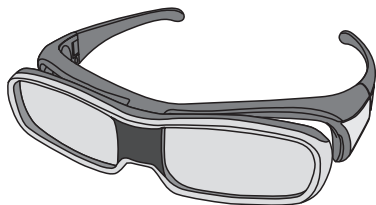


Operating Instructions 3D Eyewear

Model No. **TY-EW3D10U**




This product cannot be used as sunglasses.

This 3D Eyewear can be used only for Panasonic Plasma HDTVs supporting 3D.
For the latest information on applicable models, visit our web site.
<http://>

This product can be worn over vision correction glasses.

Thank you for purchasing a Panasonic product.

- Before operating this product, please read the instructions carefully, and save this manual for future use.
- Before using this product, be sure to read "Safety Precautions" ( pages 2 - 3).

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Safety Precautions

Warning

About Prevention of Accidental Ingestion

- **Do not store batteries or the band accessory in places where small children can reach.**

There is a danger small children could swallow such parts by mistake.

- If a child accidentally swallows such parts, seek immediate medical attention.

About Prohibition of Disassembly

- **Do not disassemble or modify the 3D Eyewear.**

Doing so may result in fire, or in a malfunction that may cause the user to feel unwell.

About Lithium Battery

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

Caution

About 3D Eyewear

- **Do not drop, exert pressure on, or step on the 3D Eyewear.**

Doing so may damage the glass section, which may result in injury.

- Always store the 3D Eyewear in the case provided when not in use.

- **Be careful of the tips of the frame when putting on the 3D Eyewear.**

Accidentally inserting the tip of the frame into the eye may cause injury.

- **Be careful not to trap a finger in the hinge section of the 3D Eyewear.**

Doing so may result in injury.

- Pay special attention when children are using this product.

About Viewing of 3D Images

■ Do not move around while wearing the 3D Eyewear.

The surrounding area appears dark, which may result in falling or other accidents that may cause injury.

■ In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images discontinue use and rest your eyes.

Parents/guardians should monitor children's viewing habits to avoid their prolonged use without rest periods.

About Lithium Battery

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

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. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user's authority to operate this device.

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



CANADIAN NOTICE:

For Model TY-EW3D10U

This Class B digital apparatus complies with Canadian ICES-003.

Identifying Controls


■ Battery case


Fitting the battery ( page 9)
When using for the first time, remove the insulating sheet.
( page 7)

■ Infra-red receiver

Receives infra-red signals from the television.
The liquid crystal shutter open/close timing is controlled by receiving infra-red signals from the television, which provide 3D expression of the images.

■ Nose pad installation section

(3D Eyewear inner section)
( page 7)

Specialized band can be attached here. ( page 7)

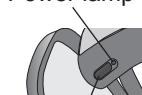
■ Liquid Crystal Shutter (lens)

Controls the images for 3D viewing.
The left and right liquid crystal shutters are alternately opened and closed in time with the left side and right side images that are alternately displayed on the television to achieve the 3D effect.

■ Power button (bottom side of 3D Eyewear)

Switches on the 3D Eyewear power.
Press and hold the power button for approximately 1 second to switch the power on, and the power lamp lights for approximately 2 seconds.
To switch the power off, press and hold the power button for approximately 1 second.
(The power lamp flashes 3 times, then the power switches off.)

Power lamp



Power button

Using Precautions


■ Liquid Crystal Shutter (Lens)

- Do not apply pressure to the liquid crystal shutter. Also, do not drop or bend the 3D Eyewear.
- Do not scratch the surface of the liquid crystal shutter with a pointed instrument etc. Doing so may cause damage to the 3D Eyewear, and reduce the quality of the 3D image.

■ Infra-red receiver section

- Do not soil the infra-red receiver section or attach stickers etc. to it.
 - Doing so may prevent the receiver from receiving signals from the television, which may prevent the 3D Eyewear from operating normally.
- If the 3D Eyewear is affected by other infra-red data communication equipment, the 3D images may not be displayed correctly.

