## **Advanced Fastening Features**



#### **Cross Thread Reduction**

Two types of the programmable features to reduce cross thread. Soft Start: Lower the no load speed to 100 rpm for a programmable time



after trigger is pulled. 360° Reverse: 360° reverse rotation for thread

alignment then rotate forward.



#### **Retightening Prevention Function**

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.



#### **Variable Speed Control Function**

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



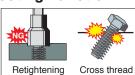
#### **Snug Torque Detection Delay**

The tool doesn't activate Snug Torque Detection mode and ignores loads in the middle of rundown for a selected time period.



#### **Rundown Error Detecting Function**

If the clutch 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





## Angle Error Shut-Off Tool shuts off when the rundow

Tool shuts off when the rundown exceeds its upper angle limit to prevent the material from damaged.



#### **Disable Reverse**

The tool is prevented from operating in reverse rotation when this function is ON.



#### **Ignore Rundown Result before Snug**

When this function is ON and tool stops before snug point due to trigger release, the rundown result isn't recorded.



#### Maintenance Interval Alarm

When the total fastening times (impact tools)/numbers (screwdrivers) are within 1 hours/10,000 fastenings of the preset maintenance interval, the display blinks notifying the operator. Once the tool reaches the preset interval, the tool is looked out from further use. (Number of setting: 0-99 hours/0-990,000 fastenings)





## Panasonic Corporation

1006, Kadoma, Osaka 571-8501, Japan

Due to ongoing product development specifications are subject to change without notice Product colors may vary slightly from those pictured in catalog



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# Transducerized Mechanical Pulse Wrench achieves both

fastening quality and work efficiency!



## **Panasonic Unique Technologies for Mechanical Pulse Torque Sensing**

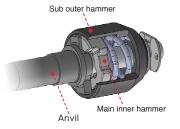
**Unique High Sensitivity Torque Transducer** ----

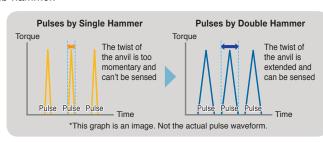
The transducer has high sensitivity to reliably measure the instantaneous torque at the pulses and high durability with non-contact structure which can't be worn out or damaged by the pulses.

\*The transducer senses the torsional torque of the anvil.

#### **Unique Double Hammer with Optimum** Pulse Behavior for Torque Sensing ....

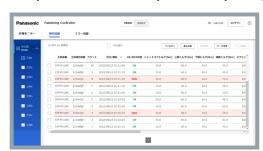
Realize torque sensing with mechanical pulse tools by extending the twisting time of the anvil with continuous pulses of the main-hammer and sub-hammer.





## **Advanced Traceability Data Management**

The tool can output torque value, angle value, fastening curve and other traceability data to PC · Tablet or your assembly management system.



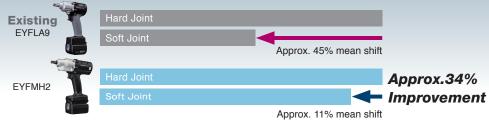




## **Accurate Fastening Performance**

Less Mean-Shift (Bolt size: M12 Target torque: 71Nm)

Mean-shift is reduced by the torque sensing. In addition, the tool can offset the meanshift by its unique algorism.



\*The values in this chart were measured under Panasonic measuring condition and are provided only for reference purpose

#### **Validation Data** (Socket length: 40mm) (only for reference purpose)

	Model	Joint	Socket length	Bolt Size	Target	1	2	3	4	5	26	27	28	29	30	Average	Accuracy
	14.4V	Hard	40mm	M10	50Nm	50	52	51	53	51	51	52	52	49	50	51.8	5.3%
	EYFMH2			M12	80Nm	81	82	83	83	82	84	83	80	82	83	81.2	7.1%
	101	Hard	40mm	M12	70Nm	72	73	76	75	76	71	70	72	73	75	72.0	9.6%
	18V EYFNH1 New			M14	140Nm	138	139	137	142	145	144	138	135	142	133	137.6	8.0%
				M16	190Nm	199	191	182	188	192	194	187	191	184	191	190.2	7.3%

<sup>\*</sup>The values in this chart were measured under Panasonic measuring condition and are provided only for reference purpose

## **High Work Efficiency and Low Running Cost**



Up to 120Nm fastening with \*1.85kg light weight body! Possible to use with one hand. \*with EYFB41 battery pack



Powerful mechanical pulse for speedy fastening even after snua!

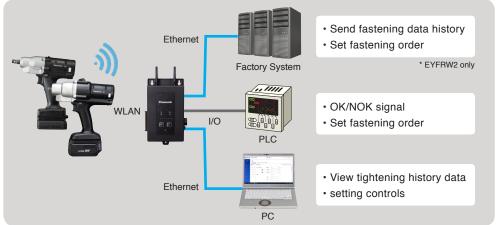
The tool can be used with confidence even in quick tack time.





