

# Assembly Tools

Bringing Innovation to the Assembly Line

Panasonic





ASSEMBLY TOOLS	
Product Line-Up	2-3
Assembly Tools Benefits	4
Precision Clutch Tools	5-9
Low Torque Clutch Tool	10
Mechanical Pulse Tools	11-23
Assembly Qualifiers	24-25
Assembly Tools Accessories Chart	26-27
Compatibility Table	28
Working Capacities Table	28
PROFESSIONAL POWER TOOLS	
Tough IP Technology	30-33
Battery Technology	34-35
Product Line-Up	36-37
Dual Voltage Technology	38-39
Impact Driver	40
Impact Wrench	41
High Torque Impact Wrench	42
Multi-Impact & Drill Driver	43
Drill & Driver	44-47
Hammer Drill & Driver	48-49
SDS-Plus Rotary Hammer	50-51
Reciprocating Saw	52-53
Multi-Purpose Metal Cutter	54-55
Angle Grinder & Flashlight	56-57
Combo & Power Supply Kits	58-59
NI-MH POWER TOOLS	
Drill & Driver Kits	60-61
Metal Cutter Kit	61
Combo Kit	61
Battery Chargers	62
Battery Compatibility Table	63
Li-ion / Ni-MH Capacity Tables	64-65
Power Tool Accessories Chart	66-67

# Assembly Tools Product Line-up

## Mechanical Pulse Tools



**EYFLA4A**  
10.8V, 3-22Nm



**EYFLA5A**  
10.8V, 6-30Nm



**EYFLA5P**  
10.8V, 6-30Nm



**EYFLA5Q**  
10.8V, 6-30Nm



**EYFLA6J**  
10.8V, 16-53Nm



**EYFLA6P**  
10.8V, 16-53Nm



**EYFMA1J**  
14.4V, 25-100Nm



**EYFMA1P**  
14.4V, 25-100Nm



**EYFPA1J**  
21.6V, 160-650Nm

## Wireless Mechanical Pulse Tools



**EYFLA4AR**  
10.8V, 3-22Nm



**EYFLA5AR**  
10.8V, 6-30Nm



**EYFLA5PR**  
10.8V, 6-30Nm



**EYFLA5QR**  
10.8V, 6-30Nm



**EYFLA6JR**  
10.8V, 16-53Nm



**EYFLA6PR**  
10.8V, 16-53Nm



**EYFMA1JR**  
14.4V, 25-100Nm



**EYFMA1PR**  
14.4V, 25-100Nm



**EYFPA1JR**  
21.6V, 160-650Nm

## Basic Clutch Tools



**EYFGB1N**  
14.4V, 2-5.5Nm



**EYFGB2N**  
14.4V, 5-8Nm



**EYFGB3N**  
14.4V, 5-10Nm

## Programmable Clutch Tools



**EYFGA1N**  
14.4V, 2-5.5Nm



**EYFGA2N**  
14.4V, 5-8Nm



**EYFGA3N**  
14.4V, 5-10Nm

## Wireless Programmable Clutch Tools



**EYFGA1NR**  
14.4V, 2-5.5Nm



**EYFGA2NR**  
14.4V, 5-8Nm



**EYFGA3NR**  
14.4V, 5-10Nm

## Wireless Receivers



**EYFR02B**  
Single Tool Qualifier



**EYFR03**  
Multi-Tool Qualifier

## Oil Pulse Tool



**EYFLC1A**  
10.8V, 18-27Nm

## Low Torque Clutch Tool



**EYFEA1N2S / EYFEA1N**  
2.7-35.4 in.lbs

# Panasonic Cordless Assembly Tools

## Bringing Innovation to the Assembly Line

### Benefits

#### Safer Work Environment

##### Improved Ergonomics

Lightweight and compact, no air hose to drag around.

##### Eliminate Trip Hazards

Removes dangerous air hoses and provides a clear work area.

##### Improved Air Quality

Eliminates airborne oily residue emitted from air tools.



#### Reduce Manufacturing Costs

##### Energy Savings

Cordless tools use 99% less energy than air tools.

##### Improved Quality

Increases accuracy by eliminating air pressure fluctuations.

##### Ease of Installation

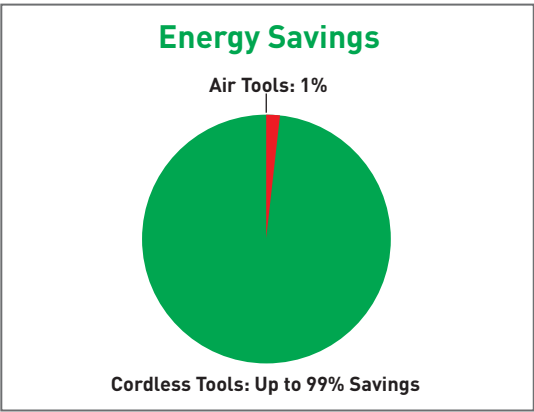
Complete freedom in assembly area design.

##### Maintenance

Eliminates the need for maintaining oilers.

##### Tool Downtime

Recovers from power outages within seconds.



#### Long Life, Durable Components

##### Long Life Clutch

All steel clutch for increased durability in EYFG tools.

##### Mechanical Pulse Unit

Long lasting, low maintenance impulse mechanism in EYFL/M/P tools.

##### Li-ion Battery

Long lasting, high capacity batteries up to 4.2Ah.

##### Brushless Motor

Energy efficient, no maintenance, about doubles the life of the tool.

##### Hybrid Switch

Carries <.5 amp, about doubles the life of the switch.



## Precision Clutch Tools

### Ergonomic, Accurate & Repeatable

- High Accuracy  $\pm 10\%$  at  $Cmk \geq 1.67$  – ISO 5393\*
- Fast Acting All Steel Clutch for Increased Durability
- Photo Interrupter Sensor Increases Clutch Life and Tool Accuracy
- 60 Stage Adjustable Clutch for Precise Adjustment
- Tamper Resistant Clutch for Increased Quality
- Programmable Version for Increased Versatility\*
- Wireless Version for Error Proofing and Data Collection\*\*



Basic Clutch Tools



Programmable Clutch Tools\*



Wireless Programmable Clutch Tools\*\*

### Programmable “Quick Set” Features

#### Speed Control

Adjustable speed in 10 rpm increments to exactly match the application.

#### Cross Thread Reduction

The tool first reverses 360 degrees, aligning the threads, greatly reducing the possibility of cross threads.

#### Cross Thread / Rehit Detection

If the clutch is activated before the programmable minimum runtime, the tool stops the fastening process and signals a NOK fastening.

#### Auto Downshift

After a programmable period of time, the rpm automatically downshifts to 300 rpms maximizing operator’s productivity.

#### Variable Speed Control

Enable variable speed or single speed trigger operation.

#### Out of Range / Anti-Theft

When enabled, the tool is disabled if taken out of the qualifier’s wireless range.

#### Maintenance Interval Alarm

Define in 10,000 increment cycles to notify the operator of upcoming scheduled maintenance.



#### LED Light

Program LED to turn on with trigger switch or on/off switch to match operator preference.

#### Buzzer

The buzzer can be programmed for OK, NOK or Disabled.



# Precision Clutch Tools

## Ergonomic, Accurate & Repeatable

High Accuracy  
 $10\% \cdot Cmk \geq 1.67^*$   
 (ISO5393)  
\*In  $\geq 3Nm$  range



OK/NOK both visual and audible indicators.  
 [Buzzer ON/OFF can be selected]



Optional battery packs:  
 Compact 2.0Ah Battery  
 and High Capacity 4.2Ah battery

## Complete Clutch Tool line-up covers a wide range of applications



Basic Clutch Tools



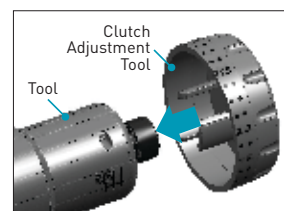
Programmable Clutch Tools



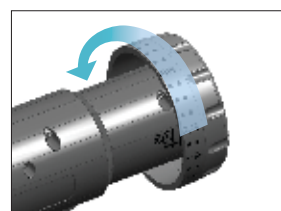
Wireless Programmable Clutch Tools

## 60 Stage adjustable clutch

### How to set clutch

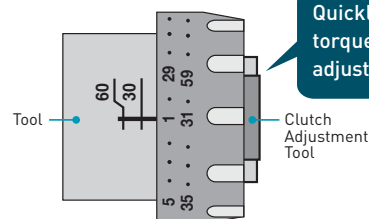


① Insert the clutch adjustment tool into the nose of the tool.



② Turn and set

Rotate the clutch adjustment tool clockwise to increase torque and counter clockwise to decrease torque.



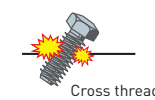
Clutch stage "1"

Quickly set the torque by adjusting the scale.

Clutch Adjustment Tool

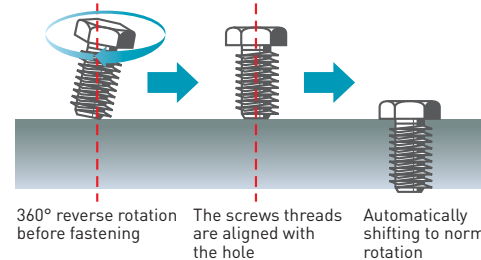
## Advanced Fastening Features

### Cross Thread Reduction

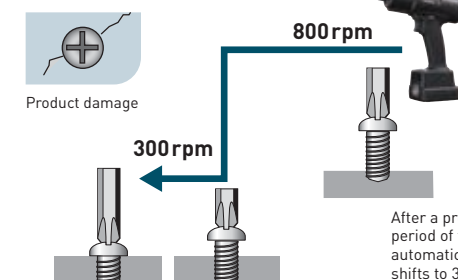


The tool first reverses 360°, aligning the threads, greatly reducing the possibility of cross threads.

### Reverse Rotation!



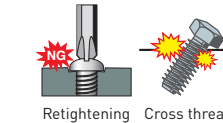
### Auto Downshift Function



Reducing the fasteners impact to the material.

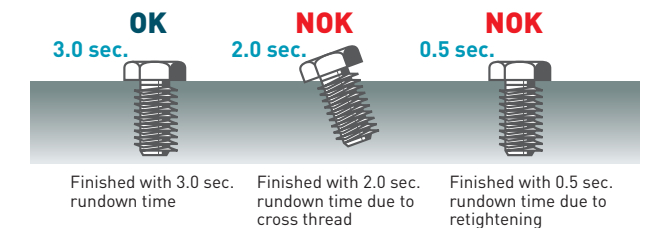
After a programmable period of time, the rpm automatically downshifts to 300 rpm's maximizing operator's productivity.

### Cross Thread / Rehit Detection



If the clutch is activated before the programmable minimum runtime, the tool stops the fastening process and signals a NOK fastening.

### • Example with 3.0 sec. time setting



### Maintenance Interval Alarm

The maintenance interval alarm can be set ON or OFF and is defined in 10,000 increment cycles.

When the total fastenings are within 10,000 fastenings of the preset maintenance interval, the display blinks notifying the operator. Once the tool reaches the preset interval, the tool is locked out from further use.

### Variable Speed Control Function

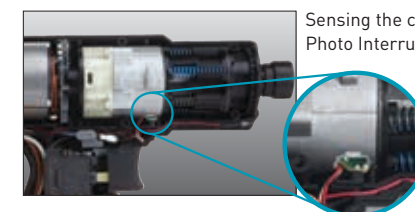
Enable variable speed or single speed trigger operation.

### Auto Battery Shut Down

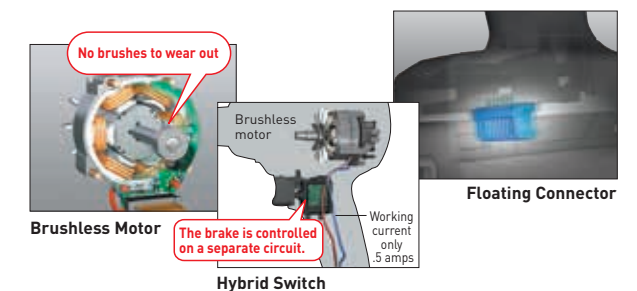
Before the battery power becomes too low to maintain torque, it shuts down the tool and notifies the operator by blinking the LED indicator until a charged battery pack is attached. Standard on all Precision Clutch Tools.

## Durable Design

### Photo interrupter sensor increases clutch life and tool accuracy



Sensing the clutch plate movement, the Photo Interrupter Sensor increases clutch life and tool accuracy not relying on mechanical contacts that wear.



Brushless Motor

Hybrid Switch

Floating Connector

## Additional Features



Rubber grip

**Compact and Lightweight**  
 A well balanced compact and light design



**LED Light**  
 Program LED to turn on with the trigger switch or ON/OFF switch to match operators preference



**Remote Control**  
 Tool setting can be set only by remote control

**New lightweight 2.0Ah battery (EYFB41B) or extended run time 4.2Ah battery (EYFB42B) available**



**Color plate for differentiation**  
 Each tool is color coded for easy identification



Tool Hanger



# Cordless Precision Clutch Tool



## EYFGA2N / EYFGA2NR / EYFGB2N

### Cordless Precision Clutch Tool

14.4V

- Torque control range – 5-8Nm (44.2-70.8 in. lbs.)
- High accuracy  $\pm 10\%$  at  $Cmk \geq 1.67$  – ISO 5393
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Fast acting all steel clutch for increased durability
- Photo interrupter sensor increases clutch life and tool accuracy
- Operator Lockout – Tamper proof features
  - Clutch adjustment tool (included (EYFA32B)) for changing torques
  - Remote control (optional (EYFA31B)) required for “Quick Set” Features
- Available 2.0Ah (EYFB41B) & 4.2Ah (EYFB42B) high capacity 14.4V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and programmable LED work light (ON/OFF Switch or trigger control)
- Charging time (EY0L82B charger (with 2.0Ah EYFB41B battery))\*: Usable: 35 minutes Full: 40 minutes
- Compact size (L x H x W (with 2.0Ah EYFB41B battery)): 7-13/16" x 9-1/8" x 2-15/16"
- Light weight (with 2.0Ah battery (EYFB41B)): 2.8 lbs.
- Includes 1 – Tool body, 1 – (EYFA32B) Clutch Adjustment Tool



- PROGRAMMABLE “QUICK SET” FEATURES**
- Adjustable speed (10 rpm Increments) and programmable auto downshift
  - Prevent and detect cross threads and rehits
  - Maintenance interval alarm
  - Variable speed enable/disable
  - Out of range anti-theft enable/disable (Radio version only)
- \*Available in EYFGA2N and EYFGA2NR

- ERROR PROOFING FEATURES**
- OK/NOK both visual and audible indicators
  - Compatibility with Panasonic Quality Control Monitoring System (Radio version required)
- \*Available in EYFGA2NR

Torque Range	5-8Nm (44.2-70.8 in. lbs.)
Speed	150-750 rpm
Drive	1/4" Hex Quick Change

EYFGA2N/EYFGA2NR/EYFGB2N:  
Battery pack, battery charger and remote control are not included.

\*Charging times are approximate and may be slightly longer depending on conditions.

## EYFGA1N / EYFGA1NR / EYFGB1N

### Cordless Precision Clutch Tool

14.4V

- Torque control range – 2-5.5Nm (17.7-48.6 in. lbs.)
- High accuracy  $\pm 10\%$  at  $Cmk \geq 1.67$  – ISO 5393\*
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Fast acting all steel clutch for increased durability
- Photo interrupter sensor increases clutch life and tool accuracy
- Operator Lockout – Tamper proof features
  - Clutch adjustment tool (included (EYFA32B)) for changing torques
  - Remote control (optional (EYFA31B)) required for “Quick Set” Features
- Available 2.0Ah (EYFB41B) & 4.2Ah (EYFB42B) high capacity 14.4V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and programmable LED work light (ON/OFF Switch or trigger control)
- Charging time (EY0L82B charger (with 2.0Ah EYFB41B battery))\*: Usable: 35 minutes Full: 40 minutes
- Compact size (L x H x W (with 2.0Ah EYFB41B battery)): 7-13/16" x 9-1/8" x 2-15/16"
- Light weight (with 2.0Ah battery (EYFB41B)): 2.8 lbs.
- Includes 1 – Tool body, 1 – (EYFA32B) Clutch Adjustment Tool



- PROGRAMMABLE “QUICK SET” FEATURES**
- Adjustable speed (10 rpm Increments) and programmable auto downshift
  - Prevent and detect cross threads and rehits
  - Maintenance interval alarm
  - Variable speed enable/disable
  - Out of range anti-theft enable/disable (Radio version only)
- \*Available in EYFGA1N and EYFGA1NR

- ERROR PROOFING FEATURES**
- OK/NOK both visual and audible indicators
  - Compatibility with Panasonic Quality Control Monitoring System (Radio version required)
- \*Available in EYFGA1NR

Torque Range	2-5.5Nm (17.7-48.6 in. lbs.)
Speed	150 - 800 rpm
Drive	1/4" Hex Quick Change

EYFGA1N/EYFGA1NR/EYFGB1N:  
Battery pack, battery charger and remote control are not included.

