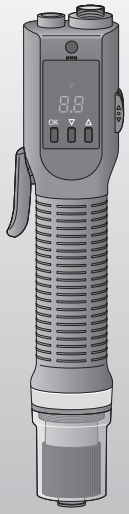
Panasonic

使用说明书

电动螺丝刀

型号 EYADA系列
WA型号
WB型号



重要信息
使用本产品之前,请先详细阅读说明书,并妥加保管,以便日后使用。
请在购买国以外控制使用无线功能。
否则会与各国的法令及规定等发生冲突。
所在地区不供货的型号,请参阅最新总目录。

原版说明书:英文
原版说明书译本:其他语言

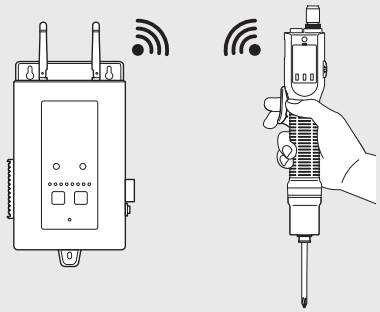
目次

产品特点

本产品是一款搭载无刷电机的电动螺丝刀，具有轻便、易握持的特点。

本产品易于操作，无需更换刷子，具有良好的易维护性，可让作业变得更舒适。

※通过和控制器端连接，可以批量设置各种功能。
（请务必连接控制器使用）

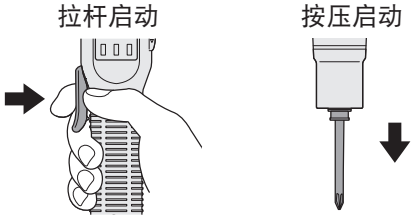


■请勿忘记紧固螺丝 P. 40
设置要进行紧固的螺丝数量。

■想知道紧固状态 P. 25
设置判定指示灯。

■想进行螺丝紧固合格与否判定 P. 33～36
设置参数的上下限值。

■想选择拉杆启动、按压启动 P. 21
设置启动方式。

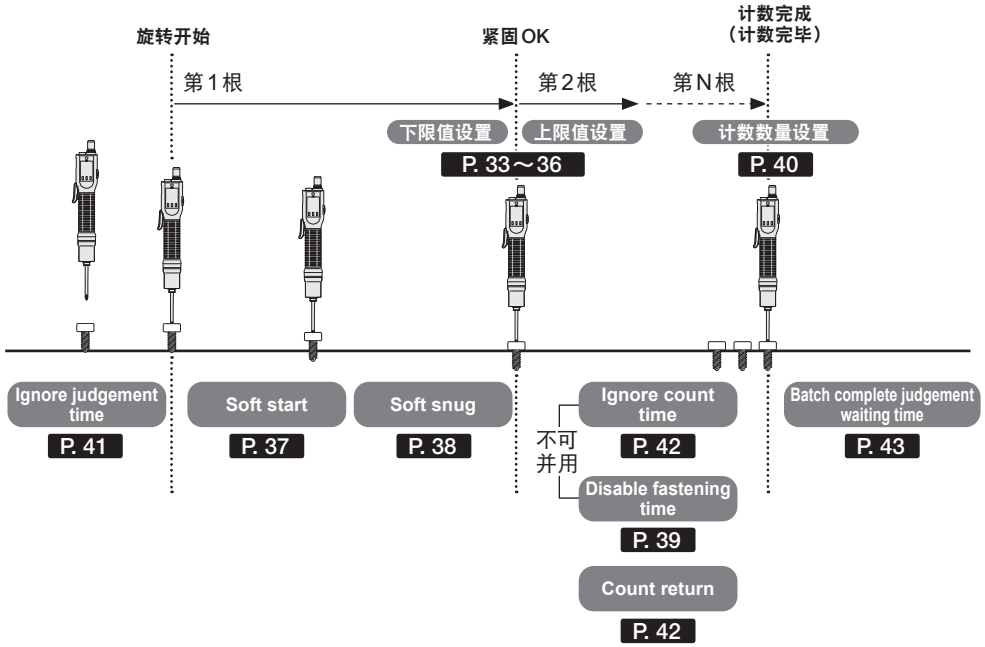


■想减少工具的取错率
设置工具的使用顺序。
※请参见控制器（EYARW1）的使用说明书中记载的“设置紧固控制模式”。

■想知道、保留紧固数据
可通过计算机的Web浏览器确认紧固履历数据。
如果使用另售的控制器管理用软件，不仅可以自动收集紧固履历数据，还可进行简单的数据分析。

■想知道、保留紧固扭矩值 P. 33
保留扭矩换算值。需要设置修正值。（仅WA型号）

■螺丝紧固中的主要支持功能



以下情形时	支持功能	参照页
想将意外的短时间旋转排除在判定之外。	Ignore judgement time	41
想让开始时的旋转变慢。（防拧斜等）	Soft start	37
想让着座前的旋转变慢。（缓和冲击等）	Soft snug	38
不想对二次紧固进行计数。（一定时间）	Ignore count time	42
想禁止二次紧固。（一定时间）	Disable fastening time	39
想设置反转作业时的计数处理。	Count return	42
想设置最终数量之后进行反转作业时的处理。	Batch complete judgement waiting time	43

安全注意事项 请务必遵守

为了防止对人的危害和财产的损害，请必须遵守说明事项。

■针对错误使用时产生的危害和损害程度进行区分并说明。

⚠警告	可能造成死亡或重伤的内容。
⚠注意	可能造成轻伤或发生财产损害危险的内容。

■使用以下图片符号表示必须遵守的内容。（以下是图片符号的示例）

	绝对禁止的内容。
	必须执行的内容。

⚠警告

务必遵守

- **日常管理扭矩。**
  如不遵守，将会因扭矩变动而造成螺丝松动，引发事故。
- **中断作业时及不使用时，确认没有运行。**
- **更换钻头和配件时，以及保管主体时，请务必将正/反转扳手置于开关锁定位置，并拔出电源适配器的电源线。**
  如不遵守，可能会因意外运行而引发事故。
- **使用过程中，保持主体不动，避免左右摆动。**
  否则可能会导致人员受伤。
- **在声音嘈杂的作业环境中，要佩戴耳塞、帽扇（耳罩）等隔音防护用具。**
  如不遵守，可能会损伤听力。
- **作业时要使用护目镜。**
  如不遵守，可能会损伤眼睛、喉咙。
- **电源插头要切实插到底。**
  如未插到底，可能会因触电或发热而引起火灾。
  请勿使用损伤的插头、松动的插座。

