Operating Instructions

Panasonic

Cordless Impact Driver

Model No:EY75A7



Before operating this unit, please read these instructions completely and save this manual for future use.

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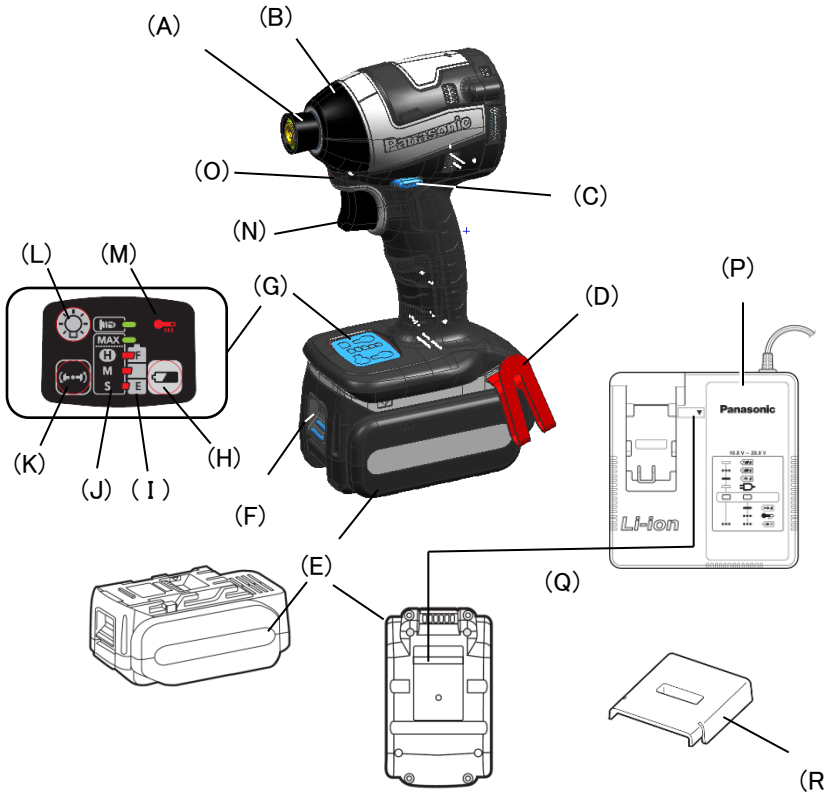
English: Page 1

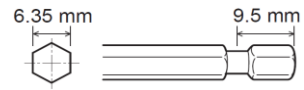
FUNCTIONAL DESCRIPTION



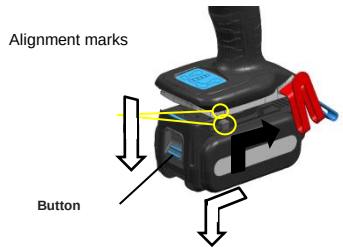
(A)	6.35 mm hex quick connect chuck	(B)	Nose protector
(C)	Forward/Reverse lever	(D)	Belt hook
(E)	Battery pack	(F)	Battery pack release button
(G)	Control panel	(H)	Battery level button
(I)	Battery level indicator	(J)	Impact power mode display
(K)	Impact power mode button	(L)	LED light button
(M)	Overheat warning lamp (motor/battery)	(N)	Variable speed control trigger
(O)	LED light	(P)	Battery charger
(Q)	Alignment marks	(R)	Pack cover

