

# Panasonic®

## Operating Instructions

3D Eyewear

Model No. TY-ER3D4MA

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This product cannot be used as sunglasses.



FULL HD RF  
3D

TQZJ405

# Viewing 3D images

You can enjoy viewing 3D images with contents or programmes corresponding to the 3D effect by wearing the 3D Eyewear (supplied). ➔ **“Standard accessories” (p. 6)**

This TV supports [Frame Sequential]\*1, [Side by Side]\*2 and [Top and Bottom]\*3 3D formats.

\*1: The 3D format that the images for the left and right eyes are recorded with the high definition quality and alternately played back.

\*2, \*3: Other available 3D formats

- How to use the 3D Eyewear ➔ (p. 31)
- How to view the 3D images ➔ (p. 34)

## Warning

### Small Parts

- 3D Eyewear contains small parts (battery, etc.) and must be kept out of reach of small children to avoid accidental ingestion.

### Disassembly

- Do not disassemble or modify the 3D Eyewear.

### Lithium Battery

- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

## Caution

To enjoy 3D images safely and comfortably, please read these instructions fully.

### 3D Eyewear

- Do not drop, exert pressure on, or step on the 3D Eyewear.
- Be careful of the tips of the frame when putting on the 3D Eyewear.
- Always keep the 3D Eyewear in a cool, dry place.
- Be careful not to trap a finger in the hinge section of the 3D Eyewear.

### Viewing 3D Content

- Do not use the 3D Eyewear if you have a history of over-sensitivity to light, heart problems, or have any other existing medical conditions.
- Please stop using the 3D Eyewear immediately, if you feel tired, are not feeling well or experience any other uncomfortable sensation. When you set the effect by using [3D Adjustment], take into account that the vision of 3D images varies among different individuals.
- Take an appropriate break after viewing a 3D movie.
- Take a break of between 30 - 60 minutes after viewing 3D content on interactive devices such as 3D games or computers.
- Be careful not to strike the TV screen or other people unintentionally. When using the 3D Eyewear the distance between the user and screen can be misjudged.
- The 3D Eyewear must only be worn when viewing 3D content.
- If you do not look toward the TV screen for a while when viewing 3D images, the 3D Eyewear may be turned off automatically.
- Use the 3D Eyewear where there is no interference from other devices with Bluetooth signal.
- If you suffer from any eyesight problems (short / far-sighted, astigmatism, eyesight differences in left and right), please ensure to correct your vision before using the 3D Eyewear.
- Stop using the 3D Eyewear if you can clearly see double images when viewing 3D content.
- Do not use the 3D Eyewear at a distance less than the recommended distance.  
The recommended viewing distance is at least 3 times of the image height.  
TH-P50ST50A: 1.9 m or more  
When the top and bottom area of the screen is blackened, such as movies, view the screen at a distance at least 3 times of the height of the actual image. (That makes the distance closer than above recommended figure.)

### Viewing 3D Images

#### 3D Eyewear Use

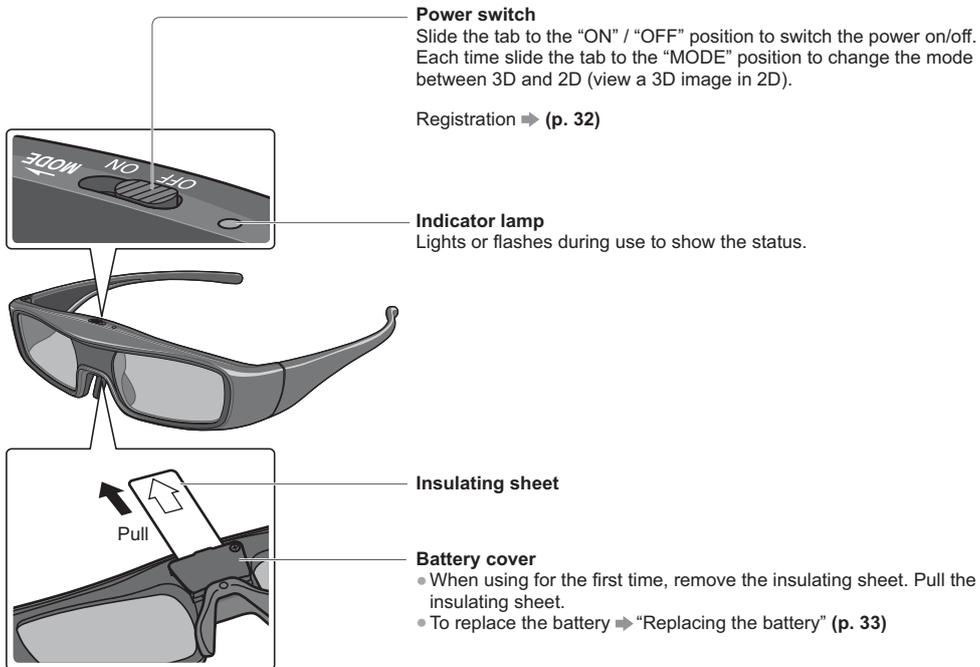
- Pay special attention when children are using the 3D Eyewear.  
3D Eyewear should not be used by children younger than about 5 - 6 years old, as a guideline. All children must be fully supervised by parents or guardians who must ensure their safety and health throughout the using 3D Eyewear.
- Before using the 3D Eyewear, ensure no breakable objects surrounding the user to avoid any accidental damage or injury.
- Remove the 3D Eyewear before moving around to avoid falling or accidental injury.
- Use the 3D Eyewear only for the intended purpose and nothing else.
- Do not use 3D Eyewear in the condition of high temperature.
- Do not use if the 3D Eyewear is physically damaged.
- Do not use devices (such as mobile phones or personal transceivers) that emit strong electromagnetic waves near the 3D Eyewear as this may cause the 3D Eyewear to malfunction.
- Stop using the 3D Eyewear immediately if a malfunction or fault occurs.
- Stop using the 3D Eyewear immediately if you experience any redness, pain, or skin irritation around the nose or temples.
- In rare cases, the materials used in the 3D Eyewear may cause an allergic reaction.

