

# **/**lirGRID

Wireless Data Communication System Instruction Manual

TYPE: WD

Digest version

Thank you for purchasing the **PirGRID** wireless data communication system Read this instruction manual carefully prior to use. This manual contains information to ensure correct use. Keep this instruction manual in a safe place Also read this manual when maintenance, an inspection, or repair is needed. If you have any guestions, contact one of the sales offices or the technical center listed on the last page.

This is a digest version of the General Instruction Manual. For more details on subjects such as settings and wiring, download the General Instruction Manual from our websites.

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.

#### -Safety Precautions-

To prevent injury to the user or other people and property damage, the following precautions must be observed.

◆This manual classifies the precautions into the following two categories depending on the degree of injury or damage caused by failure to follow them:

Narning Failure to follow a warning may cause death or serious injury.

Nation Failure to follow a caution may cause personal injury or physical damage.

#### ◆The meanings of symbols used in this manual are as shown below:

This symbol indicates what the user MUST NOT DO (Prohibited). This symbol indicates what the user MUST DO (Mandatory).

# **△** Warning



O - Do not disassemble or modify the product. Failure to follow this instruction may cause fire or electric shock.

- Do not use the product where condensation can form. Failure to follow this instruction may cause fire or electric shock.
- Do not use or install the receiver (WDR-L/U) near water or other liquids, in a place where oil may spatter, or in a moist or dusty place. Failure to follow this instruction may cause fire, electric shock, or malfunction
- Do not use this product near pacemakers or electric medical equipment because radio waves may affect these devices and equipment
- This product is not intended to be installed in or control facilities or equipment affecting human lives, including medical equipment, nuclear facilities and equipment, aerospace equipment, and transportation facilities and equipment, and facilities and equipment requiring high reliability. We assume no responsibility for any accident causing injury or death or property damage arising from use of this product with such facilities equipment or control systems
- Turn off this product in airplanes, hospitals, or other places where radio waves may affect surrounding equipment or the use of wireless devices is prohibited.



- The receiver (USB connection type: WDR-U) is driven by power supplied by a USB bus. Connect it to a USB port. Using it with other ports may cause fire, electric shock, or smoke.

- Turn off the product during wiring or installation. Failure to follow this instruction may cause an electric shock
- Ensure that the power supply voltage does not exceed the allowable voltage range. Failure to follow this instruction may cause fire or malfunction.
- If the installation of this product involves construction work, have it installed by a professional. Failure to follow this instruction may cause fire, electric shock, or fall
- If smoke, odor, or other abnormalities are present, immediately stop supplying power to this product. Using it under such abnormal conditions may cause fire or electric shock

## **⚠** Caution



- Do not splash any liquid onto the receiver (WDR-L/U) nor bring it into contact with metal objects. Failure to follow this instruction may cause fire or electric shock

- Ensure that the polarity of the power supply is correct. Incorrect polarity may cause a malfunction.
- Do not use this product near fire, in a hot and humid place, or in a place where a corrosive or combustible gas is generated. Failure to follow this instruction may cause a malfunction, preventing the product from working properly.

We assume no liability for any malfunction arising from failure to observe these warnings or cautions, disassembling or modification, or natural disasters. Do not use this product for purposes other than those specified in this manual.

# -( Attention )-----

Do not use or store this product in the following places. Doing so may cause a glitch or malfunction.

- Poorly ventilated places Near fire or a hot and humid place
- Near equipment that generates an intense electric field or ferromagnetic field
- A place subject to direct sunlight A place subject to shock and vibration Near heating devices - A place where a lot of dust or iron powder is generated
- A place from which the product is likely to fall A place exposed to salt air Pay attention to the following precautions:
- Because of the nature of radio waves, noise or casing may make it impossible to establish communication even within the access range.
- Do not eat, drink, or smoke near this product. Food or beverages or cigarette ashes may cause a malfunction
- Do not use chemicals near this product. Some chemicals may cause the product to melt or deform if they come into contact with it.

