged or in high temperature conditions may permanently reduce the life of the battery. Available battery capacity may also be temporarily lessened after storage in low temperature conditions.



**WARNING: Do not expose the battery to excessive heat.**

**WARNING: Failure to read, understand, and follow these instructions may result in overheating, chemical leakage, smoke emission, fire, or other potentially harmful results.**

- Always follow correct battery handling and storage practices. Incorrect handling and failure to abide by correct storage instructions may result in permanent damage to batteries or degrade battery charge holding capacity. Incorrect handling practices or failure to comply with instructions may also put the customer at risk.
- Lithium-Ion batteries self-discharge with age. When storing for long periods of time, charge the batteries to a capacity-level of 40% to 50%. If batteries are stored for long periods of time, Full Swing recommends that the charge levels be checked at least once every six (6) months and recharging the batteries to a capacity-level of 40% to 50%.
- Do not store the device with the batteries in a fully charged state for extended periods of time.
- Do not overcharge the battery. Overcharging may increase internal temperatures beyond the recommended limits and cause permanent damage to the battery.
- When not in use, store the Launch Monitor system in a cool, dry place. Avoid extreme hot and cold temperatures (such as inside a hot car).
- Do not expose the Launch Monitor system to corrosive gas.
- Do not expose the Launch Monitor system to direct sunlight for prolonged periods of time.
- Storing batteries in a discharged state for long periods of time may result in loss of the ability to hold a charge due to self-discharging.
- If recharging operation fails to complete even when a specified recharging time has elapsed, immediately stop further recharging.
- Do not discard the Launch Monitor system and its internal battery into fire or heat.
- If the internal battery emits an odor, generates heat, or in any way appears abnormal during use, recharging, or storage, immediately discontinue use.
- Should electrolytes begin leaking from the battery and come in contact with skin, clothing, or eyes, do the following and seek medical assistance:
  - Contact with *skin or clothing*, immediately wash the discharge off with running water. Failure to do this can result in skin inflammation.
  - Contact with *eyes*, do not rub them. Rinse the eyes with clean running water and immediately seek medical attention. Failure to do this may result in eye injury.

### Instructions for Charging

1. Locate the USB port on the side of the KIT.
2. Gently lift the USB port cover (do not pull) from the bottom of the USB port. Insert the charging cable into the USB port and into the charger
3. Plug the charger into the wall. Charging begins automatically. While charging, the Light Bar indicates the power level of the battery.

### Instructions for Safe Installation and Interconnection of the Equipment

1. Insert the charger cable into the charger.
2. Attach the charger cable to the USB port on the side of the KIT.
3. Plug the AC charger into the wall.

### Instructions to Locate Regulatory Information on the KIT

1. Start the KIT. Wait until it fully loads (boots).
2. Select **Menu > Legal and Regulatory**.
3. Select from the following options:
  - **Regulatory Certifications**
  - **RF Exposure Warning**
  - **Open Source Software Licenses**