#### Lithium Battery

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

## Part names and functions

- 3D Eyewear can be worn over vision correction glasses.



### Indicator lamp status

Indicator lamp	Status
Lights red for 2 seconds when turned on	Sufficient battery level
Flashes 5 times when turned on	Low battery level
Flashes red and green alternately	Under pairing
Flashes green once every 2 seconds	Under reconnecting to the TV
Lights green for 3 seconds	Pairing or reconnecting is successfully completed.
Flashes red 3 times	Automatically power off (Pairing or connecting fails or connection is lost)
Flashes red once every 2 seconds when in use	3D mode is selected
Flashes red twice every 4 seconds when in use	2D mode is selected

### Storing and cleaning the 3D Eyewear

- Use the supplied 3D Eyewear case to store the 3D Eyewear.
- Avoid storing the 3D Eyewear in hot or highly humid locations.
- Use a clean, soft and dry cloth to wipe the 3D Eyewear. Otherwise, dirt or dust may scratch the eyewear.
- Do not use benzene, thinner, or wax on the 3D Eyewear, as doing so may cause the paint to peel off.
- Do not submerge the 3D Eyewear in liquid such as water when cleaning.
- As the liquid crystal shutters (lens) are fragile and easily broken, be very careful when cleaning them.

## Registration

### First registration

Perform the first registration when the 3D Eyewear is used for the first time.

#### 1 Turn on the TV.

#### 2 Slide the power switch from “OFF” to “ON”.

The 3D Eyewear will power on and start registration.

Place the 3D Eyewear within 50 cm from the TV while registration in progress.

#### 3 The green LED lights on the 3D Eyewear for 3 seconds when the registration is successfully completed.

After first registration, the 3D Eyewear will reconnect with TV automatically when 3D Eyewear is powered on near the TV in 3D mode.

### Registration again

When connection with registered TV fails, or when using with another TV, re-register the 3D Eyewear.

#### 1 Turn on the TV.

#### 2 Within 50 cm from the TV, hold the power switch on the “MODE” position for more than 2 seconds.

The registration will start.

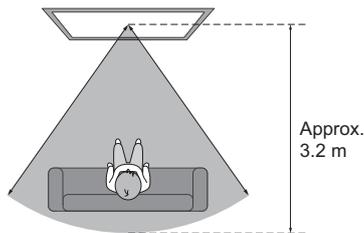
#### 3 The green LED lights for 3 seconds when the pairing is successfully completed.

#### Note

- If the registration failed, the 3D Eyewear will power off. In this case, power off the TV and perform from step 1.
- Release the power switch when Registration again starts.

Viewing 3D Images

## Viewing range for the 3D Eyewear



#### Note

- You cannot view the 3D images with the 3D Eyewear too far from the TV, because of the difficulty of receiving radio waves from the TV.
- The range may be shortened depending on the obstacles between the TV and the 3D Eyewear, or the surrounding environment.
- There are differences in the viewing range of the 3D Eyewear among individuals.
- The 3D Eyewear may not operate correctly at the outside of the viewing range.

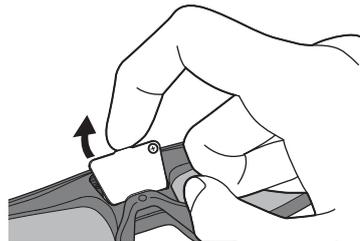
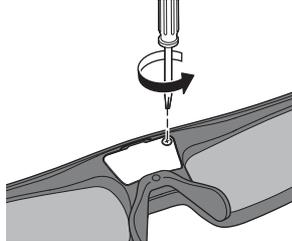
## Replacing the battery

When the battery is running low, the indicator lamp flashes 5 times on turning the 3D Eyewear on. In this case, early battery replacement is recommended.