⚠警告

务必遵守

- **定期清除电源插头上的灰尘等。**
  如果插头上积有灰尘等，就会因受潮等而造成绝缘不良，继而引发火灾。
  请拔出电源插头，用干布擦拭。
- **使用指定的配件或附件。**
  如不遵守，可能会造成人员受伤。
- **作业场所要足够明亮。**
  昏暗会使视线变差，从而导致事故或人员受伤。
- **加工物要牢固固定。**
  否则可能会发生意外移动，导致人员受伤。
  使用夹钳或虎钳等固定，确保安全。
- **使用过程中，如果主体使用状况变差，或发出异音，请立即关闭开关，停止使用。**
  请咨询您所购买的销售店或Panasonic客户咨询中心。如果继续使用，将导致人员受伤。
- **请按照使用说明书牢固安装钻头等尖头工具类及配件。**
  如未安装牢固，可能会因脱落而导致人员受伤。
- **拆除用于调节的键及扳手等工具类后再使用。**
  如不遵守，可能会因意外脱落而导致人员受伤。
- **穿着整洁的衣物进行作业。**
  - 请勿穿着宽松的衣物及佩戴项链等饰品，否则可能会被卷入旋转部。
  - 在室外进行作业时，建议穿着防滑鞋。
  - 请用帽子或发套等将长发包住。
- **高空作业时，确保底下无人，并用绳索等拴住，以免主体掉落。**
  否则，主体掉落可能会导致人员受伤。
- **使用本公司专用螺丝刀电源线、电源适配器、电源线。**
  如不遵守，可能会导致事故及人员受伤。

⚠警告


禁止

- **使用时请勿超过插座和配线器具的额定值。仅限在电气额定范围内使用。**
  如果由于并联等方式超出额定值，会因发热而引起火灾。
- **请勿损坏螺丝刀电源线、电源线、电源插头。（不要损伤、破坏、加工、靠近发热器具、强行弯曲、拧扭、拉伸、放置重物、夹入、捆扎）**
  如果在本产品损伤的情况下使用，会造成触电、短路、火灾。
  定期检查电线和插头，如有破损，请咨询销售商。
- **主体冒烟时，请勿吸入烟气。**
  否则会对身体造成损害。
- **作业刚结束时，请勿触摸钻头等尖头工具类和螺丝、切屑。**
  否则会因高温而烫伤。
- **请勿用于非指定用途。**
  否则可能会造成人员受伤。
- **主体沾有油等异物时，请勿使用。**
  否则，主体可能会掉落从而引发事故。
  此外，如果油等异物进入主体内部，可能会导致发热、起火、破裂。
- **使用过程中，身体或身体部位请勿靠近钻头等旋转部及切屑。**
  否则，可能会意外碰到脱落或破损的钻头及切屑，从而造成人员受伤。请定期更换钻头等尖头工具。
- **请勿在其他设备上使用本公司专用螺丝刀电源线、电源适配器、电源线。**
  否则可能会引发事故或导致人员受伤。
- **请勿在周边有石棉的环境下（包括清除作业）使用。**
  否则可能会损害健康。
  石棉是一种会严重危害人体健康的物质，例如会导致肺癌等，请充分注意。

⚠警告


禁止

- **不使用时，将电源插头从插座中拔出。**
  如不遵守，将会因绝缘老化而导致触电或漏电起火。


禁止接触

- **打雷后，请勿触摸本产品及电源插头。**
  否则会触电。


禁止拆解

- **不得改装。且不可拆解或维修。**
  否则可能会引起火灾、触电、人员受伤。
  维修事宜请咨询您所购买的销售店或本公司咨询窗口。


禁止淋水

请勿进行以下操作。

- **请勿在淋雨或潮湿场所使用或放置。**
- **使用时不要浸入水中。**
  否则可能会出现冒烟、起火、破裂。


禁止湿手

- **请勿用湿手从插座中插拔电源插头。**
  否则可能会触电。

⚠注意

务必遵守	● **主体发烫时，应中断作业，待温度下降后再使用。** 如不遵守，可能会造成烫伤。
	● **拔出电源插头时，请务必握住电源插头拔出，而不是拉扯电源线。** 如果拉扯电源线拔出，将会导致触电、短路。
	● **使用前，请确认主体、尖头工具和其他零件有无损伤，是否能正常运转。** 如不遵守，可能会因破损等而造成人员受伤。
	● **请保持作业场所干净整齐。** 场所和作业台散乱会引发事故。
	● **充分注意操作、作业方法及周围状况等，以常识进行作业。** 如不遵守，可能会引发事故或导致人员受伤。
	● **壁挂安装电源适配器时，需用螺丝牢牢固定，防止掉落。** 否则可能会因掉落而导致人员受伤。
禁止	● **请勿放置在儿童可以触及的场所。** 否则可能会引发事故或故障。
	● **请勿将主体存放在温度为50 ℃以上的场所。** 否则可能导致动作异常。
	● **请勿在电机锁定时强行使用。** 否则可能会出现冒烟、起火。 请用与性能适配的速度作业，以便安全高效地进行作业。

⚠注意

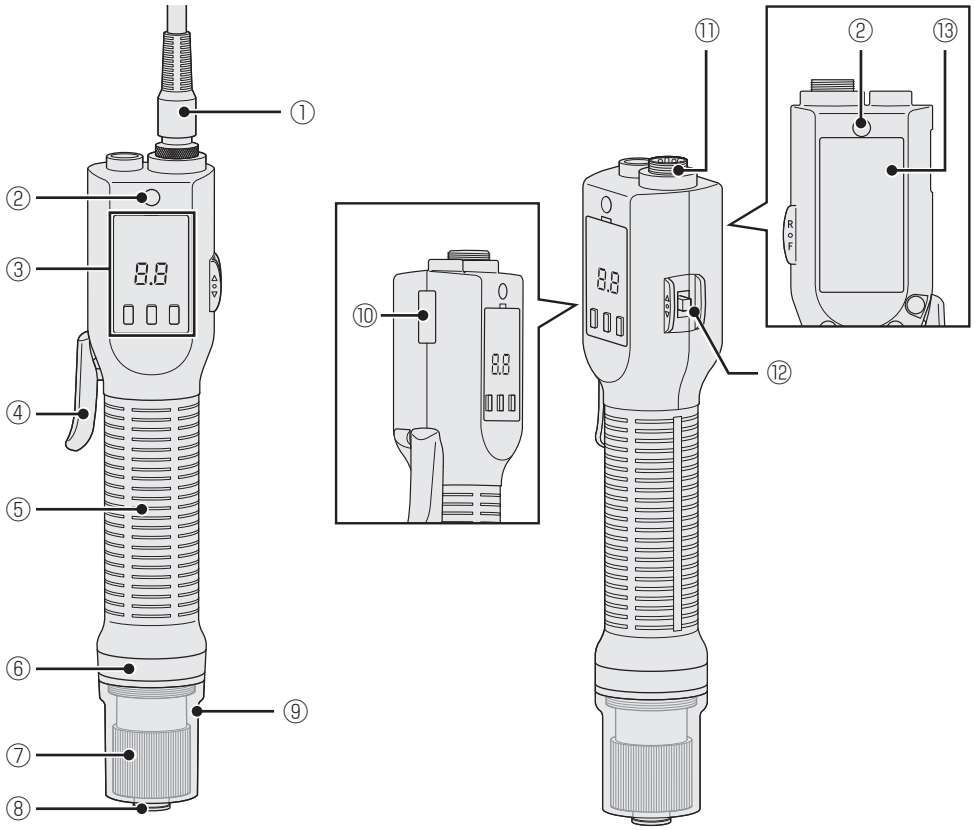
禁止	● **请勿在不合理的姿势下作业。** 否则可能会摔倒而受伤。 请时刻注意脚底，保持平衡。
	● **疲劳时请勿使用。** 否则可能会引发事故或人员受伤。
	● **请勿让儿童等非作业人员靠近车间或触碰主体。** 否则可能会导致人员受伤。
	● **请勿随身携带电线。** 否则，可能会因主体掉落导致人员受伤。

