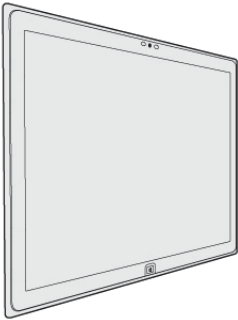




OPERATING INSTRUCTIONS

Personal Computer

Model No. **FZ-Y1** series



Contents

Read Me First

Safety Precautions	2
Regulatory Information	7

Read Me First

Getting Started

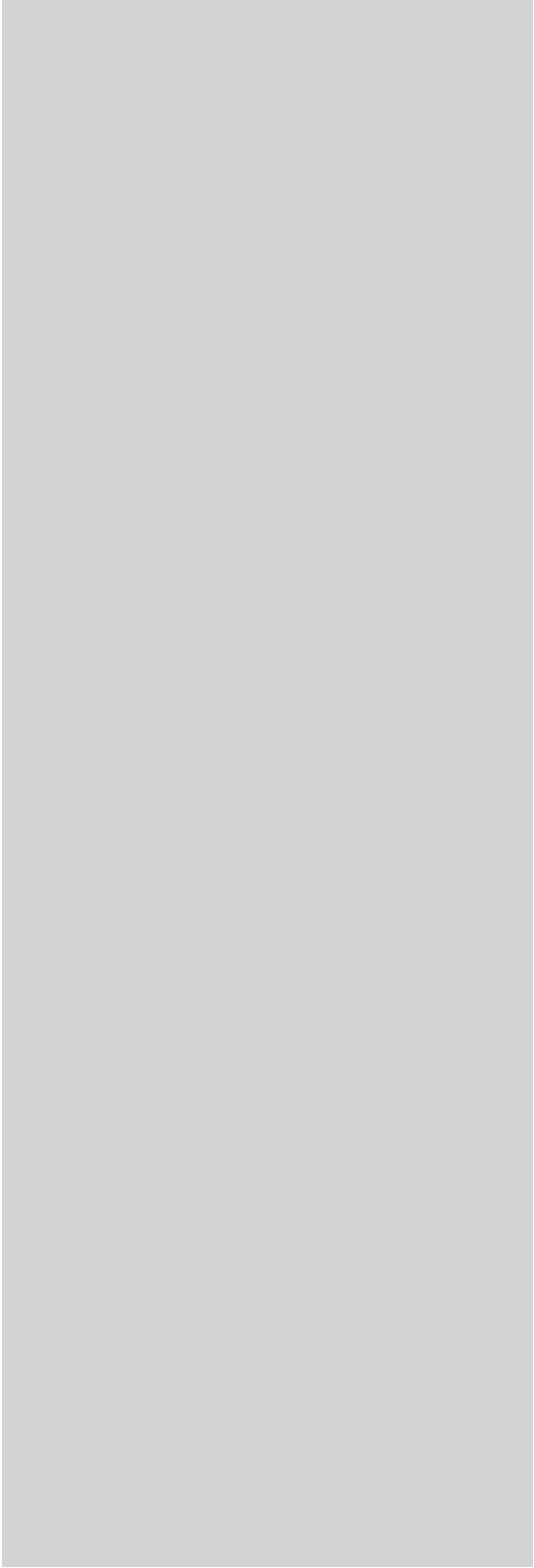
Introduction.....	14
Description of Parts	16
First-time Operation.....	18
Turning On / Turning Off.....	22

Getting Started

Useful Information

Handling and Maintenance.....	23
Installing Software	27

Useful Information



Safety Precautions

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 symbol word panels

The following symbol word panels are used to classify and describe the level of hazard, injury, and property damage caused when the denotation 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.

NOTICE

Denotes a hazard that could result in property damage.

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

   	<p>These symbols are used to alert users to a specific operating procedure that must not be performed.</p>
	<p>This symbol is used to alert users to a specific operating procedure that must be followed in order to operate the unit safely.</p>

 DANGER Precautions on the Battery Pack	
	<p>Do Not Throw the Battery Pack into a Fire or Expose It to Excessive Heat Generation of heat, ignition or rupture may result.</p>
	<p>Do Not Insert Sharp Objects Into the Battery Pack, Disassemble, or Modify It Electrolyte leakage, generation of heat, ignition or rupture may result.</p>
	<p>Do Not Short the Positive (+) and Negative (-) Contacts Generation of heat, ignition or rupture may result.</p> <ul style="list-style-type: none"> Do not place the battery pack together with articles such as necklaces or hairpins when carrying or storing.
	<p>Avoid Extreme Heat (Near the Fire, in Direct Sunlight, for Example) Electrolyte leakage, generation of heat, ignition or rupture may result.</p>
	<p>Do Not Apply Shocks to the Product by Dropping It, Applying Strong Pressure to It, etc. Electrolyte leakage, generation of heat, ignition or rupture of the battery may result.</p> <ul style="list-style-type: none"> If this product is subjected to a strong impact, damaged or deformed, stop using it immediately.
	<p>Do Not Charge the Battery Using Methods Other Than Those Specified If the battery is not charged using one of the specified methods, electrolyte leakage, generation of heat, ignition or rupture may result.</p>
	<p>When the Battery Pack Has Deteriorated, Replace It With a New One Continued use of a damaged battery pack may result in heat generation, ignition or battery rupture.</p>

Read Me First



DANGER

Precautions on the Battery Pack



Do Not Use with Any Other Product

The battery pack is rechargeable and was intended for the specified product. If it is used with a product other than the one for which it was designed, electrolyte leakage, generation of heat, ignition or rupture may result.



Do Not Use This Product with a Battery Pack Other Than the One Specified

Use only the specified battery pack (→ page 18) with your product. Use of battery packs other than those manufactured and supplied by Panasonic may present a safety hazard (generation of heat, ignition or rupture).