Illustration

【 Fig.1 】

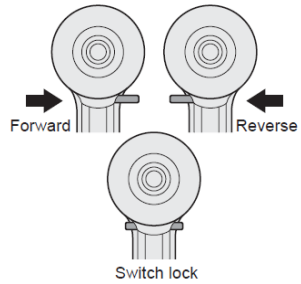


【 Fig.2 】

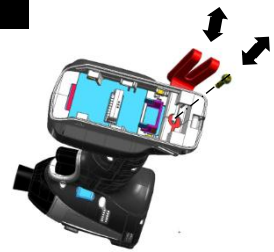


Attaching Removing

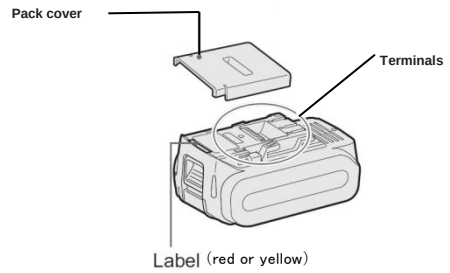
【 Fig.3 】



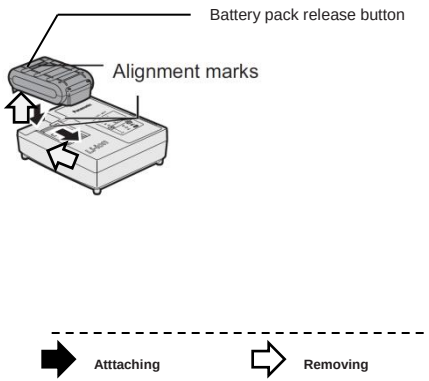
【 Fig.4 】



【 Fig.5 】

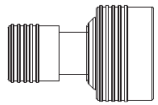


【 Fig.6 】



【 Fig.7 】

EY9HX111E



Original instructions: English
Translation of the original instructions:
Other languages

Read “the Safety Instructions ” booklet and the following before using.

I. ADDITIONAL SAFETY RULES

1)**Wear ear protectors.**
Exposure to noise can cause hearing loss.

2)**Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring;** contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.

3)Wear a dust mask, if the work causes dust.

4)Be aware that this tool is always in an operating condition, since it does not have to be plugged into an electrical outlet.

5)When drilling or driving into walls, floors, etc., “live” electrical wires may be encountered. DO NOT TOUCH THE CHUCK OR ANY FRONT METAL PARTS OF THE TOOL! Hold the tool only by the plastic handle to prevent electric shock in case you drill or drive into a “live” wire.

6)If the bit become s jammed, immediately turn the trigger switch off to prevent an overload, which can damage the battery pack or motor. Use reverse motion to loosen jammed bits.

7)Do NOT operate the Forward/Reverse lever when the trigger switch is on. The battery will discharge rapidly and damage to the unit may occur.

8)During charging, the charger may become slightly warm. This is normal. Do NOT charge the battery for a long period.

9)When storing or carrying the tool, set the Forward/Reverse lever to the center position (switch lock).

10) Do not strain the tool by holding the speed control trigger halfway (speed control mode) so that the motor stops.

11) To prevent injury during use, hold the tool steady at all times and avoid waving it around.

12) Make certain that there are no hidden gas or water pipes, or electrical wires in the area where you will be working. Coming into contact with hidden pipes or wires could result in electric shock, or water or gas leaks.

13) Make sure to hold the object you are working on steady.

14) Ensure that the area where you will be working is well-lit.

15) Avoid unexpected starts by keeping your finger off the trigger switch while moving the tool, and making sure the tool is switched off before inserting the battery pack.

16) Be sure to remove adjusting keys and wrenches.

• Make certain that adjusting keys, wrenches, and other tools have been removed before turning the tool on.

17) Always stay focused and exercise caution during operation.

• When operating cordless tools, always remember the proper way to use them, pay attention to your surroundings, and exercise caution.

• Use common sense.

• Do not operate the tool when tired.

18) Check for damaged parts.
- Check thoroughly for damage to the protective cover and other parts before operating.
- Check to make sure the tool and all of its functions are working properly.
- Check the adjustment of all movable parts, and check all fixed parts to make sure they are fitted properly and free of damage. Check all parts of the tool for abnormal function.

19) When attempting to repair the protective cover or other parts, please follow the instructions in the user manual. In cases where there are no instructions in the manual, please take it back to the store to have it repaired.
- If the drill fails to start when the trigger switch is held down or fails to stop when the trigger switch is released, please remove the battery and stop using it.

20) If the tool gets exceptionally hot during use, please take it in for service and repair.

21) It is very important to take the tool back to the store for repairs. Someone without the proper knowledge and experience is not only unprepared to carry out repairs, there is also a risk that he or she will be injured.

22) To avoid potential injury, keep face and hands away from the drill bit and any shavings.

23) Do not wear gloves when operating the tool, as they may get caught by the drill, leading to injury.

24) Battery terminals, screw shavings, and tool accessories such as drill bits will be very hot immediately after operation. Do not touch them as there is a risk of burning yourself.

Symbol	Meaning
V	Volts
⎓	Direct current
n_0	No load speed
… min^{-1}	Revolutions or reciprocations per minutes
Ah	Electrical capacity of battery pack
	Read the operating instructions before use.
	For indoor use only.