各部分的名称

主 体

■正面

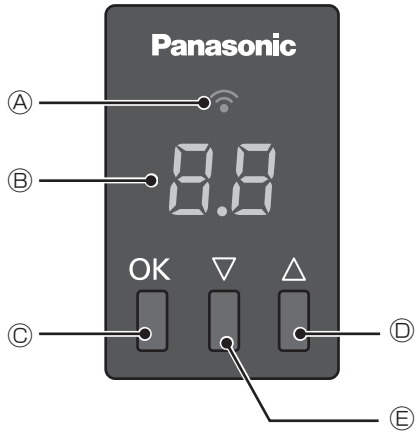
■侧面



①	螺丝刀电源线
②	螺丝刀挂具安装孔
③	操作面板
④	拉杆开关
⑤	握柄
⑥	判定指示灯
⑦	联轴器手柄

⑧	钻套（六角轴、6.35 mm）
⑨	联轴器盖
⑩	序列号牌
⑪	螺丝刀电源线连接部
⑫	正/反转扳手
⑬	额定值、警告、注意标识

■操作面板



Ⓐ	通信指示灯
Ⓑ	显示屏
Ⓒ	OK按钮

Ⓓ	▲按钮
Ⓔ	▼按钮

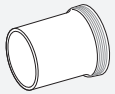
使用前

各部分的名称（续）

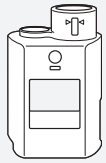
配 件（不附带钻头）

■2 m 螺丝刀电源线

■联轴器盖



■模式设置按钮盖



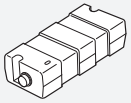
※ 中国大陆市场产品中未附带

■握柄附件
※仅EYADA407WA·WB标配

■螺丝刀挂具

另 售 件

■电源适配器
（EYSZP001）



[仅中国适用]
电源线1 m

[仅马来西亚适用]
电源线1 m

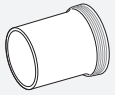
[仅泰国适用]
电源线1 m

[仅印度尼西亚适用]
电源线1 m

[仅印度适用]
电源线1 m

■螺丝刀挂具
（EYSXA100）

■联轴器盖
（EYSXA101）（EYSXA104）

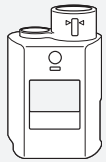


■2 m 螺丝刀电源线
（EYSXC120）

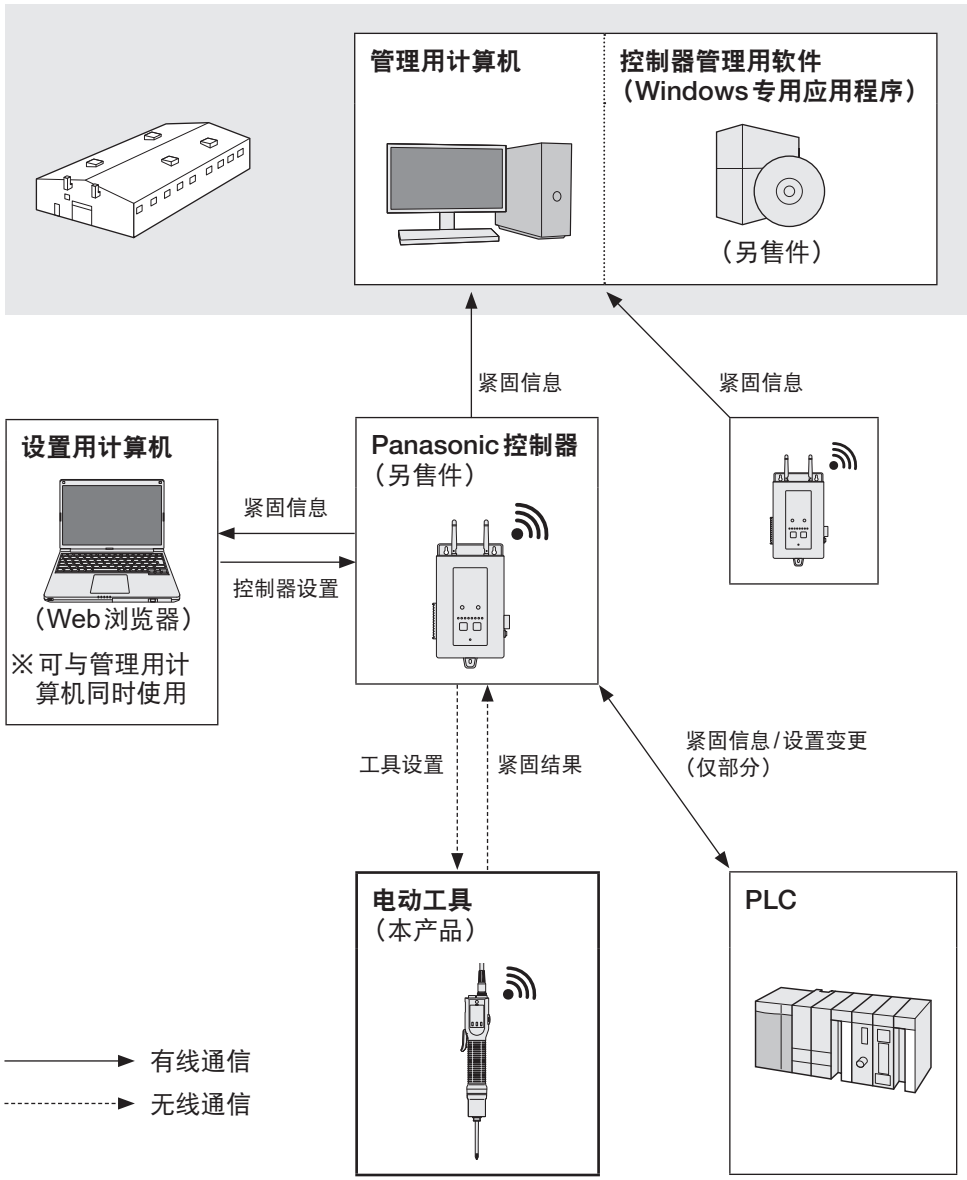
■3 m 螺丝刀电源线
（EYSXC130）

■握柄附件
（EYSXA102）
※套件内容为 P. 19

■模式设置按钮盖
（EYSXA103）



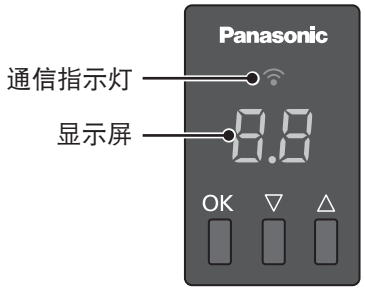
系统配置



※请在本地网络环境（无网络连接）下使用本系统。
※在实际开始使用前，请务必确认控制器的网络IP地址设置。（需要时请更改默认值）

动作模式

本产品在以下任意一个模式下运行。
通过控制面板的通信指示灯和显示屏显示当前使用的模式。
要使用全部功能时，请与控制器配对，在“Wireless Communication Mode”下使用。
动作模式的切换请确认“b9 动作模式切换设置”。 P. 55