■ Cautions during viewing

- Do not use devices that emit strong electromagnetic waves (such as cellular phones or personal transceivers) near the 3D Eyewear. Doing so may cause the 3D Eyewear to malfunction.
- The 3D Eyewear cannot operate fully at high or low temperatures. Please use within the specified usage temperature range ( page 11).
- If the 3D Eyewear is used in a room in which fluorescent lights (50 Hz) are used, the light within the room may appear to be flickering. In this case, either darken or switch off the fluorescent lights when using the 3D Eyewear.
- Wear the 3D Eyewear correctly. 3D images will not be correctly visible if the 3D Eyewear is worn upside down or back-to-front.
- Liquid crystal displays (such as computer screens, digital clocks, or calculators etc.) may be difficult to see while wearing the 3D Eyewear. Do not wear the 3D Eyewear when watching anything other than 3D images.

■ For comfortable viewing

- View the screen at a distance at least 3 times further than the effective height of the screen.

Recommended distance:

For a 50-inch television	1.9 m (6'2") or more
For a 54-inch television	2.0 m (6'6") or more
For a 58-inch television	2.3 m (7'6") or more
For a 65-inch television	2.4 m (7'10") or more

Using the 3D Eyewear at a distance closer than the recommended distance may cause eyesight fatigue.

When the top and bottom area of the screen is blackened, such as movies, view the screen at a distance 3 times further than the height of the actual image.

(That makes the viewing distance closer than above recommended distance.)

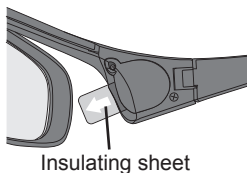
- Only use the 3D Eyewear for the specified purpose.
- Do not use if the 3D Eyewear is cracked or broken.
Doing so may result in injury or eyesight fatigue.
- Stop using the 3D Eyewear immediately if your skin feels unusual.
In rare cases, the paint or materials used in the 3D Eyewear may cause an allergic reaction.
- Stop using the 3D Eyewear immediately if you experience any redness, pain, or itching on the nose or temples.
Prolonged use may cause such symptoms due to excess pressure, which may result in the user feeling unwell.

■ Viewing 3D images

- When watching 3D movies, take an appropriate length break after watching a movie.
- When watching 3D content on interactive devices such as 3D games or computers, take an appropriate length break after using for 30 - 60 minutes.
Prolonged use may cause eyesight fatigue.

Using for the first time

■ Remove the insulating sheet



■ Attach the specialized band

If the 3D Eyewear slips out of place, use the specialized band included to hold it in place.

Specialized band

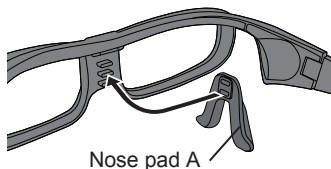


Attach the band to the left and right tips of the frame, and adjust the length.

■ Attach the nose pad

If required, use the included nose pad.

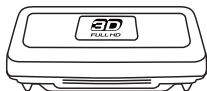
- Nose pad A adjusts the attachment position of the 3D Eyewear between 2 vertical levels. (Slot 2 of the 3 protrusions on the 3D Eyewear into the holes on nose pad A.)
- When using nose pad B, ensure that all 3 protrusions on the 3D Eyewear are inserted into the 3 holes on nose pad B.



Accessories

- < > indicates the quantity.

■ 3D Eyewear case.....<1>

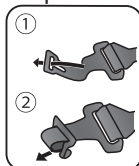


■ Nose pad A/B.....<1>



- Select the nose pad that suit you from A and B.
- It is recommended to wear the 3D glasses over correction glasses without the nose pad

■ Specialized band.....<1>



- When the end of the specialized band is straightened, form a loop at the end of the band, and fix the twisted part.


Using the 3D Eyewear

■ Using the television menu controls, set so that 3D images are shown.

1. (When 3D image signals are being received) press the MENU button on the television remote control.
 2. Select "Setup", and press the OK button.
 3. Select "3D settings", and press the OK button.
 4. Select "3D Eyewear", and use ◀▶ to select "On" or "Off".
- The procedure above is only an example. For details, see the television operating instructions.
 - You can watch 3D images in the following cases. (As of February 2010)
 - When a 3D image supporting Blu-ray disc is played on a 3D image supporting player/recorder connected using an HDMI cable to a 3D image supporting television.
 - 3D image supported broadcast (program)

■ Wearing the 3D Eyewear

1. Press and hold the power button on the 3D Eyewear for approximately 1 second. (The power lamp lights for approximately 2 seconds.)
2. Put on the 3D Eyewear.