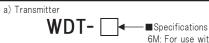
! This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

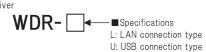
This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

#### 1. Type labeling



6M: For use with the  $\Phi$ 60 signal tower LME 5E: For use with the  $\Phi$ 50 signal tower LE

b) Receiver



c) Application software (Sample version)

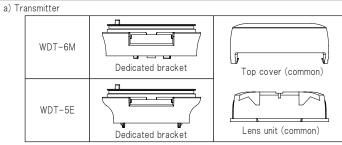
## WDS-AE

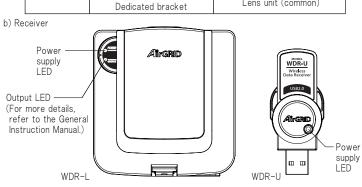
#### 2. URLs for downloads

Download the General Instruction Manual and the application software driver from one of

Download them according to the instruction of the screen after clicking the WD banner. URL: http://www.patlite.com/

### 3. Part names





#### 4. Installation and wiring

# **⚠** Warning



- Turn off the product during wiring or installation. Failure to follow this instruction may cause an electric shock.
- Be sure to connect the wires correctly. Incorrect wiring may burn the internal circuits, causing a fire.

#### **⚠** Caution

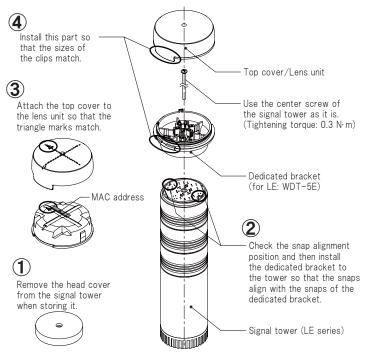


- If the transmitter (WDT-6M/5E) is installed in a high-voltage signal tower (100 VAC/220 V), ensure that the power consumption including that of the LED unit does not exceed 300 mA. Failure to follow this instruction may cause a malfunction of the product, preventing it from working properly. \* For more details, refer to the General Instruction Manual
- Be careful not to install the dedicated bracket in signal towers other than those that are compatible. Failure to follow this instruction may cause a malfunction of
- Do not leave the product with the center screw loosened. Failure to follow this instruction may cause the LED unit, the head cover, and the dedicated bracket, which come out easily, to fall and break

- Be careful not to apply undue force to the signal tower. Failure to follow this instruction may cause the LED unit to deform, preventing the product from working properly.

#### a) Transmitter

Install the transmitter according to the drawing below. This drawing is a reference drawing for the LE series. The LME series has a dedicated bracket.

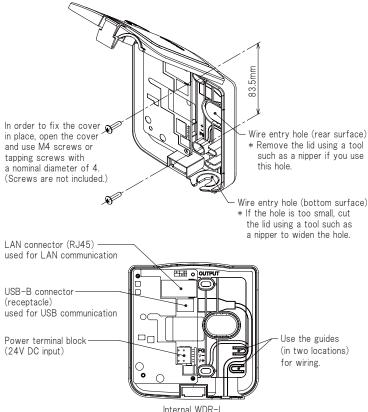


#### Note

The factory default for the power supply of the transmitter is the white signal line of the signal tower. Power the white line of the signal tower.

- \* The transmitter can be powered via other signal lines. For more details, refer to the General Instruction Manual
- The MAC address is necessary to identify the equipment. Record the installed signal tower (device).

Install and wire the WDR-L according to the drawing below. Connect the WDR-U directly to the USB port of your personal computer.



#### Note

- USB hub connections are not supported. Connect the WDR-U directly to the USB port of your personal computer.
- The power must be input either from the power terminal block or the DC jack. Do not let the personal computer go into modes such as suspend, sleep or stand-by.
- Doing so will disable data communication between the receiver and the personal computer. \* For more details, refer to the General Instruction Manual. LAN communication is not available during USB communication. Do not connect a LAN cable.

