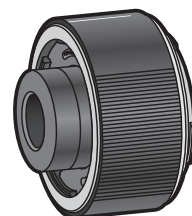


# Panasonic®

取扱説明書  
Operating Instructions  
Manuel d'utilisation  
使用说明书

品番/Model No./  
Modèle/型号 **DMW-STC20**

2x テレコンバーター  
2x Teleconverter  
Convertisseur télé 2x  
2x 増倍鏡



**LUMIX**

- 取扱説明書をよくお読みのうえ、正しく安全にお使いください。
- ご使用前に「安全上のご注意」(3～5ページ)を必ずお読みください。
- 保証書は「お買い上げ日・販売店名」などの記入を確かめ、取扱説明書とともに大切に保管してください。
- Please read these instructions carefully before using this product, and save this manual for future use.
- Veuillez lire attentivement les présentes instructions avant d'utiliser ce produit, et conserver ce manuel pour utilisation ultérieure.
- 请于使用前仔细阅读操作使用说明书，并将说明书妥善保管，以备将来使用。

If you have any questions, visit:

USA : <http://shop.panasonic.com/support>

Canada : [www.panasonic.ca/english/support](http://www.panasonic.ca/english/support)

Pour toute assistance supplémentaire, visiter :

[www.panasonic.ca/french/support](http://www.panasonic.ca/french/support)

**保証書別添付**

Register online at <http://shop.panasonic.com/support>  
(U.S. customers only/Pour les États-Unis seulement)

**DVQX1830ZB**  
F0519HN1090

# Operating Instructions

## 2x Teleconverter

Thank you for purchasing Panasonic product. Please read these instructions carefully before using this product, and save this manual for future use.

This teleconverter can be used by attaching to a compatible lens and a digital camera that complies with the Leica Camera AG L-Mount specification.

- **Compatible lens: S-R70200 (As of May 2019)**
- **Do not attach any parts other than a compatible lens. Doing so may damage the unit or the lens or adversely affect its performance.**
- **When a compatible lens and this unit are attached to a digital camera, a message may be displayed that says that the lens cannot be used. If this occurs, update the firmware of the lens to the latest version.**
- When updating the firmware of the lens, remove this unit.
- For the latest information on compatible lenses, or to download/update the firmware, visit the following support website:  
<https://panasonic.jp/support/global/cs/dsc/>  
 (English only)

- 
- L-Mount is a trademark or registered trademark of Leica Camera AG.
  - Other names, company names, product names mentioned in this document are trademarks or registered trademarks of the companies concerned.

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-If you see this symbol-

**Disposal of Old Equipment**  
**Only for European Union and countries with recycling systems**



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

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 authority.

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

## Precautions

### ■ Handling of this unit

- **When using this unit, take care not to drop, bump, or apply undue force to it. Doing so may cause malfunction or damage to this unit, the lens, and the digital camera.**
- Soiling on the surface of the lens of this unit (water, oil, fingerprints, etc.) may impact image quality. Before and after use, lightly wipe the lens with a soft, dry cloth.
- When not in use, attach the lens cap and lens rear cap to prevent dust and dirt from adhering to or entering the unit.
- To protect the contact points of the unit, do not do the following. These may cause malfunction.
  - Touch the contact points.
  - Soil the contact points.
  - Place with the contact points down.

### ■ Dust and splash resistant

- **The dust and splash resistant of the unit will not prevent the entry of dust or water droplets completely. Take the following precautions to provide satisfactory dust and splash resistant performance. If the unit is not working properly, consult the dealer or Panasonic.**
  - **Attach to digital cameras and lenses that are dust and splash resistant.**
  - When attaching or removing the unit, ensure that sand, dust, and water droplets cannot get onto the

lens mount rubber, contact points, or into the digital camera, lens, or this unit.

- If liquid gets on the unit, wipe it off with a dry soft cloth.
- To improve the dust and splash resistant performance of the unit, a lens mount rubber is used in the mount.
  - The lens mount rubber will leave scuff marks on the digital camera mount, but this does not impact performance.
  - For information on changing the lens mount rubber, contact Panasonic.

#### ■ Condensation (when the lens is fogged up)

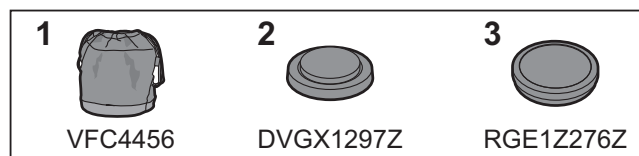
- Condensation occurs when the ambient temperature or humidity changes. Please be careful, as it may cause lens stains, mold and malfunction.
  - If condensation occurs, turn off the digital camera and leave it for approx. 2 hours. The fog will disappear naturally when the temperature of the digital camera becomes close to the ambient temperature.
- 
- The appearance and specifications of products described in this document may differ from the actual products you have purchased due to later enhancements.

## Supplied Accessories

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Check that all the accessories are supplied before using the product.

