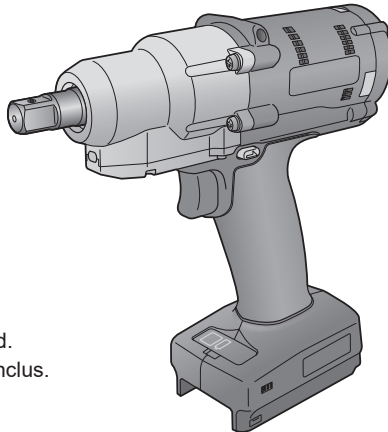


Battery Operated Tool  
Outil fonctionnant sur batterie  
Herramienta con pilas

Cordless Electronic Mechanical Pulse Wrench  
Sans fil Clé à impulsion mécanique électronique  
Inalámbrica Llave de impulso mecánica electrónica

**Model No.: EYFMH1WC  
EYFMH2WC  
EYFMH1WP  
EYFMH2WP**



Battery pack is not included.  
Le bloc batterie n'est pas inclus.  
Batería no incluida.

**IMPORTANT**

Read and follow the safety and operating instructions before using this product.  
Do not use the wireless function outside the country where you purchased the product.  
Doing so may violate the local laws and regulations.

**WICHTIG**

Lesen Sie vor der Verwendung dieses Produktes die Sicherheitsanweisungen und die Bedienungsanleitung und befolgen Sie sie.  
Verwenden Sie die Drahtlos-Funktion nicht außerhalb des Landes, in dem Sie das Produkt erworben haben.  
Dies könnte gegen örtliche Gesetze und Vorschriften verstoßen.

**IMPORTANT**

Lisez et suivez les instructions d'utilisation et de sécurité avant d'utiliser ce produit.  
N'utilisez pas la fonction sans fil en dehors du pays où vous avez acheté le produit.  
Cela pourrait enfreindre les lois et réglementations locales.

**IMPORTANTE**

Leggere e seguire le istruzioni per l'uso e di sicurezza prima di utilizzare questo prodotto.  
Non utilizzare la funzione wireless al di fuori del Paese in cui è stato acquistato il prodotto. Ciò potrebbe violare le leggi e i regolamenti locali.

**IMPORTANTE**

Lea y siga las instrucciones de seguridad y operación antes de usar este aparato.  
No utilice la función inalámbrica fuera del país donde adquirió el producto. Hacerlo podría infringir las leyes y normativas locales.



# Table of Contents

<b>1. BEFORE USE</b>	
1.1 GETTING STARTED .....	3
1.1.1 OBTAINING THE TOOL MANAGER SOFTWARE .....	3
1.1.2 OBTAINING THE OPERATING INSTRUCTIONS .....	4
1.2 SAFETY PRECAUTIONS .....	5
1.2.1 ADDITIONAL SAFETY RULES .....	5
1.2.2 INTENDED USE .....	7
1.3 FUNCTIONAL DESCRIPTION .....	8
1.4 EXTRA-COST OPTIONS .....	10
1.5 WIRING DIAGRAM .....	11
1.6 CHARGING .....	12
1.7 TOOL SETUPS BEFORE USE .....	16
<b>2. OPERATION</b>	
2.1 BASIC OPERATION .....	17
2.1.1 OPERATION MODE OF THE TOOL .....	17
2.1.2 TORQUE CONTROL FUNCTION .....	18
2.1.3 HOW TO USE .....	19
2.1.4 TIGHTENING CONFIRMATION LAMP AND COMMUNICATION LAMP .....	21
2.1.5 CONTROL PANEL FUNCTIONS .....	23
2.2 USING THE TOOL MANAGER SOFTWARE .....	25
2.2.1 INSTALLING AND UPDATING THE TOOL MANAGER SOFTWARE .....	25
2.2.2 UNINSTALLING THE TOOL MANAGER SOFTWARE .....	27
2.2.3 REPAIRING THE TOOL MANAGER SOFTWARE .....	28
2.2.4 STARTING/EXITING THE TOOL MANAGER SOFTWARE .....	29
2.2.5 CONNECTING/DISCONNECTING THE TOOL .....	30
2.2.6 SCREEN LAYOUT OF THE TOOL MANAGER SOFTWARE .....	34
2.2.7 MANAGING THE TOOL FROM THE TOOL LIST .....	36
2.2.8 CONFIGURING PARAMETERS OF THE TOOL .....	40
2.2.9 PARAMETER LIST .....	58
2.2.10 SETTING OPTIONS FOR THE TOOL .....	67
2.2.11 INITIALIZING CONFIGURATION OF THE TOOL .....	70
2.2.12 DISPLAYING AND SAVING THE HISTORY LOG .....	71
2.2.13 HISTORY LOG ITEM LIST .....	78
2.2.14 MANAGING THE DATA FOLDER .....	83
2.2.15 SETTING THE DISPLAY OF THE TOOL MANAGER SOFTWARE .....	84
2.2.16 HELP FUNCTION .....	85
<b>3. SPECIFICATIONS</b>	
3.1 CAPACITY AND SPECIFICATIONS OF THE TOOL .....	86
3.2 SPECIFICATIONS OF THE TOOL MANAGER SOFTWARE .....	88
3.3 PAIRING WITH THE CONTROLLER .....	90
3.4 PRECAUTIONS FOR WIRELESS COMMUNICATION .....	93
<b>4. MAINTENANCE AND TROUBLESHOOTING</b>	
4.1 CLEANING AND STORAGE .....	94
4.2 BATTERY PACK .....	95
4.3 ERROR CODES .....	97
4.3.1 ERROR CODES ON CONTROL PANEL .....	97
4.3.2 ERROR MESSAGES OF HISTORY LOGS .....	98
4.4 LICENCE TERMS .....	101

Characters written in red show those that are not mentioned in a brief (printed) version of Operating Instructions.

# 1.1 GETTING STARTED

## 1.1.1 OBTAINING THE TOOL MANAGER SOFTWARE

To use this product, it is necessary to set its parameters using the dedicated software (Tool Manager).

First, obtain the Tool Manager software by following the procedure below.

Preparation: Prepare a PC or tablet with the supported OS installed.

Supported OS: Windows10 Home, Windows10 Pro, Windows10 Enterprise

Access the following download site and download the installer of the Tool Manager software.

(For how to install the Tool Manager software, **Refer to 2.2.1**)

The Tool Manager software download site.

<https://www.panasonic-powertools.eu/en/construction/documents.htm>



- Please use the latest version.

# 1.1 GETTING STARTED

## 1.1.2 OBTAINING THE OPERATING INSTRUCTIONS

Access the following download site and download the Operating Instructions of EYFMH1WC or EYFMH2WC.

For full version Operating Instructions, please refer to the web site.

<https://www.panasonic-powertools.eu/en/construction/documents.htm>



# 1.2 SAFETY PRECAUTIONS

## 1.2.1 GENERAL POWER TOOL SAFETY WARNINGS

### **WARNING**

**Read all safety warnings, instructions, illustrations and specifications provided with this power tool.**

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

**Save all warnings and instructions for future reference.**

### 1) **Work Area Safety**

**a) Keep work area clean and well lit.**

Cluttered or dark areas invite accidents.

**b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**

Power tools create sparks which may ignite the dust or fumes.

**c) Keep children and bystanders away while operating a power tool.**

Distractions can cause you to lose control.

### 2) **Electrical Safety**

**a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**

Unmodified plugs and matching outlets will reduce risk of electric shock.

**b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.**

There is an increased risk of electric shock if your body is earthed or grounded.

**c) Do not expose power tools to rain or wet conditions.**

Water entering a power tool will increase the risk of electric shock.

**d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**

Damaged or entangled cords increase the risk of electric shock.

**e) When operating a power tool outdoors, use an extension cord suitable for outdoor use.**

Use of a cord suitable for outdoor use reduces the risk of electric shock.

**f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**

Use of an RCD reduces the risk of electric shock.

# 1.2 SAFETY PRECAUTIONS

## 1.2.1 GENERAL POWER TOOL SAFETY WARNINGS

### 3) Personal Safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**

A moment of inattention while operating power tools may result in serious personal injury.

- b) **Use personal protective equipment. Always wear eye protection.**

Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**

Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

- d) **Remove any adjusting key or wrench before turning the power tool on.**

A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

- e) **Do not overreach. Keep proper footing and balance at all times.**

This enables better control of the power tool in unexpected situations.

- f) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.**

Loose clothes, jewelry or long hair can be caught in moving parts.

- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**

Use of dust collection can reduce dust-related hazards.

- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.**

A careless action can cause severe injury within a fraction of a second.

### 4) Power Tool Use and Care

- a) **Do not force the power tool. Use the correct power tool for your application.**

The correct power tool will do the job better and safer at the rate for which it was designed.

- b) **Do not use the power tool if the switch does not turn it on and off.**

Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.**

Such preventive safety measures reduce the risk of starting the power tool accidentally.

# 1.2 SAFETY PRECAUTIONS

## 1.2.1 GENERAL POWER TOOL SAFETY WARNINGS

**d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**  
Power tools are dangerous in the hands of untrained users.

**e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.**  
Many accidents are caused by poorly maintained power tools.

**f) Keep cutting tools sharp and clean.**  
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

**g) Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.**

Use of the power tool for operations different from those intended could result in a hazardous situation.

**h) Keep handles and grasping surfaces dry, clean and free from oil and grease.**  
Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

### 5) Battery Tool Use and Care

**a) Recharge only with the charger specified by the manufacturer.**

A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

**b) Use power tools only with specifically designated battery packs.**

Use of any other battery packs may create a risk of injury and fire.

**c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.**

Shorting the battery terminals together may cause burns or a fire.

**d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.**

Liquid ejected from the battery may cause irritation or burns.

**e) Do not use a battery pack or tool that is damaged or modified.**

Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.

# 1.2 SAFETY PRECAUTIONS

## 1.2.1 GENERAL POWER TOOL SAFETY WARNINGS

- f) **Do not expose a battery pack or tool to fire or excessive temperature.**  
Exposure to fire or temperature above 130 °C (266 °F) may cause explosion.
  - g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.**  
Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
- 6) Service**
- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**  
This will ensure that the safety of power tool is maintained.
  - b) **Never service damaged battery packs.**  
Service of battery packs should only be performed by the manufacturer or authorized service providers.

### **Screwdrivers/impact wrenches safety warnings**

**Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.**






Fasteners contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.



# 1.2 SAFETY PRECAUTIONS

## 1.2.1 ADDITIONAL SAFETY RULES

- 1) **Wear ear protectors when using the tool for extended periods.**  
Prolonged exposure to high intensity noise can cause hearing loss.
- 2) Be aware that this tool is always in an operating condition, since it does not have to be plugged into an electrical outlet.
- 3) Do not touch the rotating parts to avoid injury.
- 4) Do not use the tool continuously for a long period of time. Stop using the tool from time to time to avoid temperature rise and heat overload of the motor.
- 5) Do not drop the tool.
- 6) Make sure to push the USB connector cover all the way in before starting work.

Symbol	Meaning
V	Volts
	Direct current
$n_0$	No load speed
$\dots\text{min}^{-1}$	Revolutions or reciprocations per minutes
Ah	Electrical capacity of battery pack
	To reduce the risk of injury, user must read and understand operating instructions.
	Do not incinerate or heat battery pack. Do not charge or use under conditions of high temperature. Do not expose to high temperatures.
	Do not disassemble or modify.
	Do not expose to rain or water.

# 1.2 SAFETY PRECAUTIONS

## 1.2.1 ADDITIONAL SAFETY RULES

### **WARNING**

- Do not use other than the Panasonic battery packs that are designed for use with this rechargeable tool.
- Panasonic is not responsible for any damage or accident caused by the use of recycled or counterfeit battery pack.
- Do not dispose of the battery pack in a fire, or expose it to excessive heat.
- Do not allow metal objects to touch the battery pack terminals.
- Do not carry or store the battery pack in the same container as nails or similar metal objects.
- Do not charge the battery pack in a high-temperature location, such as next to a fire or in direct sunlight. Otherwise, the battery may overheat, catch fire, or explode.
- After removing the battery pack from the tool or the charger, always reattach the pack cover. Otherwise, the battery contacts could be shorted, leading to a risk of fire.
- 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.
- To prevent leakage, overheating, smoke generation, fire, and rupturing from occurring, follow these instructions when handling our rechargeable power tools (tool main body/ battery pack/charger).
  - Do not allow material cuttings or dust to fall onto the battery pack.
  - Before storing, remove any material cuttings and dust from the battery pack, fit red plastic “terminal cover”, then place separately from metal objects (screws, nails, etc.) in tool case. Damage caused by loose objects in the case will not be covered by warranty.
- Do not handle the rechargeable power tools in the following way. (There is a hazard of smoke generation, fire, and rupturing)
  - Use or leave in places exposed to rain or moisture
  - Use submerging in water

# 1.2 SAFETY PRECAUTIONS

## 1.2.2 INTENDED USE

This tool is a Cordless Mechanical Pulse Wrench and can be used to tighten bolts, nuts, and screws. Additionally, it provides a torque control function that automatically stops tool operation when a preset load is reached to deliver consistent tightening torque.

### IMPROPER USE

The use of the tool other than INTENDED USE is dangerous and must be avoided. The tool must not be used for the purposes such as the following;

- to mix paint or building materials,
- polishing, grinding, sharpening, engraving.

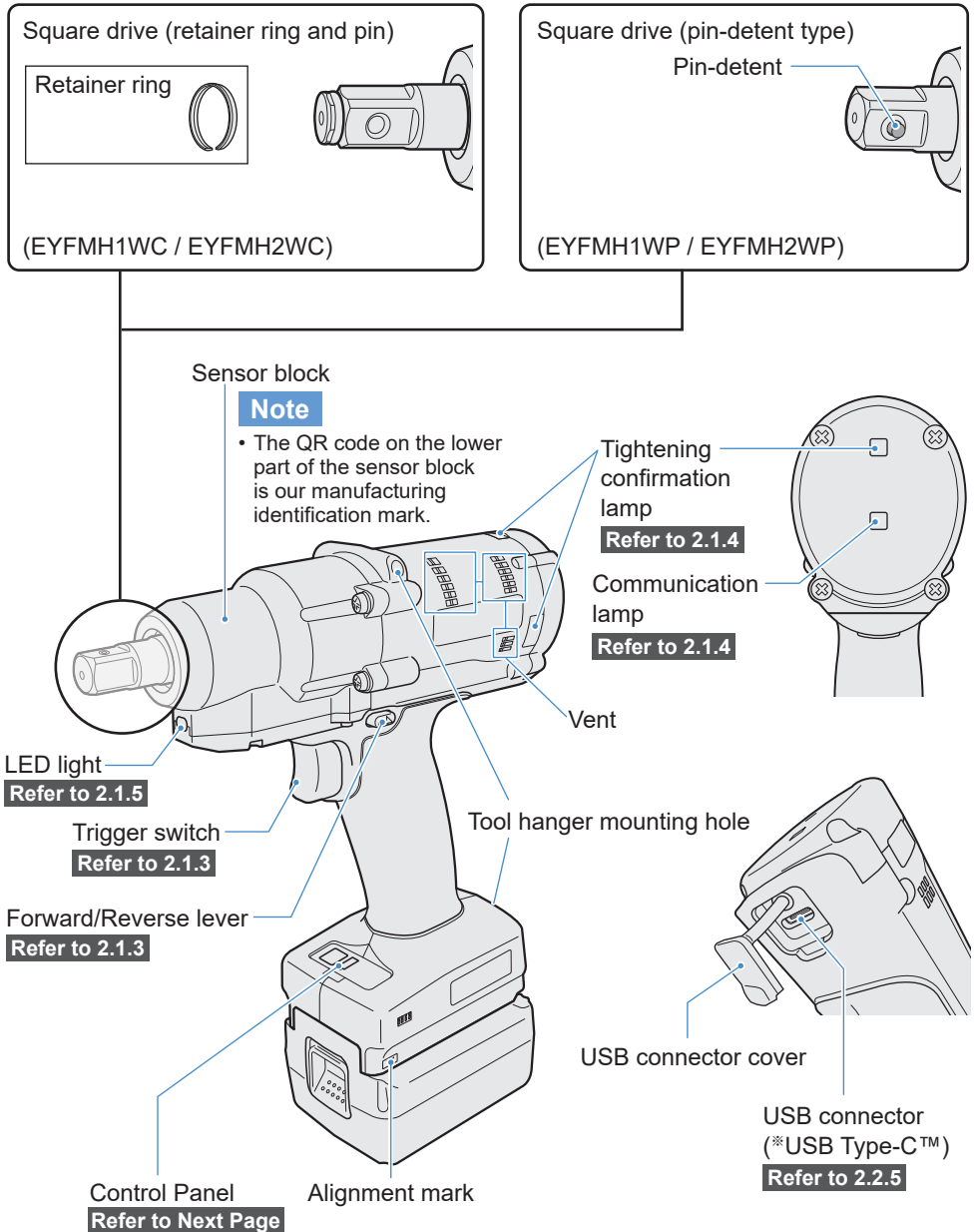
### RESIDUAL RISK

Some residual risks remain even with proper use of the tool such as the following;

- contact with the rotating bit
- contact with the sharp edges of material or something.