- Dispose of the old batteries as non-burnable rubbish, or in line with the waste disposal regulations in your local area.

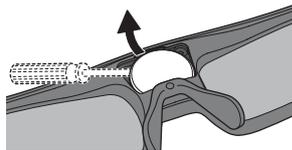
### 1 Loosen the screw and remove the cover using with a precision Phillips (No.0, plus + ) screwdriver.

- The screw is not removed from the cover.

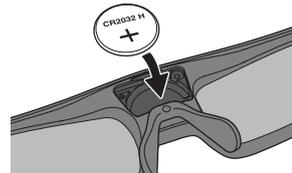


### 2 Replace the battery

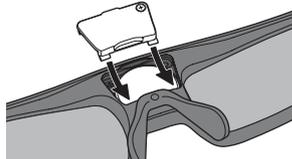
- If difficulty, remove it with the tip of the driver.



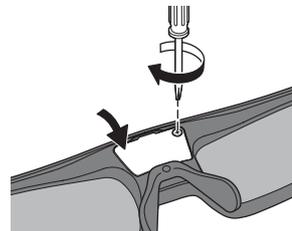
- Use the specified type of battery (coin-shaped lithium battery CR2032).
- Note the correct polarity (+ or -).



### 3 Replace and fasten the cover.



- Push the cover firmly until it clicks
- Tighten the screw



Viewing 3D Images

## FCC STATEMENT

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.
- Consult the Panasonic Service Center or an experienced radio/TV technician for help.

### FCC Caution:

**To assure continued compliance, follow the attached installation instructions and use only shielded interface cable with ferrite core when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user's authority to operate this device.**

ENGLISH

### FCC Declaration of Conformity

Models: TY-ER3D4MA  
Responsible Party: Panasonic Corporation of North America  
One Panasonic Way, Secaucus, NJ 07094  
Contact Source: Panasonic Consumer Electronics Company  
1-877-95-VIERA (958-4372)

email: consumerproducts@panasonic.com

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.

(continued overleaf)

## IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

### **Radio Frequency (RF) Exposure Information**

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized. This device has also been evaluated and shown compliant with the IC RF Exposure limits under portable exposure conditions. (antennas are less than 20 cm of a person's body).

This device has been certified for use in Canada. Status of the listing in the Industry

Canada's REL (Radio Equipment List) can be found at the following web address:

<http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng>

Additional Canadian information on RF exposure also can be found at the following web address:

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html>

Cet appareil numérique de est conforme aux normes canadiennes licence-exempt RSS standard(s)

Son fonctionnement est soumis aux deux conditions suivantes :

- (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

### **Informations concernant l'exposition aux fréquences radio (RF)**

La puissance de sortie émise par l'appareil de sans fil Dell est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil Dell de façon à minimiser les contacts humains lors du fonctionnement normal. Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils portables. (les antennes sont moins de 20 cm du corps d'une personne).

Ce périphérique est homologué pour l'utilisation au Canada.

Pour consulter l'entrée correspondant à l'appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada rendez-vous sur:

<http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng>

Pour des informations supplémentaires concernant l'exposition aux RF au Canada rendez-vous sur :

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html>

依據低功率電波輻射性電機管理辦法

第十二條 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。

**As the battery is specially for this product, do not use it for any other device.**

**Do not charge the battery.**

**Do not pierce the battery with a nail, subject it to an impact, or dismantle or modify it.**

**Do not let the wires touch any other metal or each other.**

**Do not carry or store the battery with a necklace, hair pin, or the like.**

**Do not charge, use, or leave the battery in a hot location**

**Doing so may cause the battery to generate heat, ignite, or rupture.**

**Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like**

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### 3D Eyewear

<b>Dimensions (W × H × D)</b>	167.7 mm × 42.2 mm × 170.7 mm
<b>Mass</b>	27 g Net
<b>Lens type</b>	Liquid Crystal Shutter
<b>Usage temperature range</b>	0 °C - 40 °C
<b>Battery*</b>	Coin-shaped lithium battery CR2032 Operation time: Approx. 75 hours in continuous use of the battery made by Panasonic
<b>Viewing range*</b>	Within 3.2 m from front surface of the TV
<b>Materials</b>	Main body: Resin Lens section: Liquid crystal glass
<b>Communication system</b>	2.4 GHz band FH-SS (Frequency Hopping Spread Spectrum)

\* There are differences in the viewing range of the 3D Eyewear among individuals.

- The 3D Eyewear may not operate correctly at the outside of the viewing range.

#### Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.