

Pokayoke for Alpha clamp

# PLIER WRENCH

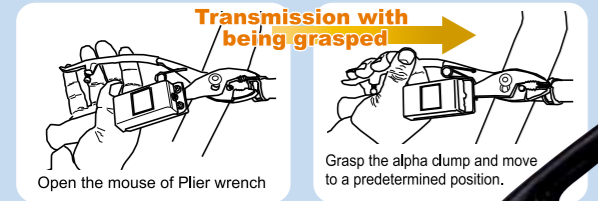
A pliers wrench is a tool for pulling and unfixing the pin of the alpha clamp used for fixation of a radiator hose, an engine hose, etc.

The pliers can equip with the transmitter which sends having held the pin on wireless. In combination with a receiver, you can use as an object for error proofing(POKAYOKE).

With Wireless function

## Timing of transmission

It sends at the moment of having grasped the alpha clamp by the pliers wrench. If an alpha clamp is grasped, power will be applied to the head part of pliers. Because it is same design as a torque wrench if power is applied to a head part, an internal limit switch is struck and it has become a mechanism that transmitter sends.



Safe design  
Easy attachment

## Prevention function of transmission for grasping nothing

Plier wrench has a prevention function of transmission for not grasping the thing of the thickness more than fixed. It is set as over 1mm before shipment.

**Stopper**  
It is an adjustable screw for prevention for grasping nothing.

**Spring**  
The mouse of edge is opened to fixed width.

**Tip of edge**  
Tip part is brazed with high hardness material.

**Stopper**  
It is for prevention for opening the mouse of tip of edge.

**Transmitter**  
It can wear with TW-800T.

**Switch part**  
LS type(Limit switch)  
Design is same as Torque wrench.

## [PLIER WRENCH LINE UP]

Below production type is not included a transmitter. Please order transmitters separately.



**Small type [JPS100Y]**  
Length 200mm Weight 300g  
Aperture 10~12mm Maximum about 20mm



**Light type [JPS175Y2]**  
Length 230mm Weight 350g  
Aperture 10~12mm Maximum about 25mm



**Light and Slim type [JPS175YS]**  
Length 230mm Weight 340g  
Aperture 10~12mm Maximum about 25mm



**Standard type [P200Y2]**  
Length 245mm Weight 410g  
Aperture 10~12mm Maximum about 25mm



**Shin nose type [SN200Y2]**  
Length 250mm Weight 420g  
Aperture 10~12mm Maximum about 25mm



**Bent nose upper type [BN200YU2]**  
Length 250mm Weight 410g  
Aperture 10~12mm Maximum about 25mm



**Bent nose under type [BN200YD2]**  
Length 250mm Weight 410g  
Aperture 10~12mm Maximum about 25mm



**Aperture wide type [LN240SR]**  
Length 240mm Weight 350g  
Aperture 17~20mm Maximum about 30mm

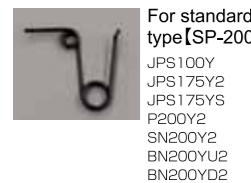


**Long type [T-308R]**  
Length 255mm Weight 380g  
Aperture 17mm Maximum about 17mm

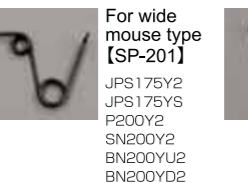


**Check pen type [CP-03]**  
Length 170mm  
\*Using "Pentel MMP20"  
\*It is possible to make about other maker pens than except the above. Please contact.

## [SPRING FOR MAINTENANCE]



**For standard type [SP-200]**  
JPS100Y  
JPS175Y2  
JPS175YS  
P200Y2  
SN200Y2  
BN200YU2  
BN200YD2



**For wide mouse type [SP-201]**  
JPS175Y2  
JPS175YS  
P200Y2  
SN200Y2  
BN200YU2  
BN200YD2



**For aperture wide type [SP-202]**  
T-308R  
LN240SR

## [Custom-made]



We make from 1pcs. Please contact us.

# Wireless Communication

Wireless Equipment for POKAYOKE

**HERUTU**

HERUTU ELECTRONICS CORPORATION

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URL <http://www.herutu.co.jp/>

**HERUTU**

HERUTU ELECTRONICS CORPORATION

# Wireless Communication TW-800 series

TW-800 series are wireless products for Pokayoke tools using at production process

## Cost down

Price down  
Downsizing

## Using Oversea

U.S.A/Canada/Thailand/  
Malaysia/Indonesia/  
Mexico...etc.  
Getting a certification.

## Diversification of use

Various kinds of tools  
(Torque wrench/Plier  
wrench and so on.)  
Push button Various  
kinds of sensor.