Mechanical pulse block requires no oil change and can make stable torque.

## **System Diagram**



\*USB Type-C is a trademark of USB Implementers Forum

#### **More Features**



**Tightening Confirmation Lamp** Multiple lamps can be seen from various angles



LED Light For operations in dimly lit place.



The tool can be attached EYFA41B to the balancer in the appropriate



Color Plate for Differentiation Each tool model is color coded for easy indentification



**USB Connection** Easy connection with PC · tablet using "USB Type-C" on the tool.

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### 14.4V Electronic Mechanical Pulse Wrench and Wireless Communication

#### **Electronic Mechanical Pulse Wrench** EYFMH1WC EYFMH2WC 14.4V **Wireless Comr** 2.0Ah \*Battery pack is not included Chuck / Anvil type 12.7mm Sq. drive Retainer ring and Pin-hole M10 bolt (Tensile bolt) M8 bolt (Tensile bolt) **Application** M12 bolt (Normal-Tensile bolt) M10 bolt (Normal bolt) M14 bolt (Normal bolt) Shut-off range 20 ~ 60 Nm 50 ~ 120 Nm $0 \sim 2{,}300 \label{eq:condition}$ (Max. rpm is adjustable from 1,500 to 2,300 in 100 increments) No load speed (unit : rpm) Impact per minutes 0 ~ 2,700 0 ~ 2,600 EYFB43B 2.05kg Weight\*1 (inc. battery) EYFB41B 1.8kg 215mm Length 246mm (EYFB41), 264mm (EYFB43) Height 61mm (Width of battery pack: 75mm) Width Torque result Angle result Fastening curve **Number of preset** Wireless Communication Mode: 5 (with EYFRW2), Standalone Mode: 1 (Standalone Mode: approx. 45,000 history data Data storage can be stored in case of 1.2 sec. fastening work) Wireless communication √ (IEEE802.11a/b/g/n) √ (USB Type-C™) **USB** connection $\sqrt{\text{(For details of the feature, Please refer to page 7)}}$ Advanced fastening features Auto battery shutdown <M8: 23Nm> <M12: 71Nm> (EYFB43) (EYFB43) (EYFB41) (EYFB41) 940 pcs/pack 490 pcs/pack 450 pcs/pack 230 pcs/pack Work capacity / Fastening speed <M10: 43Nm> (approx.) (EYFB43) (EYFB41) 670 pcs/pack 350 pcs/pack (Battery Pack EYFB43B, Charger EY0L82B) Usable Charge: 45min, Full Charge: 60min Charging time (approx.) (Battery Pack EYFB41B, Charger EY0L82B) Usable Charge: 35min, Full Charge: 40min

# <Optional Accessory> 14.4V Li-Ion Battery Pack EYFB43B, EYFB41B Charger **EY0L82B** Protector for Battery EYFA04-H (gray) EYFA06-H (gray) EYFA06 (for EYFB41B) Tool Hanger EYFA40B USB cable (1m) EYFMH1XL701W Protector for Tool EYFA14 -A (blue), -Y (yellow) -H (gray), -D (orange)

## 18V Electronic Mechanical Pulse Wrench

			Electronic Mechanical Pulse Wrench							
			EYFNH1WC							
			18V Brushless Motor							
			Wireless Communication							
Cross Theed Stop Reward		— Maint	5.0Ah							
	Ilanore V		*Battery pack is not included							
	Chuck	/ Anvil type	12.7mm Sq. drive Retainer ring and Pin-hole							
	Арр	lication	M12 • M14 bolt (Tensile bolt) M16 • M18 bolt (Normal bolt)							
	Shut-	off range	70-220 Nm							
		ad speed it : rpm)	0-1,900 rpm (Max. rpm is adjustable from 1,300 to 1,900 in 100 rpm increments)							
	Impact	per minutes	0 ~ 2,400							
(iı	Weight*1 (inc. battery) EYFB50B		3.35kg							
(0		Length	265mm							
Size		Height	294mm (EYFB50)							
		Width	76mm (Width of battery pack: 76mm)							
	Tor	que result	√							
		igle result	√							
		ening curve	√							
п	Number of preset		Wireless Communication Mode: 5 (with EYFRW2), Standalone Mode: 1							
Function		ta storage	(Standalone Mode: approx. 45,000 history data can be stored in case of 1.2 sec. fastening work)							
		communication	√ (IEEE802.11a/b/g/n )							
		connection	√ (USB Type-C™)							
		fastening features								
	Auto ba	ttery shutdown	√							
	Faster	capacity / ning speed oprox.)	<m12: 100nm=""> (EYFB50) approx. 500 pcs/pack approx. 1.0 sec/1pcs</m12:>							
Charging time (approx.)			(Battery pack EYFB50B, Charger EY0L82B) Usable Charge: 65 min. Full Charge: 80 min							

<sup>✓</sup> Available \*1 Weights are described in 0.05kg increment. \*There are models limited to particular region.