# 1.3 FUNCTIONAL DESCRIPTION

## Tool

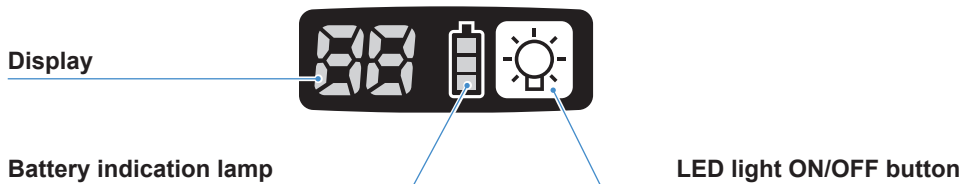


※USB Type-C is a trademark of USB Implementers Forum.

# 1.3 FUNCTIONAL DESCRIPTION

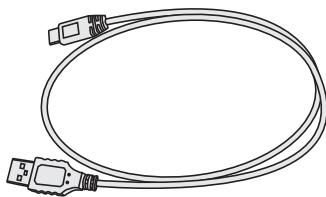
## Control Panel Refer to 2.1.5

---



## Accessory

---



**USB cable 1 m**  
EYFMH1XL701W

# 1.4 EXTRA-COST OPTIONS

## List of Extra-cost Options

### Battery pack

Model No.	EYFB41	EYFB43
Storage battery	Li-ion battery	
Battery voltage	14.4 V DC(3.6 V/4 cells)	14.4 V DC(3.6 V/8 cells)

### Battery charger

Model No.	EY0L82	
Rating	See the rating plate on the bottom of the charger.	
Weight	0.93 kg	
Charging time	EYFB41	EYFB43
	Usable: 35 min.	Usable: 45 min.
	Full: 40 min.	Full: 60 min.

### USB cable 1 m

EYFMH1XL701W (\*1)

### Tool protector

EYFA14-A (blue), D (orange), G (green), H (gray), Y (yellow)

### Battery protector

EYFA04-H (gray)

• For EYFB43

EYFA06-H (gray)

• For EYFB41

### Tool hanger

EYFA40

### Retainer ring (C-ring)

EZ7552K0187 (\*1)

### Controller

EYFRW2

\*1 You can purchase this as a repair part.

## CAUTION

- The tool hanger is for a balancer only. If any strong force or shock is applied, it may break to cause the tool to fall.

### Note

- Please purchase the battery pack, EYFB41 or EYFB43.
- Please purchase the retainer ring (C-ring), EZ7552K0187 (EYFMH1WC, EYFMH2WC).

# 1.5 WIRING DIAGRAM

The tool can be used by being connected to external devices as shown in the connection diagram below.

## Programming software

- Tool Manager (Model No. : EYFSW102)

## [Compatible OS]

- Windows10 Home/Windows10 Pro/Windows10 Enterprise

## [Features]

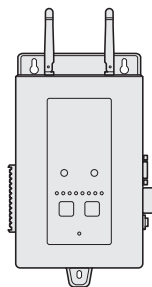
- View work results, Manage work result files
- Set parameters, Manage parameter files

How to access: **Refer to 1.1.1**

## ■ Connection example

- ←-----→ Wireless communication
- ←-----→ Wired communication, direct connection

**Controller**  
(EYFRW2)



For details on the controller, see the Operating Instructions supplied with it.

**PC for configuration**

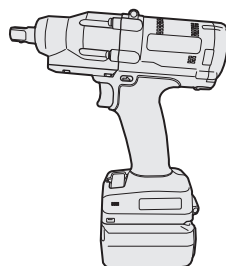


To USB terminal (Type-A)

**USB cable (accessory)**

※ To USB terminal (Type-C™)

**This unit**



※USB Type-C is a trademark of USB Implementers Forum.

# 1.6 CHARGING

## Before Charging

You can charge a sliding lithium-ion battery pack.

**(Charging EYFB41 or EYFB43)**

Install a battery charger in a place with a temperature of 5 °C to 40 °C, and charge the battery pack that is close to the temperature of the charging place.

If the battery pack temperature is 5 °C or below or significantly different from the charging place temperature, there may be a lack of charging. Leave it in that place for 1 hour or more before charging.

### Attention

- If you have charged two battery packs in a row, stop charging for about 30 minutes. Wait for the battery charger temperature to fall before charging.
- If you do not hear a fan running just after inserting a battery pack, the battery charger may be potentially out of order. Request repair immediately.

### Note

- The battery charger controls its cooling fan according to the battery pack temperature and the charging mode. The fan operation changes during charging, which is not a failure.
- Even after pulling out the power plug, the power lamp may be lit for about 10 seconds, which is not a failure.

**Temperatures mentioned in this Operating Instructions are for reference. Actually, they may vary somewhat depending on conditions.**



# 1.6 CHARGING

## How to Charge

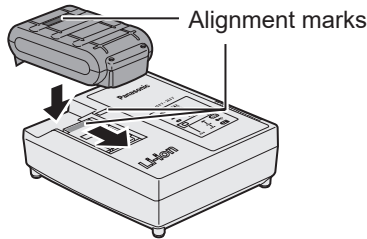
### 1 Plug the charger into the AC outlet.

#### Note

- Sparks may be produced when the plug is inserted into the AC power supply, but this is not a problem in terms of safety.

### 2 Insert the battery pack firmly into the charger.

- ① Line up the alignment marks and place the battery onto the dock on the charger.
- ② Slide forward in the direction of the arrow.



### 3 During charging, the charging lamp will be lit.

When charging is completed, an internal electronic switch will automatically be triggered to prevent overcharging.

- Charging will not start if the battery pack is warm (for example, immediately after heavy-duty operation).

The orange standby lamp will be flashing until the battery cools down.

Charging will then begin automatically.

### 4 The charge lamp (green) will flash slowly once the battery is approximately 80% charged.

### 5 When charging is completed, the charging lamp in green color will turn off.

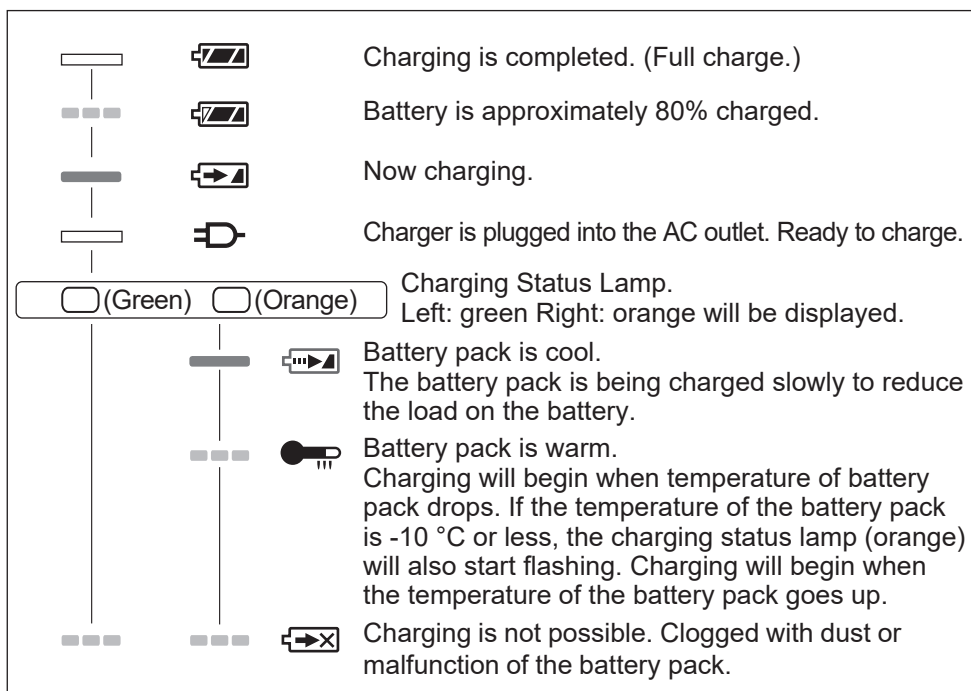
### 6 If the temperature of the battery pack is 0 °C or less, charging takes longer to fully charge the battery pack than the standard charging time.

