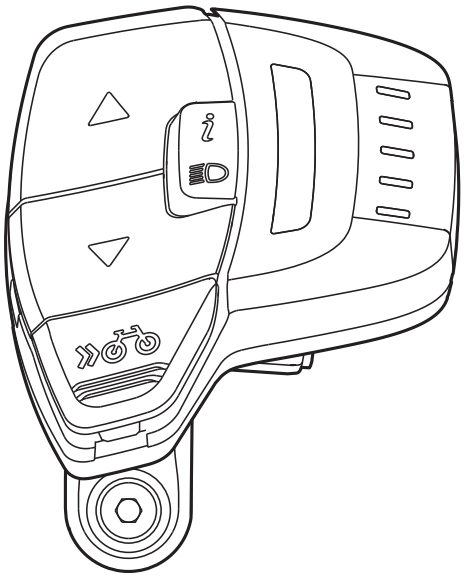
Operating Instructions

Remote 501 GXM

Remote



- Before operating this product, please read the instructions carefully and save this manual for future use.
- Before using this product, be sure to read “Read this first!”
- e-Bike (Electric Power Assisted Cycles) as used in this manual mean Pedelec.
- The descriptions in the Operating Instructions are subject to change due to version upgrade of the software, etc.

ENGLISH

NYT2141 P0625-0

Read this first!

For Your Safety

To reduce the risk of injury, loss of life, electric shock, fire, malfunction, and damage to equipment or property, always observe the following safety precautions.

Explanation of symbols

The following symbols are used to classify and describe the level of hazard, injury, and property damage caused when the warning is disregarded and improper use is performed.

DANGER	Denotes a potential hazard that will result in serious injury or death.
WARNING	Denotes a potential hazard that could result in serious injury or death.
CAUTION	Denotes a hazard that could result in minor injury or damage to the unit or other equipment.

The following symbols are used to classify and describe the type of instructions to be observed.

	This symbol is used to alert users to a specific operating procedure that must not be performed.
	This symbol is used to alert users to a specific operating procedure that must be followed in order to operate the unit safety.

WARNING

Do not modify or disassemble the console.

Do not use or leave the console lying around in high temperatures.

- This may cause damage or heat, which may lead to fire.

Do not use the e-Bike mark button (Walk assistance) when the wheels of the e-Bikes are not in contact with the ground.

- It may cause injury.
- If assistance deactivates when on a slope, when setting off, or due to erroneous operation, you may suffer an injury due to losing your balance or falling over due to riding one-handed.

■ Bluetooth

Do not use the device near automatic doors, fire alarms, or other such automatic control devices.

- Radio waves emitted by this device may interfere with automatic control devices, and this may result in accidents due to malfunction.

Do not use the device in hospitals or in places where electronic medical devices are present.

- Radio waves emitted by this device may interfere with electronic medical devices, and this may result in accidents due to malfunction.

Keep this device at least 15 cm away from the part of the body where a cardiac pacemaker is in place if you wear one.

- Radio waves emitted by this device may interfere with the operation of your pacemaker.

⚠ CAUTION

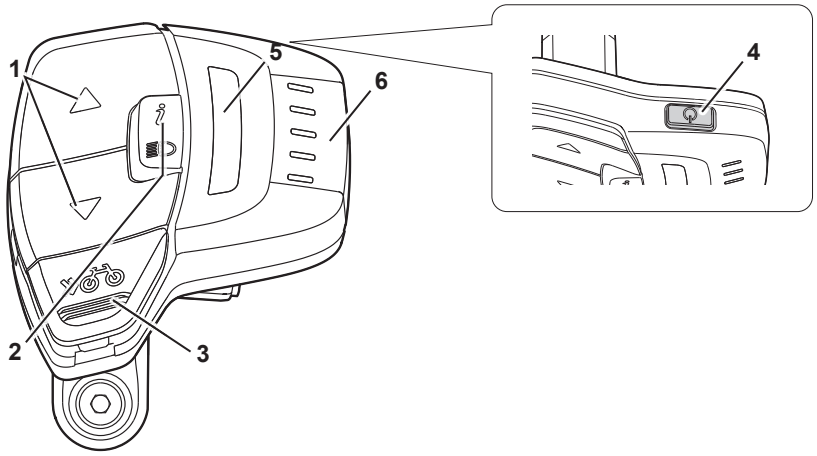
When the e-Bike is walked along while the e-Bike mark button (Walk assistance) is pressed, the pedals will still rotate.
- Please be careful as injuries can occur.