WARNING



If a Malfunction or Trouble Occurs, Immediately Stop Use

If a Malfunction Occurs, Immediately Unplug the AC Plug and the Battery Pack

- This product is damaged
- Foreign object inside this product
- Smoke emitted
- Unusual smell emitted
- Unusually hot

Continuing to use this product while any of the above conditions are present may result in fire or electric shock

- If a malfunction or trouble occurs, immediately turn the power off and unplug the AC plug, and then remove the battery pack. Then contact your technical support office for repair.



Do Not Touch This Product in a Thunderstorm If Connected with the AC Cable or Any Other Cables

Electric shock may result.



Do Not Connect the AC Adaptor to a Power Source Other Than a Standard Household AC Outlet

Otherwise, a fire due to overheating may result. Connecting to a DC/AC converter (inverter) may damage the AC adaptor. On an airplane, only connect the AC adaptor/charger to an AC outlet specifically approved for such use.



Do Not Pull or Insert the AC Plug If Your Hands Are Wet

Electric shock may result.



Clean Dust and Other Debris of the AC Plug Regularly

If dust or other debris accumulates on the plug, humidity, etc. may cause a defect in the insulation, which may result in a fire.

- Pull the plug, and wipe it with a dry cloth.
Pull the plug if the computer is not being used for a long period of time.



Insert the AC Plug Completely

If the plug is not inserted completely, fire due to overheating or electric shock may result.

- Do not use a damaged plug or loose AC outlet.



Close the Connector Cover Tightly When Using This Product Where Is a Lot of Water, Moisture, Steam, Dust, Oily Vapors, etc.

The entry of foreign matter may cause a fire or electric shocks.

- If foreign matter has found its way inside, immediately turn the power off and unplug the AC cord, and then remove the battery pack. Then contact your technical support office.







Do Not Disassemble This Product



You may receive an electric shock, or foreign matter may enter and result in a fire.








Safety Precautions

WARNING

	Do Not Turn the Volume Up to Loud When Using Headphones Listening at high volumes that over-stimulate the ear for long periods of time may result in loss of hearing.
	Do Not Use This Product in Close Contact With Your Body for a Long Period of Time <ul style="list-style-type: none"> Depending on the direction of the computer or the way you hold the computer, your hands and body will be more exposed to the hot wind. Using this product with exposing the skin to the heat source of this product or AC adaptor for a long period of time can cause a low-temperature burn.
	Do Not Do Anything That May Damage the AC Cord, the AC Plug, or the AC Adaptor Do not damage or modify the cord, place it near hot tools, bend, twist, or pull it forcefully, place heavy objects on it, or bundle it tightly. Continuing to use a damaged cord may result in fire, short circuit, or electric shock.
	Do Not Expose Yourself or Other Persons to the Hot Wind from the Ventilation Hole (Exhaust) For a Long Period of Time Low-temperature burns may result. Covering the ventilation hole (exhaust) with your hand or other object can cause heat to build up inside, possibly resulting in burns.

CAUTION

	Do Not Place This Product on Unstable Surface If balance is lost, this product may fall over or drop, resulting in an injury.
	Avoid Stacking If balance is lost, this product may fall over or drop, resulting in an injury.

	Do Not Leave This Product in High Temperature Environment for a Long Period of Time Leaving this product where it will be exposed to extremely high temperatures such as near fire or in direct sunlight may deform the cabinet and/or cause trouble in the internal parts. Continued use in such a resulting condition may lead to short-circuiting or insulation defects, etc. which may in turn lead to a fire or electric shocks.
	Do Not Block the Ventilation Hole (Exhaust/Intake) Using this product wrapped in cloth or on top of bedding or a blanket can block the ventilation hole and cause heat to build up inside, possibly resulting in a fire.
	Hold the Plug When Unplugging the AC Plug Pulling on the cord may damage the cord, resulting in a fire or electric shock.
	Do Not Move This Product While the AC Plug Is Connected The AC cord may be damaged, resulting in fire or electric shock. <ul style="list-style-type: none"> If the AC cord is damaged, unplug the AC plug immediately.
	Use Only the Specified AC Adaptor With This Product Using an AC adaptor other than the one supplied (supplied with the unit or one sold separately as an accessory) may result in a fire.
	Do Not Subject the AC Adaptor to Any Strong Impact Using the AC adaptor after a strong impact such as being dropped may result in electric shock, short circuit, or fire.
	Take a Break of 10-15 Minutes Every Hour Using this product for long periods of time may have detrimental health effects on the eyes or hands.



CAUTION



<Only for mode with LAN port>

Do Not Connect a Telephone Line, or a Network Cable Other Than the One Specified, into the LAN Port

If the LAN port is connected to a network such as the ones listed below, a fire or electric shock may result.

- Networks other than 1000BASE-T, 100BASE-TX or 10BASE-T
- Phone lines (IP phone (Internet Protocol Telephone), Telephone lines, internal phone lines (on-premise switches), digital public phones, etc.)



Do Not Expose the Skin to This Product When Using the Product in a Hot or Cold Environment.

Burns, low-temperature burns or frostbite may result.

- When it is necessary to expose the skin to this product such as to scan a fingerprint, perform the operation in the shortest time possible.


NOTICE


- Do not place the computer near a television or radio receiver.
- Keep the computer away from magnets. Data stored on the flash memory may be lost.
- This computer is not intended for the display of images for use in medical diagnosis.
- This computer is not intended for a use with connection of medical equipment for the purpose of medical diagnosis.
- Panasonic shall not be liable for loss of data or other incidental or consequential damages resulting from the use of this product.
- Do not touch the terminals on the battery pack. The battery pack may no longer function properly if the contacts are dirty or damaged.
- Do not expose the battery pack to water, or allow it to become wet.
- If the battery pack will not be used for a long period of time (a month or more), charge or discharge (use) the battery pack until the remaining battery level becomes 30% to 40% and store it in a cool, dry place.
- This computer prevents overcharging of the battery by recharging only when the remaining power is less than approx. 95% of capacity.
- The battery pack is not charged when the computer is first purchased. Be sure to charge it before using it for the first time. When the AC adaptor is connected to the computer, charging begins automatically.
- Should the battery leak and the fluid get into your eyes, do not rub your eyes. Immediately flush your eyes with clear water and see a doctor for medical treatment as soon as possible.