Stand Alone Mode ※出厂时

未连接控制器使用的模式。

通信指示灯	显示屏	详情
熄灭		可使用联轴器进行螺丝紧固作业。 不会保留作业履历。

Pairing Mode

连接控制器的准备模式。 P. 28

通信指示灯	详情
快速闪烁 （间隔0.2秒）	配对中。
亮灯	配对完成，与控制器连接完成的状态。
慢速闪烁 （间隔1秒）	无线通信待机状态，正在尝试重新连接。

Wireless Communication Mode

连接控制器使用的模式。

通信指示灯	显示屏	详情
亮灯		动作禁止状态。 （时序模式时、参数未设置时） 在本状态下，本产品不动作。 ※请参见控制器（EYARW1）的使用说明书中记载的“设置紧固控制模式”。
亮灯		数量计数中。 在显示屏上显示螺丝紧固的剩余数量或已紧固的数量。
亮灯		正在自由模式（不对紧固数量进行管理的作业模式）下动作。
亮灯		过电流警告或零件不良、非无线范围内警告等时。 在显示屏上显示E+数字。 P. 60
亮灯		因联轴器未运转而停止或不符合合格与否判定条件时。 在显示屏上显示F+数字。 P. 63

1 进行动作确认

P. 17～27

购买时未连接控制器，请根据第17页（使用前的准备）至第27页（使用方法）的内容，在“Stand Alone Mode”下进行动作确认。

2 进行配对

P. 28～30

动作确认后，请根据控制器的使用说明书实施配对操作，进行控制器的基本设置，确保能够在“Wireless Communication Mode”下使用。

※可根据现场情况切换“Stand Alone Mode”和“Wireless Communication Mode”。

3 用Web浏览器进行设置

P. 31～49

由于控制器可连接多种工具，因此本使用说明书中记载有本产品的特有参数和履历数据相关信息。
请参考控制器的使用说明书进行设置。

4 在本产品上进行设置

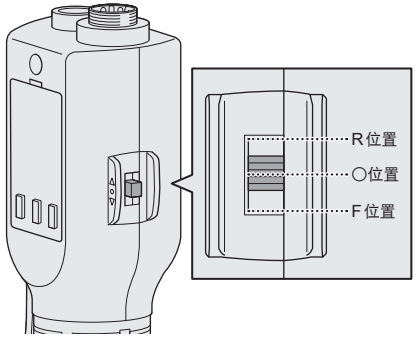
P. 50～55

虽然控制器端对多种功能进行设置，但部分功能可在本产品端设置。
需要时，请在本产品上进行设置。

使用正/反转扳手

使用正/反转扳手可以更改电动螺丝刀的旋转方向，或锁定启动。

开关位置	旋转方向
R	反转（左转）
○	开关锁定状态
F	正转（右转）



开关锁定

如将正/反转扳手切换至“○”的位置，会锁定电动螺丝刀的启动而不旋转。
安装配件和钻头时，或不进行作业时，请将正/反转扳手切换至“○”的位置，置于开关锁定状态。

通知

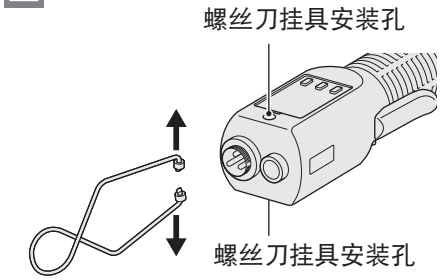
- 如在旋转中操作正/反转扳手，会强制停止旋转。

安装螺丝刀挂具

1 将螺丝刀挂具向两侧轻拉

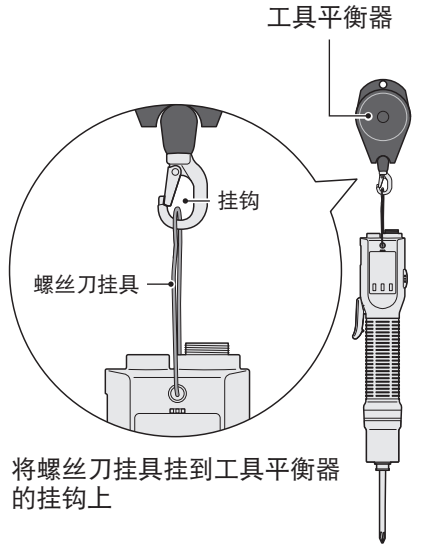
如用力拉螺丝刀挂具，将无法复原。
请用安装、拆卸所需的力度进行操作。

2 放入螺丝刀挂具安装孔



将螺丝刀挂具向两侧轻拉。

请按图中所示安装螺丝刀挂具和工具平衡器。



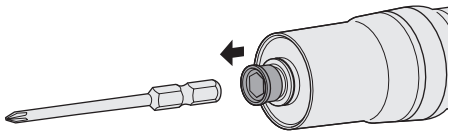
将螺丝刀挂具挂到工具平衡器的挂钩上

安装钻头

要求

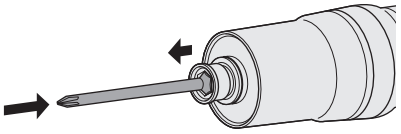
- 安装、拆卸钻头时，请将正/反转扳手置于“○（开关锁定状态）”的位置，然后关闭电源适配器的电源开关。
P. 17、20

1 拉伸钻套



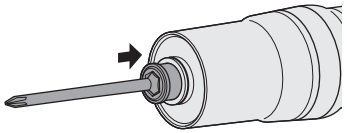
2 插入钻头

请在钻套拉伸的状态下插入。

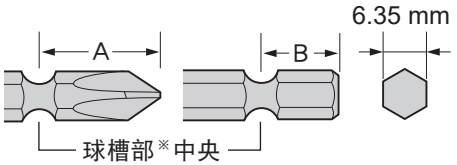


3 松开钻套

请轻拉钻头，确认不会脱落。



■本机可安装的钻头



※不可使用不含球槽部的直钻头。

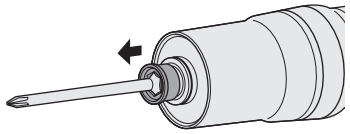
A的长度（双头钻头）	12 mm～17.5 mm
B的长度（单头钻头）	9 mm～13 mm