\*In  $\geq 3$ Nm Range \*\*Charging times are approximate and may be slightly longer depending on conditions.

## EYFGA3N / EYFGA3NR / EYFGB3N

### Cordless Precision Clutch Tool

14.4V

- Torque control range – 5-10Nm (44.3-88.5 in. lbs.)
- High accuracy  $\pm 10\%$  at  $Cmk \geq 1.67$  – ISO 5393
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Fast acting all steel clutch for increased durability
- Photo interrupter sensor increases clutch life and tool accuracy
- Operator Lockout – Tamper proof features
  - Clutch adjustment tool (included (EYFA32B)) for changing torques
  - Remote control (optional (EYFA31B)) required for “Quick Set” Features
- Available 2.0Ah (EYFB41B) & 4.2Ah (EYFB42B) high capacity 14.4V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and programmable LED work light (ON/OFF Switch or trigger control)
- Charging time (EY0L82B charger (with 2.0Ah EYFB41B battery))\*: Usable: 35 minutes Full: 40 minutes
- Compact size (L x H x W (with 2.0Ah EYFB41B battery)): 7-13/16" x 9-1/8" x 2-15/16"
- Light weight (with 2.0Ah battery (EYFB41B)): 2.9 lbs.
- Includes 1 – Tool body, 1 – (EYFA32B) Clutch Adjustment Tool



- PROGRAMMABLE “QUICK SET” FEATURES**
- Adjustable speed (10 rpm Increments) and programmable auto downshift
  - Prevent and detect cross threads and rehits
  - Maintenance interval alarm
  - Variable speed enable/disable
  - Out of range anti-theft enable/disable (Radio version only)
- \*Available in EYFGA3N and EYFGA3NR

- ERROR PROOFING FEATURES**
- OK/NOK both visual and audible indicators
  - Compatibility with Panasonic Quality Control Monitoring System (Radio version required)
- \*Available in EYFGA3NR

Torque Range	5-10Nm (44.2-88.5 in. lbs.)
Speed	150 - 450 rpm
Drive	1/4" Hex Quick Change

EYFGA3N/EYFGA3NR/EYFGB3N:  
Battery pack, battery charger and remote control are not included.

\*Charging times are approximate and may be slightly longer depending on conditions.



EYFEA1N2S / EYFEA1N

Cordless Low Torque Clutch Tool and Driver Kit 7.2V

- 21 Stage clutch with auto shut off (Approx.): Low: 2.7-35.4 in. lbs. High: 2.7-17.7 in. lbs.
- Clutch cover for locking out clutch adjustment and speed selector switch
- 2 Speed/reversible: Low: 300 rpm High: 900 rpm
- Low Battery Disable – Disables the tool if the battery doesn't have the capacity to achieve the proper torque
- Over Current Protection – Disables the tool if unable to achieve the target torque
- Variable speed trigger/reversible
- LED work light
- Long lasting 1.5Ah Li-ion battery
- 1/4" Hex quick change chuck
- Powerful: High: 17.7 in. lbs. Low: 53.1 in. lbs.
- Compact size (L x H x W): 5-3/4" x 7-7/8" x 1-5/8"
- Light weight (incl. battery): 1.39 lbs.
- Charging Time (using EY0L20B charger)\*: Usable: 35 minutes Full: 60 minutes
- Max. Screw Driving: High: M4 screw Low: M5 screw
- Kit includes 1 – Tool, 2 – (EY9L20B) 1.5Ah 7.2V Li-ion Battery, 1 – (EY0L20B) Charger and 1 – (WEYFEA1N3137) Clutch Lock Cover



EYFEA1N:  
Battery pack and battery charger  
are not included.

**TYPICAL APPLICATION**

- Electricians
- Electronics Assembly
- Rack/Cabinet Installers
- Production / Assembly Work
- Service Engineers

**Optional Accessory**  
Clutch lock cover

**WEFEA1N3137**

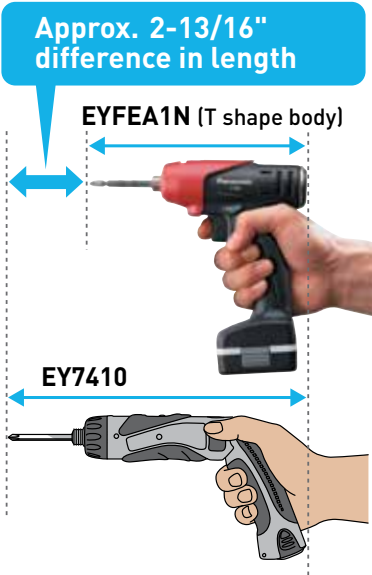
MORE FEATURES

Compact & Lightweight

User-friendly size and weight of EYFEA1N can reduce operator fatigue. Well balanced T shape body and slim grip also improve operator acceptance.

**WEIGHT**  
1.39 lbs.

**LENGTH**  
5.7"



**Clutch & High/Low switch lock cover.**  
Clutch & High/Low switch lock cover prevents the operator from changing clutch setting or rpm setting by mistake.



**LED Light**  
Operation in dimly lit areas is improved with the built in LED light.

Mechanical Pulse Tools  
Virtually No Torque Reaction Up To 650Nm



Remote Control “Quick Set” Features

Program Setting

60 unique torque controlled algorithms – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)

Flush Point Detection (L1/L2)

Determines when the CPU declares the flush point of the fastening process.

L1 – Applications with no pulses before the flush point or when fastening fragile materials like plastic.

L2 – Applications where the tool pulses before achieving the flush point encountered in many prevailing torque and varying joint rate applications.

Rehit Prevention

Disables the tool for a period of time (up to 3 sec. in 1/10 sec. intervals) after a good fastening shutoff, preventing the operator from double hitting the fastener.

Out of Range / Anti-Theft

When enabled, the tool is disabled if taken out of the qualifier's wireless range. Available on models equipped with radio transmitters only.

EYFPA1 Series Only

Prevent and Detect Cross Threads and Rehits

The tool first reverses 360 degrees, aligning the threads, greatly reducing the possibility of cross threads.

Maintenance Interval Alarm

Define in 10,000 increment cycles to notify the operator of upcoming scheduled maintenance.

Speed Control Setting

Enable variable speed or single speed trigger operation.

LED Light

Program LED to turn on with trigger switch or on/off switch to match operator.

Buzzer

The buzzer can be programmed for OK. NOK, or Disabled.



# Cordless Mechanical Pulse Tools Deliver Accuracy and Durability.

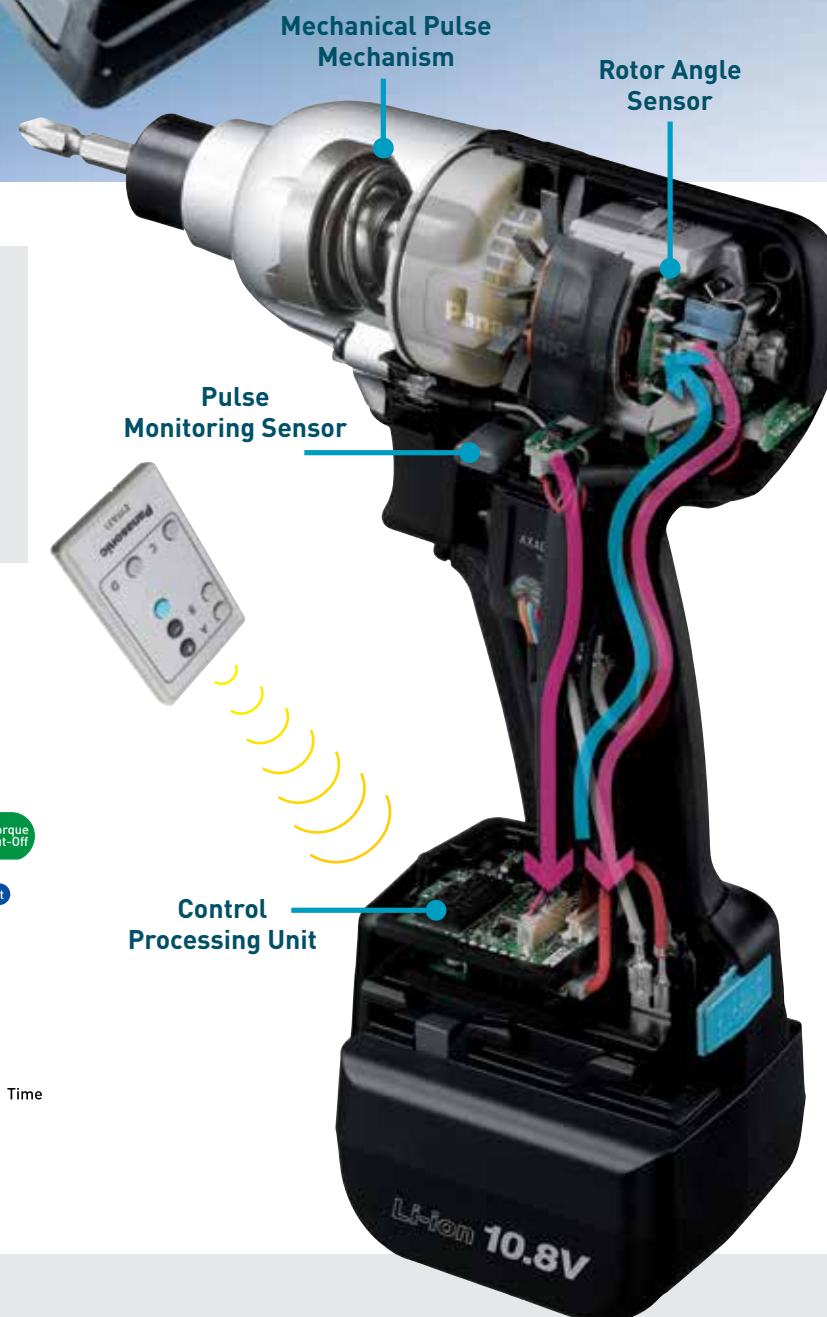
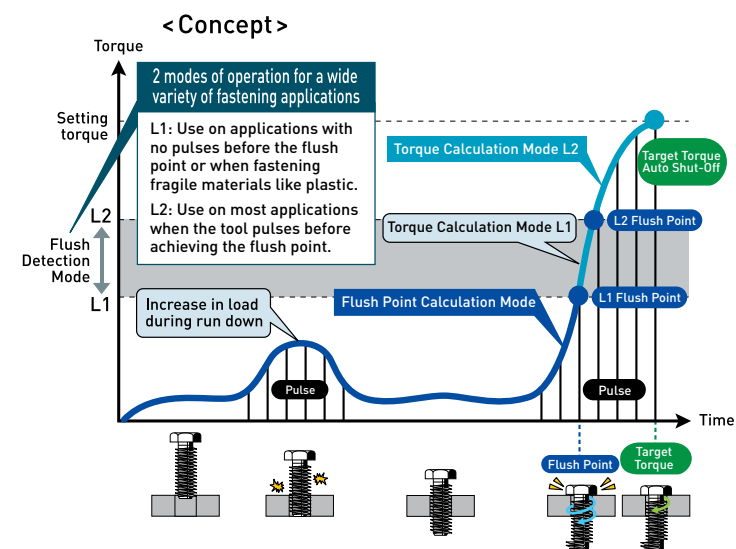
3 to 650Nm virtually reaction free!

Shut Off Tool delivers torque accuracy

## Torque Control Mechanism

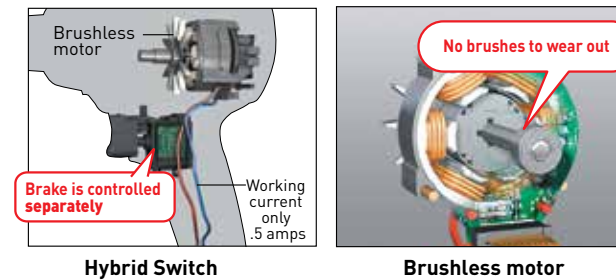
1. The on board CPU monitors two sensors (rotor angle sensor and pulse monitoring sensor) detecting the change in motor speed and rpm between pulses determining the flush point.
2. The CPU then switches to a torque calculation mode using a Panasonic patented algorithm to achieve an accurate and repeatable final torque.\*

\*Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints



## Long life parts provide lower running costs

### Improved durability of motor and switch



### Compact 10.8V/14.4V 2.0Ah Li-ion Batteries High Capacity 10.8V 3.0Ah, 14.4V 4.2Ah and 21.6V 4.2Ah Li-ion Batteries

Lifetime total performance improves drastically with brushless-motor and high capacity Li-ion battery!

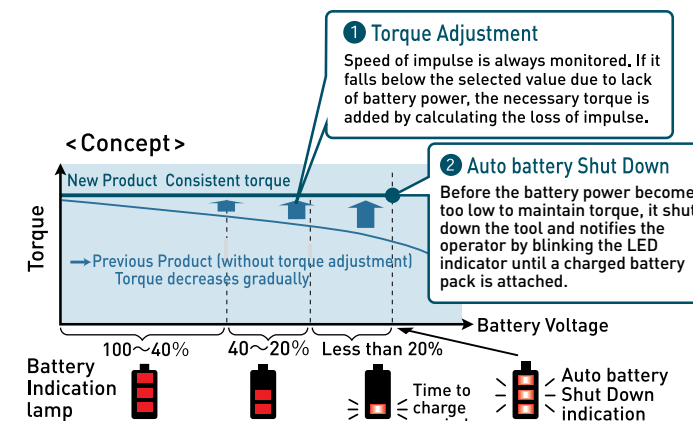
### Additional charging is acceptable

No Memory Effect  
Panasonic Li-ion batteries won't deteriorate if charged during break or for a short period of time then put back into operation.



60 unique torque controlled algorithms - 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)

### Maintains selected torque level as the battery power drops.



### Needle Bearings



Needle bearings on the output shaft reduce vibration and increase tool life.

## Retightening Prevention Function

### Maintaining Good Quality

This function prevents the tool from operating within a selected time period after it automatically stops from the torque control function. The switch will not operate even if engaged during this time period.

Example - Rehit prevention is programmed to one second.



## More Features



### Lightweight

A well balanced lightweight design means workers will experience less muscle fatigue during continuous use.



### Remote Control

Tool setting can be set only by remote control.



### LED Light

For operations in dimly lit places



### Color Plate for Differentiation

Each tool model is color coded for easy identification.



# Mechanical Pulse Tools



- Patented Panasonic CPU controlled auto shut-off
- Brushless Motor – energy efficient, no maintenance and about doubles the life of the tool
- Hybrid Switch (<.5 amps) – about doubles the life of the switch
- High fastening speed 1,600-2,300 rpm's (no load)
- Optional wireless version for quality control monitoring
- Operator lockout for consistent quality
- Low Battery Disable - Disables the tool if the battery doesn't have the capacity to achieve the proper torque
- Operator Visual OK/NOK Light
- Compact and Lightweight
- Prevent Cross Thread / Rehit Detection\*
- Maintenance Interval Alarm\*
- Variable Speed Control\*

\*Available in EYFPA1 Series.

## EYFLA4A / EYFLA4AR

### Cordless Mechanical Pulse Tool

10.8V

- Torque controlled range – 3-22Nm (2.2-16.2 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 40Nm (29.5 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for "Quick Set" features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn't have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – 1: 0-950, 2: 0-1,300, 3: 0-1,450, 4-8: 0-1,550, 9-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-7/32" x 9-25/32" x 2-61/64"
- Light weight (incl. 3.0Ah battery (EYFB30B)): 2.8 lbs.

#### TYPICAL APPLICATION

- M5-M6 Bolt (Normal-Tensile Bolt)
- M8 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M10 Bolt (F mode, tightening 3 sec.)



EYFLA4A/EYFLA4AR:  
Battery pack and battery charger are not included.