NOTE

- The battery pack may become warm during recharging or normal use. This is completely normal.
- Recharging will not commence if internal

Safety Precautions

temperature of the battery pack is outside of the allowable temperature range (0 °C to 50 °C {32 °F to 122 °F}). (➔  *Reference Manual* “Battery Power”) Once the allowable range requirement is satisfied, charging begins automatically. Note that the recharging time varies based on the usage conditions. (Recharging takes longer than usual when the temperature is 10 °C {50 °F} or below.)

- If the temperature is low, the operating time is shortened. Only use the computer within the allowable temperature range.
- This computer has a high temperature mode function that prevents the degradation of the battery in high temperature environments. (➔  *Reference Manual* “Battery Power”) A level corresponding to a 100% charge for high temperature mode is approximately equivalent to an 80% charge level for normal temperature mode.
- The battery pack is a consumable item. If the amount of time the computer can be run by using a particular battery pack becomes dramatically shorter and repeated recharging does not restore its performance, the battery pack should be replaced with a new one.
- When transporting a spare battery inside a package, briefcase, etc., it is recommended that it be placed in a plastic bag so that its contacts are protected.
- Always power off the computer when it is not in use. Leaving the computer on when the AC adaptor is not connected will exhaust the remaining battery capacity.

THIS PRODUCT IS NOT INTENDED FOR USE AS, OR AS PART OF, NUCLEAR EQUIPMENT/SYSTEMS, AIR TRAFFIC CONTROL EQUIPMENT/SYSTEMS, AIRCRAFT COCKPIT EQUIPMENT/SYSTEMS^{*1}, MEDICAL DEVICES OR ACCESSORIES^{*2}, LIFE SUPPORT SYSTEMS OR OTHER EQUIPMENTS/DEVICES/SYSTEMS THAT ARE INVOLVED WITH ENSURING HUMAN LIFE OR SAFETY. PANASONIC WILL NOT BE RESPONSIBLE FOR ANY LIABILITY RESULTING FROM THE USE OF THIS PRODUCT ARISING OUT OF THE FOREGOING USES.

^{*1} AIRCRAFT COCKPIT EQUIPMENT/SYSTEMS include Class2 Electronic Flight Bag (EFB) Systems and Class1 EFB Systems when used during critical phases of flight (e.g., during take-off and landing) and/or mounted on to the aircraft. Class1 EFB Systems and 2 EFB Systems are defined by FAA: AC (Advisory Circular) 120-76A or JAA: JAA TGL (Temporary Guidance Leaflets) No.36.

^{*2} As defined by the European Medical Device Directive (MDD) 93/42/EEC.

Panasonic cannot guarantee any specifications, technologies, reliability, safety (e.g. Flammability/Smoke/Toxicity/Radio Frequency Emission, etc) requirements related to aviation standards that exceed the specifications of our COTS (Commercial-Off-The-Shelf) products.

Regulatory Information

Information to the User / Informations destinées aux utilisateurs

<Only for model with wireless LAN/Bluetooth>

This product and your Health

This product, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this product however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because this product operates within the guidelines found in radio frequency safety standards and recommendations, we believe this product is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of this product may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using this product on board of airplanes, or
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use this product prior to turning on the product.

Regulatory Information

We are not responsible for any radio or television interference caused by unauthorized modification of this product. The correction of interference caused by such unauthorized modification will be the responsibility of the user. We and its authorized resellers or distributors are not liable for damage or violation of government regulations that may arise from failing to comply with these guidelines.

26-M-1

<Uniquement pour les modèles avec réseau local sans fil et/ou Bluetooth>

Ce produit et votre santé

Ce produit, comme tout autre appareil radio, émet de l'énergie radioélectrique. Toutefois, la quantité d'énergie émise par ce produit est beaucoup moins importante que l'énergie radioélectrique émise par des appareils sans fil tels que les téléphones portables. L'utilisation de ce produit ne comporte aucun risque pour le

consommateur du fait que cet appareil opère dans les limites des directives concernant les normes et les recommandations de sécurité sur les fréquences radio. Ces normes et recommandations reflètent le consensus de la communauté scientifique et résultent de délibérations de jurys et comités de scientifiques qui examinent et interprètent continuellement les nouveautés de la vaste littérature sur les recherches effectuées. Dans certaines situations ou environnements, l'utilisation de ce produit peut être restreinte par le propriétaire du bâtiment ou par les représentants responsables de l'organisation. Ces situations peuvent être les suivantes par exemple :

- A bord d'un avion, ou
- Dans tout autre environnement où les risques d'interférence sur d'autres appareils ou services sont perçus ou identifiables comme dangereux.

Si vous n'êtes pas sûr de la réglementation applicable à l'utilisation d'appareils sans fil dans une organisation ou un environnement spécifique, (par exemple dans un aéroport) nous vous invitons à demander l'autorisation d'utiliser ce produit avant sa mise en marche.

Informations concernant la réglementation

Nous déclinons toute responsabilité pour toute interférence radio ou télévision causée par des modifications non autorisées apportées à ce produit. La correction d'interférences causées par de telles modifications non autorisées sera la seule responsabilité de son utilisateur. Nous-mêmes, les revendeurs officiels et les distributeurs ne sommes pas responsable de tout dégât ou de toute violation des règlements de l'État pouvant découler du non-respect de ces directives.

26-F-1

Regulatory Information

Lithium Battery / Pile au lithium

Lithium Battery!

This computer contains a lithium battery to enable the date, time, and other data to be stored. The battery should only be exchanged by authorized service personnel.

Warning!