Do not use smartphones, cellphones, or other such devices when riding.
- Doing so may lead to injury through accidents.

Do not stare at the screen when riding.
- Doing so may lead to injury through accidents.

The functions described in the Operating Instructions are subject to change. In association with such function changes and troubleshooting, software is subject to change as needed.

Product specifications



1 Assist buttons

2 Information button (Night mode)

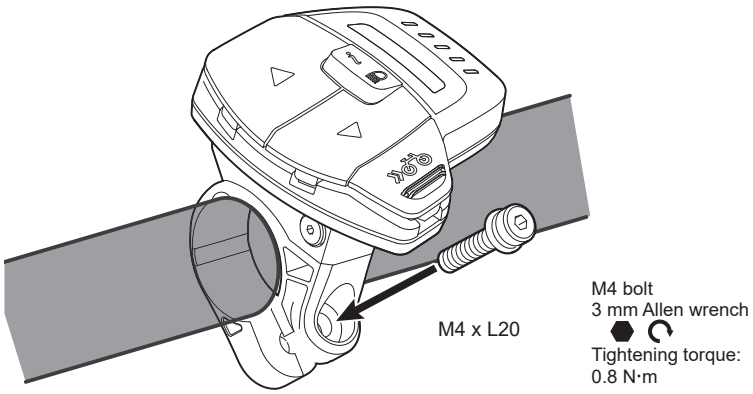
3 e-Bike mark button (Walk assistance)

4 Power button

5 Assist mode LED

6 e-Bike battery LED

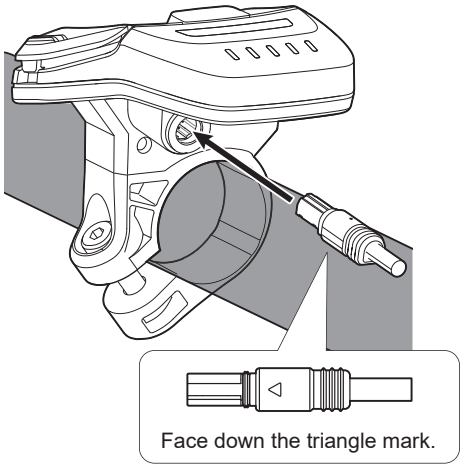
Mounting Remote 501



Attention

- Be careful not to excessively tighten the screw to avoid damage.

Attach the connector to Remote 501

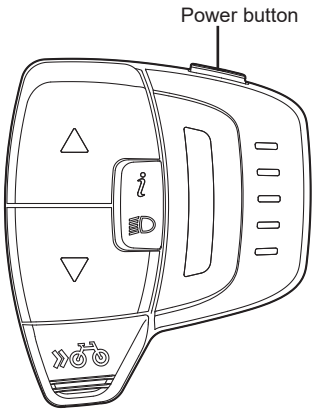


Attention

- Make sure that the connector is not inclined, facing the correct direction. Insert it to the product until it clicks.
- Do not touch the packing (O-ring) of the connector. The packing (O-ring) may incur damage, adhesion of a foreign object, position misalignment, or other problems, resulting in an adverse effect on the waterproof performance.
- Do not insert a different type of connector.
- Do not insert a foreign object to the connector port.
- Waterproof performance is exercised only when the connector fits in the connector port. Be careful not to expose the connector port to water when the connector does not fit in or does not completely fit in.
- The waterproof performance is assured only for water at ordinary temperature. Avoid exposure to liquids other than water, such as warm water, salt water, and detergent solution.
- Do not apply an excessive force to the connector. Attach the connector, avoiding interference with e-Bike parts such as a brake.
- Hold the connector housing when attaching or removing the connector. Do not remove it by holding the cable.
- Pulling the cable excessively may cause wire disconnection. Turn the handlebars to the right and left, and check the cable length.