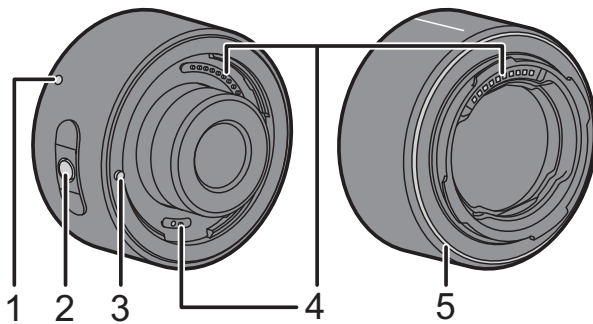
Product numbers correct as of May 2019. These may be subject to change.



- 1 Lens pouch
- 2 Lens cap\*
- 3 Lens rear cap\*

\* Attached to the teleconverter at the time of purchase.

## Names of Components



- 1 Lens fitting mark
- 2 Lens release button
- 3 Lens lock pin
- 4 Contact points
- 5 Lens mount rubber

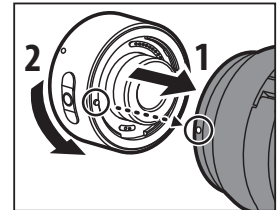
## Attaching the Teleconverter

- Attach and remove only after turning off the digital camera.
- Attach after removing the lens cap and lens rear cap.

### ■ To attach the teleconverter

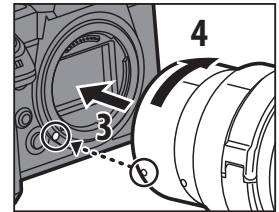
- 1 Align the lens lock pin and lens fitting mark.
- 2 Rotate in the direction of the arrow to attach to the lens.

- Rotate until you hear the click.



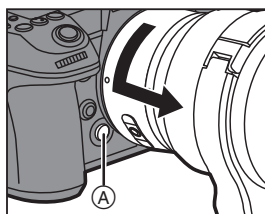
- 3 Align the lens fitting mark.
- 4 Rotate in the direction of the arrow to attach to the digital camera.

- Rotate until you hear the click.

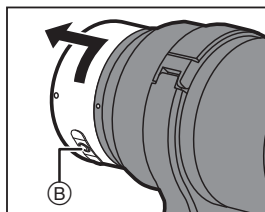


## ■ To remove the teleconverter

**1** While pressing the lens release button on the digital camera (A), rotate the teleconverter and lens in the direction of the arrow until these stop and then remove them.



**2** While pressing the lens release button on the teleconverter (B), rotate the teleconverter in the direction of the arrow until it stops and then remove it.



### Note

- While using the teleconverter, the maximum aperture of the lens becomes two steps darker.

## Cautions for Use

- **Do not allow insecticides or volatile substances to get onto the unit.**
  - This can cause deformation of the casing or peeling of the coating.
- **Do not aim the unit at the sun or strong light sources.**
  - The concentrated light may cause fire or damage.
- **Do not directly touch the unit when using it for long periods in cold temperatures.**
  - Skin burns may result if you leave the metal parts of the unit in direct contact with the skin for long periods of time in cold places (environments with temperatures at or below 0 °C (32 °F), such as ski resorts). Use gloves or similar for prolonged use.
- **When cleaning, use a soft dry cloth that does not produce dust.**
  - Do not use solvents such as benzene, thinners, alcohol, kitchen cleansers, etc., as this can cause problems such as deformation of the casing or peeling of the coating.
  - Do not use wipes with chemicals.
- Do not keep products made of rubber or vinyl in contact with the unit for a long period of time.
- Do not disassemble or alter this product.
- When not using for long periods of time, we recommend storing together with a desiccant (silica gel).

- Check all the parts before recording when you have not used the unit for a long period of time.
- Do not use or store the unit in the following types of places. Doing so can cause defects or malfunctions.
  - In direct sunlight or on a beach in summer
  - In locations with high temperatures and humidity levels or severe changes in temperature and humidity
  - In sandy or dusty locations
  - Where there is fire
  - Near heaters, air conditioners or humidifiers
  - Places that can easily get wet with water
  - Where there is vibration
  - Inside a vehicle
- Also refer to the operating instructions for the digital camera and the interchangeable lens.

## Specifications

The specifications are subject to change for performance enhancement.

### 2x Teleconverter (DMW-STC20)

#### Magnification ratio

2×

#### Lens construction

8 elements in 4 groups (2 UHR lenses)

#### Maximum diameter

∅65.3 mm (2.6")

#### Overall length

Approx. 41.6 mm (1.6")  
(From the tip to the base surface of the lens mount)

#### Mass (Weight)

Approx. 230 g (0.507 lb)

#### Dust and splash resistant

Yes

#### Recommended operating temperature

–10 °C to 40 °C (14 °F to 104 °F)

#### Permissible relative humidity

10%RH to 80%RH

## Limited Warranty (ONLY FOR U.S.A.)

### Panasonic Products Limited Warranty

#### Limited Warranty Coverage (For USA Only)

If your product does not work properly because of a defect in materials or workmanship, Panasonic Corporation of North America (referred to as “the warrantor”) will, for the length of the period indicated on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor.