A risk of explosion from incorrect installation or misapplication may possibly occur.

15-E-1

Pile au lithium!

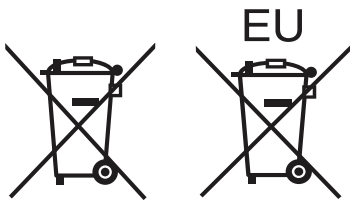
Le micro-ordinateur renferme une pile au lithium qui permet de sauvegarder certaines données, notamment la date et l'heure. La pile ne doit être remplacée que par un technicien qualifié.

Danger ! Risque d'explosion en cas de non respect de cette mise en garde!

15-F-1

Read Me First

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



These symbols are only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

53-M-1

Safety Precautions

<Only for model with wireless WAN>

The following safety precautions must be observed during all phases of the operation, usage, service or repair of any Personal Computer or Handheld Computer incorporating wireless WAN modem. Manufacturers of the cellular terminal are advised to convey the following safety information to users and operating personnel and to incorporate these guidelines into all manuals supplied with the product. Failure to comply with these precautions violates safety standards of design, manufacture and intended use of the product. Panasonic assumes no liability for customer failure to comply with these precautions.



When in a hospital or other health care facility, observe the restrictions on the use of mobiles. Switch Personal Computer or Handheld Computer incorporating wireless WAN modem off, if instructed to do so by the guidelines posted in sensitive areas. Medical equipment may be sensitive to RF energy.

The operation of cardiac pacemakers, other implanted medical equipment and hearing aids can be affected by interference from Personal Computer or Handheld Computer incorporating wireless WAN modem placed close to the device. If in doubt about potential danger, contact the physician or the manufacturer of the device to verify that the equipment is properly shielded. Pacemaker patients are advised to keep their Personal Computer or Handheld Computer incorporating wireless WAN modem away from the pacemaker, while it is on.



Switch off Personal Computer or Handheld Computer incorporating wireless WAN modem before boarding an aircraft. Make sure it cannot be switched on inadvertently. The operation of wireless appliances in an aircraft is forbidden to prevent interference with communications systems. Failure to observe these instructions may lead to the suspension or denial of cellular services to the offender, legal action, or both.

For details on usage of this unit in aircrafts please consult and follow instruction provided by the airline.



Do not operate Personal Computer or Handheld Computer incorporating wireless WAN modem in the presence of flammable gases or fumes. Switch off the cellular terminal when you are near petrol stations, fuel depots, chemical plants or where blasting operations are in progress. Operation of any electrical equipment in potentially explosive atmospheres can constitute a safety hazard.



Your Personal Computer or Handheld Computer incorporating wireless WAN modem receives and transmits radio frequency energy while switched on. Remember that interference can occur if it is used close to TV sets, radios, computers or inadequately shielded equipment. Follow any special regulations and always switch off Personal Computer or Handheld Computer incorporating wireless WAN modem wherever forbidden, or when you suspect that it may cause interference or danger.



Road safety comes first! Do not use a Personal Computer or Handheld Computer incorporating wireless WAN modem while driving a vehicle. Do not place the computer with wireless WAN modem in an area where it could cause personal injury to the driver or passengers. It is recommended to stow the unit in the boot or secure stowage area while driving.

Do not place the computer with wireless WAN modem in an area over an air bag or in the vicinity where an air bag may deploy.

Air bags inflate with great force and if the computer with wireless WAN modem is placed in the air bag deployment area may be propelled with great force and cause serious injury to occupants of the vehicle.



IMPORTANT!

Personal Computer or Handheld Computer incorporating wireless WAN modem operate using radio signals and cellular networks cannot be guaranteed to connect in all conditions. Therefore, you should never rely solely upon any wireless device for essential communications, for example emergency calls.

Remember, in order to make or receive calls, Personal Computer or Handheld Computer incorporating wireless WAN modem must be switched on and in a service area with adequate cellular signal strength.

Some networks do not allow for emergency calls if certain network services or phone features are in use (e.g. lock functions, fixed dialing etc.). You may need to deactivate those features before you can make an emergency call.

Some networks require that a valid SIM card be properly inserted in Personal Computer or Handheld Computer incorporating wireless WAN modem.

CAUTION:
Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions. 58-E-1

ATTENTION:
Il y a risque d'explosion si la batterie est remplacée par une batterie de type incorrect.
Mettre au rebut les batteries usagées conformément aux instructions. 58-F-1

Camera Light

<For model with rear camera>

CAUTION

- The light from the LED is strong and can injure human eyes. Do not look directly at the LEDs with naked eyes.

57-E-1

Regulatory Information

For U.S.A.

Federal Communications Commission Radio Frequency Interference Statement

Note: 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 Panasonic Service Center or an experienced radio/TV technician for help.

Warning

To assure continued compliance, use only shielded interface cables when connecting to a computer or peripheral. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

- This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.
- The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.

* Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

<Only for model with wireless LAN>

This product is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems. High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this product.

25-M-W-1

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.

Responsible Party: Panasonic Corporation of North America
Two Riverfront Plaza
Newark, NJ 07102
Tel No:1-800-LAPTOP5
(1-800-527-8675)

6-M-1



A lithium ion battery that is recyclable powers the product you have purchased.

Please call 1-800-8-BATTERY for information on how to recycle this battery.

L'appareil que vous vous êtes procuré est alimenté par une batterie au lithium-ion.

Pour des renseignements sur le recyclage de la batterie, veuillez composer le 1-800-8-BATTERY.

48-M-1

Read Me First

USA Only: Disposal may be regulated in your community due to environmental considerations. For disposal or recycling information, please visit Panasonic website: <http://www.panasonic.com/environmental> or call 1-888-769-0149

65-M-2

<For USA-California Only>

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material - special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate/

38-M-1

Regulatory Information

For Canada

Canadian ICES-003

CAN ICES-3(B)/NMB-3(B)

7-M-2

<Only for model with wireless LAN/Bluetooth>

Industry Canada

This product complies with RSS210 Industry Canada.