## EYFLA5A / EYFLA5AR

### Cordless Mechanical Pulse Tool

10.8V

- Torque controlled range – 6-30Nm (4.4-22 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 90Nm (66.4 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for "Quick Set" features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn't have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – 1: 0-1,300, 2: 0-1,450, 3: 0-1,550, 4-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-7/32" x 9-25/32" x 2-61/64"
- Light weight (incl. 3.0Ah battery (EYFB30B)): 2.8 lbs.

#### TYPICAL APPLICATION

- M6 Bolt (Tensile Bolt)
- M8 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M14 Bolt (F mode, tightening 3 sec.)



EYFLA5A/EYFLA5AR:  
Battery pack and battery charger are not included.



EYFLA5P / EYFLA5PR

Cordless Mechanical Pulse Tool10.8V

- Torque controlled range – 6-30Nm (4.4-22 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 90Nm (66.4 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 3/8” Square drive with pin detent
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – 1: 0-1,300, 2: 0-1,450, 3: 0-1,550, 4-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-7/16” x 9-25/32” x 2-61/64”
- Light weight (incl. 3.0Ah battery (EYFB30B)): 2.8 lbs.

TYPICAL APPLICATION

- M6 Bolt (Tensile Bolt)
- M8 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M14 Bolt (F mode, tightening 3 sec.)



EYFLA5P/EYFLA5PR:  
Battery pack and battery charger are not included.

EYFLA5Q / EYFLA5QR

Cordless Mechanical Pulse Tool10.8V

- Torque controlled range – 6-30Nm (4.4-22 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 90Nm (66.4 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 3/8” Square drive with through hole
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – 1: 0-1,300, 2: 0-1,450, 3: 0-1,550, 4-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-7/16” x 9-25/32” x 2-61/64”
- Light weight (incl. 3.0Ah battery (EYFB30B)): 2.8 lbs.

TYPICAL APPLICATION

- M6 Bolt (Tensile Bolt)
- M8 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M14 Bolt (F mode, tightening 3 sec.)



EYFLA5Q/EYFLA5QR:  
Battery pack and battery charger are not included.

EYFLA6P / EYFLA6PR

Cordless Mechanical Pulse Tool10.8V

- Torque controlled range – 16-53Nm (11.8-39 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 120Nm (88.5 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 1/2” Square drive with pin detent
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – Torque Setting 1-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-25/32” x 9-25/32” x 2-61/64”
- Light weight (incl. 3.0Ah battery (EYFB30B)): 3.1 lbs.

TYPICAL APPLICATION

- M8 Bolt (Tensile Bolt)
- M10 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M14 Bolt (F mode, tightening 3 sec.)



EYFLA6P/EYFLA6PR:  
Battery pack and battery charger are not included.

EYFLA6J / EYFLA6JR

Cordless Mechanical Pulse Tool10.8V

- Torque controlled range – 16-53Nm (11.8-39 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 120Nm (88.5 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 1/2” Square drive with through hole
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – Torque Setting 1-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-25/32” x 9-25/32” x 2-61/64”
- Light weight (incl. 3.0Ah battery (EYFB30B)): 3.1 lbs.

TYPICAL APPLICATION

- M8 Bolt (Tensile Bolt)
- M10 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M14 Bolt (F mode, tightening 3 sec.)



EYFLA6J/EYFLA6JR:  
Battery pack and battery charger are not included.



EYFMA1P / EYFMA1PR

Cordless Mechanical Pulse Tool14.4V

- Torque controlled range – 25-100Nm (18.4-73.7 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 185Nm (136.5 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB41B) & 4.2Ah (EYFB42B) high capacity 14.4V Li-ion battery
- Variable speed trigger/reversible
- 1/2" Square drive with pin detent
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – Torque Setting 1-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-25/32" x 9-25/32" x 2-61/64"
- Light weight (incl. 4.2Ah battery (EYFB42B)): 3.3 lbs.



EYFMA1P/EYFMA1PR:  
Battery pack and battery  
charger are not included.

TYPICAL APPLICATION

- M10 Bolt (Tensile Bolt)
- M14 Bolt (Tensile Bolt)
- M12 Bolt (Normal Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M16 Bolt (F mode, tightening 3 sec.)

EYFMA1J / EYFMA1JR

Cordless Mechanical Pulse Tool14.4V

- Torque controlled range – 25-100Nm (18.4-73.7 ft. lbs.) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 185Nm (136.5 ft. lbs.)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting – 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal.
  - L2: Use on any applications when the tool pulses before achieving the flush point.
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Remote control required for “Quick Set” features (See page 11)
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables the tool if the battery doesn’t have the capacity to achieve the proper torque
- Available 2.0Ah (EYFB41B) & 4.2Ah (EYFB42B) high capacity 14.4V Li-ion battery
- Variable speed trigger/reversible
- 1/2" Square drive with through hole
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (Torque Setting: rpm) – Torque Setting 1-30 & F: 0-2,300
- Rehit Prevention – Disables the tool for a period of time after a good fastening preventing the operator from double hitting the fastener.
- Compact size (L x H x W): 6-25/32" x 9-25/32" x 2-61/64"
- Light weight (incl. 4.2Ah battery (EYFB42B)): 3.3 lbs.



EYFMA1J/EYFMA1JR:  
Battery pack and battery  
charger are not included.

TYPICAL APPLICATION

- M10 Bolt (Tensile Bolt)
- M14 Bolt (Normal Bolt)
- M12 Bolt (Normal-Tensile Bolt)

\* Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints  
\*\* M16 Bolt (F mode, tightening 3 sec.)

EYFPA1J/EYFPA1JR

Cordless Mechanical Pulse Tool21.6V

- Torque controlled range – 160-400Nm (118-295 ft. lbs) (Based on medium hard joint\*)
- Maximum Torque in non-shut off mode – Approx. 650Nm (479 ft. lbs)\*\*
- Patented Panasonic CPU controlled auto shut-off
- Torque Setting - 30 stages in L1 mode and 30 stages in L2 mode + F mode (non shut-off mode)
- Flush Detection Mode Applications
  - L1: Use on applications with no pulses before the flush point or when fastening fragile materials like plastic to metal
  - L2: Use on any applications when the tool pulses before achieving the flush point
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Twin Hammer design for durability, speed & size
- Remote control required for “Quick Set” features
- Programmable “Quick Set” features
  - Prevent and detect cross threads and rehits
  - Maintenance interval alarm
  - Variable speed or On/Off switch
  - Out of range anti-theft enable/disable (Radio version only)
  - Light and Buzzer
- Error proofing with OK/NOK indicator
  - Radio version required for Panasonic Quality Control Monitoring System (See page 24-25)
- Low Battery Disable – Disables tool if battery doesn’t have the capacity to achieve proper torque
- Available 4.2Ah (EYFB60B) high capacity 21.6V Li-ion battery
- Variable speed trigger/reversible
- 3/4" Square drive with through hole
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed: 0-1600 rpm
- Charging time: Usable: 60 minutes Full: 75 minutes
- Compact size (L x H x W): 9-27/32" x 11-5/8" x 2-61/64"
- Lightweight (incl. 4.2Ah battery EYFB60B): 7.7 lbs
- Optional accessories: EY0L82B Battery Charger, EYFB60B – 21.6V 4.2Ah Li-ion Battery



EYFPA1J/EYFPA1JR:  
Battery pack and battery  
charger are not included.

TYPICAL APPLICATION

- M16 Bolt (Tensile Bolt)

\*Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints \*\*M24 Bolt (F mode, tightening 3 sec.)

EYFLC1A

Cordless Oil Pulse Tool10.8V

- Torque controlled range – 18-27Nm (13.3-19.9 ft. lbs) (Based on medium hard joint\*)
- Brushless Motor and Hybrid Switch about doubles the life of the tool
- Overheat Warning Light – Protects the tool in the event of the battery overheating
- Available 2.0Ah (EYFB32B) & 3.0Ah (EYFB30B) high capacity 10.8V Li-ion battery
- Variable speed trigger/reversible
- 1/4" Hex quick change chuck
- Battery indicator lamp (3 stages) and LED work light (ON/OFF Switch)
- No Load Speed (rpm) 0-3150
- Compact size (L x H x W): 6-1/4" x 9-25/32" x 2-61/64"
- Lightweight (incl. 3.0Ah battery EYFB30B): 3.2 lbs



EYFLC1A:  
Battery pack and battery  
charger are not included.

TYPICAL APPLICATION

- M5 & M6 Bolt (Tensile Bolt)
- M8 Bolt (Normal Bolt)

\*Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints.



# High Power 21.6V Cordless Mechanical Pulse Tool

Virtually no torque reaction

- M16 (High Tensile Bolt) up to 400Nm
- M24 (High Tensile Bolt) up to 650Nm

\*Final results may have higher torque ranges with hard joints and lower torque ranges with soft joints.

Torque controlled range  
**160~650Nm**

Maximum Torque  
**700Nm**  
(After 3 sec.)

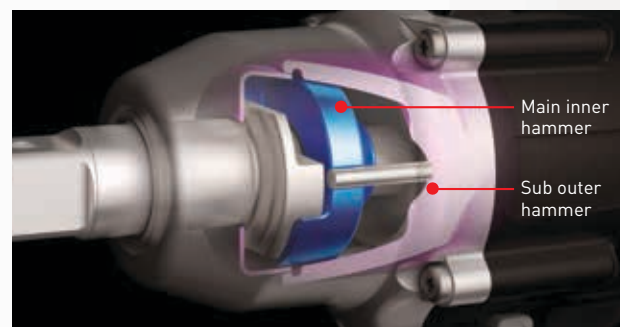
Lightweight  
approx. **7.7 lbs**

High capacity  
**4.2Ah**

## Advanced technologies delivering a compact, lightweight tool with high torque

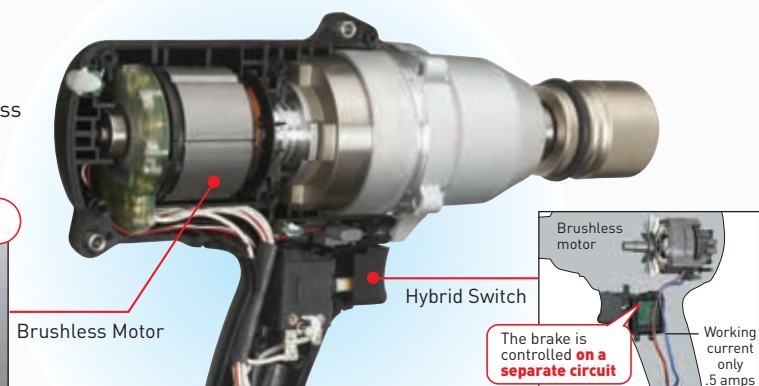
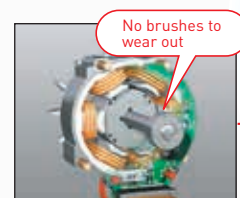
### High-Efficient, Twin Hammer

The newly developed high efficient twin hammer design delivers high power while reducing the tool size and vibration thus less operator fatigue.



### Compact and high-power brushless motor

Compact and high-power brushless motor accomplishes heavy load applications.



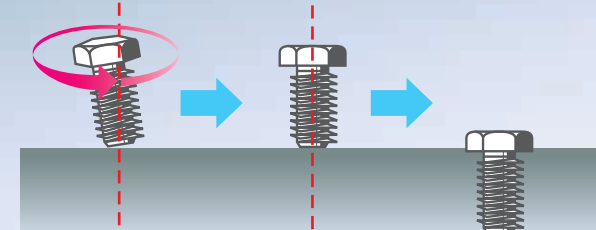
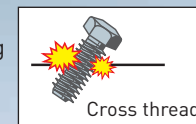
Long socket fastening

## Advanced fastening features

### Cross thread reduction

The tool first reverses 360 degree, aligning the threads, greatly reducing the possibility of cross threads.

Reverse Rotation!



360° reverse rotation before fastening

The screws threads are aligned with the hole

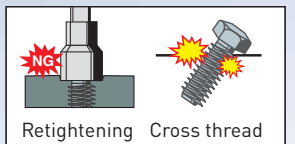
Automatically shifting to normal rotation

### Maintenance interval alarm

When the total fastenings are within 10,000 fastenings of the preset maintenance interval, the display blinks notifying the operator. Once the tool reaches the preset interval, the tool is locked out from further use. This function can be set ON or OFF and is defined in 10,000 increment cycles. (Number of setting: 0-990,000pcs)

### Cross Thread / Rehit Detection

If the shut-off is activated before the programmable minimum runtime, the tool alerts the operator to a NOK fastening. (Time setting: 0.1-3.0sec, 0.1sec per stage)



### •Example with 3.0sec. normal time setting



### Auto battery Shut Down

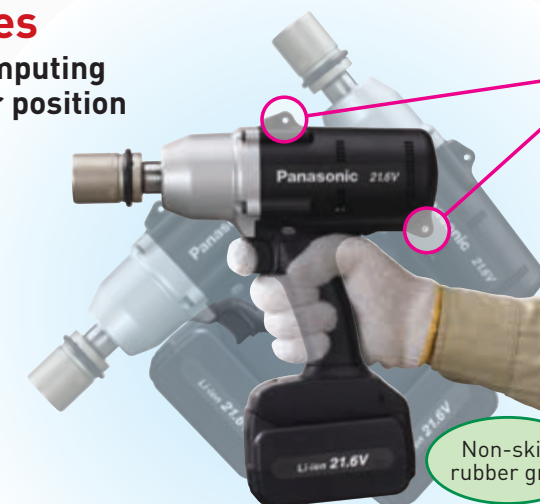
Before the battery power becomes too low to maintain torque, it shuts down the tool and notifies the operator by blinking the LED indicator until a charged battery pack is attached.

### Speed Control Function

Speed can be controlled by use of the trigger. Speed control function ON and OFF can be selected by remote.

## Additional features

### Ergonomic design by computing the best weighted center position



### Tool Hanger (Optional)

Tool can be suspended from a balancer either vertically or horizontally.



### LED light

Program LED to turn on with the trigger switch or ON/OFF switch to match operators preference



### Tightening confirmation lamp

OK/NOK both visual and audible indicators. (Buzzer ON/Off can be selected)



Mechanical Pulse Tool Spec Table


MODELS	EYFLA4A EYFLA4AR	EYFLA5A/5P/5Q EYFLA5AR/5PR/5QR	EYFLA6J/6P EYFLA6JR/6PR	EYFMA1J/1P EYFMA1JR/1PR	EYFPA1J/EYFPA1JR
Voltage	10.8V	10.8V	10.8V	14.4V	21.6V
Drive	A = 1/4" Hex Quick Change	A = 1/4" Hex Quick Change P = 3/8" Sq. Pin Detent Q = 3/8" Sq. Through Hole	J = 1/2" Sq. Through Hole P = 1/2" Sq. Pin Detent	J = 1/2" Sq. Through Hole P = 1/2" Sq. Pin Detent	J = 3/4" Sq. Through Hole
Torque Range	3-22Nm (2.2-16.2 ft. lbs.)	6-30Nm (4.4-22 ft. lbs.)	16-53Nm (11.8-39 ft. lbs.)	25-100Nm (18.4-73.8 ft. lbs.)	160-650Nm (118-479.4 ft. lbs.)
Max Torque (F mode, tightening 3 sec.)	Approx. 40Nm M10 Bolt	Approx. 90Nm M14 Bolt	Approx. 120Nm M14 Bolt	Approx. 185Nm M14 Bolt	Approx. 700Nm M24 Bolt
No Load Speed (Torque Setting : RPM)	1: 0-950 2: 0-1300 3: 0-1450 4-8: 0-1550 9-30 & F: 0-2300	1: 0-1300 2: 0-1450 3: 0-1550 4-30 & F: 0-2300	1-30 & F: 0-2300	1-30 & F: 0-2300	0-1600
PPM (Pulses Per Min)	1: 0-1900 2: 0-2500 3: 0-2800 8: 0-3000 9-30 & F: 0-4000	1: 0-2500 2: 0-2800 3: 0-3000 4-30 & F: 0-3600	1-30 & F: 0-3000	1-30 & F: 0-3200	0-2200
Weight	2.8 lbs. (incl. 3.0Ah (EYFB30B))	2.8 lbs. (incl. 3.0Ah (EYFB30B))	3.1 lbs. (incl. 3.0Ah (EYFB30B))	3.3 lbs. (incl. 4.2Ah (EYFB42B))	7.7 lbs. (incl. 4.2Ah (EYFB60B))
Size (L x W x H)	6-7/32" x 9-25/32" x 2-61/64"	5A: 6-7/32" x 9-25/32" x 2-61/64" 5P/5Q: 6-7/16" x 9-25/32" x 2-61/64"	6-25/32" x 9-25/32" x 2-61/64"	6-25/32" x 9-25/32" x 2-61/64"	9-27/32" x 11-5/8" x 2-61/64"
Function	Wireless Communication with assembly qualifier: (OK Fasten=Green light, NOK Fasten=Red light) (*radio models only)			Wireless Communication with assembly qualifier: (OK Fasten=Green light, NOK Fasten=Red light) (*radio models only)	Wireless Communication with assembly qualifier: (OK Fasten=Green light, NOK Fasten=Red light) (*radio models only)
	Tightening & Confirmation Lamp: (ON/OFF Switch, Light off after five minutes automatically)			Tightening & Confirmation Lamp: (ON/OFF Switch, Light off after five minutes automatically)	Tightening & Confirmation Lamp: (ON/OFF Switch, Light off after five minutes automatically)
	OK/NOK Light: (Finish tightening: Green / Not finished tightening: Red)			OK/NOK Light: (Finish tightening: Green / Not finished tightening: Red)	OK/NOK Light: (Finish tightening: Green / Not finished tightening: Red)
	Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)			Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)	Rehit Prevention: (Possible to set per 0.1 sec. between 0-3 sec.)
	Battery Indication Lamp: (3 stage)			Battery Indication Lamp: (3 stage)	Battery Indication Lamp: (3 stage)
	Low Power Disable			Low Power Disable	Low Power Disable
Programmable "Quick Set" Features	-			-	Prevent and detect cross threads and rehits
	-			-	Maitenance interval alarm
	-			-	Variable speed On / Off Switch
	-			-	LED Light: On / Off or On with pull of switch
	-			-	Buzzer On / Off