拆卸钻头

要求

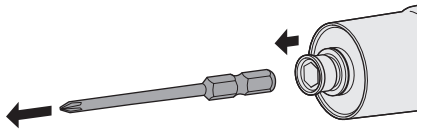
- 作业刚结束时，请勿触摸钻头等尖头工具类及螺丝。
否则会因高温而烫伤。

1 拉伸钻套



2 拆下钻头

请在钻套拉伸的状态下拔出。

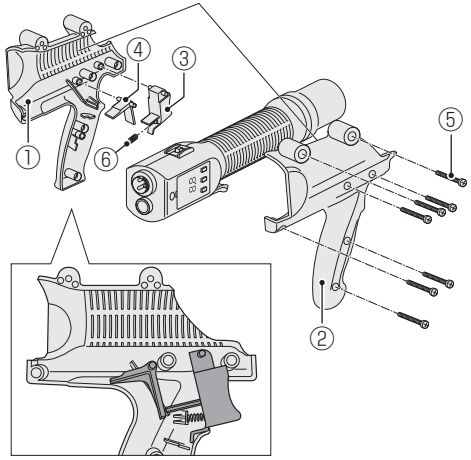


安装握柄附件

所有机型均可安装。
（仅EYADA407WA·WB标配）
可阻断联轴器运转时的反作用力，减轻疲劳。

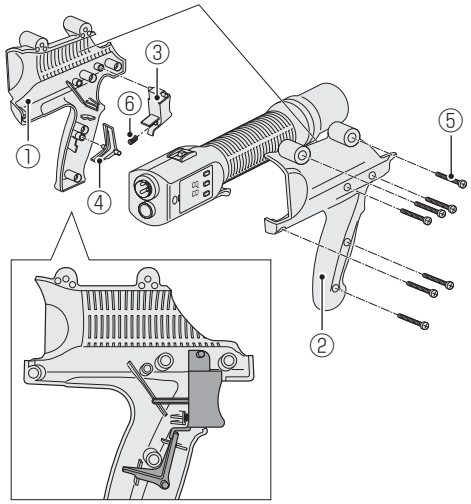
以拉杆启动方式使用时

将握柄附件的槽和握柄的加强筋对齐



以按压启动方式使用时

将握柄附件的槽和握柄的加强筋对齐



套件内容

①	握柄附件（A）… 1个
②	握柄附件（B）… 1个
③	触发器 … 1个
④	接头 … 1个
⑤	螺丝 … 7个
⑥	弹簧 … 1个

要求

- 安装、拆卸握柄附件时，请将正/反转扳手置于“○（开关锁定状态）”的位置，然后关闭电源适配器的电源开关。
P. 17、20
- 请先将钻头拆下后，再安装、拆卸握柄附件。
- 请用螺丝固定握柄附件后，再确认螺丝有无松动、摇晃、偏离。

1 将握柄附件（A）的槽和主体握柄的加强筋对齐

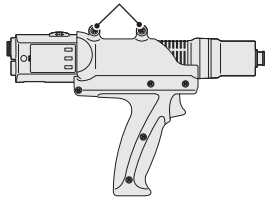
2 将触发器和接头安装到图中的位置

3 将握柄附件（B）的槽和主体握柄的加强筋对齐

4 紧固螺丝

请确认螺丝有无松动、摇晃、偏离。

螺丝刀挂具安装孔（2处）



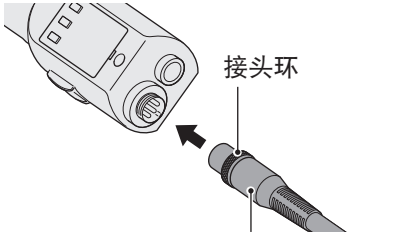
连接电源

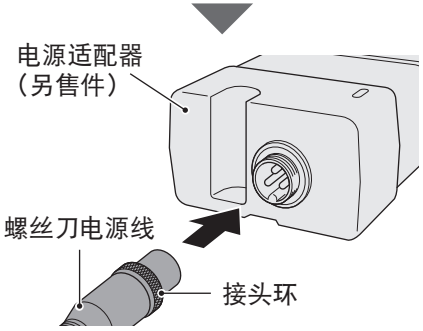
要求

- 请将正/反转扳手置于“〇”的位置，锁定开关后进行连接。 P. 17
- 请勿使用非本公司的电源（螺丝刀电源线、电源适配器、电源线）。
  此外，请勿在其他设备上使用本公司专用电源和电源线。
- 长期不使用时，建议从插座中拔出电源线。即使未打开本产品电源，也会消耗电量。