Even when the battery is fully charged, it will have approximately 50% of the power of a fully charged battery at normal operating temperature.

# 1.6 CHARGING

- 7** Consult an authorized dealer if the charging lamp (green) does not turn off.
- 8** If a fully charged battery pack is inserted into the charger again, the charging lamp lights up. After several minutes, the charging lamp in green color will turn off.
- 9** Remove the battery pack while the battery pack release button is held up.

## LAMP INDICATIONS



 Turn off   
  Illuminated   
  Flashing

# 1.6 CHARGING

## ■ Federal Communication Commission Interference 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 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 dealer or an experienced radio/TV technician for help.

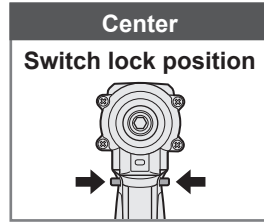
FCC Caution: To assure continued compliance, install and use in accordance with provided instructions. Use only the battery pack specified in the instructions. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device 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.

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

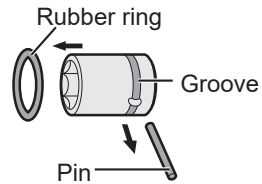
# 1.7 TOOL SETUPS BEFORE USE

- 1 Hold the forward/reverse lever in the center to keep it in a switch lock position.

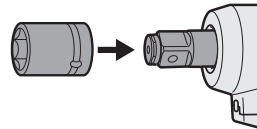


- 2 **Attach a socket.**

- 1 Remove a rubber ring and a pin from the socket.

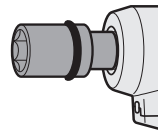


- 2 Insert the socket into the tool.  
(Align their hole positions.)



- 3 Reversing the procedure 1, attach the pin and the rubber ring.

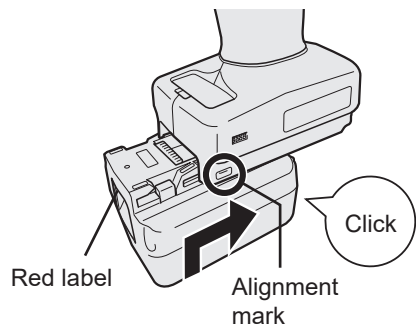
- Be sure to put the rubber ring so that the pin will not come out.



- The retainer ring (C-ring) is for temporary fixing. Be sure to use the pin and the rubber ring to fix the socket.
- If you use a socket that is worn or deformed, an anvil of the retainer ring (C-ring) type may not be inserted.

- 3 **Aligning the alignment marks, attach the battery pack.**

Slide it until the red label is out of sight, and make sure that it is fixed and won't come off.



# 2.1 BASIC OPERATION

## 2.1.1 OPERATION MODE OF THE TOOL

The tool operates in one of the following modes.

The mode in which it is used now is shown on the display of the control panel.



Display	Mode name	Mode details
	<b>Stand Alone Mode</b>	This is a mode in which the tool operates according to the configured parameters registered in its inside. The history log data is recorded in the tool's internal storage. The tool does not communicate with the controller. The Tool Manager software is used to change the setting to [Stand Alone Mode]. <b>Refer to 2.2.8</b>
	<b>Wireless Communication Mode</b>	This is a mode in which the tool is controlled via wireless communication. The tool communicates with the controller to send the history log data and receive the configured parameters. <b>Refer to 2.2.9</b>
	<b>Operation Disable Mode</b>	The tool has been locked by an operation prohibition signal from the controller in the wireless communication mode. It will be unlocked by a release signal from the controller.
	<b>Pairing mode</b>	This is a mode to check the pairing status. It can also be done on the controller. <b>Refer to 3.3</b>
	<b>Minimum Output Mode</b>	This is a mode in which to check whether torque control is available when the target torque is low. The tool is shut off at the minimum number of pulses. The Tool Manager software is used to change the setting to [Minimum Output Mode]. It can also be done on the controller. <b>Refer to 2.2.8</b>
	<b>Offset Mode</b>	This is a mode in which to correct the calculated torque of the tool for the actual torque. The Tool Manager software is used to change the setting to [Offset Mode]. It can also be done on the controller. <b>Refer to 2.2.8</b>
	<b>Factory Default Mode</b>	This is a mode in which the tool is in the factory default status. Select [Stand Alone Mode] or [Wireless Communication Mode] in accordance with your purpose using the Tool Manager software before use.

# 2.1 BASIC OPERATION

## 2.1.2 TORQUE CONTROL FUNCTION

The tightening torque for the work target is calculated by the torque sensor of the tool. When the calculated torque value reaches the preset target value, the tool is supposed to stop (shut off) automatically.

(For how to set the Shut-Off Torque, **Refer to 2.2.8.**)

### **WARNING**

Make a daily management of torque performance. Otherwise, bolts will be loosened by torque change, causing an accident.

### **CAUTION**

- During work, the trigger switch should be pulled all the way in. If the trigger switch is not pulled in enough, torque control will not function and the tool will not stop automatically.
- At work where a load on the way is higher than the target torque, bolts may not be tightened up because the load on the way is judged to be the target torque.
- At work where members vary, the tightening torque may vary even at the same set torque.
- If you tighten the same bolt twice, overtightening may cause the bolt to break or the bolted member to deform.
- The tightening torque varies with the work conditions. Adjust it in the actual work.
- The bolt tightening torque might change according to the following factors.

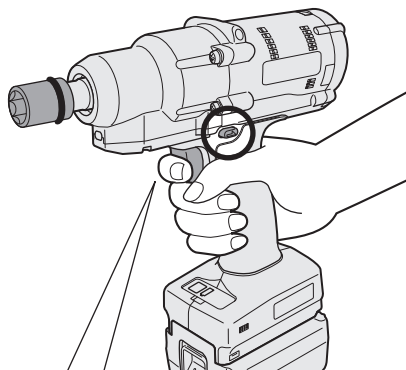
Bolt	Bolt diameter (generally, as the diameter becomes large, the tightening torque will increase), torque coefficient (shown by the bolt manufacturer), grade, length, washer presence and type, etc.
Socket	Length, quality of material, deterioration degree, use of universal joint, use of socket adapter, use of extension socket, etc.
Condition of member to tighten	Quality of material, bearing surface finish, etc.
Working method	How you put the tool to a bolt, force that holds the tool, how you pull the trigger switch, etc.

# 2.1 BASIC OPERATION

## 2.1.3 HOW TO USE

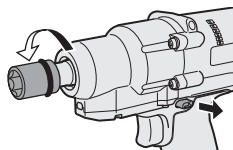
### 1 Choose forward or reverse with the forward/reverse lever, and turn on the trigger switch.

- Trigger switch pull-in operation may delay the startup of rotation for a moment, which is not a failure.
- In case of quick ON/OFF, the rotation startup will be late a little for that.
- If you keep pulling the trigger switch to make rotations continuously, the tool may come to an error (EA) stop automatically because the recordable data per work exceeds the upper limit.
- The operating temperature range of lithium-ion battery packs is 0 °C to 40 °C. If a cold battery pack that is 0 °C or below is used as it is in cold regions etc., the tool may not operate normally. In this case, before use, leave the battery pack in a place that is 10 °C or above for 1 hour or more to raise its temperature. After the temperature has risen, use the battery pack.

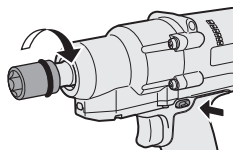


For about 1 second just after a battery pack is attached, trigger switch pull-in operation is not accepted.

#### Forward



#### Reverse



## CAUTION

- Wait for the motor to stop, before operating the forward/reverse lever. Operating it while the motor has not stopped completely will cause a failure.

# 2.1 BASIC OPERATION

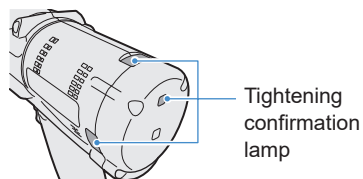
## 2.1.3 HOW TO USE

### 2 See the tightening confirmation lamp display to check whether torque control has functioned.

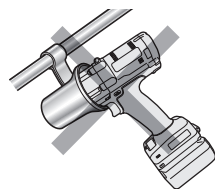
For the tightening confirmation lamp display, **Refer to 2.1.4.**

#### Note

- At reverse work, the tightening confirmation lamps do not light up.
- The lamps will go out when you pull the trigger switch.



To use the tool in a holder, select such a holder as will not interfere with the trigger switch of the tool. If the holder interferes with the trigger switch, the trigger switch will be pulled in to make the battery pack discharge electricity, causing a failure in the battery pack.