Methods of Use

To enable the assist function or display the various indications, press the power button on the console to turn on the e-Bike Systems.



Turning on the e-Bike Systems

Press the power button on the Remote for approx. one second or more.

Press the power button on the Remote for approx. one second or more. After all LEDs light up temporarily, the e-Bike battery state and the assist mode level are displayed with LED. Stepping on the pedal immediately activate the e-Bike. (except the case where the assist mode is set to OFF) Select the assist mode from among [HIGH], [AUTO], [STD], [ECO], and [OFF].

Attention

- Do not place your foot on the pedal before pressing the power button. A torque sensor error may occur, or assist power may be weakened.
- Do not press other buttons while pressing the power button. An error may be displayed.
- Do not turn ON/OFF the power button while riding the e-Bike. When the assist function is not necessary, set the assist mode to [OFF].

Note

- The assist function of the e-Bike will not work in the following cases:
  – When you stop pedalling
  – When a speed of 25 km/h is reached (The assist function starts to work by starting pedalling again at 25 km/h or less.)
  – When there is no remaining e-Bike battery capacity

Turning off the e-Bike Systems

Press the power button on the Remote for approx. one second or more. After all LEDs light up temporarily, the system enters the sleep mode.

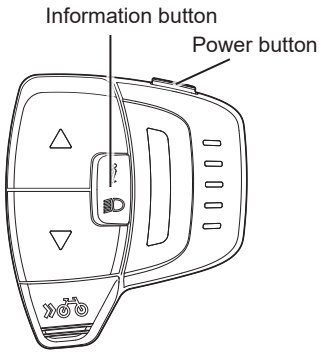
Attention

- Do not remove or insert the connector of the harness while the system is powered OFF. When removing or inserting the connector of the harness for inspection or any other purposes, first remove the e-Bike battery from the e-bike before the work.

Note

- Even if the power button is not pressed to turn off the e-Bike Systems, the power automatically turns off to save energy if the e-Bike is not used for about ten minutes (for example, when the e-Bike is parked).

Night mode



1) Press the power button.

- The system is turned on, and the LED of this product lights up in the normal mode.

2) Press and hold the information button for approx. one second or more.

- The system enters the night mode, lowering the intensity of the assist mode LED and e-Bike battery LED. When a headlight or taillight is mounted on the e-Bike, those lights light up. To switch to the normal mode, press and hold the information button for approx. one second or more again.

Assist mode select buttons

Press the assist buttons to set an assist mode. The selected assist mode is color-displayed with the assist mode LED.

Assist Mode		
[HIGH]	Red purple	*1On flat and uphill roads, a powerful assist force is provided for a comfortable ride on slopes and carrying heavy loads.
[AUTO]	Yellow	*1Depending on road conditions, the assist force automatically changes from low to powerful.
[STD]	Blue	*1On flat and uphill roads, a mid assist force is provided.
[ECO]	Green	*1On flat and uphill roads, a low assist force is provided allowing for a longer distance traveled by a single charge.
[OFF]	White	*1No assist force.

*1 The assist force may change depending on weather conditions, road conditions, e-Bike conditions, or riding styles.

e-Bike mark button (Walk assistance)

This is the push-assistance function that assists you by providing drive up to 6 km/h, for example, when you are carrying a heavy load.

Hold down the e-Bike mark button (Walk assistance).

- When you release your finger from the e-Bike mark button (Walk assistance), or the e-Bike exceeds a speed of 6 km/h, the function will not be activated.

Note

- When the pedals hit the curb or other objects and the push-assist function stops, hold down the e-Bike mark button (Walk assistance) again.
- Do not press the e-Bike mark button when the e-Bike without the wheels of the eBike touching the ground. Doing so may cause injury.