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.

<Ne s'applique qu'aux modèles avec technologie Bluetooth/LAN sans fil>

Industrie Canada

Cet équipement est conforme à la norme CNR-210

d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes :

- (1) ce dispositif ne peut produire de brouillage, et
- (2) ce dispositif doit accepter le brouillage, y compris le brouillage pouvant entraîner le fonctionnement non désiré de l'appareil.

30-Ca-1-1

<Only for model with wireless LAN>

This product (local network devices) for the band 5150-5250 MHz is only indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LELAN devices.

<Ne s'applique qu'aux modèles avec technologie LAN sans fil>

Cet appareil (pour réseaux locaux radioélectriques) dans les bandes de fréquences 5150-5250 MHz est réservé à une utilisation à l'intérieur afin de réduire le risque d'interférence avec les systèmes satellites mobiles bicanaux.

Les radars forte puissance sont désignés comme étant les premiers utilisateurs (c'est-à-dire qu'ils ont la priorité) des bandes de fréquences 5250-5350 MHz et 5650-5850 MHz. Ces stations radars peuvent provoquer des interférences et/ou des dommages à ce périphérique.

30-Ca-2-1

<Only for model with wireless LAN/ Bluetooth>

- * This computer complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment.
- * This PC with WLAN and/or Bluetooth transmitters installed, has been approved for portable operation and does not require any minimum spacing be provided between antennas and all person's body.

<Ne s'applique qu'aux modèles avec technologie Bluetooth >

- * Cet équipement est conforme aux limites d'exposition aux rayonnements d'Industrie Canada établies pour un environnement non contrôlé.
- * Ce PC avec émetteurs WLAN et/ou Bluetooth a été approuvé à des fins d'opération mobile; aucun espace minimum entre les antennes et le corps de l'utilisateur n'est requis..

For India



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler or recycler, or Panasonic service center when disposing of this product. Please see the Panasonic website for further information on collection centers, etc. <http://www.panasonic.co.in/wps/portal/home>

68-M-1

Introduction







Thank you for purchasing this Panasonic product. For optimum performance and safety, please read these instructions carefully.

In these instructions, the names are referred as follows.

Windows 8 indicates Windows® 8 Operating System.

Windows 7 indicates Windows® 7 Operating System.

■ Terms and illustrations in these instructions

CAUTION :	Conditions that may result in minor or moderate injury.
NOTE :	Useful and helpful information.
Enter :	Press [Enter] key.
Alt + Del :	Press and hold [Alt] key, and then press [Del] key.
 :	Page in these Operating Instructions or in the Reference Manual.
 :	Reference to the on-screen manuals.
Windows 8 Display “Charm”	Flick from right side to inside of the screen.
Touch [Charm] -  :	This illustration means to touch  (Settings) in the Charm menu.
Windows 7  (Start) - [All Programs] :	Touch  (Start), and then touch [All Programs].

- Some illustrations are simplified to help your understanding and may look different from the actual unit.
- If you do not log on as an administrator, you cannot use some functions or cannot display some screens.
- Refer for the latest information about optional products to the catalogs, etc.
- In these instructions, the names and terms are referred as follows.
 - “Windows® 8 Pro 64-bit” as “Windows” or “Windows 8”
 - “Windows® 7 Professional 32-bit Service Pack 1” and “Windows® 7 Professional 64-bit Service Pack 1” as “Windows” or “Windows 7”
 - DVD MULTI drive as “DVD drive”
- **Windows 8**
Screen messages are explained in [English (United States)].
(Depending on the language preference, some screen messages in these instructions are different from the actual screen messages. For example, [Flight mode] may be displayed instead of [Airplane mode] in some language preference)

■ Disclaimer

Computer specifications and manuals are subject to change without notice. Panasonic Corporation assumes no liability for damage incurred directly or indirectly from errors, omissions or discrepancies between the computer and the manuals.

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Bluetooth® is a registered trademark owned by Bluetooth SIG, Inc., U.S.A. and licensed to Panasonic Corporation.

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■ On-screen Manual

For further information about the computer, you can refer to the on-screen manual.

● Reference Manual

The Reference Manual contains the practical information to help you fully enjoy the computer's performance.

● Important Tips

The Important Tips will provide you with the battery information so that you can use the battery pack in the optimum condition to obtain longer operation time.

To access the on-screen manuals, follow the steps below.

Windows 8


On the Start screen, touch the [Manual Selector] tile, and select the on-screen manual.

Windows 7

Double-touch [Manual Selector] on the desktop screen, and select the on-screen manual.

5 Setup Windows.

Follow the on-screen instructions.

- The computer restarts several times. Do not touch the screen or tablet buttons, and wait until the drive indicator  has turned off.
- After the computer is turned on, the screen remains black or unchanged for a while, but this is not a malfunction. Wait for a moment until the Windows setup screen appears.
- Setup of Windows will take approximately **Windows 8** 5 minutes / **Windows 7** 20 minutes.

Go to the next step, confirming each message on the display.

- **Windows 7** Follow the steps below.
 - ① When “Enable sensors” is displayed, touch [Enable this sensor].
 - ② When the [User Account Control] screen is displayed, touch [Yes].
 - ③ At the [Display Rotation Tool] confirmation screen, touch [Yes].

The computer restarts automatically, and the setting is enabled.


- **Windows 7** “Join a wireless network” screen may not appear. You can set the Wireless Network after the setup of Windows is complete.

CAUTION

- You can change the user name, password, image and security setting after setup of Windows.
- Remember your password. If you forget the password, you cannot use Windows. Creating a password reset disk beforehand is recommended.
- Do not use the following words for user name: CON, PRN, AUX, CLOCK\$, NUL, COM1 to COM9, LPT1 to LPT9, @, &, space. In particular, if you create a user name (account name) that includes the “@” mark, a password will be requested at the log-on screen, even if no password has been set. If you try to log on without entering a password, “The user name or password is incorrect.” may be displayed and you will not be able to **Windows 8** sign in / **Windows 7** log on to Windows (→ page 35).



