

**Notice to Customer** Thank for your purchasing our PATLITE products.

•This Wireless Data Acquisition System WD PRO transmitter (hereafter referred to as "this product") is a WD PRO Series product. •Request the installation and wiring be performed by a professional contractor if construction work is involved. •Prior to installation, read this manual thoroughly before using this product to ensure correct use. •Re-read this manual before conducting maintenance, inspections, repairs, and so on. If you have any questions about this product, please contact our service and repair desk listed on the back of this manual. •For details on use, from our website download and refer to the Instruction Manual.

Home Page Address **www.patlite.com**

**To the Contractor** •Prior to installation, read this manual and the instruction manual thoroughly for correct installation results. •Return this manual to the customer.

**Before you begin**

**About Safety Symbols**

- To prevent injuries to the user and other personnel, as well as to prevent damage to assets, note the following.
- The degree of harm and damage that will occur when misuse is made by ignoring the contents of the icons indicated is explained below.

	<b>WARNING</b>	This symbol indicates, "Failure to follow the instructions may lead to death or serious injury."
	<b>CAUTION</b>	This symbol indicates, "Failure to follow the instructions may lead to injury or property damage."

The following symbols classify and describe the content of associated messages.

	This symbol identifies "Prohibited" operations that should never be carried out.
	This symbol identifies "Mandatory" instructions that should always be carried out.
	This symbol identifies general "Caution" related information.

**Safety Precautions**

**WARNING** ⚠ This product gets various data and wirelessly transfers this data from a transmitter to a receiver. Do not use this product for any other purpose. ⚠ Do not use this product in the vicinity of implanted cardiac pacemakers and other medical equipment, as this product's radio waves may affect the performance of these devices. ⚠ Do not use or install the receiver in locations where liquids such as water is present, oil will splatter, or locations that are humid or dusty. Failure to follow these instructions could result in fire, electric shock or product failure. ⚠ To prevent accidents, do not use this product other than for its intended purpose and do not run operations or maintenance other than those described in this manual. ⚠ Do not use this product where high reliability is required and where human life is involved, such as medical equipment, atomic energy equipment and machinery, aviation and aerospace, transportation, and control of other equipment. If this product is used for these applications, we cannot be held responsible in the event of injury or property damage. ⚠ Do not modify or disassemble this product. Failure to follow these instructions could result in fire or electric shock. ⚠ Do not use this product when there is condensation. Failure to follow these instructions could result in fire or electric shock. ⚠ Do not allow liquids to enter the receiver, and do not allow it to have contact with metallic objects. Failure to follow these instructions could result in fire or electric shock. ⚠ Request the installation and wiring be performed by a professional contractor if construction work is involved. Failure to follow this instruction could result in fire, electric shock or falls. ⚠ Turn off the power before performing any electric wiring or product installation. Failure to follow this instruction could result in electric shock. ⚠ In places such as aircraft and hospitals, turn off this product where usage of wireless devices is prohibited and where its radio waves affect surrounding equipment. ⚠ We cannot foresee all circumstances concerning the handling and dangers associated with this product. Therefore, not every possible danger is indicated in this instruction manual. To prevent accidents when operating or maintaining the product, in addition to the safety guidelines identified in the instructions of this manual, follow all general safety guidelines. ⚠ In the unlikely event that there is an abnormal situation such as smoke or odors emitting from the product, immediately cut the power supplied to the product. Continued use of the product in this condition could result in fire or electric shock.

**CAUTION** ⚠ Do not install this product near other electrical appliances. If you install this product near a facsimile, personal computer, television, microwave oven, or equipment using a motor, this product may not operate properly. ⚠ Do not use or store this product in the following locations. Failure to follow this instruction could result in a malfunction or product failure. • Environments with poor breathability and ventilation • Near equipment that generate strong electrical or strong magnetic fields • Places exposed to direct sunlight • Locations subject to shock and vibration • Near heating appliances • Environments where there is dust, iron powder, and so on • Places near fire or environments with high temperatures and humidity • Locations where the product could fall and break • Locations exposed to salty sea air ⚠ Do not use this product near chemicals. This product could melt or become deformed if any chemicals adhere to it. ⚠ Due to the nature of radio waves, communication can be disabled even over insignificant distances as a result of noise or other environmental factors. ⚠ Always use this product with each signal tower unit and head cover securely installed to maintain dust and waterproofing performance. ⚠ Do not use this product with the O-ring removed. Waterproofing will be affected. Failure to follow this instruction will result in injury or equipment damage. ⚠ To prevent static electricity, discharge the static electrical charge in your body before starting work. (You can discharge static electricity by touching your hand on grounded metal objects.)

•Conformity requirements for the UL Standard  
 - Maximum surrounding air temperature rating of 50 °C  
 - For use in Pollution Degree 2 Environment.

This telecommunication equipment conforms to the standard or technical requirements of NBTC.

•FCC notation requirement  
 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
 (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC CAUTION**  
 Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.  
 Note: This equipment 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
 - Reorient or relocate the receiving antenna.  
 - Increase the separation between the equipment and receiver.  
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.  
 - Consult the dealer or an experienced radio/TV technician for help.  
 (Responsible party in U.S.A.) PATLITE U.S.A. Corporation, R20130 S. Western Ave. Torrance, CA90501, U.S.A.