Oil Pulse Tool Spec Table


MODELS	EYFLC1A
Voltage	10.8V
Drive	1/4" Hex Quick Change
Torque Range	18-27Nm (13.3-19.9 ft. lbs.)
Max Torque (F mode, tightening 3 sec.)	Approx. 27Nm M8 Bolt
No Load Speed (Torque Setting : RPM)	0 – 3150
PPM (Pulses Per Min)	0 - 1850
Weight	3.2 lbs. (incl. 3.0Ah (EYFB30B))
Size (L x W x H)	6-1/4" x 9-25/32" x 2-61/64"

Assembly Tool Accessories


Batteries & Chargers




EY9L20B  
7.2V 1.5Ah Li-ion  
Battery Pack




EYFB32B  
10.8V 2.0Ah Li-ion  
Battery Pack




EYFB30B  
10.8V 3.0Ah Li-ion  
Battery Pack




EYFB41B  
14.4V 2.0Ah Li-ion  
Battery Pack




EYFB42B  
14.4V 4.2Ah Li-ion  
Battery Pack



EYFB60B  
21.6V 4.2Ah Li-ion  
Battery Pack




EY0L20B  
7.2V Charger




EY0L82B  
10.8V - 28.8V Charger


Tool Covers




EYFA02-H  
Battery Protector  
for EYFB30B




EYFA03-H  
Battery Protector  
for EYFB32B




EYFA04-H  
Battery Protector for  
EYFB40B/EYFB42B




EYFA06-H  
Battery Protector  
for EYFB41B




EYFA08-H  
Battery Protector  
for EYFB60B



EYFA05  
EYFG Tool Protectors  
-A (blue) -Y (yellow)  
-H (gray)



EYFA01  
EYFL/EYFM Tool Protectors  
-A (blue) -Y (yellow)  
-H (gray) -G (green)



EYFA07  
EYFP Tool Protectors  
-A (blue) -Y (yellow)  
-H (gray) -G (green)

Accessories



EYFA32B  
Clutch Adjustment Tool  
for EYFG Series Tools



EYFA40B  
EYFG Tool Hanger



EYFLM-H  
EYFL/EYFM Tool Hanger



EYFA41B  
EYFP Tool Hanger



WEYFEA1N3137  
Clutch Lock Out Cover  
for EYFEA1N



EYFA31B  
Remote Control for  
all EYFG/EYFL/  
EYFM/EYFP Tools



# Panasonic Quality Control Monitoring

With highly efficient tools and qualifiers, Panasonic offers a reliable Quality Control System



## Panasonic Assembly Qualifiers

A single tool Assembly Qualifier for a specific application or a multi-tool Assembly Qualifier for versatile error proofing options, the Panasonic Assembly Qualifiers deliver the solution you need.

## EYFR03

### Multi-Tool Assembly Qualifier

110V



#### 16 to 1

Up to 16 tools can communicate over a secure connection simultaneously with the Qualifier to indicate OK/NOK fastenings.

#### Programming Modes

Parameter – Run one tool at a time.  
Groups – Run a group of tools simultaneously.  
Jobs – Run tools or a group of tools in a sequence.

#### Process Control

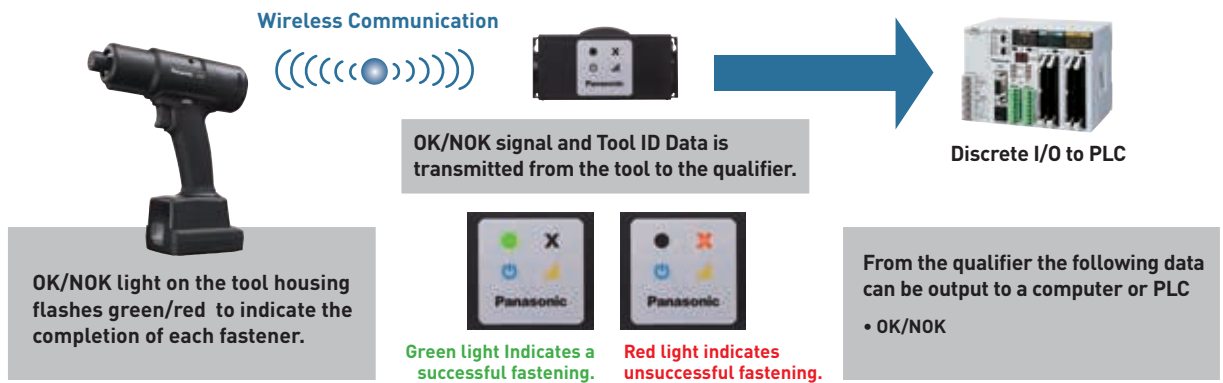
Utilizing I/O or Fieldbus capabilities improves quality and increases productivity.

- ✓ Atlas Copco Open Protocol
- ✓ Atlas Copco Tools Net
- ✓ Ethernet IP

## EYFR02B

### Single Tool Assembly Qualifier

110V



#### Tool Distance

A highly reliable data signal can be transmitted if the tool is within 10m (33 feet) of the assembly qualifier and if there are no barriers between the tool and qualifier.



#### Out of Range Disable Function

In the event that wireless communication cannot be completed between the tool and the qualifier, the tool will be disabled and cannot be operated. Operation of this function is set on the tool body with remote control.








#### Enable/Disable Tools

Tools can be locked out to prevent use after batch is completed and/or when not in use.



### Comparison of Assembly Qualifiers

MODEL	EYFR02B	EYFR03A	EYFR03B	EYFR03C	EYFR03D
					
Graphics Display	–	✓	✓	–	–
Number of Tool Connectivity	1	16	16	16	16
Number of Tools Simultaneously	1	16	16	16	16
Secure Zigbee Wireless Communication	✓	✓	✓	✓	✓
Discrete Inputs/Outputs	1/2	8/12	–	8/12	–
Remote Inputs/Outputs Connection	–	✓	✓	✓	✓
PLC Integration	✓	✓	*With Remote I/O Box	✓	*With Remote I/O Box
Ethernet IP/Atlas Copco OP & ToolsNet	–	✓	✓	✓	✓
Data Collection	–	✓	✓	✓	✓
Batch Counting	–	✓	✓	✓	✓
Tool Sequencing	–	✓	✓	✓	✓
Bar Code Scan Capability	–	✓	✓	✓	✓
Remote Tool Disable	✓	✓	✓	✓	✓
Out of Range Disable / Anti-Theft	✓	✓	✓	✓	✓
Recommended Range	10M				
Rated Supply Voltage	AC 100-240V, 50/60 Hz				
I/O Voltage	5A @ 30VDC	2A @ 24VDC			
Dimensions [L x H x W]	9-1/16" x 14-1/8" x 3-1/2"	10-1/4" x 10-3/4" x 4-1/4"			
Operating Temperature Range	14-140°F [(-10)-60°C]				
Compatible Tools	EYFGA1NR, EYFGA2NR, EYFGA3NR, EYFLA4AR, EYFLA5AR, EYFLA5PR, EYFLA5QR, EYFLA6PR, EYFLA6JR, EYFMA1PR, EYFMA1JR, EYFPA1JR				

Communication range varies with operating environment. The presence of metal walls, people or other objects may result in decreased range. Software available for download for EYFR02B and EYFR03 models.



Standard / Optional Accessory Chart

		CLUTCH TOOLS											OIL PULSE	MECHANICAL PULSE TOOLS														QUALIFIERS									
		7.2V		14.4V									10.8V										14.4V				21.6V										
		EYFEA1N	EYFEA1N2S	EYFGA1N	EYFGA1NR	EYFGA2N	EYFGA2NR	EYFGA3N	EYFGA3NR	EYFGB1N		EYFGB2N	EYFGB3N	EYFLC1A	EYFLA4A	EYFLA4AR	EYFLA5A	EYFLA5AR	EYFLA5Q	EYFLA5QR	EYFLA5P	EYFLA5PR	EYFLA6J	EYFLA6JR	EYFLA6P	EYFLA6PR	EYFMA1J	EYFMA1JR	EYFMA1P	EYFMA1PR	EYFPA1J	EYFPA1JR	EYFR02B	EYFR03			
BATTERY PACKS																																					
7.2V 1.5Ah Li-ion Battery Pack	EY9L20B	○	●																																		
10.8V 2.0Ah Li-ion Battery Pack	EYFB32B												○	○	○	○	○	○	○	○	○	○	○	○	○												
10.8V 3.0Ah Li-ion Battery Pack	EYFB30B												○	○	○	○	○	○	○	○	○	○	○	○	○												
14.4V 2.0Ah Li-ion Battery Pack	EYFB41B			○	○	○	○	○	○	○		○	○													○	○	○	○								
14.4V 4.2Ah Li-ion Battery Pack	EYFB42B			○	○	○	○	○	○	○		○	○													○	○	○	○								
21.6V 4.2Ah Li-ion Battery Pack	EYFB60B																													○	○						
CHARGERS																																					
Charger for Panasonic Li-ion Battery 7.2V (EY9L20B)	EY0L20B	○	●																																		
Charger for Panasonic Li-ion Batteries 10.8V - 28.8V	EY0L82B			○	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○					
QUALIFIERS																																					
Single Tool Qualifier	EYFR02B				○		○		○						○		○		○		○		○		○		○		○		○						
Multi-Tool Qualifier - Graphics Disp/Discrete I/O/Remote I/O/ACOP/ToolNet/EIP	EYFR03-A				○		○		○						○		○		○		○		○		○		○		○		○						
Multi-Tool Qualifier - Graphics Disp/Remote I/O/ACOP/ToolNet/EIP	EYFR03-B				○		○		○						○		○		○		○		○		○		○		○		○						
Multi-Tool Qualifier - Discrete I/O/Remote I/O/ACOP/ToolNet/EIP	EYFR03-C				○		○		○						○		○		○		○		○		○		○		○		○						
Multi-Tool Qualifier - Remote I/O/ACOP/ToolNet/EIP	EYFR03-D				○		○		○						○		○		○		○		○		○		○		○		○						
TOOL COVERS																																					
Protector for EYFB30B Battery - Gray	EYFA02-H														○	○	○	○	○	○	○	○	○	○	○												
Protector for EYFB32B Battery - Gray	EYFA03-H														○	○	○	○	○	○	○	○	○	○	○												
Protector for EYFB40B/EYFB42B Battery - Gray	EYFA04-H			○	○	○	○	○	○	○		○	○													○	○	○	○								
Protector for EYFB41B Battery - Gray	EYFA06-H			○	○	○	○	○	○	○		○	○													○	○	○	○								
Protector for EYFB60B Battery - Gray	EYFA08-H																													○	○						
Protector for EYFG Clutch Tool Bodies - Blue	EYFA05-A			○	○	○	○	○	○	○		○	○																								
Protector for EYFG Clutch Tool Bodies - Gray	EYFA05-H			○	○	○	○	○	○	○		○	○																								
Protector for EYFG Clutch Tool Bodies - Yellow	EYFA05-Y			○	○	○	○	○	○	○		○	○																								
Protector for EYFL/EYFM 10.8V & 14.4V Mechanical Pulse Tool Bodies - Blue	EYFA01-A														○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Protector for EYFL/EYFM 10.8V & 14.4V Mechanical Pulse Tool Bodies - Green	EYFA01-G														○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Protector for EYFL/EYFM 10.8V & 14.4V Mechanical Pulse Tool Bodies - Gray	EYFA01-H														○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Protector for EYFL/EYFM 10.8V & 14.4V Mechanical PulseTool Bodies - Yellow	EYFA01-Y														○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Protector for EYFP 21.6V Mechanical Pulse Tool Bodies - Blue	EYFA07-A																														○	○					
Protector for EYFP 21.6V Mechanical Pulse Tool Bodies - Green	EYFA07-G																															○	○				
Protector for EYFP 21.6V Mechanical Pulse Tool Bodies - Gray	EYFA07-H																																○	○			
Protector for EYFP 21.6V Mechanical PulseTool Bodies - Yellow	EYFA07-Y																																○	○			
ACCESSORIES																																					
Clutch Adjustment Tool for EYFG Clutch Tools	EYFA32B			●	●	●	●	●	●	●		●	●																								
Clutch Lock Out Cover EYFEA1N	WEYFEA1N3137	●	●																																		
I/O Cable for EYFRZ02 Single Tool Qualifier	EYFRZ02CA																																○				
I/O Cable for EYFR03 Multi-Tool Qualifier	EYFR03CA																																	○			
Remote Control for all EYFL, EYFM, EYFG Series Tools	EYFA31B			○	○	○	○	○	○						○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○					
Tool Hanger for EYFG Clutch Tools	EYFA40B			○	○	○	○	○	○	○		○	○																								
Tool Hanger for EYFL 10.8V & 14.4V Mechanical Pulse Tools	EYFLM-H														○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Tool Hanger for EYFP 21.6V Mechanical Pulse Tools	EYFA41B																															○	○				

Battery Pack/Battery Charger – Assembly Tool Compatibility Chart

VOLTAGE	MODEL	BATTERY	CHARGING TIMES USABLE: FULL CHARGE	CHARGER	
21.6V	EYFPA1J/1JR	EYFB60B (4.2Ah)	65 min : 85 min	EY0L82B	
14.4V	EYFGA1N/1NR EYFGA2N/2NR EYFGA3N/3NR EYFGB1N EYFGB2N EYFGB3N EYFMA1J/1JR EYFMA1P/1PR	EYFB41B (2.0Ah)	35 min : 40 min		
		EYFB42B (4.2Ah)	50 min : 60 min		
10.8V		EYFLA4A/4AR EYFLA5A/5AR EYFLA5P/5PR EYFLA5Q/5QR EYFLA6J/6JR EYFLA6P/6PR	EYFB30B (3.0Ah)		35 min : 45 min
			EYFB32B (2.0Ah)		35 min : 40 min
7.2V	EYFEA1N EYFEA1N2S	EY9L20B	35 min : 60 min	EY0L20B	

Mechanical Pulse Tool Working Capacities

	MODELS	EYFLA4A EYFLA4AR	EYFLA5A/5P/5Q EYFLA5AR/5PR/5QR	EYFLA6J/6P EYFLA6JR/6PR	EYFMA1J/1P EYFMA1JR/1PR	EYFPA1J EYFPA1JR
Application Capacity/ Working Speed	EYFB30B 3.0Ah Battery	approx. 1200 pcs/pack approx. 0.7 sec/1 pcs (M6: 10Nm Stage: 19)	approx. 800 pcs/pack approx. 0.8 sec/1 pcs (M8: 23Nm Stage: 22)	approx. 500 pcs/pack approx. 0.9 sec/1 pcs (M10: 43Nm Stage: 23)	-	-
	EYFB42B 4.2Ah Battery	-	-	-	approx. 785 pcs/pack approx. 0.9 sec/1 pcs (M12: 71Nm Stage: 22)	-
	EYFB60B 4.2Ah Battery	-	-	-	-	approx. 450 pcs/pack approx. 0.7 sec/1 pcs (M16: 180Nm Stage: 6)

Precision Clutch Tool Working Capacities

	MODELS	JOINT	EYFGA1N/1NR EYFGB1N	EYFGA2N/2NR EYFGB2N	EYFGA3N/3NR EYFGB3N
Application Capacity/ Working Speed	EYFB41B 2.0Ah Battery	Hard Joint 30°	approx. 1200 pcs/pack approx. 1.1 sec/1 pcs (M6 - 5.5Nm)	approx. 1050 pcs/pack approx. 1.0 sec/1 pcs (M6 - 8Nm)	approx. 1100 pcs/pack approx. 1.0 sec/1 pcs (M6 - 10Nm)
		Soft Joint 720°	approx. 540 pcs/pack approx. 1.3 sec/1 pcs (M6 - 5.5Nm)	approx. 410 pcs/pack approx. 1.3 sec/1 pcs (M6 - 8Nm)	approx. 310 pcs/pack approx. 1.4 sec/1 pcs (M6 - 10Nm)
	EYFB42B 4.2Ah Battery	Hard Joint 30°	approx. 2700 pcs/pack approx. 1.1 sec/1 pcs (M6 - 5.5Nm)	approx. 2350 pcs/pack approx. 1.0 sec/1 pcs (M6 - 8Nm)	approx. 2500 pcs/pack approx. 1.0 sec/1 pcs (M6 - 10Nm)
		Soft Joint 720°	approx. 1250 pcs/pack approx. 1.3 sec/1 pcs (M6 - 5.5Nm)	approx. 1000 pcs/pack approx. 1.3 sec/1 pcs (M6 - 8Nm)	approx. 730 pcs/pack approx. 1.4 sec/1 pcs (M6 - 10Nm)

Low Torque Clutch Tool and Driver Working Capacities

	MODEL	FASTENING	EYFEA1N
Application Capacity/ Working Speed	EY9L20B 1.5Ah Battery	Screws in Sheet Metal (M2.5 x 1/4")	High: Approx. 1900 pcs
		Screws in Sheet Metal (M4 x 3/8")	High: Approx. 1850 pcs
		Screws in Sheet Metal (M5 x 5/16")	Low: Approx. 1450 pcs

Oil Pulse Tool Working Capacities

	MODEL	FASTENING
Application Capacity/ Working Speed	EYFB30B 3.0Ah Battery	approx. 720 pcs/pack approx. 0.7 sec/1 pcs



Use 14.4V or 18V power!