6 Create the recovery disc.

A recovery disc allows you to install OS and restore its factory default condition, in case, for example, the recovery partition of the flash memory is damaged. We recommend creating a recovery disc before you begin using the computer.


Refer to →  *Reference Manual* “Recovery Disc Creation Utility” about creating the disc.

Turning On / Turning Off

Turning On

Press and hold the power switch  (→ page 16) until the power indicator  (→ page 16) lights.


NOTE

- Do not press the power switch repeatedly.
- The computer will forcibly be turned off if you press and hold the power switch for four seconds or longer.
- Once you turn off the computer, wait for ten seconds or more before you turn on the computer again.
- Do not perform the following operation until the drive indicator  turns off.
 - Connecting or disconnecting the AC adaptor
 - Pressing the power switch
 - Touching the tablet buttons, screen or external mouse/keyboard

Turning Off

① Shut down the computer.


Windows 8

1. Display “Charm” and touch .
2. Touch [Power] - [Shut down].

Windows 7

Touch  (Start) - [Shutdown].


NOTE

- **Windows 8**
To turn off the computer, proceed as follows.
 - ① Display “Charm” and touch  - [Change PC settings] - [General].
 - ② Touch [Restart now] under “Advanced startup”.
 - ③ Touch [Turn off your PC].

Precaution against Starting Up/Shutting Down

- Do not do the following
 - Connecting or disconnecting the AC adaptor
 - Pressing the power switch
 - Touching the screen or external mouse/keyboard

NOTE

- To conserve power, the following power saving methods are set at the time of purchase.
 - The screen automatically turns off after :
 - 10 minutes (when AC adaptor is connected) of inactivity
 - 5 minutes (when operating on battery power) of inactivity
 - The computer automatically enters sleep^{*1} after :
 - Windows 8** 30 minutes / **Windows 7** 20 minutes (when AC adaptor is connected) of inactivity
 - 15 minutes (when operating on battery power) of inactivity
- ^{*1} Refer to  *Reference Manual* “Sleep and Hibernation Functions” about resuming from sleep.

Handling and Maintenance

Operation environment

- Place the computer on a flat stable surface not subject to shock, vibration, and danger of dropping. Do not place the computer upright or turn it over. If the computer is exposed to an extremely strong impact, it may become damaged.

- Operating environment

Temperature: Operation : -10 °C to 50 °C {14 °F to 122 °F} (IEC60068-2-1, 2)^{*1}

Storage : -20 °C to 60 °C {-4 °F to 140 °F}

Humidity: Operation : 30% to 80% RH (No condensation)

Storage : 30% to 90% RH (No condensation)

Even within the above temperature/humidity ranges, operation for a long time in extreme environments, smoking nearby, or operation in places where oil is used or where there is a lot of dust will result in the product deterioration and will shorten the product life.

- ^{*1} Do not expose the skin to this product when using the product in a hot or cold environment. (→ page 5)

If the computer is wet in temperatures of 0 °C {32 °F} or below, freeze damage may occur. Make sure to dry off the computer in such temperatures.

- Do not place the computer in the following areas, otherwise the computer may be damaged.
 - Near electronic equipment. Image distortion or noise may occur.
 - In extremely high or low temperature.
- As the computer can become hot during operation, keep it away from items that are sensitive to heat.

Handling cautions

This computer is designed to minimize shock to parts such as the LCD and the flash memory drive, but no warranty is provided against any trouble caused by shock. Be extremely careful when handling the computer.

- When carrying the computer:
 - Turn off the computer.
 - Remove all external devices, cables, Smart Cards and other protruding objects.
 - Do not drop or hit the computer against solid objects.
 - Do not grip the display part.
- When you board an airplane, take the computer with you and never put it in your checked luggage. When using the computer on airplane, follow the airline's instructions.
- When carrying a spare battery, put it in a plastic bag to protect its terminals.
- Avoid any harmful substances such as oil from getting into the touch pad. The pointer may not work correctly.
- Be careful not to get injured by dropping or getting hit when carrying the computer.
- Use only the included digitizer pen to touch the screen. Do not place any object on its surface and do not press down strongly with sharp-pointed or hard objects that may leave marks (e.g., nails, pencils and ball point pens).
- Do not use the screen when dust or dirt (e.g., oil) is on the screen. Otherwise foreign particles on the screen/digitizer pen can scratch the screen surface or obstruct the digitizer pen operation.
- Use the digitizer pen only for touching the screen. Using it for any other purpose may damage the digitizer pen and result in scratches on the screen.
- The digitizer uses electromagnetic induction and may not work properly near strong electrical field or magnetic field such as:
 - Near AM radio base station or relay station antennas
 - Near CRT displays that generate strong electromagnetic field noiseMove the digitizer away from such locations so it will work properly.
- The pointer cannot follow the digitizer pen movement if you move the digitizer pen too quickly.

Handling and Maintenance

■ When the battery indicator does not light on

The battery indicator may not light on even if the AC adaptor and the battery pack are correctly connected to the computer, due to the following reasons.

- The AC adaptor's protection function may be working. In this case, pull out the AC cord and wait for more than 1 minute before reconnecting the AC cord.

■ When using peripheral devices


Follow these instructions and the Reference Manual to avoid any damage to the devices. Carefully read the instruction manuals of the peripheral devices.

- Use the peripheral devices conforming to the computer's specifications.
- Connect to the connectors in the correct direction.
- If it is hard to insert, do not try forcibly but check the connector's shape, direction, alignment of pins, etc.
- If screws are included, fasten them securely.
- Remove the cables when you carry the computer. Do not pull the cables forcibly.