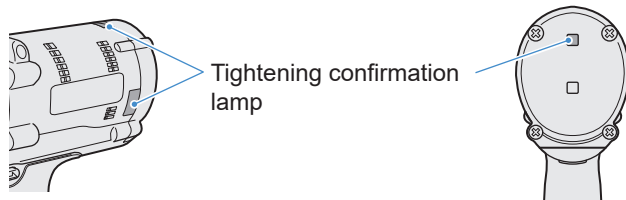




# 2.1 BASIC OPERATION

## 2.1.4 TIGHTENING CONFIRMATION LAMP AND COMMUNICATION LAMP

You can check the tightening result and the communication status by seeing the LED lamps on the tool.



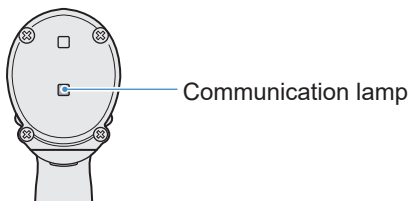
### Tightening Confirmation Lamp Display

Lamp display		Meaning of display	Details
Green	Lit for 2 s + Buzzer (depending on the setting)	Work judged OK	The tightening work reached the set shut-off torque successfully.
Red	Lit for 2 s + Buzzer (depending on the setting)	Work judged NOK	The tightening work did not reach the set shut-off torque. For the cause of incompleteness, check the contents of the history log on the Tool Manager software. <b>Refer to 2.2.12</b>
		Tool error	If any error is shown on the control panel display, take action according to the error description. <b>Refer to 4.3.1</b>
Red	Lit continuously + Buzzer	Auto power-off functioning	If the battery indication lamp is all blinking, replace the battery pack.
		Maintenance Interval Alarm Lock Mode	The tool is locked because it reached the maintenance timing that was set in [Maintenance Interval Alarm]. Also check that the setting value (1 to 99) and "0" are shown alternately on the control panel display. <b>Refer to 2.2.10</b>
Orange	Blinking continuously + Buzzer	Communication error	Take action according to the error description shown on the control panel display. <b>Refer to 4.3.1</b>
Orange	Lit continuously + Buzzer	Out of wireless communication range	Also check "E9" shown on the control panel display. If it is correct, move into the wireless communication range.

# 2.1 BASIC OPERATION

## 2.1.4 TIGHTENING CONFIRMATION LAMP AND COMMUNICATION LAMP

You can check the tightening result and the communication status by seeing the LED lamps on the tool.



### Communication Lamp Display

Lamp display		Meaning of display	Details
Blue	Blinking fast (0.2 s cycle)	Communicating	When the communication lamp is blinking fast, some communications have taken place inside the tool or between the tool and external devices. Do not pull out the USB cable or the battery pack until it goes out.
Blue	Lit continuously	USB connected	While the tool is connected with the Tool Manager software on your PC or tablet, the communication lamp lights up.
Blue	Blinking fast (0.2 s cycle)	Pairing in progress	The communication lamp blinks fast while pairing is in progress.
Blue	Blinking slowly (1 s cycle)	Reconnection in progress	The communication lamp blinks slowly while reconnection is in progress.
Blue	Blinking (0.2 s cycle) + buzzer	Pairing completed	The communication lamp starts blinking slowly (0.5 s cycle) after pairing is completed. After pairing is completed, the tool enters a "Waiting for a wireless signal" or a "Wireless operation prohibited" state at a command from the controller.
Blue	Blinking slowly (1 s cycle)	Waiting for a wireless signal	The communication lamp blinks slowly while the tool is in the wireless communication mode.
—	Off	Wireless operation prohibited	The tool's operation is disabled by an operation prohibition signal from the controller.

# 2.1 BASIC OPERATION

## 2.1.5 CONTROL PANEL FUNCTIONS

**Power is in an OFF state when all the lamps on the control panel have gone out. Pull the trigger switch once to activate the tool before operating it.**

In the following cases, power will be in an OFF state to cut battery drain, and the LED light and all the displays will go out.

- Just after a battery pack is attached
- When you have operated nothing for the following time
  - In [Stand Alone Mode]: About 5 minutes
  - In [Wireless Communication Mode]: About 120 minutes
  - When Tool Manager software is connected: About 20 minutes

### Utilizing the LED Light

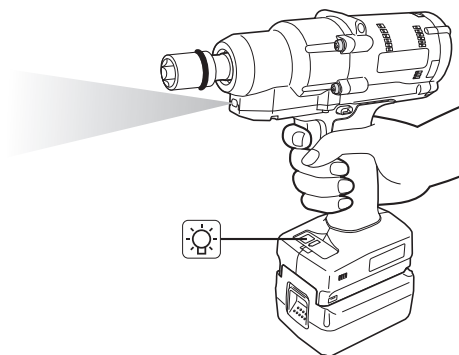
The LED light can be changed by the light ON/OFF button among Linked to trigger, Always lit, and Always out.

When you press the button once, the present status will be shown on the display of the control panel.

Then, whenever you press the button, LED light settings will change.

#### Note

- While the light is lit, if you have operated nothing for about 5 minutes, the light will go out automatically.
- The light uses just a small current to light up. It has little influence on the tool's work capacity.



Display	LED light settings
d1	Linked to trigger
d2	Always lit
d3	Always out

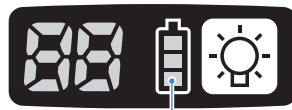


# 2.1 BASIC OPERATION





## 2.1.5 CONTROL PANEL FUNCTIONS

### How to Read the Battery Indication Lamp

- You can check the remaining battery level.
- Use the remaining battery level for reference, because it varies somewhat with the ambient temperature, battery properties, etc.

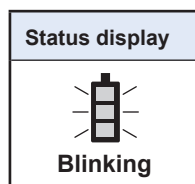


Battery indication lamp

Status display	Remaining battery level
	<b>Full</b>
	<b>About 40% or less</b>
 <b>Blinking</b>	<b>About 20% or less (Time to charge)</b> ⇒Charge the battery pack early.
 <b>Blinking</b>	<b>No remaining battery level</b> ⇒Charge the battery pack. (* Auto power-off functioning)

\* See below for description of the auto power-off function.

### Auto Power-off Function



This is a function to shut off power to the tool when battery voltage dropped to a certain standard. When it functions, even if you pull the trigger switch, the tool will not move until you charge the battery pack (or replace it with another battery pack that is charged).

#### Note

- When auto power-off functions, all the three segments of battery indication lamp will blink. Moreover, the tightening confirmation lamp will also light up in red.
- When the lamp blinks, charge the battery pack immediately (or replace it with another battery pack that is charged).
- The battery pack where auto power-off functioned should be charged until charging is completed. If charging is not enough, the auto power-off function may not be canceled.

## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.1 INSTALLING AND UPDATING THE TOOL MANAGER SOFTWARE

Before using the tool, install the Tool Manager software in your PC or tablet by following the procedure below.

Preparation:

Prepare a PC or tablet with the supported OS installed.

(For the supported OS, **Refer to 3.2** .)

### Installation

#### 1 Download the installer of the Tool Manager software from our website.

For how to download the Tool Manager software, **Refer to 1.1.1** .

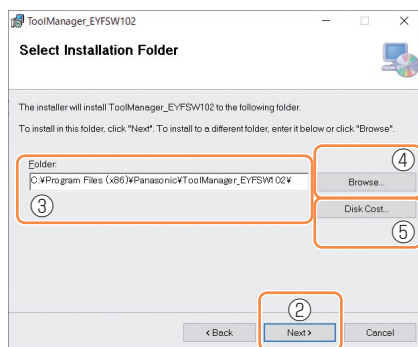
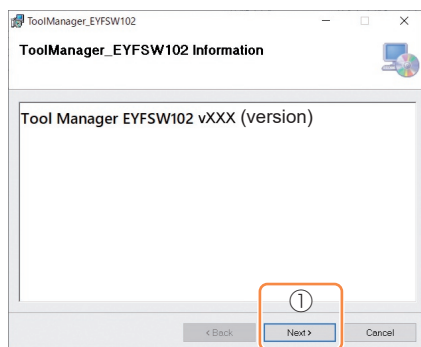
#### 2 Open the folder where you saved the downloaded installer and start "Install.exe".

#### 3 When the installer is displayed, select [Next] (①).

#### 4 The screen to select an installation folder is displayed.

To install the software in the default folder, select [Next] (②). To install it in another folder, enter a folder path in "Folder" (③) or select [Browse] (④) and then select a desired installation folder.