⚠ 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 drive the likes of nails into the battery pack, subject it to shocks, dismantle it, or attempt to modify it.
- 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.
- Never use other than the dedicated charger to charge the battery pack.
  Otherwise, the battery may leak, overheat, 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.

II. ASSEMBLY

Attaching or Removing Bit

NOTE:
When attaching or removing a bit, disconnect battery pack from tool or place the switch in the center position (switch lock).

1. Hold the collar of quick connect chuck and pull it out from the driver.
2. Insert the bit into the chuck.
   Release the collar.
3. The collar will return to its original position when it is released.
4. Pull the bit to make sure it does not come out.
5. To remove the bit, pull out the collar in the same way.

CAUTION:
If the collar does not return to its original position or the bit comes out when pulled on, the bit has not been properly attached. Make sure the bit is properly attached before use.

Use 6.35 mm hexagonal bits.
To ensure proper securement of the bit, use only hexagonal bits with 9.5 mm detent. [Fig.1]

Attaching or Removing Battery Pack [Fig.2]

1. To connect the battery pack:
   Align the highlighted marker points and attach battery pack.
   - Slide the battery pack until it locks into position.
2. To remove the battery pack:
   Push the button and slide the battery pack forward.

III. OPERATION

⚠ WARNING
- Do not inhale any smoke emitted from the tool or battery pack as it may be harmful.

[Main Body]

Switch and Forward/Reverse Lever Operation [Fig.3]

1. Push the lever for forward or reverse rotation. Check the direction of the lever before using.
2. Depress the trigger switch slightly to start the tool slowly.
3. Speed will increase by pressing the trigger. The tool stops working immediately by releasing the trigger.
4. When done with an application, lock the switch by centering the lever.

To Change the Belt Hook Location Side

The belt hook can be attached to either side of the unit. [Fig.4]
1. Removing the hook
   (1) Remove the nut.
   (2) Draw out the hook.
2. Attaching the hook to the other side
   (1) Insert the hook in the other side.
   (2) Tighten the nut fully so that it securely fastened.

Variable Speed Control Trigger

To set the center of a hole, pull the trigger slightly to start the bit rotation slowly.
The more the speed control trigger is pulled, the higher the speed becomes.

CAUTION:
When operating the tool by pulling the trigger, there may be a momentary lag before rotation starts. This does not signal a malfunction.

* This lag occurs as the tool's circuitry starts up when the trigger is pulled for the first time after installing a new battery pack or after the tool has not been used for at least 1 minute (or at least 5 minutes when the LED is on). Rotation will start without any lag during second and subsequent operations.

Control Panel

Impact Power Mode Select --- (k) on page 2

- Selecting the impact power among 5 modes (Hard, Max, Self-drilling screw, Soft, Medium).

  Press the impact power mode button to set it. The mode changes to Hard, Max, Self-drilling screw, Soft or Medium each time the button is pressed.

  The driver is preset to "Hard" impact mode setting when shipped from the manufacturer.

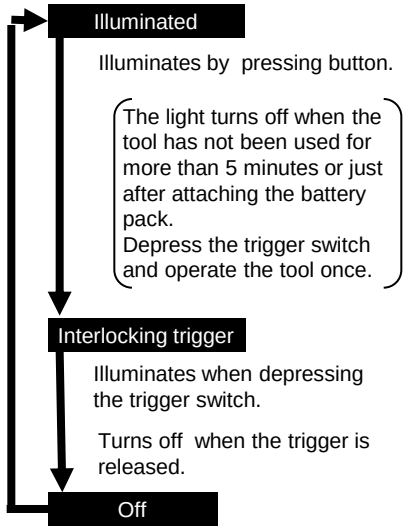
Hard  0 – 2500 r.p.m. and 0 – 3100 i.p.m.	•Jobs requiring high torque where there is no possibility of breaking screw or chipping screw head. *Fastening larger size bolt (M8 or larger) *Fastening long wood screw	
Medium  0 – 1450 r.p.m. and 0 – 2900 i.p.m.	• Jobs requiring decent torque with minimizing the possibility of breaking screw, chipping screw head, or breaking bit. *Fastening smaller diameter bolt (such as M6)	
Soft  0 – 950 r.p.m. and 0 – 1900 i.p.m.	• Jobs requiring limited torque with eliminating the possibility of breaking screw, chipping screw head, or breaking bit. • Jobs requiring minimal damage of finished exterior surface. *Fastening smaller diameter bolt (M6 or smaller) *Fastening into plastic *Installing drywall	
Self-drilling screw  0 – 2500 r.p.m. and 0 – 1200 i.p.m.	• Jobs requiring flush finish of self-drilling screw. (dia.4mm x 15mm or smaller) (Automatic mode change starting from Hard mode to slower r.p.m. before flush finish)	

* i.p.m. = Impact per minute.