● Automatic brightness adjustment

The computer is equipped with an automatic brightness adjustment function that adjusts the display screen based on the ambient light sensor. You can configure the automatic adjustment function as follows.

Windows 8

- ① Display "Charm" and touch  - [Change PC Settings] - [General] - [Screen] - [Adjust my screen brightness automatically].

Windows 7

- ① Touch  (Start) - [Control Panel] - [Hardware and Sound] - [Power Option].
- ② Touch [Change plan settings] for the power plan currently used.

-
- ③ Touch [Change advanced power settings] and double-touch [Display].
 - ④ Double-touch [Enable adaptive brightness], make necessary settings, and touch [OK].
Set each item to ON, and the brightness of the screen display will adjust automatically.
- The ambient light sensor is located at the top of LCD.
The ambient light cannot be detected properly if this area is obstructed or dirty.

● **Magnetic sensor**

The magnetic sensor on the computer operates by detecting geomagnetism. Therefore, the magnetic sensor may not function properly and its readings may be inaccurate, especially in the following environments.

- Inside or near steel structures such as buildings or bridges
- Inside or near automobiles, or near train power lines
- Near metallic furniture or appliances
- When the AC adaptor or other peripheral devices are brought closer to the computer
- Near magnets, speakers, or other objects with strong magnetic fields

The magnetic directions indicated by the magnetic sensor may not be accurate immediately after purchase or in environments with poor magnetic fields.

In such cases, turn on the computer and move it as follows.

- ① Hold the computer so that its screen side is facing upward and level.
- ② While keeping the computer level, rotate it 90 degrees or more clockwise.
- ③ Return the computer to position ①, and rotate it 90 degrees or more counterclockwise.
- ④ Return the computer to position ①.
- ⑤ Tilt the computer 90 degrees or more to the left so that the left side of the computer tilts down.
- ⑥ Return the computer to position ①, and tilt it 90 degrees or more to the right so that the right side of the computer tilts down.

CAUTION


- Hold the computer firmly when moving it. Strong shocks from dropping the computer may result in damage.
-

Handling and Maintenance

Maintenance

If drops of water or other stains get on the surface of the LCD panel, wipe them off immediately. Failure to do so may result in staining.

To clean the LCD panel

Use the soft cloth included with the computer. (For further information, refer to “Suggestions About Cleaning the LCD Surface” →  *Reference Manual* “Screen Input Operation”.)

To clean areas other than the LCD panel

Wipe with a soft dry cloth such as gauze. When using detergent, dip a soft cloth in water-diluted detergent and wring it thoroughly.

CAUTION

- Do not use benzene, thinner, or rubbing alcohol since it may adversely affect the surface causing discoloration, etc. Do not use commercially-available household cleaners and cosmetics, as they may contain components harmful to the surface.
- Do not apply water or detergent directly to the computer, since liquid may enter inside of the computer and cause malfunction or damage.

Installing Software

Installing software will return the computer to the default condition. When you install the software, the flash memory data will be erased.

Back up important data to other media or an external hard disk before installation.

CAUTION

- Do not delete the Recovery Partition on the flash memory. The disk space in the partition is not available to store data.

To check the Recovery Partition, perform the following methods.

① Windows 8

Open “Computer”. Long touch [Computer], then touch [Manage].

To open “Computer”, proceed as follows on the Start screen.

1. On the Start screen, flick from right side to inside of the screen.
2. Touch [All apps] on the toolbar.
3. Touch [Computer] under “Windows System”.

Windows 7

Touch  (Start) and long touch [Computer], then touch [Manage].

- A standard user needs to enter an administrator password.

② Touch [Disk Management].

■ Flash memory Recovery

You can reinstall the OS that was pre-installed at the time of purchase (Windows 8 or Windows 7).

Preparation

- Connect the external keyboard.
- Remove all peripherals.
- Connect the AC adaptor and do not remove it until installation is complete.

Windows 8

1 Perform “Remove everything and reinstall Windows”.

① Display “Charm” and touch  - [Change PC settings] - [General].

② Touch [Get Started] under “Remove everything and reinstall Windows”.

Installation starts according to the instructions on the screen. (It will take approximately 20 minutes.)

- Do not interrupt installation, for example by turning off the computer or performing other operation.

Otherwise installation may become unavailable as Windows may not start up or the data may be corrupted.

2 When termination screen is displayed, touch [OK] to turn off the computer.

3 Turn on the computer.

- If the password is requested, enter the Supervisor Password.

4 Perform the “First-time Operation” (→ page 20).

5 Start the Setup Utility and change the settings as necessary.

6 Perform Windows Update.

7 <Only for model with TPM> Clear TPM.

① On the Start screen, flick from bottom side to inside of the screen and touch [All apps] on the toolbar.

② Touch [Run] under “Windows System”, input [tpm.msc] and touch [OK].

③ Touch [Clear TPM ...] under “Actions” on the right of the “TPM Manager on Local Computer” screen.

Installing Software

- ④ Touch [Restart] of the “Manage the TPM security hardware” screen.
The computer will restart.
- ⑤ When “TPM configuration change was requested to ...” is displayed, press **F12**.
Windows will start.
- ⑥ When “TPM is ready” appears, touch [Close].