Li-ion  
**\$4.2Ah**

**TOUGH IP™**



## Tough Tools for Tough Conditions



**Dust Protection  
Level 5**



**Water Protection  
Level 6**

### Test

The IP standard test is administered by the International Electrotechnical Commission (IEC), to test the level of protection that a product offers against water and dust. The products are subjected to a very thorough examination to test their capabilities in the toughest conditions imaginable before they are allowed to carry the IP rating.

Tested not in motion in accordance with IP56 of International Standard, IEC 60529. The rating of IP56 qualifies this tool for the minimum impact of water or dust, but not for the assurance of performance in such conditions. See Safety and Operating Instructions for further details for proper operation.



### Dust Protection Test

The tool is subjected to heavy dust and then checked to ensure it continues to function properly.



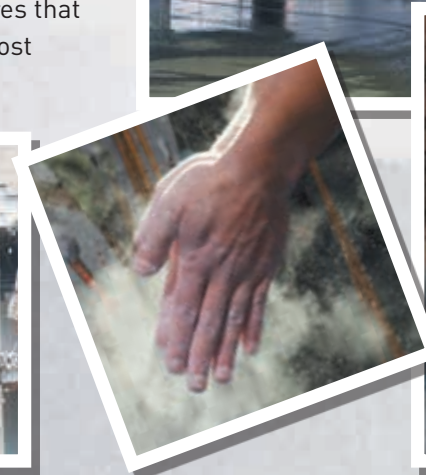
### Water Protection Test

The tool is subjected to powerful water jets and then checked to ensure it continues to function properly.

### Conditions

Many things can happen at a job site; such as unexpected incidents, water contact, or exposure to dust, which can cause a tool to malfunction. Also, with more electronics in power tools, it's important to protect them from dust and moisture.

By incorporating the Tough IP technology, it reassures that Panasonic cordless tools perform at their best in most difficult situations.



### Results

Panasonic cordless tools are designed with protection features and have attained level IP56. These results show Panasonic's on-going commitment to the industry by providing customers with innovative products that work in the toughest job conditions.

**International Protection Code** classifies the degree of protection provided against intrusion of solid foreign objects and liquids in electrical machinery and fixtures as defined by IEC standards.

**Dust Resistance Level** indicates the degree of protection provided against the intrusion of solid foreign objects using a scale of six levels.

Level	Brief description
1	Protected against solid foreign objects of 50mm Ø and greater
2	Protected against solid foreign objects of 12.5mm Ø and greater
3	Protected against solid foreign objects of 2.5mm Ø and greater
4	Protected against solid foreign objects of 1.0mm Ø and greater
5	Dust protected
6	Dust-tight

# IP56

**HIGH LEVEL  
TEST RESULTS**

**Water Resistance Level** Indicates the degree of protection provided against the intrusion of water associated with harmful effects using a scale of eight levels.

Level	Brief description
1	Protected against vertically falling water drops
2	Protected against vertically falling water drops when enclosure tilted up to 15°
3	Protected against spraying water
4	Protected against splashing water
5	Protected against water jets
6	Protected against powerful water jets
7	Protected against the effects of temporary immersion in water
8	Protected against the effects of continuous immersion in water



# Tough. Durable. Innovative.

## Cordless Tools with high-end features.

Panasonic has developed intelligent power tools to increase task efficiency as well as operate in tough conditions of various jobsites. Panasonic continues to evolve its technology and provide tools that meet any type of job requirements.



As a result of dust and water resistant technologies, these tools comply with International Protection standards.



### Switch

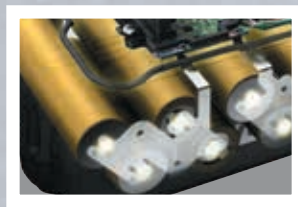
An additional rubber cap seals the switch and protects it against dust and water.

### Electronic Circuit

The electronic circuits and battery pack are protected to withstand water and dust.

### Battery

The battery cells are designed to protect against moisture and keep performing at their best.



## Tough Environmental Conditions

- Dust Resistance
- Water Resistance

**IP56**

## Task Efficiency Innovation

- Work Speed
- Comfortable
- Convenience

## Tough Usage

- High Durability
- Long Life
- High Capacity



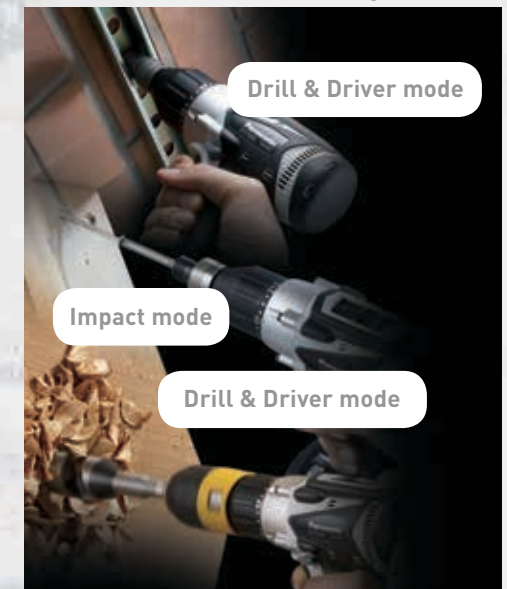
High power/high speed drilling/cutting



Easy-to-hold, ergonomic design



Multi-task with a single tool



Drill & Driver mode

Impact mode

Drill & Driver mode

## Long-lasting, Brushless Motor

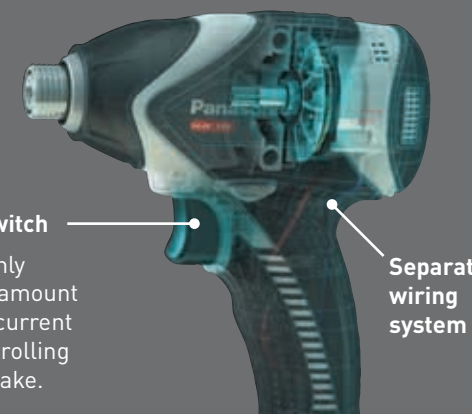
No Brushes! Replacement is not necessary.



Electronic switch

The switch only requires the amount of electrical current used for controlling speed and brake.

Separate wiring system





Li-ion  
**S 4.2Ah**

# Panasonic's Lithium Nickel 4.2Ah Battery Pack! Durable, Lightweight and Extended Run Time.

**Approx. 27%**  
More working capacity per charge



Li-ion  
**S 4.2Ah**  
18V EY9L51B  
Li-ion S type

**120** holes



Li-ion  
**R 3.3Ah**  
18V EY9L50B  
Li-ion S type

**95** holes

Holes in Yellow Pine dia. 11/16" x t=4-3/4" \*Drill & Driver 18V EY74A1

## 4.2Ah Li-ion Battery = Longer Battery Capacity



**Driving 340 pcs**  
(Spax screw dia. 5/16" x 3-5/32")  
\*Drill & Driver 18V EY74A1



**Bolting 350 pcs**  
(M12 x 1 t=3/8")  
\*Impact Wrench 18V EY75A5



**Cutting yellow pine 80 pcs**  
\*Reciprocating Saw 18V EY45A1



### Total Performance (Index comparison. 14.4V N type battery at 100%)



18V EY9L51B Li-ion S type 205



14.4V EY9L45B Li-ion S type 170



18V EY9L50B Li-ion R type 167



14.4V EY9L44B Li-ion R type 133



14.4V EY9L41B Li-ion Z type 125



14.4V EY9L40B Li-ion N type 100

## The new battery packs offer protection, durability and are long lasting.

### Monitoring of Individual Battery Cells

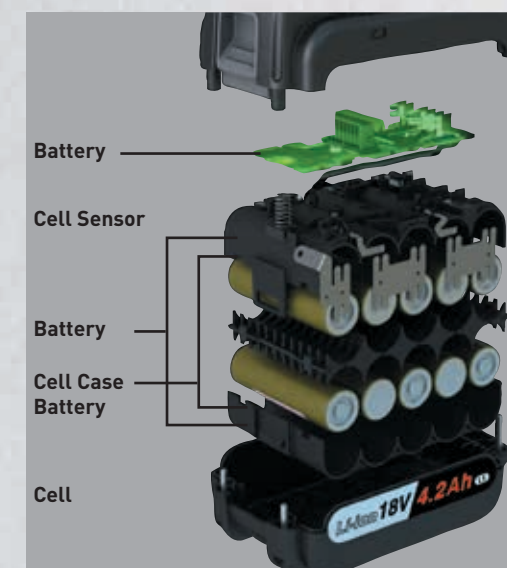
Each 3.6V segment is monitored by a sensor to ensure optimal discharge control, preventing overcharging and overdischarging.

### Overdischarge Prevention Sensor

A sensor works to prevent overdischarging (discharge of the battery until voltage falls below a minimum threshold), a disadvantage inherent to lithium ion cells.

### Battery Overheat Protection Sensor

A temperature sensor cuts off power to the motor before the battery temperature rises to a harmful level and flashes a warning lamp on the tool's control panel to notify the user.





# Li-ion Power Tool Line-Up

Panasonic introduces the latest technology in digital cordless tools.

## 3.6V



**EY7411LA2S**  
Drill & Driver

**EY7410LA2S**  
Drill & Driver

## 14.4V



**EY7441LR2S**  
Drill & Driver

**EY7549X**  
Multi-Impact &  
Drill Driver

**EY7940LR2S**  
Hammer Drill & Driver

**EY4542LR2M**  
Multi-Purpose  
Metal Cutter

**EY4640X**  
Angle Grinder

## 14.4V / 18V Series with Dual Voltage



**EY74A1LS2G**  
Drill & Driver

**EY75A4LS2G**  
Impact Driver

**EY75A5LS2G**  
Impact Wrench

**EY45A1LS1S**  
Reciprocating Saw

## 14.4V / 18V / 21.6V



**EY37C1B**  
Flashlight

## 18V



**EY7450LS2S**  
Drill & Driver

**EY7450LR2S**  
Drill & Driver

**EY7950LR2S**  
Hammer Drill &  
Driver

**EY7950LS2S**  
Hammer Drill &  
Driver

**EY7552X**  
Impact Wrench

## 28.8V



**EY7880LP2S**  
SDS-Plus Rotary  
Hammer

## Power Supply Kits



**EYC941B**  
14.4V Power  
Supply Kit

**EYC950B**  
18V Power  
Supply Kit

## Combo Kits



**EYC144V33**  
14.4V 3.3Ah  
Combo Kit

**EYC144DV42**  
14.4V 4.2Ah  
Combo Kit

**EYC18DV42**  
18V 4.2Ah  
Combo Kit

**EYC194LR**  
14.4V 3.3Ah  
Combo Kit

## Ni-MH Power Tool Line-Up



**EY6432NQKW**  
Cordless 1/2" Drill &  
Driver Kit

**EY6409NQKW**  
Cordless 1/2" Drill &  
Driver Kit

**EY6220NQ**  
Cordless Drill &  
Driver Kit

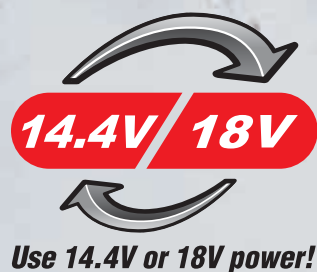
**EY3530NQMKW**  
Cordless Metal Cutter Kit

**EYC136NQKW**  
Metal Combo Kit



# Dual Voltage Technology

Versatility, High Performance  
and Extreme Run Time!



## Dual Voltage Circuit



The circuit detects battery voltage, controls the proper current and delivers the correct voltage flow to the tool for best performance



**14.4V**  
It's easier to use,  
lightweight and compact



**18V**  
Increases application speed  
and working capacity



The new series with Dual Voltage Technology is compatible with current **18V and 14.4V Li-ion battery packs**.

**18V**



4.2Ah S type  
**EY9L51B**



3.3Ah R type  
**EY9L50B**



**14.4V**



4.2Ah S type  
**EY9L45B**



3.3Ah R type  
**EY9L44B**



1.5Ah E type  
**EY9L42B**



3.1Ah Z type  
**EY9L41B**

## The new series with dual voltage line up



**EY74A1LS2G**  
Drill & Driver



**EY75A4LS2G**  
Impact Driver



**EY75A5LS2G**  
Impact Wrench



**EY45A1LS1G**  
Reciprocating Saw



# Impact Driver

Brushless Motor with Variable Speed for Increased Control

18V

Faster and long lasting

14.4V

Lighter weight for overhead use

# Impact Wrench

Brushless Motor, Variable Speed, 1/2" Square Drive with 1/4" Quick Change Adapter Included.

18V

Faster and long lasting

14.4V

Light weight for overhead use

## EY75A4LS2G / EY75A4X

Li-ion 4.2Ah

14.4V/18V

Brushless Motor

TOUGH IP™

### Cordless 1/4" Hex Impact Driver

Dual Voltage Technology

- Dual voltage – accepts either 14.4V or 18V Panasonic Li-ion batteries
- High capacity 4.2Ah Li-ion battery (optional)
- High power: Impact Mode: 1,370 in. lbs. (114 ft. lbs.)
- Brushless motor and hybrid switch
- Variable speed trigger/reversible
- Electric brake
- 1/4" Hex quick connect collet
- LED work light
- Belt hook
- Low battery indicator
- Compact size (L x H x W): 5-5/8" x 9-17/32" x 2-13/16"
- Light weight (incl. Battery): 3.53 lbs.
- Charging Time (using EY0L82B charger)\*: Usable: 55 minutes Full: 70 minutes

#### Tool Specs

Max. Torque	1,370 in. lbs.*
Speed at No Load	0 - 2,500 rpm
Impact/min.	0 - 3,000 ipm

\*M14 High tensile bolt tightening for 3 sec.

#### TYPICAL APPLICATION

- Construction
- General Industry
- Automotive/Truck Repair and Maintenance
- HVAC
- Maintenance
- Recreational Vehicles



EY75A4X: Battery pack and battery charger are not included.