If the 3D Eyewear slips out of place, hold it in place using the specialized band, and adjust the length of the band. ( page 7)

If the 3D images are not displayed correctly, adjust the 3D image-related settings.
For details, see the television operating instructions.

* The perceived three dimensional effects of the 3D Eyewear differ from person to person.

■ After Use

Press and hold the power button on the 3D Eyewear for approximately 1 second. (The power lamp on the 3D Eyewear flashes 3 times, then the power switches off.)
After using the 3D Eyewear, store it in the case provided.

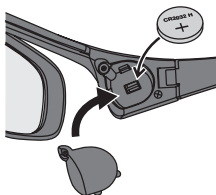
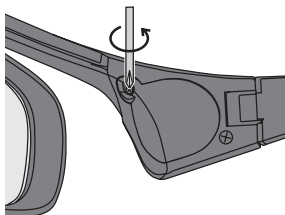
Storage and Cleaning

- Clean using a soft, dry cloth.
Wiping the 3D Eyewear with a soft cloth that is covered in dust or dirt may scratch the eyewear. Shake off any dust from the cloth before use.
Do not use benzene, thinner, or wax on the 3D Eyewear, as doing so may cause the paint to peel off.
- Do not dunk the 3D Eyewear in liquid such as water when cleaning.
- Avoid storing the 3D Eyewear in hot or highly humid locations.

Replacing the batteries

When the power lamp does not light, replace the battery with new one by following instructions.

1. Loosen the screw and remove the cover using the screwdriver (included with the television).
2. Replace the batteries, and then replace the cover.



- Always tighten the screw to hold the battery case cover in place.

NOTE:

- Use the specified type of battery (coin-shaped lithium battery CR2032).
- Do not insert the battery with the polarity (plus ⊕ and minus ⊖) backwards.
- Dispose of the old batteries as non-burnable garbage, or in line with the garbage regulations in your local area.



Troubleshooting/Q&A

Images are not 3D.

- **Are the image settings switched to 3D images?**

Some 3D image signals are not automatically recognized as 3D images.

Set the television images to "On".

For details, see the television operating instructions.

- **Is there a sticker or other such item blocking the infra-red reception section on the 3D Eyewear?**

The 3D Eyewear operates by receiving signals from the television.

Check that there are no objects blocking the path between the television and 3D Eyewear.

- **Individual differences may occur in which the 3D images are difficult to see, or cannot be seen, especially in users that have a different level of eyesight between the left and right eyes.**

Take the necessary steps (wearing glasses etc.) to correct your eyesight before use.

The power of the 3D Eyewear turns off by itself.

- **Are there any objects between the eyewear and television?**

- **Is there a sticker or other such item blocking the infra-red reception section on the 3D Eyewear?**

The 3D Eyewear operates by receiving signals from the television.

Check that there are no objects blocking the path between the television and 3D Eyewear.

- **If the eyewear stops receiving infra-red signal from the television, the power automatically switches off after 5 minutes.**

There is something wrong with the 3D images.

- **Are the left and right sides of the 3D image reversed?**

Switch the left and right sides of the 3D image.

For details, see the television operating instructions.

Specifications

Lens type	Liquid Crystal Shutter Frame sequential type
Batteries (duration)	Coin-shaped lithium battery CR2032 (approx. 75 hours in a row)
Dimensions	Width: 177 mm (6-15/16") Height: 46 mm (1-25/32") Depth: 174 mm (6-27/32")
Power supply	DC 3 V
Materials	Main body: Resin Lens section: Liquid crystal glass
Mass (including batteries)	Approx. 63 g (approx. 2.22 ozs.)
Viewing range^{*1}	Transmitter for 3D Eyewear Within 3.2 m (10'5") from front surface (Within 35° horizontal, 20° vertical)
Usage temperature range	0 °C - 40 °C (32°F - 104°F)

^{*1} Viewing range

- The location of the 3D Eyewear transmitter differs depending on the model of television.
- There are differences in the viewing range of the 3D Eyewear among individuals.

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