## Improvement in reliability

2 Way Communication  
Frequency Hopping  
Function Original  
Protocol

## Correspondence to Network

Expand by serial port  
LAN connecting  
RS-232C connecting

## Transmitter TW-800T

TW-800T is a transmitter used fixing to a torque wrench, plier wrench, check pen and so on.

- You can look see the communication OK/NG by LED lighting and flashing.
- TW-800T uses CR2032 type of battery. Battery life is about 300,000 shots.
- TW-800T has the function of remaining battery level notice and communication check by using test switch.
- It is used polypropylene material for protecting broken the case.

**OPTION** Protect Cover



For small size wrench [TW-510C-1]  
For middle and big size wrench [TW-510C-2]

Ref) We recommend to use TW-510C-1 for small wrenches to the wrench not more than 50N.



## Receiver TW-800R

TW-800R is a receiver of 1 point relay output type.

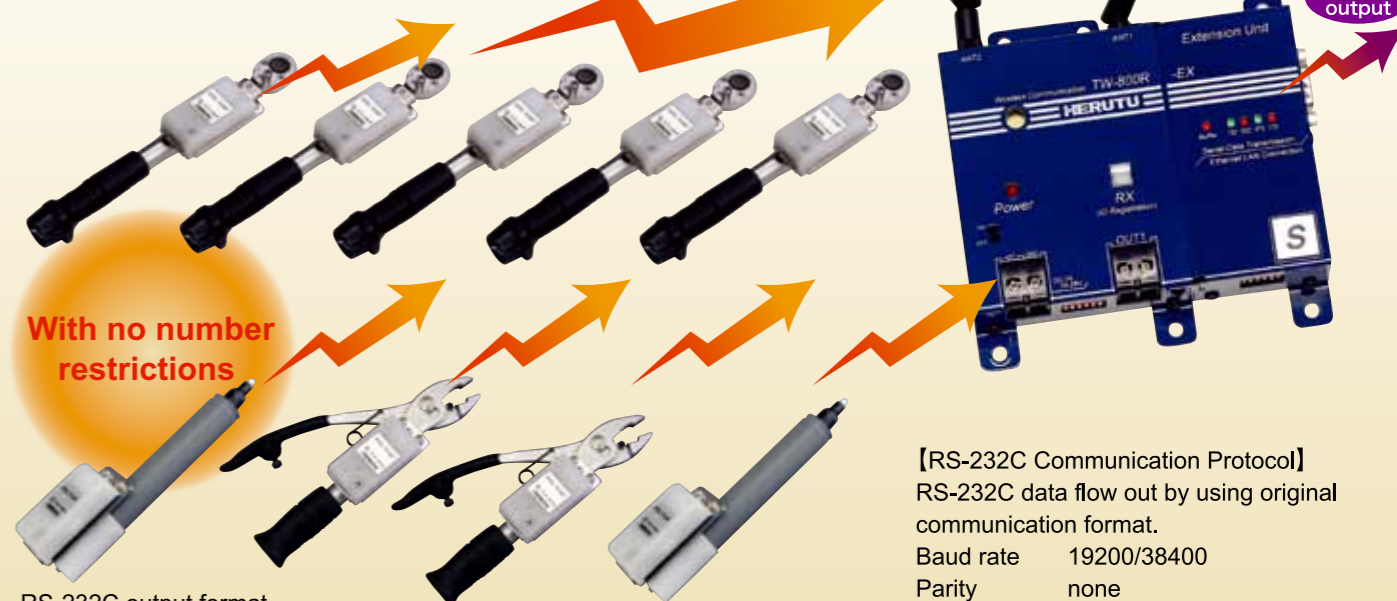
- TW-800R is used by AC100-240V by using AC/DC adaptor of an option.
- The diversity antenna which realizes stable communication is a standard.



- The diversity antenna which realizes stable communication is a standard.
- TW-800R is small and light. Weight is 250g, Dimension is 10cm × 8cm × 3cm.

## Receiver with a extension unit of serial output TW-800R-EXS

TW-800R-EXS is a receiver having an interface of RS-232C. TW-800R-EXS can receive signals from transmitters. The number of transmitters does not have restriction.