#### 5. Usage

Be sure to refer to the General Instruction Manual for the usage instructions.

#### 6. Specifications

ltem	Transmitter specification	
Model	WDT-6M	WDT-5E
Compatible signal tower	LME series *	LE series *
Rated voltage	24V DC (No polarity)	
Allowable voltage range	21.6V DC to 26.4V DC	
Consumption current	35mA $\pm$ 5mA	
Operating ambient temperature	-10°C to 60°C	
Relative humidity	85% RH or less (no condensation)	
Storage ambient temperature	-20°C to 70°C (no icing)	
Number of connected transmitters	The recommended number is 20. (It differs depending on the installation location and the communication environment.)	
Installation direction	Proper direction only (indoor use only)	
Protective structure	In compliance with the installed signal tower	
Weight	52g ± 5g	

ltem	Receiver specification		
Model	WDR-L	WDR-U	
Rated voltage	24V DC	5V DC (USB bus powered)	
Allowable voltage range	21.6V DC to 26.4V DC	4.5V DC to 5.5V DC	
Consumption current	70mA ± 10mA	80mA ± 10mA	
Operating ambient temperature	-10℃ to 60℃	5°C to 40°C	
Relative humidity	85% RH or less (no condensation)	85% RH or less (no condensation	
Storage ambient temperature	-20℃ to 70℃ (no icing)	-5℃ to 50℃ (no icing)	
Installation direction (Indoor use only)	Upright direction (installed onto the wall) Lateral direction (horizontal installation)	All directions * Connected to the USB port of the PC	
Protective structure	IP20	-	
Weight	160g ± 10g	10g ± 2g	
* Refer to the General Instruction Manual for the detailed specifications and compatible			

- signal towers
- \* The specifications are subject to change due to improvement without notice.

#### 株式会社パーライト **PATLITE** Corporation 社 / 〒542-0067 京/〒104-0033 台/〒983-0852 仙台市宮城野区榴岡3-7-35 ■TEL. 022(256)5656 東/〒330-0845 さいたま市大宮区仲町3-13-1 ■TEL 048(640)2020 横浜市港北区新横浜2-6-13 ■TEL. 045(473)1118 浜/〒222-0033 名 古 屋/〒460-0022 名古屋市中区金山1-14-18 ■TEL. 052(856)0001 原/〒542-0067 大阪市中央区松屋町8-8 *■TEL. 06(6763)8800* 島/〒733-0011 広島市西区横川町2-9-1 *■TEL. 082(297)2277* 岡/〒812-0039 福岡市博多区冷泉町5-35 ■TEL. 092(686)7333 北 海 道/〒060-0001 札幌市中央区北1条西9-3-10 ■サテライトオフィス International Division Sales & Marketing Department Division Internationle Département De Vente & Marketing 8-8 Matsuya-machi, Chuo-ku, Osaka 542-0067 JAPAN ■TEL. +81-6-6763-8220 PATLITE (U.S.A.) Corporation estern Avenue, Torrance, CA 90501 U.S.A. PATLITE (SINGAPORE) PTE LTD ■TEL. +1-310-328-3222 Kee Road, #05-01 Thye Hong Centre, Singapore 159086 ■TEL. +65-6226-1111 PATLITE (CHINA) Corporation eng Business Building, No.697-3 Lingshi Road, Shanghai 200072, China **#**TEL. +86-21-6630-8969 **PATLITE Europe GmbH**

http://www.patlite.co.jp

受付時間 9:00~17:00 ◆技術相談窓口 ■ 10120(ダダブル 330) ■ FAX. 079(568)6604 銀円番電話でお受けいたします。※ご注文・価格・商品内容等は、各営業所拠点または代理店にお問い合わせください。

Am Soeldnermoos 8, D-85399 Hallbergmoos, Germany ※電話番号などは、変更されることがあります。あらかじめご了承ください。

■TEL. +49-811-99819770-0