## EY75A5LS2G / EY75A5X

Li-ion 4.2Ah

14.4V/18V

Brushless Motor

TOUGH IP™

### Cordless 1/2" Impact Wrench

Dual Voltage Technology

- Dual voltage – accepts either 14.4V or 18V Panasonic Li-ion batteries
- High capacity 4.2Ah Li-ion battery (optional)
- High power: Impact Mode: 1,815 in. lbs. (151 ft. lbs.)
- Brushless motor and hybrid switch
- Variable speed trigger/reversible
- 1/2" Square drive with 1/4" quick change adapter (EY9HX111E)
- Electric brake
- LED work light
- Belt hook
- Low battery indicator
- Compact size (L x H x W): 6-1/8" x 9-17/32" x 2-13/32"
- Light weight (incl. Battery): 3.75 lbs.
- Charging Time (using EY0L82B charger)\*: Usable: 55 minutes Full: 70 minutes

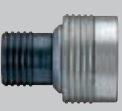
#### Tool Specs

Max. Torque	1,815 in. lbs.*
Speed at No Load	0 - 2,300 rpm
Impact/min.	0 - 3,500 ipm

\*M16 High tensile bolt tightening for 3 sec.

Standard Accessory  
1/2" square drive to 1/4" quick change adapter

EY9HX111E



#### TYPICAL APPLICATION

- Construction
- General Industry
- Automotive/Truck Repair and Maintenance
- HVAC
- Maintenance
- Recreational Vehicles



EY75A5X: Battery pack and battery charger are not included.



# High Torque Impact Wrench

470Nm (346 ft. lbs.) High Torque Impact,  
1/2" Square Drive, Compact & Light Weight



# Multi-Impact & Drill Driver

From driving to drilling holes... A single tool can do it all.



## EY7552LS2S / EY7552X

Li-ion **4.2Ah** **TOUGH IP**

### Cordless High Torque Impact Wrench Kit

18V

- High torque output 470Nm (346 ft. lbs.)
- Twin Hammer design for durability, speed & size
- Faster working speed than single hammer designs
- 1/2" Square drive with friction ring and through hole design
- Low vibration and noise level
- Variable speed trigger/reversible
- Electric brake
- Battery level indicator
- 4.2Ah High capacity 18V Li-ion battery
- Compact size (L x H x W): 8-7/16" x 9-15/16" x 3-1/16"
- Light weight (incl. Battery): 5.7 lbs.
- Charging Time (using EY0L82B charger): Usable: 55 minutes Full: 70 minutes

#### Tool Specs

Max. Torque	470Nm (346 ft. lbs.)
Speed at No Load	0 - 1,550 rpm
Impact/min.	0 - 2,400 ipm

#### TYPICAL APPLICATION

- Construction
- General Industry
- Automotive/Truck Repair and Maintenance
- HVAC
- Maintenance
- Recreational Vehicles



EY7552X: Battery pack and battery charger are not included.

## EY7549X

**TOUGH IP**

### Cordless Multi-Tool Impact & Drill Driver

14.4V

- Multi-function tool
- 1/4" Hex Impact Driver
- 1/2" Impact Wrench
- 2 Speed Drill Driver
- High capacity 14.4V 4.2Ah Li-ion battery (optional)
- 1/2" Square drive with ball detent
- 1/2" Detachable keyless chuck (EY9X003E (included))
- 1/4" hex quick change adapter (EY9HX111E (included))
- 2 Speed variable speed drill with 21 stage adjustable clutch (Approx.): 6.2 in. lbs. - 38.9 in. lbs.
- High power: Impact Mode: 1327 in. lbs. Drill & Driver Mode: 230 in. lbs.
- Variable Speed/Reversible:
- Impact Mode: 0-2,350 rpm
- Drill & Driver Mode: High 180-1,200 rpm Low: 60-380 rpm
- Impact/min.: 0-3,200 ipm in Impact Mode
- Electric brake
- LED work light
- Belt hook
- Low battery indicator
- Compact size (L x H x W): 8-9/32" x 9-3/16" x 2-1/16" (square drive)
- Light weight (incl. Battery): 4.07 lbs. (square drive) 4.52 lbs. (with keyless chuck)
- Charging Time (using EY0L82B charger): Usable: 50 minutes Full: 60 minutes

#### TYPICAL APPLICATION

- Construction
- General Industry
- Heavy Equipment/Off Road
- Automotive Repair and Maintenance
- HVAC
- Maintenance
- Recreational Vehicles



EY7549X: Battery pack and battery charger are not included.

Standard Accessory  
1/2" Detachable  
keyless chuck



EY9X003E

Standard Accessory  
1/2" Square drive  
to 1/4" hex quick  
change adapter



EY9HX111E



# Drill & Driver

High Speed Performance, Compact and Lightweight

18V

Increases application speed and working capacity



## EY74A1LS2G / EY74A1X

Li-ion **4.2Ah** **14.4V/18V** **TOUGH IP™**

### Cordless 1/2" Drill & Driver Kit

Dual Voltage Technology

- Dual voltage – accepts either 14.4V or 18V Panasonic Li-ion batteries
- High capacity 4.2Ah Li-ion battery
- Compact size (L x H x W): 8" x 9-13/32" x 2-5/16"
- Light weight (incl. battery): 4.30 lbs.
- Variable speed/reversible: Low: 80-600 rpm High: 220-1,750 rpm
- Clutch Torque (Approx.): 4.3-39 in. lbs. (2.0 in. lbs. per stage, total 18 stage)
- 1/2" Heavy duty keyless chuck
- Charging Time (using EY0L82B charger)\*: Usable: 55 minutes Full: 70 minutes
- Electric brake
- LED work light
- Low battery indicator
- Kit includes 1 - EY74A1, 2 - (EY9L51B) 4.2Ah 18V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- Max. Drill Diameter: in Wood: dia. 1-3/8" in Metal: dia. 1/2"
- Max. Screws Driving: Wood screw: dia. 9/32" Self-drilling screw: dia. 1/4"

**TYPICAL APPLICATION**

- General Construction
- Plumbing
- Finishing Carpentry
- Electric Installation Work



EY74A1X: Battery pack and battery charger are not included.

## EY7450LS2S **Li-ion 4.2Ah** EY7450LR2S **Li-ion 3.3Ah**

**TOUGH IP™**

### Cordless 1/2" Drill & Driver Kit

18V

- High capacity **EY7450LS2S** 4.2Ah Li-ion battery
- Compact size (L x H x W): 8-9/16" x 9-3/4" x 2-1/2"
- Light weight (incl. battery): **EY7450LS2S** 4.70 lbs.
- High power: **EY7450LS2S** 505 in. lbs.
- Variable speed/reversible: Low: 50-430 rpm High: 160-1,650 rpm
- Clutch Torque (Approx.): 8.8-61.0 in. lbs. (3.0 in. lbs. per stage, total 18 stage)
- 1/2" Heavy duty keyless chuck
- Charging Time (using EY0L82B charger)\*: **EY7450LS2S** Usable: 55 minutes Full: 70 minutes
- Electric brake
- LED work light
- Low battery indicator
- **EY7450LS2S** Kit includes 1 - EY7450, 2 - (EY9L51B) 4.2Ah 18V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- **EY7450LR2S** Kit includes 1 - EY7450, 2 - (EY9L50B) 3.3Ah 18V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- Max. Drill Diameter: in Wood: dia. 1-7/16" in Metal: dia. 1/2"
- Max. Screws Driving: Wood screw: dia. 5/16" Self-drilling screw: dia. 1/4"

**TYPICAL APPLICATION**

- General Construction
- Plumbing
- Finishing Carpentry
- Electric Installation Work



## EY7441LR2S

**Li-ion 3.3Ah** **TOUGH IP™**

### Cordless 1/2" Drill & Driver Kit

14.4V

- High capacity 3.3Ah Li-ion battery
- Compact size (L x H x W): 7-5/8" x 9-1/8" x 2-3/8"
- Light weight (incl. battery): 3.85 lbs.
- High power: 370 in. lbs.
- Variable speed/reversible: Low: 70-400 rpm High: 200-1,400 rpm
- Clutch Torque (Approx.): 4.4-39.0 in. lbs. (2.0 in. lbs. per stage, total 18 stage)
- 1/2" Heavy duty keyless chuck
- Charging Time (using EY0L82B charger)\*: Usable: 40 minutes Full: 55 minutes
- Electric brake
- LED work light
- Low battery indicator
- Belt hook
- Kit includes 1 - EY7441, 2 - (EY9L44B) 3.3Ah 14.4V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- Max. Drill Diameter: in Wood: dia. 1-3/8" in Metal: dia. 1/2"
- Max. Screws Driving: Machine screw: M5 Wood screw: dia. 1/4"

**TYPICAL APPLICATION**

- General Construction
- Plumbing
- Finishing Carpentry
- Electric Installation Work





# Cordless Drill & Driver Kit



## EY7411LA1S

### Cordless Drill & Driver Kit with Batch Counting

Li-ion  
**E 1.5Ah**

3.6V

- Batch count function up to 99 fasteners
- 21 Stage clutch with auto shut off (Approx.): 2.7-25.7 in. lbs.
- Clutch cover for locking out clutch adjustment
- Rehit prevention function
- 3 Programmable tones for batch complete
- 2 Speed/reversible: Low: 200 rpm High: 600 rpm
- Yellow LED work light which reduces glare
- Long lasting 1.5Ah Li-ion battery
- 1/4" Hex quick change chuck
- Powerful: Low: 39.0 in. lbs. High: 13.3 in. lbs.
- Compact size (L x H x W): 10-7/8" x 5-9/32" x 1-13/16" in straight format
- Light weight (incl. battery): 1.10 lbs.
- Charging Time (using EY0L10B charger)\*: Usable: 15 minutes Full: 30 minutes
- Low battery indicator
- Max. Drill Diameter: in Metal dia. 3/16" (spc t=1/16")
- Max. Screw Driving: Wood screw dia. 5/32" x 1-1/2"
- Kit includes 1 - EY7411LA1S, 1 - (EY9L10B) 1.5Ah 3.6V Li-ion Battery, 1 - (EY0L11B) Charger, 1 - (EY9X007E) Clutch Cover



#### TYPICAL APPLICATION

- Rack/Cabinet installers
- Electronics Assembly
- Electricians
- Service engineers



Standard Accessory  
Clutch lock cover

EY9X007E

## EY7410LA2S / EY7410LA1C

### Cordless Drill & Driver Kit

Li-ion  
**E 1.5Ah**

3.6V

- 1.5Ah Li-ion battery
- Compact size (L x H x W): 10-7/8" x 5-9/32" x 1-13/16" in straight format
- Light weight (incl. battery): 1.10 lbs.
- Powerful: Low: 39.0 in. lbs. High: 13.3 in. lbs.
- 2 Speed reversible: Low: 200 rpm High: 600 rpm
- Clutch Torque (Approx.): 2.7-25.7 in. lbs. (0.9 in. lbs. per stage, total 21 stage)
- 21 Stage clutch with auto shut off
- 1/4" Hex quick change chuck
- Cap for clutch lock out
- Charging Time (using EY0L11B charger)\*: Usable: 15 minutes Full: 30 minutes
- Yellow LED work light which reduces glare
- Low battery indicator
- Kit includes 1 - EY7410, 2 - (EY9L10B) 1.5Ah 3.6V Li-ion Batteries, 1 - (EY0L11B) Charger, and Case.
- Max. Drill Diameter: in Metal dia. 3/16" (spc t=1/16")
- Max. Screws Driving: Wood screw dia. 5/32" x 1-1/2"



EY7410LA1C:  
1 Battery pack is included.  
Charger not included.

#### TYPICAL APPLICATION

- Rack/Cabinet installers
- Electronics Assembly
- Electricians
- Service engineers



Optional Accessory  
Clutch lock cover

EY9X007E

\*Charging times are approximate and may be slightly longer depending on conditions.



# Hammer Drill & Driver

High power drilling in masonry, wood, metal.

Li-ion  
**S4.2Ah**



EY7950LS2S **Li-ion S4.2Ah** EY7950LR2S **Li-ion R3.3Ah**

**TOUGH IP**

## Cordless Hammer Drill & Driver Kit

18V

- High capacity **EY7950LS2S** 4.2Ah Li-ion battery  
**EY7950LR2S** 3.3Ah Li-ion battery
- Compact size (L x H x W): 9-1/4" x 9-3/4" x 2-1/2"
- Light weight (incl. battery): **EY7950LS2S** 5.00 lbs.  
**EY7950LR2S** 5.00 lbs.
- High performance as regular drill: Max. Torque: **EY7950LS2S** 505 in. lbs.  
**EY7950LR2S** 505 in. lbs.
- Variable speed control/reversible: Low: 50-430 rpm High: 160-1,650 rpm
- Clutch Torque (approx.): 8.8-61.0 in. lbs. (3.0 in. lbs. per stage, total 18 stage) (Max. Torque at drilling position-stage 16)
- Blows Rate per Minute: Low: 900-7,740 bpm High: 2,880-29,700 bpm
- 1/2" Heavy duty keyless chuck
- Charging Time (using EY0L82B charger)\*:  
**EY7950LS2S** Usable: 55 minutes Full: 70 minutes  
**EY7950LR2S** Usable: 40 minutes Full: 55 minutes
- Electric brake
- LED work light
- Low battery indicator
- **EY7950LS2S** Kit includes 1 - EY7950, 2 - (EY9L51B) 4.2Ah 18V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- **EY7950LR2S** Kit includes 1 - EY7950, 2 - (EY9L50B) 3.3Ah 18V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- Max. Drill Diameter: in Wood: dia. 1-7/16" in Metal: dia. 1/2" in Mortar/Brick: dia. 1/2"
- Max. Screws Driving: Wood screw: dia. 5/16" Self-drilling screw: dia. 1/4"



TYPICAL APPLICATION	
Electricians	Masonry drilling
General construction	Masonry/wood fastening
Interior installation	Wood/metal drilling
	Heating, water & sanitation technicians

\*Charging times are approximate and may be slightly longer depending on conditions.

## EY7940LR2S

**Li-ion R3.3Ah TOUGH IP**

## Cordless Hammer Drill & Driver Kit

14.4V

- High capacity 3.3Ah Li-ion battery
- Compact size (L x H x W): 7-7/8" x 9-1/8" x 2-3/8"
- Light weight (incl. battery): 3.96 lbs.
- High performance as regular drill: Max. Torque: 370 in. lbs.
- Variable speed control/reversible: Low: 70-400 rpm High: 200-1,400 rpm
- Clutch Torque (approx.): 8.8-39 in. lbs. (1.8 in. lbs. per stage, total 18 stage) (Max. Torque at drilling position-stage 16)
- High speed masonry drilling: Max. 1,400 rpm / 25,200 bpm
- Blows Rate per Minute: Low: 1,260-7,200 bpm High: 3,600-25,200 bpm
- 1/2" Heavy duty keyless chuck
- Charging Time (using EY0L82B charger)\*: Usable: 40 minutes Full: 55 minutes
- Electric brake
- LED work light
- Low battery indicator
- Kit includes 1 - EY7940, 2 - (EY9L44B) 3.3Ah 14.4V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.
- Max. Drill Diameter: in Metal dia. 1/2" in Wood dia. 1-3/8" in Mortar/Brick dia. 1/2"
- Max. Screws Driving: Machine screw: M5 Wood screw: dia. 1/4" Self-drilling screw: dia. 1/4"

TYPICAL APPLICATION	
Electricians	Masonry drilling
General construction	Masonry/wood fastening
Interior installation	Wood/metal drilling
	Heating, water & sanitation technicians



\*Charging times are approximate and may be slightly longer depending on conditions.



# SDS-Plus Rotary Hammer

Powerful, light and tough for continuous use!



Easy to hold, resists fatigue!

Two-Speed Selection



Two-finger switch

Grip width of our EY6813



Ø5- Ø20	Ø3.2- Ø5
HammerH and	Hammer Soft
T + H	T + S
23.6 kN [2,400 kgf]	12.7 kN [1,300 kgf]

## EY7880LP2S

### Cordless SDS-Plus Rotary Hammer Kit

Li-ion **P3.0Ah** **TOUGH IP**

28.8V

- High capacity 3.0Ah Li-ion battery
- Compact size (L x H x W): 12-9/16" x 8" x 3-1/16"
- Light weight (incl. battery): 8.49 lbs.
- Two speed hammering selection: High: 0 - 4,500 bpm Low: 0 - 2,800 bpm
- Two speed drilling selection variable speed/reversible: High: 0 - 920 rpm Low: 0 - 500 rpm
- Dual function: Rotary hammer or drill
- Slow start two-finger switch for accurate drilling with a clean finish
- Ergonomic soft rubber grip for stress reduction
- Dust collection cup as standard equipment
- 3/4" SDS-Plus bit system
- Hammering force: 23.6 kN
- 360° auxiliary side handle with built-in depth gauge
- Charging Time (using EY0L82B charger)\*: Usable: 60 minutes Full: 80 minutes
- LED work light
- Low battery indicator
- Kit includes 1 - EY7880, 2 - (EY9L81B) 3.0Ah 28.8V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.