Windows 7

- 1 Turn on the computer, and press **F2** or **Del** while [Panasonic] boot screen is displayed.**
The Setup Utility starts up.
 - If the [Panasonic] boot screen is not displayed, turn on the computer while holding down **F2** or **Del**.
 - If the password is requested, enter the Supervisor Password.
- 2 Write down all of the contents of the Setup Utility and press **F9**.**
At the confirmation message, select [Yes] and press **Enter**.
- 3 Press **F10**.**
At the confirmation message, select [Yes] and press **Enter**.
Computer will restart.
- 4 Press **F2** or **Del** while [Panasonic] boot screen is displayed.**
The Setup Utility starts up.
 - If the password is requested, enter the Supervisor Password.
- 5 Select the [Exit] menu, then select [Recovery Partition] and press **Enter**.**
- 6 Touch [Reinstall Windows] and touch [Next].**
The License Agreement screen appears.
- 7 Touch [YES].**
The License Agreement screen appears.
- 8 Touch [Yes, I agree to the provisions above and wish to continue!] and touch [Next].**
- 9 Select the setting and touch [Next].**
 - [Reinstall Windows to the whole Hard Disk to factory default.]
Select this option when you want to install Windows to the factory default. After installation, you can create a new partition. For how to create a new partition, refer to “To change the partition structure” (→ page 21).
 - [Reinstall to the System and OS partitions.]^{*1}
Select this option when the flash memory has already been divided into several partitions. For how to create a new partition, refer to “To change the partition structure” (→ page 21).
You can keep the partition structure.
^{*1} This does not appear if Windows cannot be installed to the recovery partition and the area usable by Windows.
- 10 At the confirmation message, touch [YES].**
- 11 Select OS (32bit or 64bit) and touch [OK].**
- 12 At the confirmation message, touch [YES].**
Installation starts according to the instructions on the screen. (It will take approximately 20 minutes.)
 - Do not interrupt installation, for example by turning off the computer or pressing **Ctrl** + **Alt** + **Del**.

Otherwise installation may become unavailable as Windows may not start up or the data may be corrupted.

- 13 **When Ending process screen is displayed, touch [OK] to turn off the computer.**
- 14 **Turn on the computer.**
 - If the password is requested, enter the Supervisor Password.
- 15 **Perform the “First-time Operation” (→ page 20).**
- 16 **Start the Setup Utility and change the settings as necessary.**
- 17 **Perform Windows Update.**

■ Using Recovery Disc


Use the Recovery Disc in the following conditions.

- You have forgotten the administrator password.
- Installation is not complete. The recovery partition in the flash memory may be broken.
- **Windows 7** <Only for Windows 7 downgrade model>
To change OS from Windows 7 to Windows 8, or vice versa.

NOTE

- **Windows 7** To change OS from 32 bit to 64 bit, or vice versa, install OS using the recovery partition in the flash memory.

Preparation

- Prepare the following items:
 - Recovery Disc (→  *Reference Manual* “Recovery Disc Creation Utility”)
 - USB DVD drive (optional) (refer to recent catalogs and other sources for information about the products available)
- Remove all peripherals (except for the USB DVD drive).
- Connect the AC adaptor and do not remove it until installation is complete.

NOTE

- You can use the following buttons instead of the keyboard.

 : F2 key (Default setting)

 : ↓ key

 : ↑ key


 : Enter key

 : Tab key

1 **Connect the DVD drive to the USB port.**

2 **Start the Setup Utility.**

Windows 8

- ① Display “Charm” and touch  - [Change PC settings] - [General].
- ② Touch [Restart now] under “Advanced startup”.
- ③ Touch [Troubleshoot] - [Advanced options] - [UEFI Firmware Settings] - [Restart].

Windows 7

Turn on the computer, and touch top left of the screen while [Panasonic] boot screen is displayed.

- If the [Panasonic] boot screen is not displayed, turn on the computer while touching top left of the screen.

Installing Software

- If the password is requested, enter the Supervisor Password.
- 3 Write down all of the contents of the Setup Utility and touch [Exit] and double-touch [Load Default Values].**

At the confirmation message, touch [Yes].
 - 4 Check the [UEFI Boot] setting of the Setup Utility.**

[UEFI Boot] should be set to as follows.
When the recovery disc for Windows 8 is used: [Enabled]
When the recovery disc for Windows 7 is used: [Disabled]
 - 5 Set the Recovery Disc into the DVD drive.**
 - 6 Touch [Exit] and double-touch [Save Values and Reboot].**

At the confirmation message, touch [Yes].
Computer will restart.
 - 7 Touch top left of the screen while [Panasonic] boot screen is displayed.**

The Setup Utility starts up.

 - If the password is requested, enter the Supervisor Password.
 - 8 Touch [Exit], then double-touch your DVD drive in [Boot Override].**
 - 9 Double-touch [Yes].**

The computer will restart.
 - 10 Touch [Reinstall Windows] and touch [Next].**
 - 11 **Windows 8** At the confirmation message, touch [YES].**
 - 12 At the License Agreement screen, Touch [Yes, I agree to the provisions above and wish to continue!] and touch [Next].**
 - 13 When the recovery disc for Windows 8 is used, touch [Next].**

When the recovery disc for Windows 7 is used, select the setting and touch [Next].

 - [Reinstall Windows to the whole Hard Disk to factory default.]
Select this option when you want to install Windows to the factory default. After installation, you can create a new partition. For how to create a new partition, refer to “To change the partition structure” (→ page 21).
 - [Reinstall to the System and OS partitions.]²
Select this option when the flash memory has already been divided into several partitions. For how to create a new partition, refer to “To change the partition structure” (→ page 21).
You can keep the partition structure.
² This does not appear if Windows cannot be installed to the recovery partition and the area usable by Windows.
 - 14 At the confirmation message, touch [YES].**

Installation starts according to the instructions on the screen. (It will take approximately 30 - 45 minutes.)

 - Do not interrupt installation, for example by turning off the computer.
Otherwise installation may become unavailable as Windows may not start up or the data may be corrupted.
 - 15 When Ending process screen is displayed, remove the Recovery Disc and DVD Drive.**

-
- 16 **Windows 8** Touch [OK].
The computer will restart.
 - Windows 7** Touch [OK] to turn off the computer.
 - 17 **Windows 7** Turn on the computer.
 - If the password is requested, enter the Supervisor Password.
 - 18 Perform the “First-time Operation” (→ page 20).
 - 19 Start the Setup Utility and change the settings as necessary.
 - 20 Perform Windows Update.
 - 21 **Windows 8** <Only for model with TPM> Clear TPM (→ page 27).

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