Connecting with a smartphone

A smartphone with Panasonic e-Bike app installed is necessary.
Connect with Panasonic e-Bike app via Bluetooth. Press and hold both assist button △ and assist button ▽ for three seconds or more.
The assist mode LED blinks in blue, and Bluetooth pairing starts. As soon as the pairing starts, release assist button △ and assist button ▽. Confirm the connection with Panasonic e-Bike app.
When the pairing is successful, the assist mode LED lights up in blue. When the pairing is unsuccessful, the assist mode LED blinks fast in blue.
For details, follow the guidance of Panasonic e-Bike app.
Connection is possible with a third-part app that supports CPP (Cycling Power Profile). The pairing method is the same as that for Panasonic e-Bike app.
When Display 501 is used, connection can be made with Panasonic e-Bike app from the settings menu. For details, refer the Operating Instructions of Display 501.

Attention

Due to the circumstances of the application provider, the services from the application provider may be changed or suspended without notice. Panasonic assumes no responsibility for loss or damage resulting from changes or suspension of the service.
Panasonic assumes no responsibility for failures resulting from combination of connected devices, or damage resulting from other troubles.
It is not guaranteed that this device enables wireless communication with all smartphone. Operation method, display, and operations are not guaranteed.

Software update

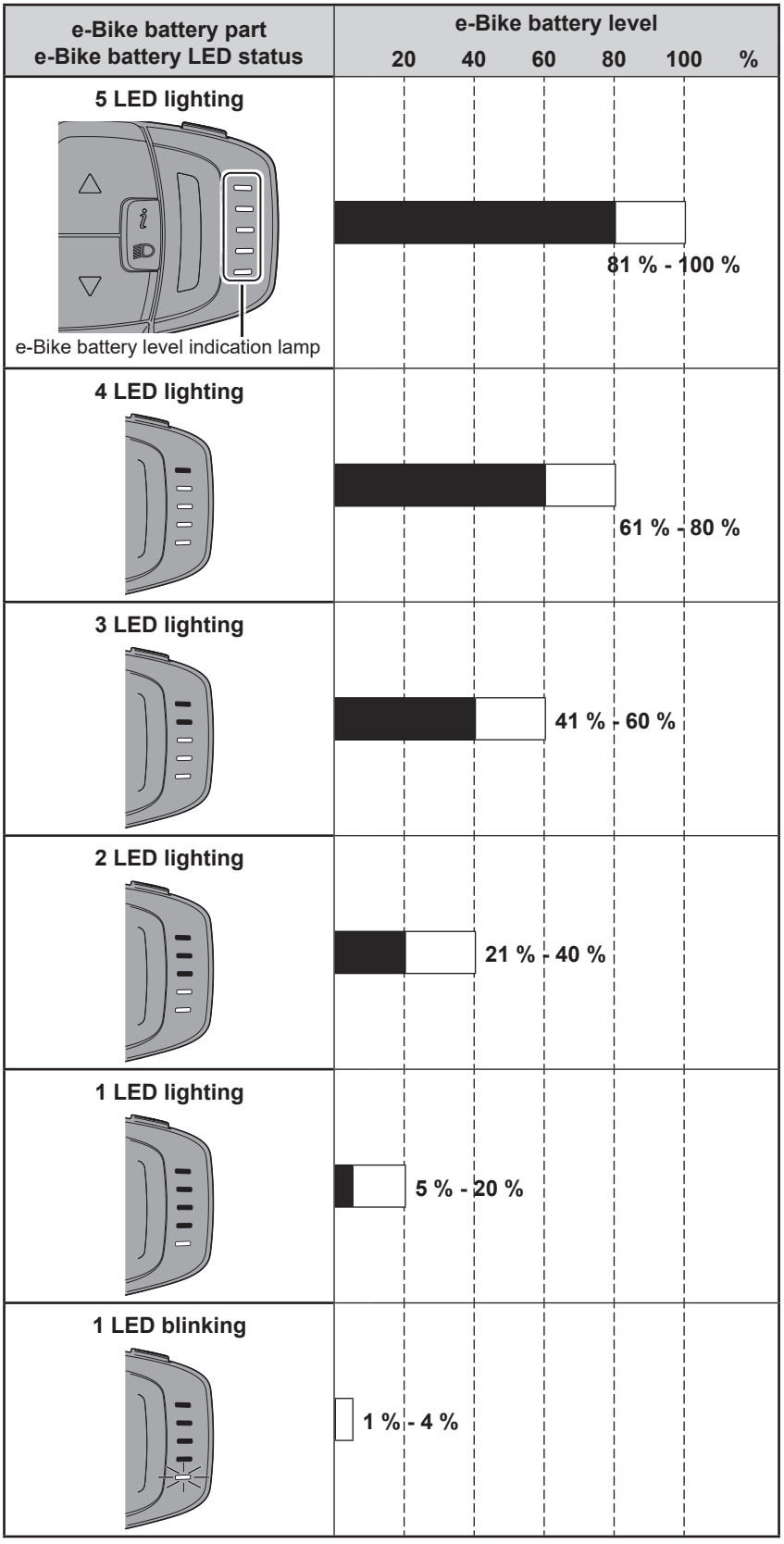
After connecting with Panasonic e-Bike app, e-Bike enters the maintenance mode as needed, and conducts diagnosis or software update.
All LEDs blink in white. In this state, the assist operation cannot be performed. After the update is complete, turn off the product and turn it on again.