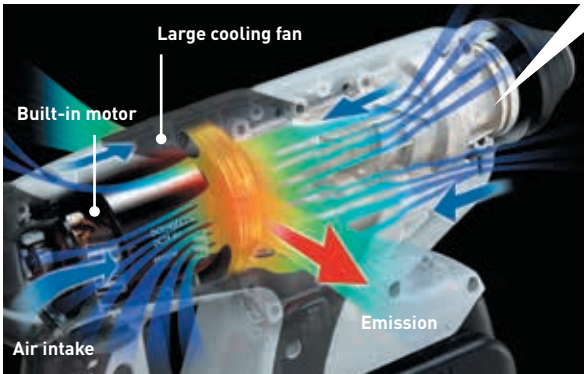


#### TYPICAL APPLICATION

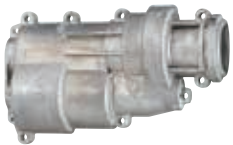
- Concrete drilling
- Masonry drilling

### Excellent cooling/dust-proof design supports continuous use

Rigorous continuous use is made possible by the flow of air through a space between the gear case and the main unit housing. This acts to cool the gear case, containing the hammer and gears, which can become hot during extended use. Large cooling fan drivers exhaust system helps prevent dust build-up.



#### Magnesium metal gear case



The gear case is made from magnesium which is light and excellent for dispersing heat. The hammer and gears are covered to prevent fine particles of dust from entering the tool and grease from leaking.

#### Dust-proof switch



The dust-proof switch prevents fine particles of dust from entering the tool and causing problems with the motor.

### Serial drilling of 180 holes (1/2" in diameter)!

Cooling and dust proof performance have been improved and this serial drilling display of 180 holes (dia. 1/2" x 1-9/16") demonstrates the toughness of the hammer to handle rigorous continuous work conditions (equivalent to 3 battery packs).



#### Optional Accessories

SDS-Plus Chiseling Attachment  
For light chiseling

EY9HX402E



SDS-Plus Drill Chuck  
For 1/16" dia. - 1/2" dia. bit

EY9HX400E



### Carefully designed for ease of use. Supported functions.



Standard Accessory  
Dust collection cup



White LED light



For light chiseling

\*Charging times are approximate and may be slightly longer depending on conditions.



# Reciprocating Saw

Long Lasting for continuous use

18V

Powerful cutting through thick metal pipe

14.4V

Fast cutting through thin metal pipe

Li-ion  
S4.2Ah

EY45A1LS1G/EY45A1X

Li-ion  
S4.2Ah

14.4V/18V

TOUGH IP™

## Cordless Reciprocating Saw Kit

Dual Voltage Technology



- Dual voltage – accepts either 14.4V or 18V Panasonic Li-ion batteries
- High capacity 4.2Ah Li-ion battery
- Powerful Cutting (stroke length 1-1/8mm, 0-2,800spm)
- Compact Size (L x H x W): 18-1/8" x 8-1/4" x 3-7/16"
- Light weight: 7.50 lbs.
- Max. Cutting Size in metal pipe dia. 5-1/8", in wood 9-1/4" thickness
- Easy blade replacement
- Safety switch lock lever
- Low battery indicator
- Charging Time (using EY0L82B charger)\*: Usable: 55 minutes Full: 70 minutes
- Kit includes 1 - EY45A1, 1 - (EY9L51B) 4.2Ah 18V Li-ion Battery, 1 - (EY0L82B) Charger, and Case.

### TYPICAL APPLICATION

- Carpentry
- Plumbing
- Electrician
- Installation
- Demolition

EY45A1X: Battery pack and battery charger are not included.



### Cutting

Long strong length and high stroke speed enables cutting through thick materials.



### Demolition

High voltage reciprocating saw offers powerful cutting performance.



### Long Lasting

High battery capacity enables tool to last longer.



### Anti vibration

Spring inside tool absorbs shock for less fatigue



### Blade Replacement

Blade replacement made easy by using the blade clamping system. Blade is easily secured by inserting and pushing into tool. Blade can be easily removed by turning the holder collar.

### Replacement Blade

\*Not available as an accessory

#### Metal Blade Standard

- Bi-metal blade
- 14 teeth per inch
- Blade length: 5-7/8"
- Blade length for cutting: 5-1/8"
- Blade width: 1/16"
- Cutting range: ø2-3/4"

#### Wood Blade Standard

- carbon tool steels
- 5 teeth per inch
- Blade length: 9-7/16"
- Blade length for cutting: 8-11/16"
- Blade width: 1/16"
- Cutting range: ø5-7/8"

\*Charging times are approximate and may be slightly longer depending on conditions.



# Multi-Purpose Metal Cutter

Made for cutting various materials



EY4542LR2M

Li-ion 3.3Ah TOUGH IP™

## Cordless Multi-Purpose Metal Cutter Kit

14.4V

- High capacity 3.3Ah Li-ion battery
- Compact size (L x H x W): 13-1/4" x 9" x 6-5/16"
- Light weight (incl. battery): 5.84 lbs.
- Rotating Speed: 3,600 rpm
- Blade Size: Outer diameter 5-3/8" Arbor size 13/16"
- Cutting Depth: Max. 1-13/16"
- Electric brake
- Cutting edge is easily seen through transparent window
- In-line ergonomic design for comfortable cutting
- Safety switch lock lever
- Shaft lock button for easy blade replacement
- Charging Time (using EY0L82B charger)\*:  
Usable: 40 minutes Full: 55 minutes
- LED work light
- Low battery indicator
- Kit includes 1 - EY4542, 2 - (EY9L44B) 3.3Ah 14.4V Li-ion Batteries, 1 - (EY0L82B) Charger, and Case.

### TYPICAL APPLICATION

- Metal construction
- Plumbing
- General construction
- Electric installation work



### Metal Cutting Blade Standard



- C-6 tungsten carbide-tipped blade for metal cutting
- 30 teeth
- Kerf (in.): 1/16" (.055)

### Wood Cutting Blade Optional



- C-6 tungsten carbide-tipped blade for wood cutting
- 30 teeth
- Kerf (in.): 3/64" (.047)

### 3-way Dust Control



1 Use with vacuum cleaner to collect dust



2 Collects dust in the dust case



3 Eject dust to the rear of the machine



Cutting depth adjustment



Cutting edge is easily seen through window

\*Charging times are approximate and may be slightly longer depending on conditions.



# Cordless Angle Grinder

EY4640X

TOUGH IP™

## Cordless Angle Grinder

14.4V

- Compact size (L x H x W): 14-3/8" x 4-1/8" x 2-15/16"
- Light weight (incl. battery): 4.85 lbs.
- Speed at No Load: 9,500 rpm
- Wheel diameter: 4-1/2"
- Slim grip
- On lock warning lamp function
- Low battery indicator
- Replaceable carbon brushes
- Charging Time (using EY0L82B charger)\*:  
Usable: 40 minutes Full: 55 minutes
- Electronic Performance Monitoring System
- Accepts Panasonic 14.4V Li-ion battery packs.

\*Charging time, weight and size:  
case of using the battery pack (EY9L44B)

### TYPICAL APPLICATION

- Metal construction
- General construction
- Plumbing
- Electric installation work



EY4640X: Battery, battery charger and grinding wheel are not included.

\*Charging times are approximate and may be slightly longer depending on conditions.



Reinforcement bar cutting



Metal Cutting



Metal Grinding



### Slim grip design

Slim grip is designed so that you can hold it securely with five fingers, reducing fatigue and making the grinder easy to use both above your head and facing to the side.



### Indicator lamp for on lock warning lamp function

The grinder will not start when the switch is at the ON position, or even when the battery pack is inserted. The warning lamp will flash to indicate that the on lock start prevention has started.



EY37C1B

## Cordless Flashlight

14.4V / 18V / 21.6V

- Triple voltage – accepts either 14.4V, 18V or 21.6V Panasonic Li-ion batteries
- Brightness of approx. 4,000 Lux
- Adjustable head angle (Four steps)
- Low battery indicator
- Bulb: Xenon 0.55A
- Size (L x H x W) (excluding battery): 10-63/64" x 4-7/8" x 3-35/64"
- Weight (excluding battery): 0.75 lbs.
- Shoulder strap
- Accepts Panasonic 14.4V, 18V, 21.6V Li-ion battery packs.

### Acceptable Battery Packs and Hours of Use

- With 21.6V Li-ion battery pack EY9L61B: Approx. 6 hours 20 minutes
- With 18V Li-ion battery pack EY9L51B: Approx. 6 hours 15 minutes
- With 18V Li-ion battery pack EY9L50B: Approx. 5 hours 30 minutes
- With 14.4V Li-ion battery pack EY9L45B: Approx. 5 hours 10 minutes
- With 14.4V Li-ion battery pack EY9L44B: Approx. 4 hours 35 minutes
- With 14.4V Li-ion battery pack EY9L41B: Approx. 4 hours 20 minutes
- With 14.4V Li-ion battery pack EY9L42B: Approx. 2 hours



EY37C1B: Battery pack and battery charger are not included.



EYC194LR

14.4V 3.3Ah Combo Kit

14.4V

Li-ion R 3.3Ah

- 1 - EY7441 (Body): 14.4V Drill & Driver
  - 1 - EY4542 (Body): 14.4V Multi-Purpose Metal Cutter
  - 2 - EY9L44B: 14.4V 3.3Ah Li-ion battery pack
- 1 - EY0L82B: Charger
  - 1 - Panasonic Tool Bag
  - Standard/Optional Accessories: See page 41



EYC941B

14.4V Power Supply Kit

14.4V

Li-ion S 4.2Ah

- 2 - EY9L45B: 14.4V 4.2Ah Li-ion battery pack
- 1 - EY0L82B: Charger



EYC950B

18V Power Supply Kit

18V

Li-ion S 4.2Ah

- 2 - EY9L51B: 18V 4.2Ah Li-ion battery pack
- 1 - EY0L82B: Charger



EYC144V33

14.4V 3.3Ah Combo Kit

14.4V

Li-ion R 3.3Ah

- 1 - EY7441 14.4V Drill & Driver
  - 2 - EY9L44B 14.4V 3.3Ah Battery Packs
  - 1 - Carry Bag
- 1 - EY75A1 Dual Voltage Impact Driver
  - 1 - EY0L82B Charger



EYC144DV42

14.4V 4.2Ah Combo Kit

14.4V

Li-ion S 4.2Ah

- 1 - EY74A1 Dual Voltage Drill & Driver
  - 2 - EY9L45B 14.4V 4.2Ah Battery Packs
  - 1 - Carry Bag
- 1 - EY75A1 Dual Voltage Impact Driver
  - 1 - EY0L82B Charger



EYC18DV42

18V 4.2Ah Combo Kit

18V

Li-ion S 4.2Ah

- 1 - EY74A1 Dual Voltage Drill & Driver
  - 2 - EY9L51B 18V 4.2Ah Battery Packs
  - 1 - Carry Bag
- 1 - EY75A1 Dual Voltage Impact Driver
  - 1 - EY0L82B Charger





# Ni-MH Series



## EY6432NQKW

### Cordless 1/2" Drill & Driver Kit

15.6V

- 2.8Ah Ni-MH battery
- Compact size (L x H x W): 8-3/16" x 9" x 2-9/32"
- Light weight (incl. battery): 4.50 lbs.
- High power: 370 in. lbs.
- Variable speed control/reversible: Low: 65 - 450 rpm High: 200 -1,450 rpm
- Clutch Torque (approx.): 9-61 in. lbs. (3.0 in. lbs. per stage, total 18 stage) (Max. Torque at drilling position-stage 19)
- 1/2" heavy-duty keyless chuck
- 2-speed gear box
- Spindle Thread: 3/8" - 24
- Charging Time (using EY0110B charger)\*: 45 minutes
- Electric brake
- New ergonomic design
- Kit includes 1 - EY6432, 2 - (EY9230B) 2.8Ah 15.6V Ni-MH Batteries, 1 - (EY0110B) Charger, and Case.

**TYPICAL APPLICATION**

- General construction
- Finishing carpentry
- Electric installation work
- Plumbing



## EY6409NQKW

### Cordless 1/2" Drill & Driver Kit

12V

- 2.8Ah Ni-MH battery
- Compact size (L x H x W): 8-3/16" x 8-31/32" x 2-9/32"
- Light weight (incl. battery): 4.20 lbs.
- High power: 292 in. lbs.
- Variable speed control/reversible: Low: 50-400 rpm High: 180-1,300 rpm
- Clutch Torque (approx.): 9-50 in. lbs. (2.4 in. lbs. per stage, total 18 stage) (Max. Torque at drilling position-stage 19)
- 1/2" heavy-duty keyless chuck
- 2-speed gear box
- Spindle Thread: 3/8" - 24
- Charging Time (using EY0110B charger)\*: 45 minutes
- Electric brake
- New ergonomic design
- Kit includes 1 - EY6409, 2 - (EY9200B) 2.8Ah 12V Ni-MH Batteries, 1 - (EY0110B) Charger, and Case.

**TYPICAL APPLICATION**

- General construction
- Finishing carpentry
- Electric installation work
- Plumbing



## EY6220NQ

### Cordless Drill & Driver Kit

2.4V

- Compact size (L x H x W): 9-3/8" x 5" x 1-7/16" in straight format
- Light weight (incl. battery): 0.90 lbs.
- Max. Torque: Low: 26 in. lbs. High: 13 in. lbs.
- Speed at No Load: Low: 200 rpm High: 400 rpm
- Clutch Torque (approx.): 3.5, 6.3, 9.1, 11.9, 14.7, 17.5 in. lbs. (multi-stage) (Max. Torque at 6 position)
- Easily converts from straight to pistol form
- 2-speed gear box
- 1/4" hex drive
- Multi-stage clutch plus drill
- Reversible
- Gear lock mechanism for manual tightening
- Charging Time (using EY0L11B charger)\*: 45 minutes
- Kit includes 1 - EY6220, 1 - (EY9221B) 2.8Ah 2.4V Ni-MH Battery, and 1 - (EY0L11B) Charger.



#### TYPICAL APPLICATION

- Appliance Repair
- Production line, assembly work
- Circuit board assembly (of small equipment)



EY6220N: 1 Battery pack is included. Charger not included.

## EY3530NQMKW

### Cordless Metal Cutter Kit

15.6V

- 2.8Ah Ni-MH battery
- Compact size (L x H x W): 13-25/32" x 7-1/8" x 7-13/16"
- Light weight (incl. battery): 6.70 lbs.
- Rotating Speed: 3,100 rpm
- Blade Size: Outer diameter 5-3/8" Arbor size 13/16"
- Cutting Depth: Min. 1/8" Max. 1-13/16"
- Electric brake
- Cutting edge is easily seen through transparent window
- In-line ergonomic design for comfortable cutting
- Safety switch lock lever
- Spindle lock button for easy blade replacement
- Charging Time (using EY0110B charger)\*: 45 minutes
- Kit includes 1 - EY3530, 2 - (EY9230B) 2.8Ah 15.6V Ni-MH Batteries, 1 - (EY0110B) Charger, and Case.

#### TYPICAL APPLICATION

- General construction
- Electric installation work
- Metal construction
- Plumbing



**EY9PM13C Standard**

- C-6 tungsten carbide-tipped blade for metal cutting
- 30 teeth
- Kerf (in.): 1/16" (.055)

Replacement Blades Blade size: dia. 5-5/16"



## EYC136NQKW

### Metal Combo Kit

15.6V

- 1 - EY3530 (Body): 15.6V Metal Cutter + Standard metal cutter blade
- 1 - EY6432 (Body): 15.6V Drill & Driver
- 1 - EY0110: Charger for Ni-MH battery pack
- 2 - EY9230: 2.8Ah Ni-MH battery pack
- 1 - Carrying Case



\*Charging times are approximate and may be slightly longer depending on conditions.