Avoid repeatedly depressing the switch when the bolts and screws are securely fastened.
Not doing so may cause a delay in rotation starting, or the Impact Power mode display to flash and prevent rotation from starting for circuit protection.

LED light --- (L) on page 2

Press the button and set illumination condition.



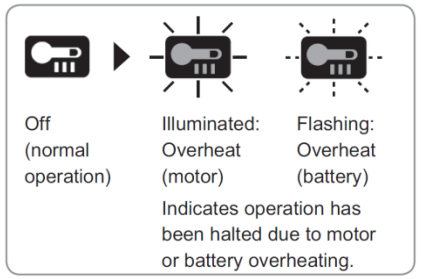
The light illuminates with very low current, and it does not adversely affect the performance or its battery capacity.

CAUTION:

- The built-in LED light is designed to illuminate the small work area temporarily.
- Do not use it as a substitute for a regular flashlight, since it does not have enough brightness.

CAUTION: DO NOT STARE INTO BEAM. Use of controls or adjustments or performance of procedures other than those specifi ed herein may result in hazardous radiation exposure.

Overheat warning lamp --- (M) on page 2



To protect the motor or battery, be sure to note the following when carrying out this operation.

- If the motor or battery becomes hot, the protection function will be activated and the motor or battery will stop operating.
  The overheat warning lamp on the control panel illuminates or flashes when this feature is active.
- If the overheating protection feature activates, allow the tool to cool thoroughly (at least 30 minutes). The tool is ready for use when the overheat warning lamp goes out.
- Avoid using the tool in a way that causes the overheating protection feature to activate repeatedly.
- If the tool is operated continuously under high-load conditions or if it is used in hot-temperature conditions (such as during summer), the overheating protection feature may activate frequently.
- If the tool is used in cold-temperature conditions (such as during winter) or if it is frequently stopped during use, the overheating protection feature may not activate.

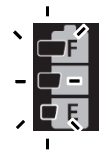
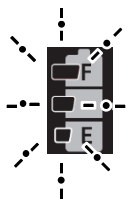
Battery level indicator and button --- (I) and (H) on page 2

- Press the battery level button.
  Battery level indicator shows battery level in three levels while pressing the button.
  It shifts to Impact power mode when release the button.

NOTE:

The indicator will not show the battery level even the button is pushed in the following cases.

- The main unit is powered off.
- Just after attaching the battery pack
- The main unit or battery level button is not operated for approx. five minutes.
  Push the battery level button again after depressing the trigger switch.
- The battery temperature is high.
  Stop the operation and wait until the battery temperature is low.

Indicator		Battery status
	3 lamps illuminated	Charged enough
	2 lamps illuminated	Approx. 60% remaining
	One lamp illuminated	Battery level is low. Need to be charged soon
	3 lamps flashing	Empty Need to be charged immediately

Battery level indication is just guide.
The indication may change due to the condition of battery or ambient temperature.

Excessive (complete) discharging of lithium ion batteries shortens their service life dramatically. The driver includes a battery protection feature designed to prevent excessive discharging of the battery pack.

Recommended Grip

Use the grip to hold and operate the driver with one hand. If the job requires additional force, you can push against the rear end of the driver with your other hand.

[Battery Pack]

For Appropriate Use of Battery Pack [Fig.5]

- The rechargeable batteries have a limited life.
- For optimum battery life, store the Li-ion battery pack following use without charging it.
- When charging the battery pack, confirm that the terminals on the battery charger are free of foreign substances such as dust and water etc. Clean the terminals before charging the battery pack if any foreign substances are found on the terminals.
  The life of the battery pack terminals may be affected by foreign substances such as dust and water etc. during operation.
- 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 sparks, burns or a fire.
- When operating the battery pack, make sure the work place is well ventilated.