Attention

- Update the software in an environment where Bluetooth connection is stable.
  Do not keep this device away from the smartphone while the update is in progress.
- When the update has failed, try the update again.
- Update the software after confirming that the e-Bike battery level and smartphone battery level are sufficient. Do not power off the e-Bike during update.
- Do not remove the e-Bike battery during update.

e-Bike battery level display

The e-Bike battery level is displayed with LEDs. When all five e-Bike battery LEDs are lit, the e-Bike battery level is between 100% and 81%. When the e-Bike battery level LEDs are unlit, the level is 0%. Charge the e-Bike battery. The details are shown below.



Note

- When you charge the e-Bike battery through the e-Bike charging port, the top e-Bike battery level LED will blink.
- When charging is complete and reaches 100%, all e-Bike battery level LEDs will light up.
- If communication with the e-Bike battery is not possible, the bottom and top e-Bike battery level LEDs will light up.

When using Bluetooth devices...

Frequency band

The 2.4 GHz frequency band used by this product is also used by industrial, scientific, and medical equipment such as microwave ovens, as well as premises radio stations (license required) used for identification of moving objects in factory production lines and in other such places, specified low-power radio stations (no license required), and amateur radio stations (license required).

① Before using this device, check that there are no premises radio stations used for identification of moving objects, specified low-power radio stations, or amateur radio stations nearby.
② If this devices causes interference with premises radio stations used for identification of moving objects, you should immediately change the place you use it in or halt the use of radio waves.

Device certification

This device has received a Technical Standards Conformity Certification based on the Radio Act, so it does not require a radio station license. However, the following acts are punishable by law if performed on this device.
- Disassembly/modification

Usage limitations

- This device is not guaranteed to be able to communicate wirelessly with every Bluetooth® device.
- Any Bluetooth® device with which wireless communication is to be performed must be certified as compliant with the standards set by Bluetooth SIG, Inc. However, it may not be possible to connect to a device even if it is certified as being compliant with these standards due to its usage and settings, and no guarantees are made regarding the operating method, display, or operation.
- This device supports security functions that conform to Bluetooth® standards, but security may not be sufficient depending on the usage environment and details of the settings. Please be aware of this when using wireless communication.
- Please understand that Panasonic shall accept no responsibility for any data or information leaks that occur during wireless communication.

Usable range

Use a Bluetooth® device within 1 m of this device. The usable range may be shorter depending on whether the surrounding environment has any obstacles or any other devices that may cause interference. Please note that the usable range above is not guaranteed.

Impact from other devices

- Do not use the device in places where magnetic fields, static electricity, or radio wave interference occur. If used in the vicinity of the following, communication may be lost or experience delays.
  - Microwave ovens
  - Digital cordless telephones
  - Other devices that use radio waves in the 2.4GHz band (wireless audio devices, game consoles, etc.)
  - Metal objects and other such objects that are prone to reflecting radio waves
- In the vicinity of broadcasting stations and other such things where the radio waves in the periphery are very strong, the device may not work correctly.