EYOL82B

Charger for Li-ion Batteries

- Accepts Panasonic's **10.8V-28.8V** Battery Packs (See below for details)
- Equipped with a lamp system that indicates the status of the 6 charging functions at a glance

	TYPE OF BATTERY		
	Li-ion		
	LS TYPE	LR TYPE	LZ TYPE
28.8V			EY9L82B
21.6V			EY9L62B
18V	EY9L51B	EY9L50B	
14.4V	EY9L45B	EY9L44B	
Charging Time	EY9L51B: 55 min.* 70 min. EY9L45B: 55 min.* 70 min.	40 min.* 55 min.	EY9L82B: 60 min.* 80 min. EY9L62B: 60 min.* 85 min.



\*Usable Charge (80%)

EYOL11B

Charger for Li-ion Batteries & Ni-MH Batteries

- Accepts Panasonic's **2.4V-3.6V** Battery Packs (See below for details)

	TYPE OF BATTERY	
	Li-ion	Ni-MH
	LA TYPE	N TYPE
3.6V	EY9L10B	
2.4V		EY9221B
Charging Time	15 min.* • 30 min.	45 min.



EYOL10B

Charger for Li-ion & Ni-CD Batteries

- Accepts Panasonic's **2.4V-3.6V** Battery Packs (See below for details)

	TYPE OF BATTERY		
	Li-ion	Ni-Cd	
	LA TYPE	C TYPE	D TYPE
3.6V	EY9L10B	EY9025B	
2.4V			EY9021B
Charging Time	15 min.* • 30 min.	15 min.	15 min.



EY0110B

Charger for Ni-MH Batteries & Ni-Cd Batteries













- Accepts Panasonic's **7.2V-24V** Battery Packs (See below for details)
- Equipped with a lamp system that indicates the status of the 5 charging functions at a glance

	TYPE OF BATTERY							
	Ni-MH				Ni-Cd			
	G TYPE	N TYPE		V TYPE	F TYPE	E TYPE	C TYPE	D TYPE
24V			EY9210B		EY9117B	EY9116B		
18V	EY9251B							
15.6V		EY9231B		EY9230B		EY9136B		
12V		EY9201B		EY9200B		EY9106B	EY9101B	EY9006B
9.6V							EY9182B/9180B	EY9086B
7.2V					EY9166B			EY9066B
Charging Time	65 min.	55 min.	90 min.	45 min.	60 min.	30 min.	25 min.	20 min.



\*Charging times are approximate and may be slightly longer depending on conditions.

Battery Pack / Battery Charger - Compatibility Chart

Voltage	Model			Battery	Charging Time										Charger
					15	30	35	40	50	55	60	70	75	80	
28.8V	EY7880			 EY9L82B							▲*2			●	EYOL82B
18V	 EY37C1B	 EY74A1 EY45A1 EY75A4 EY75A5	 EY9L51B							▲*2		●			
			 EY9L50B				▲*2		●						
 EY9L45B							▲*2		●						
			 EY9L44B				▲*2		●						
14.4V			 EY9L44B												
3.6V	EY7410 EY7411			 EY9L10B	▲*2	●								EYOL11B	
15.6V	EY6432 EY3530			 EY9230B				●						EY0110B	
12V	EY6409			 EY9200B				●							
2.4V	EY6220			 EY9221B				●						EYOL11B	

\*1 Available X type (bare tool) \*2 Usable Charge (80%)



# Li-ion Capacity Table

## Impact Driver

Voltage				18V
Model No.				EY75A4LS2G
Battery Type				EY9L51B (LS)
Fastening	Wood Screws in Yellow Pine	dia. 3/16" x 2-15/16"	610 pcs	
	Self-Drilling Screws in SPC	dia. 5/32" x 1/2" t=1/16"	990 pcs	
Bolting	Standard Tensil Bolt	M16 x 1" t=3/8"	1,150 pcs	
	Standard Tensil Bolt	M12 x 1" t=3/8"	2,700 pcs	
	High Tensil Bolt	M12 x 1" t=3/8"	340 pcs	

## High Torque Impact Wrench

Voltage				18V
Model No.				EY7552LS2S
Battery Type				EY9L51B (LS)
Fastening	SPAX screws in yellow pine		dia. 8mm x 80mm	210 pcs
Bolting	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec.	300 pcs	
	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec. *with extension	180 pcs	
	Standard Tensil Bolt	M12 x 25mm, t=10mm 1 sec.	640 pcs	
	High Tensil Bolt	M24 x 25mm, t=10mm 3 sec.	220 pcs	
	Standard Tensil Bolt	M20 x 25mm, t=10mm 2.5 sec.	250 pcs	
	Standard Tensil Bolt	M16 x 25mm, t=10mm 2 sec.	300 pcs	

## Impact Wrench

Voltage				18V
Model No.				EY75A5LS2G
Battery Type				EY9L51B (LS)
Fastening	Wood Screws in Yellow Pine	dia. 3/16" x 2-15/16"	550 pcs	
	Wood Screws in Yellow Pine	dia. 3/16" x 4-3/4"	120 pcs	
	Self-Drilling Screws in SPC	dia. 5/32" x 1/2" t=1/16"	950 pcs	
Bolting	Standard Tensil Bolt	M16 x 1" t=3/8"	1,000 pcs	
	Standard Tensil Bolt	M14 x 1" t=3/8"	1,090 pcs	
	High Tensil Bolt	M12 x 1" t=3/8"	350 pcs	

## Multi-Impact & Drill Driver

Voltage				14.4V
Model No.				EY7549X
Battery Type				EY9L45B (LS)
Drill Driver Mode	Holes in SPC	dia. 13/16", t=1/16"	19 pcs	
	Holes in SPC	dia. 1-5/16", t=1/16"	16 pcs	
	Holes in Yellow Pine	dia. 11/16", t=4-3/4"	90 pcs	
	Holes in Yellow Pine	dia. 1-3/16", t=1-9/16"	120 pcs	
Impact Mode	Coach Screws in Yellow Pine	dia. 11/32" x 1-31/32"	55 pcs	
	Self Drilling Screws in SPC	dia. 5/32" x 1/2", t=3/32"	450 pcs	
	High Tensile Bolt	M12 x 1", t=3/8"	200 pcs	

## Drill & Driver

Voltage				18V			14.4V
Model No.				EY7450LS2S	EY7450LR2S	EY74A1LS2G	EY7441LR2S
Battery Type				EY9L51B (LS)	EY9L50B (LR)	EY9L51B (LS)	EY9L44B (LR)
Fastening	Wood Screws in Yellow Pine [High Mode]	dia. 5/32" x 1"	-	-	-	1,300 pcs	930 pcs
	Wood Screws in Yellow Pine [Low Mode]	dia. 5/16" x 3-5/32"	-	-	-	340 pcs	-
	Self-drilling Screws in SPC [High Mode]	dia. 5/32" x 1/2" t=1/16"	640 pcs	500 pcs	1,050 pcs	590 pcs	
Drilling	Holes in Plaster Board + PlyWood [Wooding Core] [High Mode]	Plaster Board 1/2" + PlyWood 15/32" dia. 2-11/16" t=15/16"	75 pcs	60 pcs	80 pcs	-	
	Holes in SPC [High Mode]	dia. 1/2" t=1/16"	300 pcs	240 pcs	-	-	
	Holes in SPC [Hole saw] [High Mode]	dia. 13/16" x t=1/16"	45 pcs	35 pcs	40 pcs	19 pcs	
	Holes in SPC [Hole saw] [Low Mode]	dia. 1-5/16" t=1/16"	45 pcs	35 pcs	60 pcs	16 pcs	
	Holes in Yellow Pine [High Mode]	dia. 11/16" x t=4-3/4"	130 pcs	100 pcs	120 pcs	75 pcs	
	Holes in Yellow Pine [Low Mode]	dia. 1-3/16" t=1-9/16"	-	-	220 pcs	120 pcs	

Voltage		3.6V	3.6V
Model No.		EY7410LA2S	EY7411LA1S
Battery Type		EY9L10B (LA)	EY9L10B (LA)
Wood Screws	dia. 1/8" x 1/2"	600 pcs	600 pcs
Screws in	M5 x 5/16"	1,000 pcs	1,000 pcs
Holes in SPC	dia. 1/16", *t=1/16"	85 pcs	85 pcs

## Hammer Drill & Driver

Voltage			18V		14.4V
Model No.			EY7950LS2S	EY7950LR2S	EY7940LR2S
Battery Type			EY9L51B (LS)	EY9L50B (LR)	EY9L44B (LR)
Fastening	Wood Screws in Yellow Pine [High Mode]	dia. 1/4" x 3-5/32"	300 pcs	240 pcs	-
	Wood Screws in Yellow Pine [Low Mode]	dia. 5/16" x 3-5/32"	190 pcs	150 pcs	-
	Self-drilling Screws in SPC [High Mode]	dia. 5/32" x 1/2" t=1/16"	640 pcs	500 pcs	590 pcs
Drilling	Holes in Plaster Board + PlyWood [Wooding Core] [High Mode]	Plaster Board 1/2" + PlyWood 15/32" dia. 2-11/16" t=15/16"	75 pcs	60 pcs	-
	Holes in Plaster Board + PlyWood [Low Mode]	Plaster Board 1/2"+PlyWood 15/32" dia. 4-29/32" x 15/16"	30 pcs	25 pcs	-
	Holes in SPC [High Mode]	dia. 1/2" t=1/16"	300 pcs	240 pcs	-
	Holes in SPC (Hole saw) [High Mode]	dia. 13/16" x t=1/16"	45 pcs	35 pcs	19 pcs
	Holes in SPC (Hole saw) [Low Mode]	dia. 1-5/16" t=1/16"	45 pcs	35 pcs	16 pcs
	Holes in mortar [High Mode]	dia. 1/4" x 1-3/16" depth	180 pcs	140 pcs	85 pcs
	Holes in mortar [High Mode]	dia. 3/8" x 1-3/16" depth	140 pcs	110 pcs	-
	Holes in masonry [High Mode]	dia. 3/16" x 1-9/16" depth	150 pcs	120 pcs	-
	Holes in Yellow Pine [High Mode]	dia. 11/16" t=4-3/4"	130 pcs	100 pcs	75 pcs

## SDS-Plus Rotary Hammer

Voltage		28.8V
Model No.		EY7880LP2S
Battery Type		EY9L82B
Concrete*	dia. 1/4" x 1-3/16"	160 holes /charge
	dia. 5/16" x 3-15/16"	30 holes /charge
	dia. 1/2" x 1-9/16"	75 holes /charge
	dia. 9/16" x 3-17/32"	20 holes /charge
	dia. 25/32" x 1-9/16"	30 holes /charge

## Reciprocating Saw

Voltage			18V
Model No.			EY45A1LS1G
Battery Type			EY9L51B (LS)
Steel Pipe for Ordinary Piping	outer diameter 1-11/32" (t=1/8")	45 pcs/charge	
	outer diameter 1-29/32" (t=1/8")	30 pcs/charge	
	outer diameter 3-1/16" (t=5/32")	10 pcs/charge	
Yellow Pine	2 x 4 (1-1/16" x 3-1/16")	80 pcs/charge	
	2 x 10 (1-1/16" x 9-1/32")	50 pcs/charge	

## Multi-Purpose Metal Cutter

Voltage		14.4V
Model No.		EY4542LR2M
Battery Type		EY9L44B (LR)
Conduit Pipe	ø1" t=1/16"	170 pcs/charge
SPC	17-11/16" t=1/16"	14 pcs/charge
Plywood	35-7/16" t=1/2"	55 pcs/charge
PVC Pipe	dia. 1-1/2" t=1/8"	120 pcs/charge

## Angle Grinder\*

Voltage		14.4V
Model No.		EY4640X
Reinforcing Bar	dia. 3/8"	30 pcs/charge

\*Capacity if using EY9L44B battery pack

# Ni-MH Capacity Table

## Drill & Driver

Voltage		15.6V	12V	2.4V
Model No.		EY6432NQKW	EY6409NQKW	EY6220NQ
Wood Screws in Yellow Pine	dia. 5/32" x 1"	—	525 pcs	—
	dia. 1/4" x 2-1/2"	480 pcs	—	—
	dia. 1/8" x 25/32"	—	—	280 pcs
Self-Drilling Screws in SPC	dia. 1/8" x 1/2", *t=1/16"	—	730 pcs	—
Holes in Yellow Pine	dia. 1-7/16", *t=1-1/2"	120 pcs	—	—

\* The above table shows average values. There may be some difference depending on the battery condition, the sharpness of the drill bit, the material hardness, etc.

\* t=thickness of material      \*At concrete strength of medium hardness.



Standard / Optional Accessory Chart

- STANDARD
- OPTIONAL

Voltage		14.4V/18V							14.4V/18V/21.6V
Model No.		EY74A1LS2G	EY74A1X	EY75A4LS2G	EY75A4X	EY75A5X	EY75A5LS2G	EY45A1X	EY37C1
28.8V Battery Pack (3.0Ah Li-ion Battery Type P)	EY9L82B								
21.6V Battery Pack (4.2Ah Li-ion Battery Type S)	EY9L62B								○
18V Battery Pack (3.3Ah Li-ion Battery Type R)	EY9L50B	○	○	○	○	○	○	○	○
18V Battery Pack (4.2Ah Li-ion Battery Type S)	EY9L51B	●	○	●	○	○	●	○	○
15.6V Battery Pack (2.8Ah Ni-MH Battery Type N)	EY9230B								
14.4V Battery Pack (3.3Ah Li-ion Battery Type R)	EY9L44B	○	○	○	○	○	○	○	○
14.4V Battery Pack (4.2Ah Li-ion Battery Type S)	EY9L45B	○	○	○	○	○	○	○	○
12V Battery Pack (2.8Ah Ni-MH Battery Type N)	EY9200B								
3.6V Battery Pack (1.2Ah Li-ion Battery Type L)	EY9L10B								
2.4V Battery Pack (2.8Ah Ni-MH Battery Type N)	EY9221B								
Power Supply Kit	EYC941B	○	○	○	○	○	○	○	○
Power Supply Kit	EYC950B	○	○	○	○	○	○	○	○
Charger for Li-ion	EY0L82B	●	○	●	○	○	●	○	○
Charger for Ni-MH & Ni-Cd Battery (7.2-24V)	EY0110B								
Charger for Li-ion, Ni-MH battery	EY0L11B								
Attachable 1/2" to 1/4" Quick Change Adapter	EY9HX111E					●	●		
Attachable 1/2" Keyless Drill Chuck for EY7549	EY9X003E								
1/2" Keyless Chuck for 18V and 21.6V Drills	EY9HX410E	●	●						
1/2" Keyless Chuck for EY7441 and EY7940	EY9HX411E								
1/2" Keyless Drill Chuck for EY7950	EY9HX412E								
Carbide-Tipped Blade for Metal	EY9PM13C								
Carbide-Tipped Blade for Wood	EY9PW13A								
Rip Fence	EY3500B7727								
Dust collection cup	EY9X004E								
Clutch Lock Cover	EY9X007E								



28.8V	21.6V		18V						14.4V					3.6V			15.6V			12V	2.4V	
EY7880LP2S	EY7460LZ2S	EY7960LZ2S	EY7450LS2S	EY7450LR2S	EY7552LS2G	EY7552X	EY7950LS2S	EY7950LR2S	EY7441LR2S	EY7940LR2S	EY7549X	EY4542LR2M	EYC194LR	EY7411LA1S	EY7410LA2S	EY7410LA1C	EY6432NQKW	EY3530NQMKW	EYC136NQKW	EY6409NQKW	EY6220NQ	EY6220N
●																						
	●	●																				
			○	●	○	○	○	●														
			●	○	●	○	●	○														
									●	●	○	●	●				●	●	●			
									○	○	○	○	○									
														●	●	●				●		
																					●	●
			○	○	○	○	○	○	○	○	○	○	○									
●	●	●	●	●	●	○	●	●	●	●	○	●	●									
																	●	●	●	●		
														●	●	○					●	○
											●											
	●	●	●	●							●											
									●	●			●									
							●	●														
												●	●					●	●			
												○	○									
												○	○					○	○			
●																						
														●	○	○						



**Panasonic Eco Solutions North America  
Assembly Tools Division**  
2 Riverfront Plaza  
Newark, NJ 07102

For more information, visit our website at  
**[us.panasonic.com/assemblytools](http://us.panasonic.com/assemblytools)**  
or call **1-800-338-0552**

**Panasonic Canada Inc.**  
5770 Ambler Drive  
Mississauga, ON L4W 2T3  
Phone: 1-800-669-5165  
Fax: 905-238-2414

**[www.panasonic.ca](http://www.panasonic.ca)**