<Optional Accessory>

18V Li-Ion Battery Pack **EYFB50B** 



Charger **EY0L82B** 



Protector for Battery EYFA10-H (gray)



Tool Hanger EYFA41B



USB cable (1m) EYFMH1XL701W



Protector for Tool EYFA16 -A (blue), -Y (yellow) -H (gray), -D (orange) -G (green)



3 ✓ Available \*1 Weights are described in 0.05kg increment. \*There are models limited to particular region.

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## WLAN Controller with Maximum 8 Tools Simultaneous Control Capability



## **Various Technologies for Stable Wireless Communication**

Recommended range

approx 16m 2.4GHz approx 10m 5GHz

Recommended range

#### Support both 2.4GHz and 5GHz frequency

To avoid interference, the frequency can be selected according to the usage environment. There is also an auto channel function that automatically selects an empty channel

#### High efficiency antenna design

Stable communication performance is achieved by the highly efficient antenna design (average -5dBi) of the diversity antenna on the controller and the transmission module on the tool.

Demonstrates high performance with various tool positions and directions.

#### Safety function in case of communication disconnection

Work history data can be backed up in the tool and resent to the controller even when communication is temporarily disconnected, allowing work to continue.

#### High security

Communication data is encrypted and protected by TLS.

#### **Setting and viewing from a web browser**

Tool/controller settings and work history data viewing can be done from a web browser

No software installation required on your PC.



#### **Maximum 8 tools simultaneous** control

Simultaneously control the operations of up to 8 tools and collect work history data.

#### WLAN access point compatible

Supports communication via general WLAN access points. Tools can be used regardless of where the controller is installed.



Compatible models:IEEE.802.11a/b/g/n compliant WLAN access points

## Various control of tools is possible without external equipment

and 1 torque setting 30Nm Up to 5 batches can be registered

for a tool

Batch

Continuous work with 1 tool

Continuous work with 1 tool and multiple torque settings

Job

Ex.1 Multiple fastening works with different target torques Ex.2 Multiple fastening works with different bolt lengths

Ex.3 Mix of pre-fastening and final fastening



Up to 10 steps (batches) can be set for a job

Up to 5 jobs can be registered for

#### Continuous work with multiple tools and multiple torque settings

Ex.1 Multiple fastening works with multiple bolt sizes

Ex.2 Multiple fastening works which can not be covered with a single tool torque range



1st tool: EYFMH1 (20-60Nm)

70Nm Up to 10 steps (batches/jobs) can be set for a sequence

Up to 5 sequences can be registered in a controller

Model	EYFRW2						
Communication data	OK/NOK						
Rated supply voltage	AC100-240V 50-60Hz						
Communication method	WLAN (IEEE802.11a/b/g/n)						
Frequency band	(European nations, Turkey, Malaysia, Indonesia, Thailand, South Korea, India) 2.412-2.472GHz / 5.180-5.240GHz (United States, Canada, China) 2.412-2.462GHz / 5.180-5.240GHz						
Channel	(European nations, Turkey, Malaysia, Indonesia, Thailand, South Korea, India) 2.4GHz band: 1ch – 13ch / 5GHz band: 36,40,44,48ch (United States, Canada, China) 2.4GHz band: 1ch – 11ch / 5GHz band: 36,40,44,48Ch						
Recommended range	2.4GHz band: *approx. 16m / 5GHz band: *approx. 10m						
No. of connectable devices	Maximum 8 tools						
Input/output terminal (I/O)	Input: 8 / Output: 8						
Power consumption	approx. 30W						
Dimensions (L x H x W)	approx. 239mm × approx. 150mm × approx. 41mm (Hight including antenna: approx. 281mm)						
Weight	550g (Main body only)						
Communication interface	• Ethernet × 2 • USB-A × 1 • RS232C × 1						
Communication protocol	OpenProtocol						
Data storage	Approx. 200,000 history data (Including fastening curve)						
Optional accessory	Controller stand						
	<u> </u>						

EYFMH1WC, EYFMH2WC, EYFNH1WC

Compatible tools

The presence of metal walls, people, or other objects may result in decreased range

<Optional Accessory>

Controller stand EYFRW1F7001



AC adapter (EU, TUR, THA, IDN) EYFRW1K7652 (GBR, MYS) **EYFRW1K7653** EYFRW1K7654 EYFRW1K7655

EYFRW1K7656



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Communication range varies with operating environment.