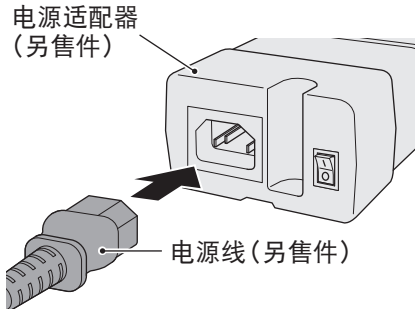
1 将螺丝刀电源线连接到电源适配器和本产品

请确认连接器的方向，正确安装。
用接头环固定。



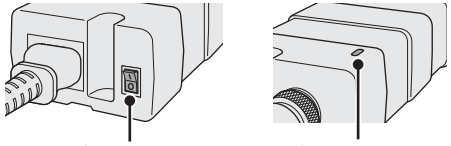


2 将电源线安装到电源适配器

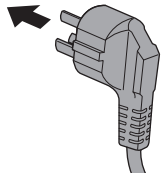


3 确认电源适配器的电源开关已关闭

电源OFF时，电源指示灯熄灭。



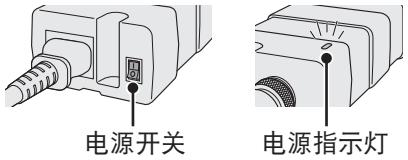
4 将电源插头插入插座



例：中国大陆

5 打开电源适配器的电源开关

电源指示灯亮绿灯。



切换启动方式

本产品具有2种旋转启动方式。
请根据作业，切换使用。
（出厂时为拉杆启动方式）

■切换为拉杆启动方式

1 将正/反转扳手设到“〇”的位置

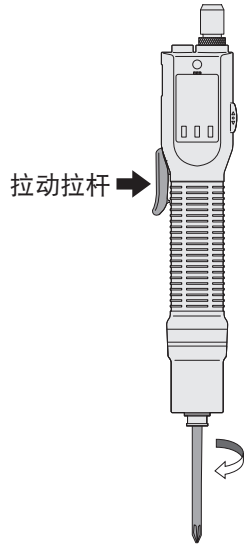
变为开关锁定状态。
P. 17

2 长按拉杆（约5秒），直至判定指示灯亮黄灯（约1秒）

同时，蜂鸣器也会鸣响3声短音（哔哔哔）。

什么是拉杆启动方式

拉动拉杆，即开始旋转。松开拉杆，即停止旋转。



■切换为按压启动方式

1 将正/反转扳手设到“〇”的位置

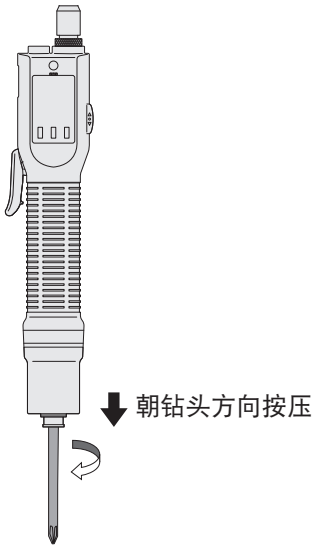
变为开关锁定状态。
P. 17

2 将钻头前端按压到作业台等处（约5秒），直至判定指示灯亮黄灯（约1秒）

请在钻套部分微陷的状态下稍等片刻。
同时，蜂鸣器也会鸣响3声短音（哔哔哔）。

什么是按压启动方式

将电动螺丝刀朝钻头方向按压后，即开始旋转。停止按压，即停止旋转。

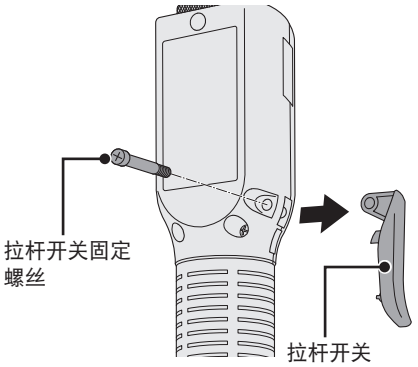


通知

- 仅可以选择的启动方式运行。不可以未选择的启动方式运行。

通知

- 如下图所示，可以拆除拉杆开关。



请在确认电源适配器的电源开关关闭后，再拆卸拉杆开关。

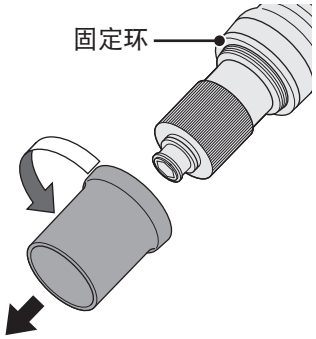
设置紧固扭矩

可根据作业，按96档调节联轴器扭矩。

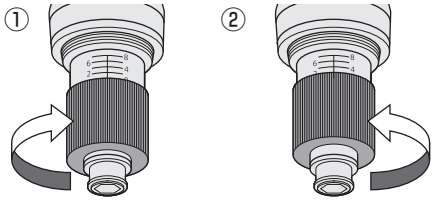
■设置步骤

1 拆下联轴器盖

逆时针旋转联轴器盖。



2 用联轴器手柄调节扭矩



① 要提高输出扭矩时，将联轴器手柄向右（顺时针）转

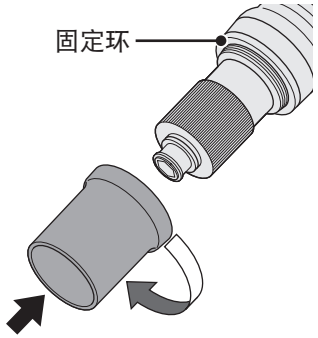
② 要降低输出扭矩时，将联轴器手柄向左（逆时针）转

请遵守以下事项，以确保不发生故障，长期安全地使用。

- **请参考紧固扭矩标准表设置扭矩。** P. 23
- **请勿在电机锁定时强行使用。**

3 安装联轴器盖

请顺时针旋转联轴器盖。

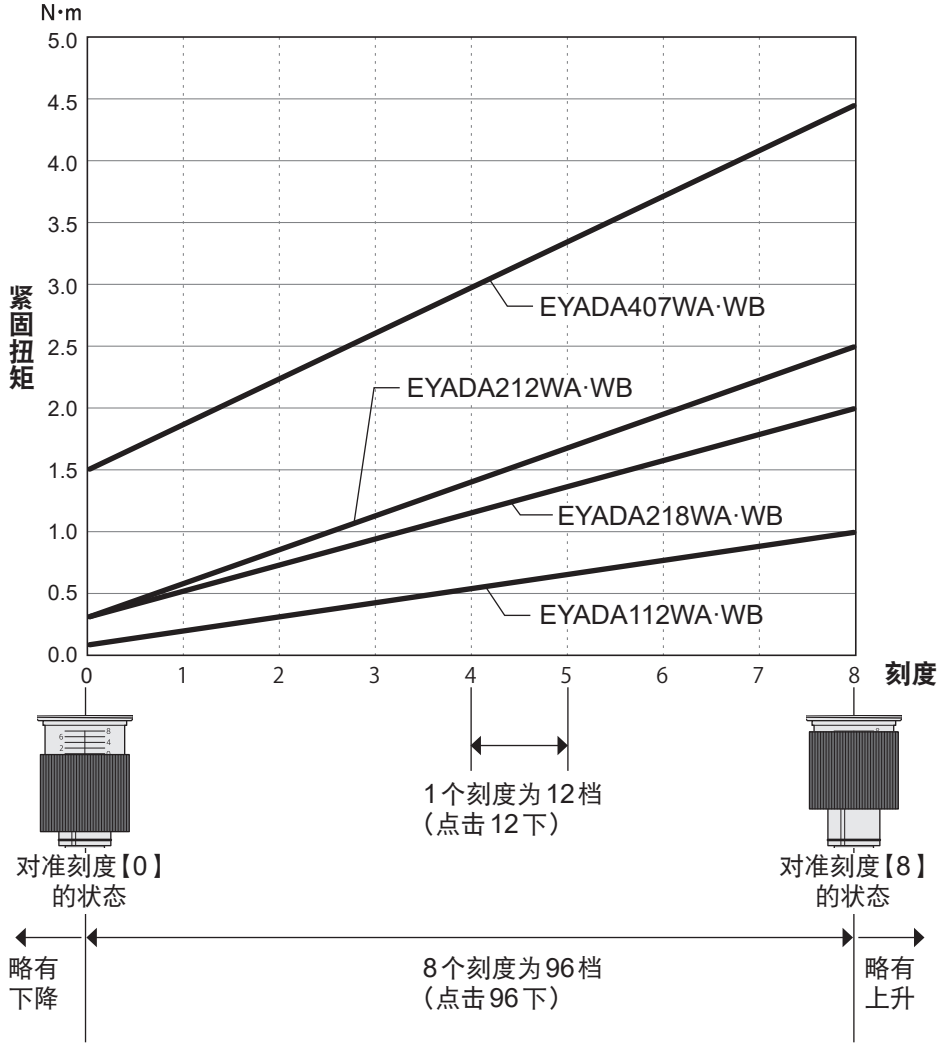


要求

- 请安装联轴器盖使用，以免意外更改联轴器设置。
- 如果固定环松动，请进行紧固。

紧固扭矩标准表（参考值）

本数据是在以下测量条件下测得的参考值。
实际作业因周围条件（螺丝、零配件、固定方法等）而异。



测量条件	按本公司规定的测量条件。

※实际作业因周围条件（螺丝、零配件、固定方法等）而异。建议在实际作业前进行确认。

■关于紧固扭矩

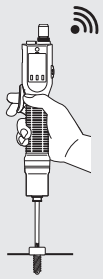
在实际工件上紧固螺丝产生的扭矩与用扭矩测量仪测得的螺丝刀主体的扭矩不一致。

※ 这是因为实际工件的作业条件与扭矩测量仪的作业条件不同。
如果作业条件改变，螺丝产生的扭矩就会改变。
（螺丝的尺寸/材质、配合材料的材质、有无底孔/精加工状态、作业姿势等）