With no number restrictions

**[RS-232C Communication Protocol]**  
RS-232C data flow out by using original communication format.  
Baud rate 19200/38400  
Parity none  
Data length 8bit  
Stop bit 1bit  
Flow control RTS-CTS/none

RS-232C output format

Preamble	STX	Transmitter ID number	Tightening information Test SW, Battery information	ETX	Check sum
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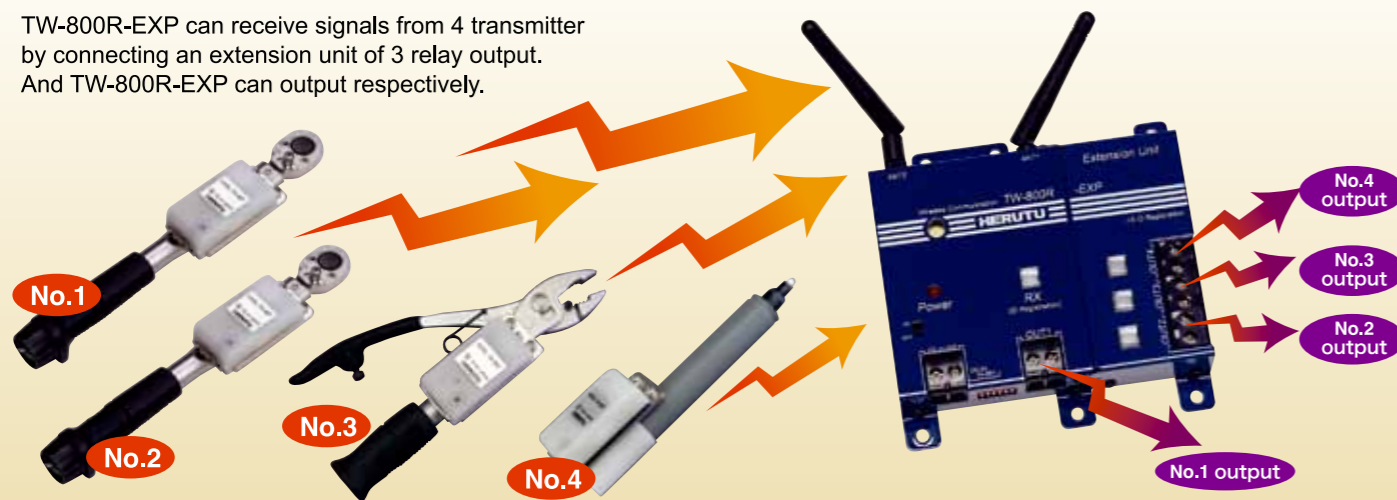
※We can make LAN type. Please contact us.

## [Specification]

Items	TW-800T	TW-800R	TW-800R-EXP	TW-800R-EXS
Frequency	2,403MHz~2,478MHz(An unassigned channel is automatically chosen by a frequency hopping function.)			
Communication	2 way communication 250kbps			
Input	Limit switch 1point Test switch 1point	—		
Output	—	Contact output* 4point Terminal block:M3(2P) Rated load voltage AC/DC30V per point Rated load current 0.5A per point	Contact output* 1point Terminal block:M3(2P) Rated load voltage AC/DC30V per point Rated load current 0.5A per point	Contact output* 1point Terminal block:M3(2P) Rated load voltage AC/DC30V per point Rated load current 0.5A per point
Interface	RS-232C×1			
Display	LED 1 point(Red/Green)	LED for receiving(Green) * 1point (Combination lighting switch for pairing) Power LED(Red) * 1point	LED for receiving(Green) * 1point (Combination lighting switch for pairing) Power LED(Red) * 1point	LED for receiving(Green) * 1point (Combination lighting switch for pairing) Power LED(Red) * 1point Communication monitor LED * 5point
Buzzer	Electrical buzzer 95dB/m			
Power	Coin Battery(CR2032)	DC24V±20%(DC19~28V)(Terminal block:M3)		
Consumption current	—	Under 60mA	Under 80mA	Under 90mA(At receiving standby under 50mA)
Operation temperature range	Temperature 0-50 degree Humidity Under 80%			
Dimension	34W×71D×17.5Hmm (Except projection)	80W×100D×28Hmm (Except projection)	130W×100D×28Hmm (Except projection)	
Weight	Approx40g	Approx250g	Approx430g	Approx450g
Antenna	Dipole antenna(Diversity type)			
Battery life	Approx 300,000 shots (It changes with operating conditions.)			

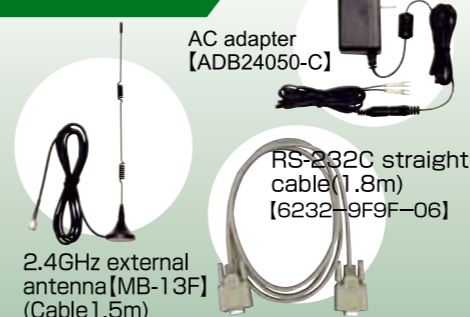
## Receiver with a extension unit of 3 relay output TW-800R-EXP

TW-800R-EXP can receive signals from 4 transmitter by connecting an extension unit of 3 relay output. And TW-800R-EXP can output respectively.



※We don't sell a body of torque wrench.

## OPTION



TW-510T/TWF-600  
TWF-700R  
Continuous sale