**CE**  
 •EU Declaration of Conformity  
 We PATLITE Corporation, 4-1-3, Kyutaromachi, Chuo-ku, Osaka-shi, Osaka 541-0056 JAPAN declare under our sole responsibility that the product described below is in compliance the following directives.  
 - Product Name: Wireless Data Acquisition System WD PRO Transmitter  
 - Company Logo: **PATLITE**  
 - Directive: Electromagnetic Compatibility Directive(EMC): 2014/30/EU - RoHS Directive: 2011/65/EU  
 - Radio Equipment Directive: 2014/53/EU  
 - Low Voltage Directive (LVD): 2014/35/EU  
 Note: This equipment 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
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第十三條  
 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。  
 第十四條  
 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。  
 前項合法通信，指依電信法規定作業之無線電通信。  
 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

**2 Model**

WDT-6LR-Z2-PRO: φ 60, WD PRO Series

**3 Compatible Unit Model**

•You can mount the following to the top of this product.

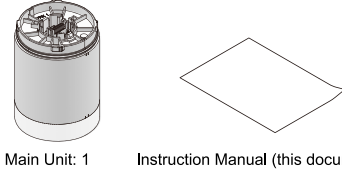
Contact Input - Serial Communication Base Unit	WDB-D80S-PRO
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[Caution] Do not connect units other than compatible units. Failure to follow this instruction could result in equipment damage.

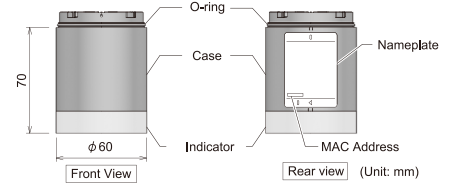
•You can mount the following to the top of this product.

LED Unit (Maximum number of tiers: 5)	LR6-E-□, LR6-E-□□, LR6-E-MZ	□ = R, Y, G, B, C
Buzzer Unit	LR6-BW	

**4 Contents**



**5 Part Names and Dimensions**



**6 Mounting Methods**

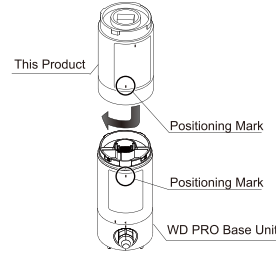
Follow the instructions below when installing or removing this product and detaching parts (such as the LED unit and buzzer unit) from the LR signal tower.

•The WD PRO base unit applies to the series. The following shows how to attach and detach the Contact Input - Serial Communication Base Unit (WDB-D80X-PRO).

<b>WARNING</b>	⚠ Before any work is done, disconnect the power. ⚠ Be sure wiring is carried out correctly. Otherwise, an internal short-circuit or combustion may occur.
<b>CAUTION</b>	⚠ Install this product directly above the WD PRO base unit. ⚠ The maximum number of attachments per Signal Tower is five LED units + one buzzer unit + this product. Do not attach units beyond that. ⚠ Do not apply excessive force to the units or WD PRO base unit. Failure to follow this instruction could result in equipment damage. ⚠ Do not touch the connectors on the units or WD PRO base unit, or the LED in LED units. Failure to follow this instruction could result in equipment damage. ⚠ Use the following method when detaching units. Failure to follow these instructions could result in equipment damage. Attaching: Attach units one at a time to the WD PRO base unit. Detaching: Hold adjacent units and remove units one at a time. ⚠ Securely lock each unit when attaching. Failure to follow this instruction could result in equipment damage.
<b>NOTICE</b>	•Before starting setup and wiring work, always read the Instruction Manual (which you can download from our website).

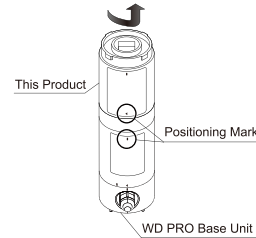
**Attach**

Align this product with the positioning mark on the WD PRO base unit and turn clockwise to lock.

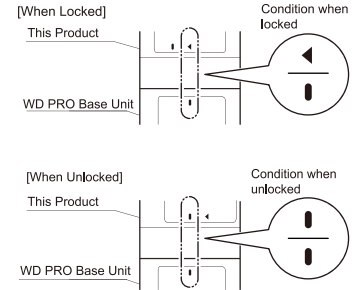


**Detach**

While holding the WD PRO base unit, turn this product counterclockwise to release the lock, then lift up.



**How to Read the Positioning Mark**



**7 Specifications**

Model	WDT-6LR-Z2-PRO
Ambient Operating Temperature	-10 °C to + 50 °C
Ambient Operating Humidity	85% RH or less, no condensation
Storage Ambient Temperature	-20 °C to + 60 °C
Storage Ambient Humidity	85% RH or less, no condensation
Mounting location	Indoors
Mounting direction	Upright
Protection Rating	IP65 (IEC 60529), NEMA TYPE 4X,13

Mass (Tolerance: ±10%)	90 g
Wireless Standard	IEEE 802.15.4 compliant
Communication Frequency	2405 to 2480 MHz (16 channels)
Transmission/Receiving Method	Direct Sequence (DS-SS) Format
Communication method	Zigbee2007 compliant, with ZigbeePro Stack
Transmission Output	Maximum 3 mW or less (at the antenna feed point)
Communication Distance	Approximately 30 m from source (reference value)
Display Unit	Indicator for status display

**For customers in China**

**微功率短距离无线电发射设备 (F 类设备)**

- 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装发射频率放大器），不得擅自更改发射天线；
- 不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；
- 应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；
- 如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取有效措施消除干扰后方可继续使用；
- 在航空器内和依据法律法规、国家有关规定、标准划定的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；
- 使用微功率短距离无线电发射设备应当符合国家无线电管理有关规定

**PATLITE Corporation**

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