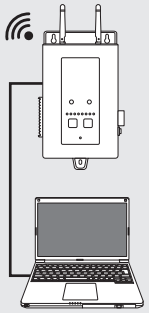
■推荐的联轴器档位设置和扭矩管理（记录）

管理（记录）的扭矩值有“实际工件的扭矩值（A）”或“螺丝刀主体的扭矩值（B）”2种。

① 使用螺丝刀主体，在实际工件上进行紧固



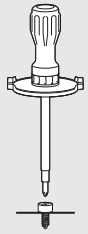
② 使用可测量紧固螺丝扭矩的测量仪，确认与设置扭矩值的差
（反转扭矩法、正转扭矩法等）



③ 反复设置联轴器档位，确认差最小的联轴器档位

➡ 将测量仪显示的扭矩值保留为“实际工件的扭矩值（A）”记录

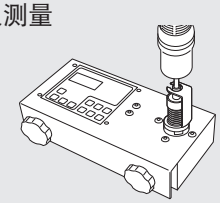
用测量仪测量实际工件



④ 按照确定的联轴器档位，使用扭矩测量仪，测量螺丝刀主体的扭矩

➡ 将扭矩测量仪显示的扭矩值保留为“螺丝刀主体的扭矩值（B）”记录

用扭矩测量仪测量



※ ③和④中，由于作业条件不同，因此扭矩值不同。
（③中的“实际工件的扭矩值（A）”≠ ④中的“螺丝刀主体的扭矩值（B）”）

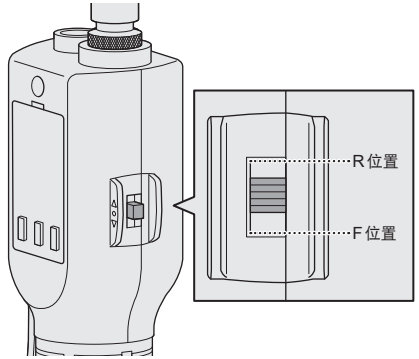
※ 由于作业条件也会存在偏差，因此请多次测量后再进行设置。

※ 由于作业条件也会随时间变化，因此请定期测量、设置。

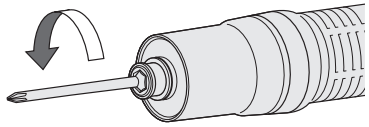
开始作业

1 用正/反转扳手设置旋转方向

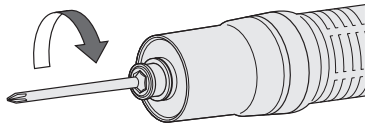
设到“F”位置为正转（右转），设到“R”位置为反转（左转）。



正转（右转）



反转（左转）



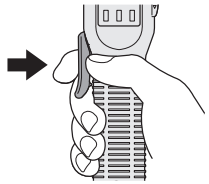
通知

- 如在旋转中操作正/反转扳手，会强制停止旋转。

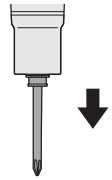
2 开始旋转

如为“拉杆启动”，请拉动拉杆。
如为“按压启动”，请朝钻头方向按压。

拉杆启动



按压启动



- **启动时，旋转初期可能会有一瞬间变慢，这并非故障。**
- **快速ON/OFF时，旋转初期的随动性稍有变慢。**
- **启动方式可选择“拉杆启动”或“按压启动”。**

P. 21

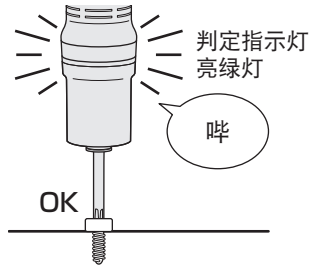
确认紧固状况

本产品通过蜂鸣器和判定指示灯通知作业情况。

■紧固OK

联轴器运转并正常完成紧固后，会通过蜂鸣器（哔）和判定指示灯点亮绿灯进行通知。
也可以与通过旋转时间进行判定同时使用。

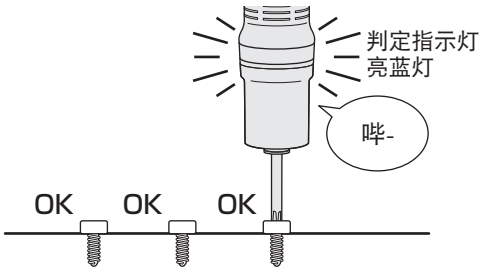
- 可在Web浏览器中更改判定条件。
P. 33～36
- 可在Web浏览器中更改指示灯的亮灯颜色。
P. 45



■计数完成（计数完毕）

判定为紧固OK的螺丝紧固达到设定的计数数量的状态。
通过蜂鸣器（哔-）和判定指示灯亮蓝灯通知螺丝紧固已经正常执行完设置次数。

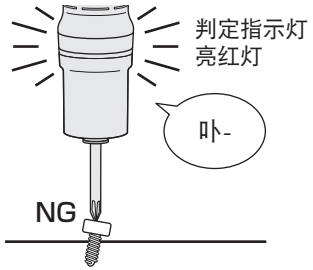
- 请设置计数数量。P. 40
- 可在Web浏览器中更改指示灯的亮灯颜色。P. 45
- 可在Web浏览器中更改蜂鸣器模式。P. 44
- 可在Web浏览器中更改蜂鸣器音量。P. 44



■紧固NG（NOK）

联轴器不运转而停止，或未达到满足判定条件的状态。
蜂鸣器（叶-）和判定指示灯通过亮红灯通知螺丝紧固发生问题。

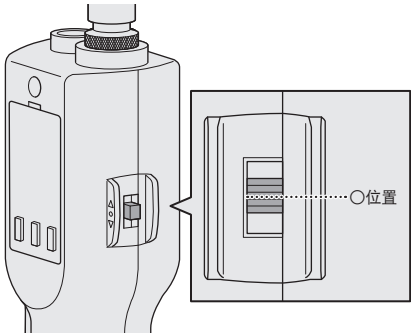
- 按下OK按钮，错误显示消失。
- 可在Web浏览器中更改指示灯的亮灯模式。P. 45