Be sure to use the Pack cover

When the battery pack is removed from the main body of the tool, replace the battery pack cover immediately in order to prevent dust or dirt from contaminating the battery terminals and causing a short circuit.

⚠ **CAUTION:**

To protect the motor or battery, be sure to note the following when carrying out operation.

- If the motor and battery becomes hot, the protection function will be activated and the motor and battery will stop operating.

For safe use

- The battery pack is designed to be installed by proceeding two steps for safety. Make sure the battery pack is installed properly to the main unit before use.
- If the battery pack is not connected firmly when the switch is switched on, the overheat warning lamp and the battery low warning lamp will flash to indicate that safe operation is not possible, and the main unit will not rotate normally. Connect the battery pack into the unit of the tool until the red or yellow label disappears.

[Battery Charger]

Charging

⚠ **CAUTION:**

1)The charger is designed to operate on standard domestic electrical power only as stated in the rating plate. Charge only on the voltage indicated on the rating plate of unit. e.g.230v / 50Hz.

2)Do not attempt to use it on any other voltage or frequency rating!

3)If the temperature of the battery pack falls approximately below −10° C (14° F), charging will automatically stop to prevent degradation of the battery.

4)The ambient temperature range is between 0° C (32° F) and 40° C (104° F). If the battery pack is used when the battery temperature is below 0° C (32° F), the tool may fail to function properly.

5) Use the charger at temperatures between 0° C and 40° C, and charge the battery at a temperature similar to that of the battery itself. (There should be no more than a 15° C difference between the temperatures of the battery and the charging location.)

6)When charging a cool battery pack (below 0° C (32° F)) in a warm place, leave the battery pack at the place and wait for more than one hour to warm up the battery to the level of the ambient temperature.

7)Cool down the charger when charging more than two battery packs consecutively.

8)Do not insert your fingers into contact hole, when holding charger or any other occasions.

9) To prevent the risk of fire or damage to the battery charger.
- Do not cover vent holes on the charger and the battery pack.
- Unplug the charger when not in use.

NOTE:

Your battery pack is not fully charged at the time of purchase. Be sure to charge the battery before use.

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

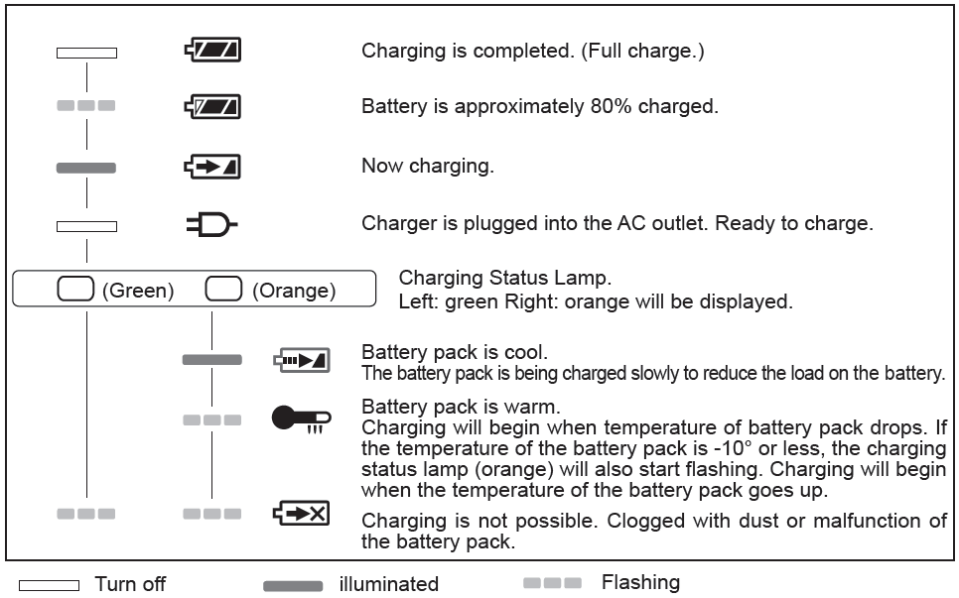
2. Connect the battery pack firmly into the charger.
   1 Line up the alignment marks and place the battery onto the dock on the charger.
   2 Slide forward in the direction of the arrow.
   [Fig.6➡]
3. During charging, the charging lamp will be lit. When charging is completed, an internal electronic switch will automatically be triggered to prevent overcharging.