Restrictions on purpose of use

This device assumes general usage, and it is not designed or manufactured for high-safety usage*. Do not use for any purpose that requires high safety.
* High-safety purposes refer to uses that require an extremely high level of safety in controls that involve a major direct risk to life or risk of injury.
  Examples: Control of nuclear reactions in nuclear power facilities / automatic flight control in aircraft / air traffic control / transport control in high-volume shipment systems / medical devices for life support / missile launch control in weapons systems, etc.

Warning and error

The assist mode LED blinking in orange is an indication of warning. The assist mode LED blinking in red is an indication of error. When an error is detected, the drive unit automatically stops driving. Although the assist function stops, traveling as an e-Bike can be continued. When a warning occurs, pressing the information button returns to the normal display.
The details of warnings and errors can be checked on Panasonic e-Bike app. It is recommended to connect with Panasonic e-Bike app beforehand. When the Display 501 is connected, an error code is indicated on the Display 501.

Specifications

Item No.	NKS517S
Operating temperature	–10°C to 45°C
Storage temperature	–15°C to 50°C
Weight	Approx. 33 g
Waterproofing level	IPX5
Communication type	Bluetooth version 5.2
Maximum transmit power	0 dBm (Class 3)
Communication range	Up to approx. 1 m
Frequency band	2402-2480 MHz
Supported profiles	CPP (*1), komoot (*2)
Supported app	Panasonic e-Bike / komoot (*2)

*1 CPP (Cycling Power Profile)
*2 komoot (supports the komoot app): This product needs to be connected to the display (NKS518) for operation.

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In addition, the various names, company names, and product names in this manual are trademarks or registered trademarks of the relevant company. Please note that some ™ and ® marks are omitted in this manual.

Daily care

- When removing the product, remove the e-Bike battery first. When the e-Bike battery is attached, a voltage is applied to this product.
- Do not use thinner or strong solvent for cleaning. Doing so may damage the surface.
- For cleaning, tightly wring a cloth soaked with water, and wipe the product.
- Although this product is waterproof and designed to withstand bicycling in the rain, do not submerge or immerse it in water.
- Do not store or leave the product in a place with a high temperature and high humidity, or a place exposed to direct sunlight.
- Do not apply high pressure for washing the e-Bike. Doing so may cause a failure or rust.
- Do not invert the e-Bike. Doing so may damage the product.
- Handle the product carefully, and do not apply strong impact.

After-sales service

Check with an authorized e-Bike dealer if you have any questions about the e-Bike Systems and its components.

Information for Users on Collection and Disposal of Old Equipment and used Batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directive 2012/19/EU and Regulation (EU) 2023/1542.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local municipality.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Declaration of Conformity (DoC)

Hereby, “Panasonic Cycle Technology Co., Ltd.” declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.
Customers can download a copy of the original DoC to our RE products from our DoC server:
https://www.ptc.panasonic.eu/
Contact to Authorised Representative:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre,
Winsbergring 15, 22525 Hamburg, Germany

Generated data of Panasonic products

“EU Data Act” is an EU regulation which provides that fair access to data and use data between companies(BtoB) and between companies and consumers(BtoC) and will effective since 12 Sep 2025.
The purpose of EU Data Act is to distribute fairly interoperable data that is expected to enhance competitiveness and innovation and lead to sustainable economic growth.
In accordance with this regulation, the generated data of Panasonic products are disclosed to customers fairly. The generated data of Panasonic products can be found at the following 2D code.

UK PSTI Compliance

This product complies with the UK Product Security and Telecommunications Infrastructure (PSTI) Act. For more information, including the Statement of Compliance (SoC), please visit the following website:

https://industry.panasonic.eu/products/devices/e-bike-systems/display-remote

After-sales service

Manufactured by:	**Panasonic Cycle Technology Co., Ltd.** **13-13 Katayama-cho, Kashiwara City, Osaka 582-8501, Japan**
Authorized Representative in Europe:	**Panasonic Marketing Europe GmbH** **Panasonic Testing Centre** **Winsbergring 15, 22525 Hamburg, Germany**
Imported by:	**Panasonic Industry Europe GmbH** **Caroline-Herschel- Strasse 100 85521 Ottobrunn, Germany**