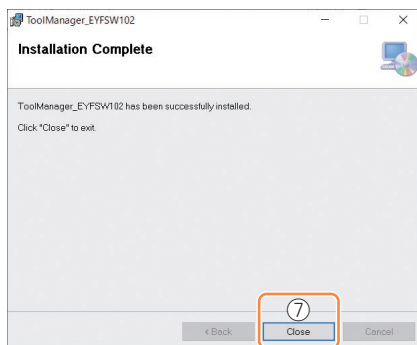
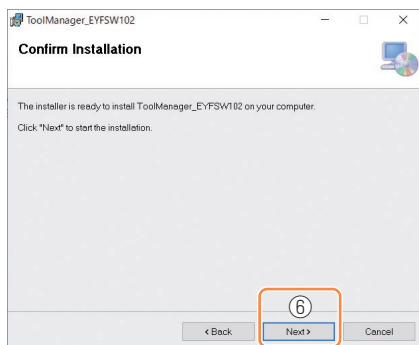
You can check whether the installation drive has enough capacity by selecting [Disk Cost] (⑤).



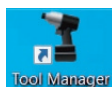
## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.1 INSTALLING AND UPDATING THE TOOL MANAGER SOFTWARE

- 5** When the screen to confirm installation is displayed, select [Next] (⑥).
- 6** When the Windows dialog is displayed asking whether to allow the application to make a change to your device, select [Yes].
- 7** Installation of the Tool Manager software starts.  
When the notification that the installation has been successfully completed is displayed, select [Close] (⑦).



- 8** The installation is completed if you find the Tool Manager icon on the desktop.



### Update

- You can update the Tool Manager software by reinstallation with a newer version installer. (Uninstallation is not required before update.)
- At the time of installation, confirm the version information shown on the initial screen of the installer.

# 2.2 USING THE TOOL MANAGER SOFTWARE

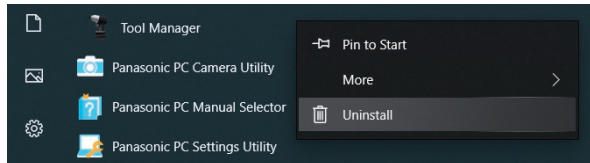
## 2.2.2 UNINSTALLING THE TOOL MANAGER SOFTWARE

You can uninstall the Tool Manager software by performing the standard Windows procedure for uninstalling the application.

Uninstalling the Tool Manager software does not clear the data of history log, configured parameters, and option settings, which will be taken over if the Tool Manager software is reinstalled.

- Select “Tool Manager” via one of the following Windows menu and execute uninstallation. (For (1) and (3), right-click to display the uninstallation option.)

### (1) (Start Menu)

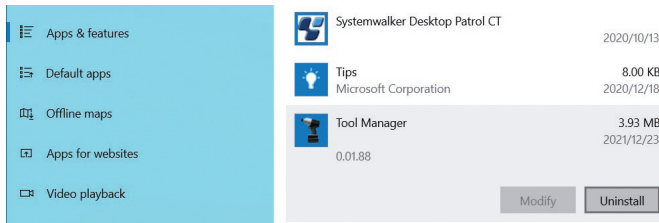


#### Note

- For (1), the uninstallation option will not appear if you have not yet restarted your device since installing the Tool Manager software.

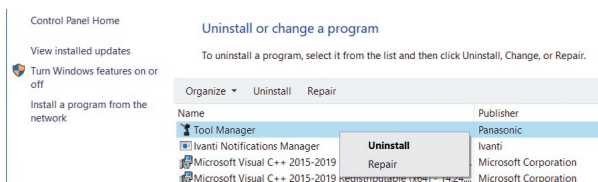
### (2) Apps & features

#### (Windows Settings) → Apps → Apps & features



### (3) Programs and Features

#### (Control Panel → Programs → Programs and Features)

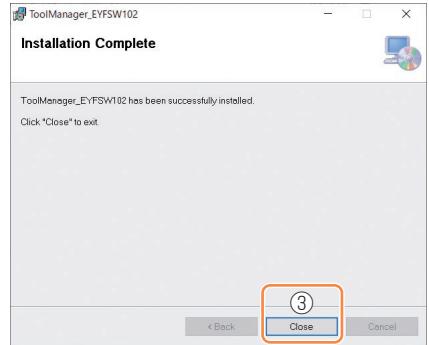
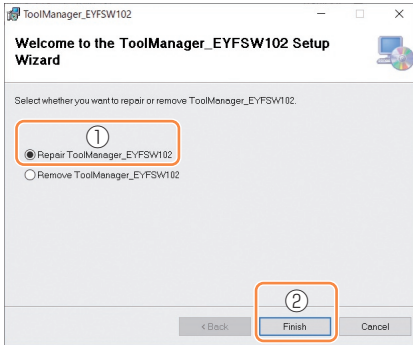


# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.3 REPAIRING THE TOOL MANAGER SOFTWARE

You can repair the Tool Manager software via its installer. Try this if the Tool Manager software will not start.

- 1** On your PC or tablet with the Tool Manager software installed, start the installer of the Tool Manager software as described in 2.2.1.
- 2** When the screen to repair or remove Tool Manager is displayed, select “Repair ToolManager\_EYFSW102” (①) and click [Finish] (②).
- 3** Repair of the Tool Manager software starts. When the notification that the repair has been successfully completed is displayed, select [Close] (③).





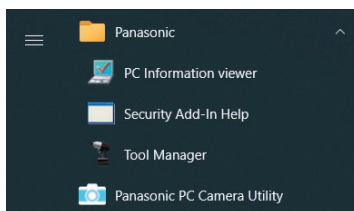
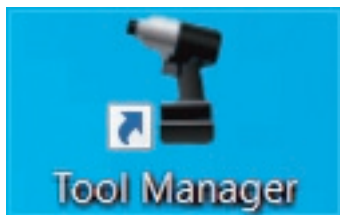
# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.4 STARTING/EXITING THE TOOL MANAGER SOFTWARE

You can start and exit the Tool Manager software by following the procedure below.

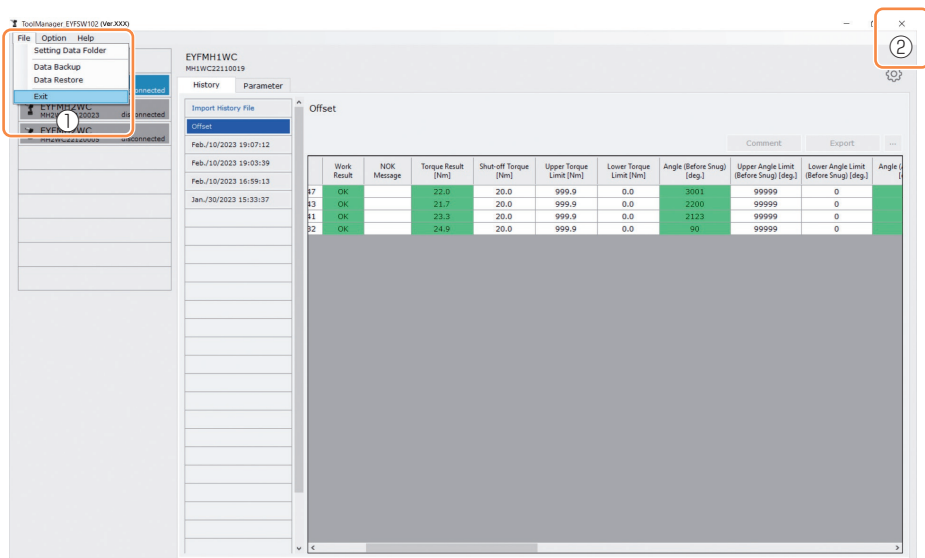
### Start the Tool Manager Software

To start the Tool Manager software, select Tool Manager on the desktop or from the Windows start menu.



### Exit the Tool Manager Software

To exit the Tool Manager software, select [Exit] in [File] (①) or select the [x] button (②) on the upper right of the window.



## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.5 CONNECTING/DISCONNECTING THE TOOL

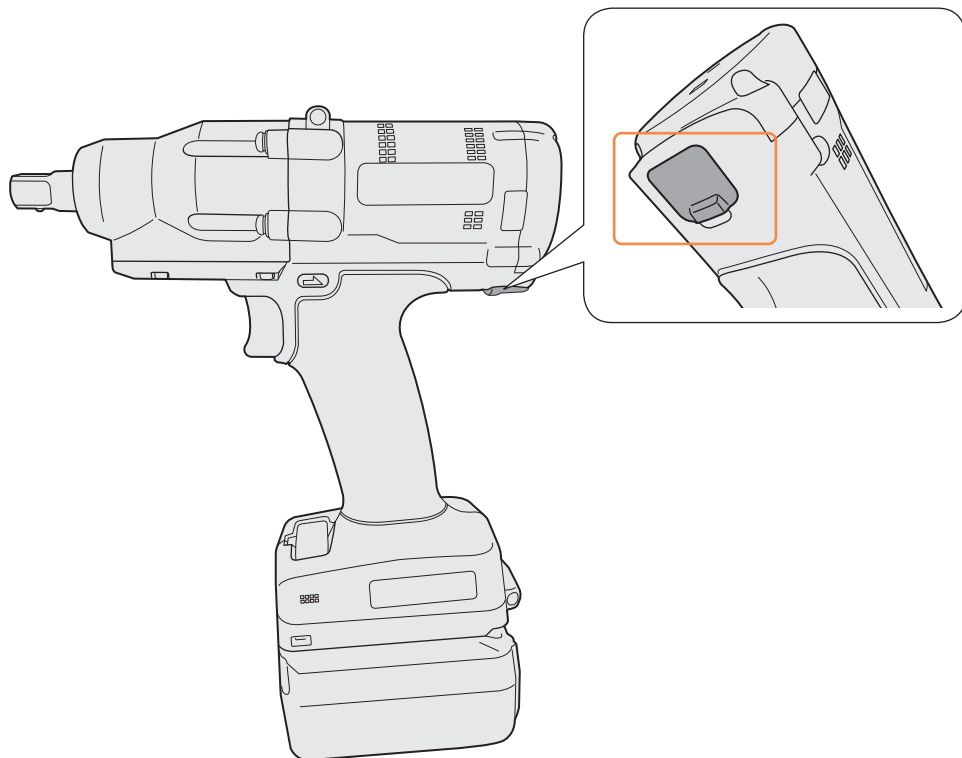
The tool and your PC or tablet on which the Tool Manager software is installed can be used by connecting them with a USB cable.

Preparation: Attach a charged battery pack to the tool.

Start the Tool Manager software installed on your PC or tablet.

#### USB Connector

- There is a USB port on the underside of the housing in the rear of the tool. Open the cover before use.
- USB connector (Tool side): ※ USB Type-C™



※USB Type-C is a trademark of USB Implementers Forum.

# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.5 CONNECTING/DISCONNECTING THE TOOL

### Connect the Tool

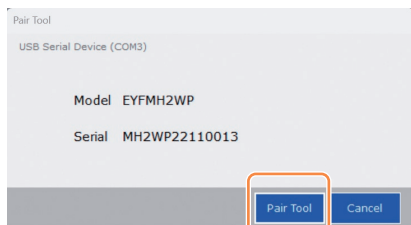
**1** If power to the tool is not on, pull the trigger switch of the tool to turn on the power.

**2** Connect the tool to your PC or tablet with a USB cable.

### CAUTION

- Hold the plug and insert or remove it straight. If you insert it diagonally, the connector will be deformed and cause a malfunction.
- If performing above steps **2** to **1** in this order, you may fail in the connection.

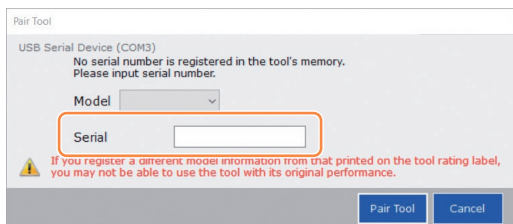
**3** When the pairing dialog is displayed, select [Pair Tool].



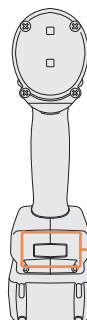
※ Depending on the OS, it may be displayed differently.

### Note

- If there is no serial number information in the tool, select a tool's model number and enter the serial number from the pairing dialog. (The serial number is printed on the tool's color plate.)



※ Depending on the OS, it may be displayed differently.



Color plate

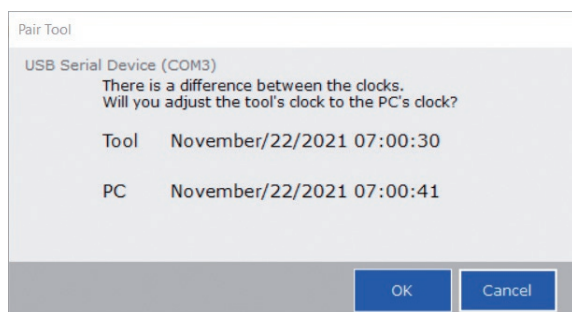
# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.5 CONNECTING/DISCONNECTING THE TOOL

**4** If a tool's internal clock is different from a clock of your PC or tablet in time by 10 seconds or more, the dialog will ask whether to correct the time of the tool's internal clock to that of the clock of your PC or tablet.

Select [OK] to make the correction or select [Cancel] to skip this process without correcting the clock.

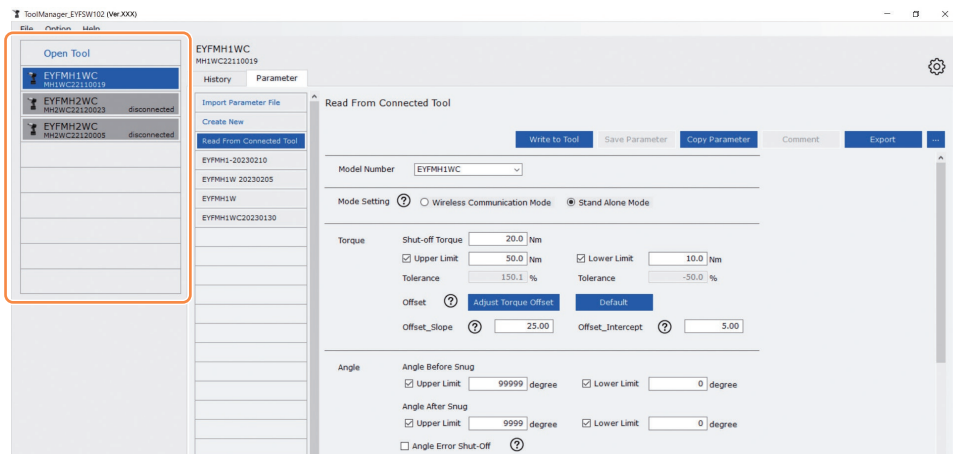
The time of the tool's internal clock is reflected in the history log in [Stand Alone Mode].



※ Depending on the OS, it may be displayed differently.

**5** The connected tool is added to the top of the tool list on the Tool Manager software.

Once added to the tool list, the tool remains in the list even when it is disconnected. (If the number of tools on the list exceeds 10, the oldest selected one will be hidden.)



## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.5 CONNECTING/DISCONNECTING THE TOOL

#### Disconnect the Tool

---

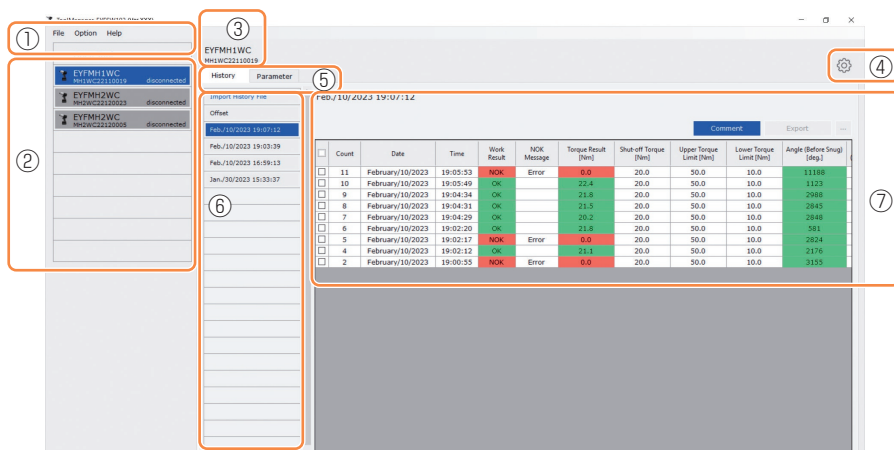
Unplug the USB cable from the tool or the connected PC or tablet.

#### CAUTION

- If the communication lamp (blue) on the tool is blinking fast (0.2 s cycle), this means that data is being communicated. Do not disconnect the USB cable, otherwise there will be a risk of damaging the data being communicated.
- Do not work with the USB cable connected with the tool.
- Before use for work, close the USB connector cover securely by pushing it all the way in.