Product or part name	Parts	Labor
Teleconverter	1 Year	1 Year
All included Accessories (Except Non-Rechargeable Batteries)	90 Days	Not Applicable
Only Non-Rechargeable Batteries	10 Days	Not Applicable

During the “Labor” warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. This Limited Warranty excludes both parts and labor for non-rechargeable batteries, antennas, and cosmetic parts (cabinet). This

warranty only applies to products purchased and serviced in the United States. This warranty is extended only to the original purchaser of a new product which was not sold “as is”.

#### Mail-In Service--Online Repair Request

##### Online Repair Request

To submit a new repair request and for quick repair status visit our Web Site at <http://shop.panasonic.com/support>.

When shipping the unit, carefully pack, include all supplied accessories listed in the Owner’s Manual, and send it prepaid, adequately insured and packed well in a carton box. When shipping Lithium Ion batteries please visit our Web Site at <http://shop.panasonic.com/support> as Panasonic is committed to providing the most up to date information. Include a letter detailing the complaint, a return address and provide a daytime phone number where you can be reached. A valid registered receipt is required under the Limited Warranty.

**IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD, THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.**



### **Limited Warranty Limits and Exclusions**

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

**THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.**

(As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but for illustration only.)

**ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Service Center. If the problem is not handled to your satisfaction, then write to:

Panasonic Corporation of North America  
Consumer Affairs Department 8th Fl.  
Two Riverfront Plaza  
Newark NJ 07102-5490

**PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.**

## **Shop Accessories!**

for all your Panasonic gear

Go to

<http://shop.panasonic.com/support>

Get everything you need to get the most out of  
your Panasonic products

Accessories & Parts for your Camera, Phone, A/V  
products, TV, Computers & Networking, Personal  
Care, Home Appliances, Headphones, Batteries,  
Backup Chargers & more...

### **Customer Services Directory**

For Product Information, Operating Assistance,  
Parts, Owner's Manuals, Dealer and Service info  
go to <http://shop.panasonic.com/support>

For the hearing or speech impaired TTY: 1- 877-833-8855

**As of December 2019**

## **Limited Warranty (ONLY FOR CANADA)**

**Panasonic Canada Inc.**

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

### **PANASONIC PRODUCT – LIMITED WARRANTY**

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship under normal use and for a period as stated below from the date of original purchase agrees to, at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by Panasonic Canada Inc.

Teleconverter	<b>One (1) year, parts and labour</b>
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This warranty is given only to the original purchaser, or the person for whom it was purchased as a gift, of a Panasonic brand product mentioned above sold by an authorized Panasonic dealer in Canada and purchased and used in Canada, which product was not sold "as is", and which product was delivered to you in new condition in the original packaging.

**IN ORDER TO BE ELIGIBLE TO RECEIVE WARRANTY SERVICE HEREUNDER, A PURCHASE RECEIPT OR OTHER PROOF OF DATE OF ORIGINAL PURCHASE, SHOWING AMOUNT PAID AND PLACE OF PURCHASE IS REQUIRED**

(ENG) DVQX1830 21

## **LIMITATIONS AND EXCLUSIONS**

This warranty **ONLY COVERS** failures due to defects in materials or workmanship, and **DOES NOT COVER** normal wear and tear or cosmetic damage. The warranty **ALSO DOES NOT COVER** damages which occurred in shipment, or failures which are caused by products not supplied by Panasonic Canada Inc., or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, improper batteries, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Authorized Servicer, or damage that is attributable to acts of God. Dry cell batteries, printer ink cartridge and paper are also excluded from coverage under this warranty. Rechargeable batteries are warranted for ninety (90) days from date of original purchase.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF

ANY EXPRESS OR IMPLIED WARRANTY.

(As examples, this warranty excludes damages for lost time, travel to and from the Authorized Servicer, loss of or damage to media or images, data or other memory or recorded content. This list of items is not exhaustive, but for illustration only.)

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable. This warranty gives you specific legal rights and you may have other rights which vary depending on your province or territory.

## **WARRANTY SERVICE**

**For product operation, repairs and information assistance**, please visit our Support page:  
**[www.panasonic.ca/english/support](http://www.panasonic.ca/english/support)**

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### **For the U.S.A.**

Panasonic Corporation of North America  
Two Riverfront Plaza, Newark, NJ 07102-5490  
**<http://shop.panasonic.com>**

### **For CANADA**

Panasonic Canada Inc.  
5770 Ambler Drive, Mississauga, Ontario L4W 2T3  
**[www.panasonic.com](http://www.panasonic.com)**

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## Panasonic Corporation

Web Site/Site Web: <http://www.panasonic.com>

パナソニック株式会社 アプライアンス社

〒525-8520 滋賀県草津市野路東2丁目3番1-1号

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