- Charging will not start if the battery pack is hot (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 batter 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.

6. If the temperature of the batter 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.
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. [Fig.6➡]

LAMP INDICATIONS



Battery Recycling

ATTENTION:

For environmental protection and recycling of materials, be sure that it is disposed of at an officially assigned location, if there is one in your country.

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



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2012/19/EC and 2006/66/EC.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

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

【For business users in the European Union 】

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

【 Information on Disposal in other Countries outside the European Union 】

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

IV. MAINTENANCE

- Use only a dry, soft cloth for wiping the unit.
  Do not use a damp cloth, thinner, benzine, or other volatile solvents for cleaning.
- In the event that the inside of the tool or battery pack is exposed to water, drain and allow to dry as soon as possible.
  Carefully remove any dust or iron filings that collect inside the tool. If you experience any problems operating the tool, consult with a repair shop.

V. ACCESSORIES

Use only suitable size of bit.
Panasonic original Optional Quick change chuck (EY9HX111E).
Chuck Size: 6.35 mm hex
[Fig.7]

VI. APPENDIX

MAXIMUM RECOMMENDED CAPACITIES

Model No.		EY75A7
Screw driving	Wood screw	Φ 3.5 mm – Φ 9.5 mm
	Self-drilling screw	Φ 3.5 mm – Φ 6 mm
Bolt fastening		Standardbolt : M6 - M16 High tensile bolt : M6 – M12

WARRANTY SUPPLEMENT

- The breakdown and damage caused by usage consistent for a long time (e.g.: factory work on the assembly line, etc.) is out of warranty.
- In the event that the inside of the tool or battery pack is exposed to water, drain and allow to dry as soon as possible. Carefully remove any dust or iron filings that collect inside the tool. If you experience any problems operating the tool, consult with a repair shop.

VII. SPECIFICATIONS

NOTE: Weight indication
Greater than or equal to 1kg : indicated by 0.05kg.
Less than 1kg : indicated by 0.01kg.

MAIN UNIT

Model No.		EY75A7	
Motor voltage		14.4 V DC	18 V DC
No load speed	Soft mode	0 min^{-1} (rpm) ～ 950 min^{-1}(rpm)	
	Medium mode	0 min^{-1} (rpm) ～ 1450 min^{-1}(rpm)	
	Hard mode	0 min^{-1} (rpm) ～ 2500 min^{-1}(rpm)	
	Self-drilling screw mode	0 min^{-1} (rpm) ～ 2500 min^{-1}(rpm)	
Maximum torque		155N・m	160N・m
Impact per minute	Soft mode	0 min^{-1} (ipm)~ 1900 min^{-1}(ipm)	
	Medium mode	0 min^{-1} (ipm)~ 2900 min^{-1}(ipm)	
	Hard mode	0 min^{-1} (ipm)~ 3100 min^{-1}(ipm)	
	Self-drilling screw mode	0 min^{-1} (ipm)~ 1200 min^{-1}(ipm)	
Overall length		118mm	
Weight	With battery pack:EY9L48	1.55 kg	———
	With battery pack:EY9L47	1.3 kg	———
	With battery pack:EY9L54	———	1.65 kg
	With battery pack:EY9L53	———	1.45 kg
Noise, Vibration		See the included sheet	

BATTERY PACK

Model No.	EY9L45	EY9L47	EY9L51	EY9L52
Storage battery	Li-ion battery			
Battery voltage	14.4 V DC (3.6 V × 8 cells)	14.4 V DC (3.6 V × 4 cells)	18 V DC (3.6 V × 10 cells)	18 V DC (3.6 V ×5 cells)

Model No.	EY9L53	EY9L54
Storage battery	Li-ion battery	
Battery voltage	18 V DC (3.6 V × 5 cells)	18 V DC (3.6 V ×10 cells)

BATTERY CHARGER

Model №		**EY0L82**						
Electrical rating		**See the rating plate on the bottom of charger**						
Weight		**0.93 kg**						
Charging time	**Model №**	EY9L45	EY9L47	EY9L50	EY9L51	EY9L52	EY9L53	EY9L54
	Full	60 min	40 min	55 min	70 min	40 min	60 min	75 min

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Germany

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1006,Kadoma,Osaka 571-8501,Japan
http://www.panasonic.net

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