# 2.2 USING THE TOOL MANAGER SOFTWARE

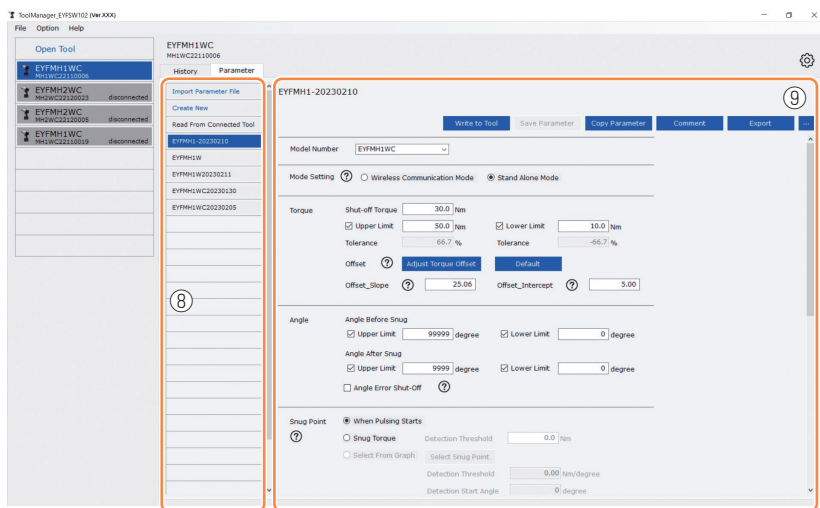
## 2.2.6 SCREEN LAYOUT OF THE TOOL MANAGER SOFTWARE



Name		Overview
①	Menu bar	Opens the menus and windows of file, option, and help.
②	Tool list	This is a list for selecting a tool to operate.
③	Tool information display	The model number and serial number of the selected tool are displayed.
④	Device setting icon	Opens the windows of [Tool Settings] and [Tool Info].
⑤	Display change tab	Changes the history list/history display screen and the parameter list/parameter input screen with each other.
⑥	History list	This is a list for selecting a history log folder to display. Whenever a history log is imported, it will be saved to a newly created folder.
⑦	History display	The list of history logs in the selected history log folder is displayed.

# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.6 SCREEN LAYOUT OF THE TOOL MANAGER SOFTWARE



Name		Overview
⑧	Parameter list	This is a list for selecting a configured parameter file to edit. It can be selected from the data saved in the tool being connected or the Tool Manager software.
⑨	Parameter input screen	This is a screen for inputting configured parameters.

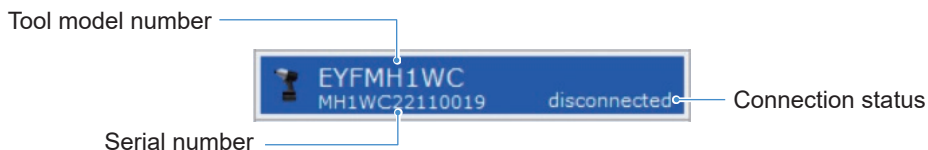
# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.7 MANAGING THE TOOL FROM THE TOOL LIST

A tool to operate with the Tool Manager software is selected from the tool list. The tool list displays the tools being connected with the Tool Manager software or the tools that have been connected before. (Up to 9 tools can be displayed.)

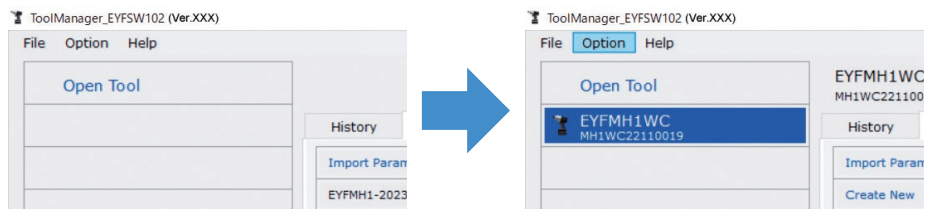
- Data is being communicated while the communication lamp (blue) on the tool is blinking (0.2 s cycle). Do not disconnect the USB cable. Otherwise, there will be a risk of corrupting the data being communicated.

The item of each tool on the tool list displays information on the tool model number, serial number, and connection status.

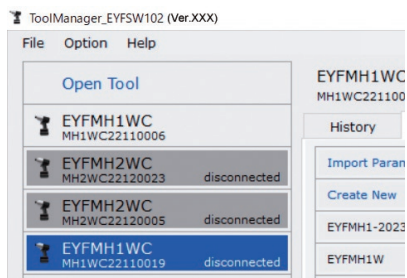


### Add to the Tool List

When you pair the tool with the Tool Manager software, it will be displayed automatically on the tool list.



Even if the tool is disconnected, it will remain on the tool list as a disconnected tool. (If the number of tools on the list exceeds 10, the oldest selected one will be hidden.)





## 2.2 USING THE TOOL MANAGER SOFTWARE

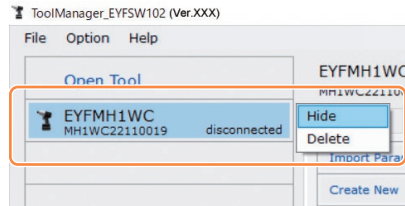
### 2.2.7 MANAGING THE TOOL FROM THE TOOL LIST

#### Hide the Tool

The tool in a disconnected state can be hidden from the tool list.

(The data of the hidden tool remains in the Tool Manager software, and it can be recalled with [Open Tool].)

- 1 Select a disconnected tool on the tool list, and click [Hide].



- 2 When the dialog is displayed asking whether to hide the tool, select [Hide], and the selected one will be hidden from the tool list.

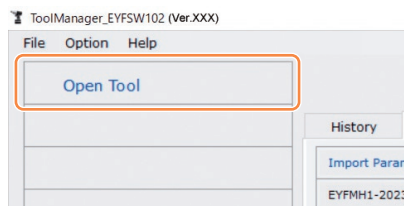
# 2.2 USING THE TOOL MANAGER SOFTWARE

## 2.2.7 MANAGING THE TOOL FROM THE TOOL LIST

### Recall the Tool

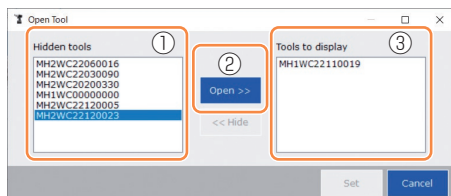
The hidden tool can be recalled with [Open Tool].

- 1 Click [Open Tool] to display the dialog to open tools.



- 2 Select a serial number of the tool to display from the [Hidden tools] list (①), click [Open] (②), and move it to the [Tools to display] list (③).

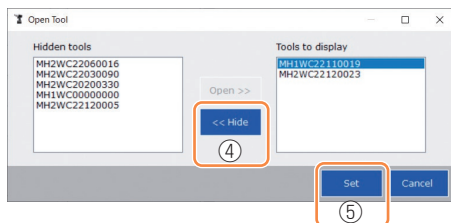
(Up to 9 tools can be set to the displayed tool list.)



- 3 To hide the tool being displayed, hide it from the [Tools to display] list.

Select a serial number of the tool, click [Hide] (④), and move it to the [Hidden tools] list. (The tool being connected cannot be hidden.)

- 4 When you have selected a tool to display or a tool to hide, click [Set] (⑤) to refresh the tool list.



## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.7 MANAGING THE TOOL FROM THE TOOL LIST

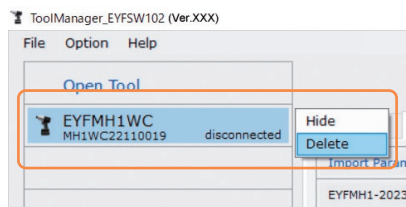
#### Delete the Tool

The tool in a disconnected state can be deleted from the tool list.

The history log data of the deleted tool is completely erased from the Tool Manager software.

Since the erased history log cannot be restored, you are recommended to back it up. (For how to make a backup, [Refer to 2.2.14.](#))

- 1 Select a disconnected tool on the tool list, and click [Delete].



- 2 When the dialog is displayed asking whether to delete the tool, select [Delete], and the selected one will be deleted from the tool list and the history log data will be deleted completely.

## 2.2 USING THE TOOL MANAGER SOFTWARE

### 2.2.8 CONFIGURING PARAMETERS OF THE TOOL

This tool can be used by configuring parameters that specify the operation.

#### (1) How to Use Parameters

##### ■ Stand Alone Mode

The tool runs according to the parameters registered in its internal storage.