结束作业

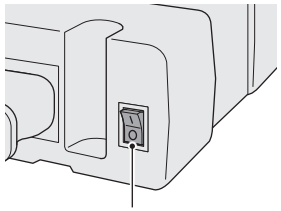
1 将正/反转扳手设为开关锁定

请设到“〇”位置。

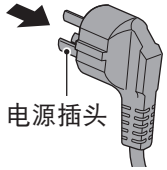


2 关闭电源适配器的电源开关
或
从插座中拔出电源插头

关闭电源开关



从插座中拔出电源插头

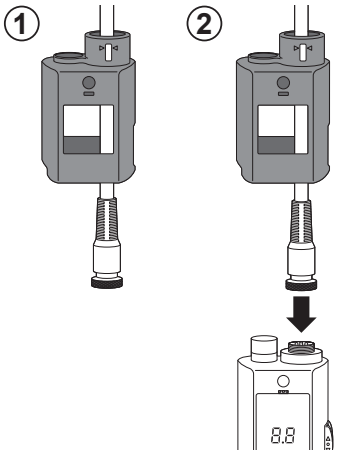


例：中国大陆

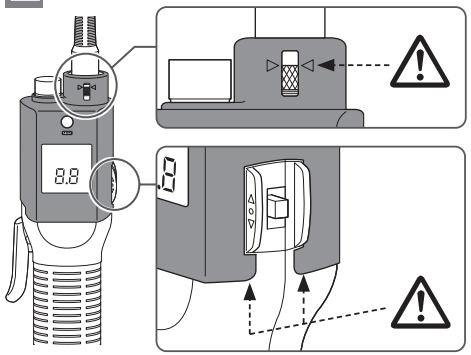
安装护罩（另售件）

■EYSXA103模式设置按钮盖

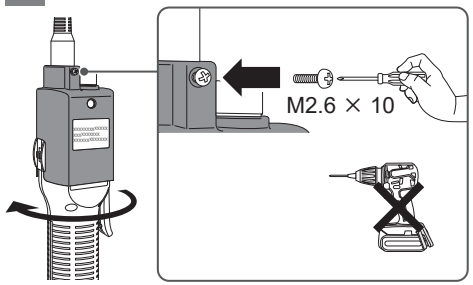
1



2

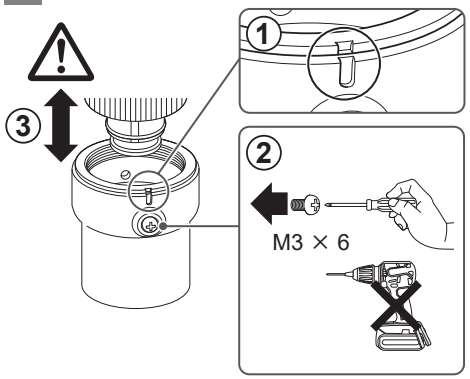


3



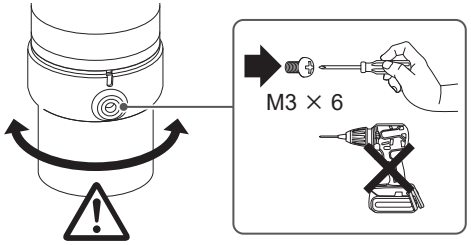
■EYSXA104联轴器盖

1



⚠ 将联轴器盖牢牢地固定在螺丝刀主体上。

2



- 将联轴器盖安装到螺丝刀主体后，拆下螺丝。

⚠ 确保联轴器盖可自由转动，不会从螺丝刀主体上脱落。

操作

启动配对

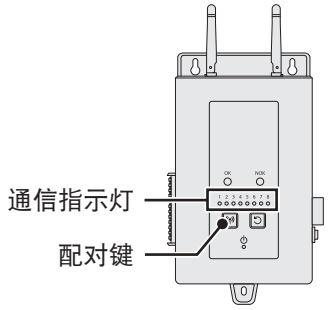
使用控制器（EYARW1）上的配对键。

选择编号未注册的通信指示灯（灯灭）并按下配对键，进入配对模式。

在时长两分钟的配对模式期间，处于覆盖范围以内的工具上开启配对模式，自动建立配对。

如果未在该时间内建立配对，配对模式将终止。

※尝试开始配对后，须等待片刻，控制器才能进入配对模式。



（注册工具No. 4）

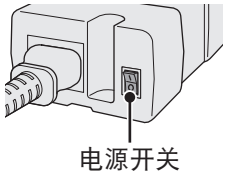
1 按控制器上的配对键4次，选择工具No. 4

通信指示灯No. 4闪烁。

2 选择No. 4时，按下控制器上的配对键，进入工具No. 4的配对模式。

配对模式中，通信指示灯No. 4开始快速闪烁。

3 按住工具主体上的OK按钮，打开电源适配器的电源开关



进入配对模式。

自动建立无线通信，完成配对注册，通过控制器端的蜂鸣器进行通知。

※详细内容请参见控制器的使用说明书。

※如果配对失败，请在控制器上取消配对，然后尝试重新配对。

预先将螺丝刀电源线连接到电源适配器和工具主体后，请在电源插头插入于插座的状态下进行操作。

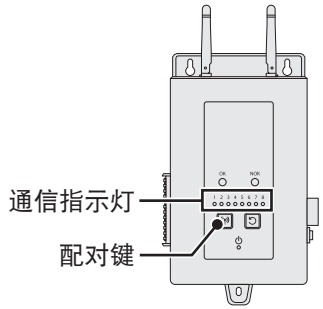
通信指示灯	配对模式 （快速闪烁）	已注册 （点亮）
控制器	4	4
工具（本产品）	Panasonic OK ▽ △	Panasonic OK ▽ △

通知

- 除了使用控制器上的配对键之外，您还可以通过在设置屏幕中进行设置来启动配对。
- 关于如何在设置屏幕上启动配对以及控制器的操作详情，请参见随控制器提供的使用说明书。
- 控制器端和工具（本产品）端的切换为已注册亮灯的时间可能不同。

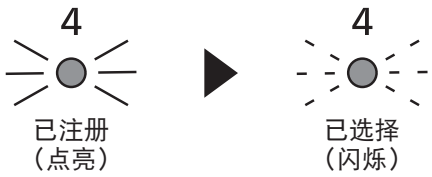
取消配对

使用控制器（EYARW1）上的配对键。
选择想要取消注册的工具编号的通信指示灯（灯亮）并按下配对键，取消配对注册。



（取消工具No. 4）

1 按控制器上的配对键4次，选择工具No. 4。
通信指示灯No.4闪烁。



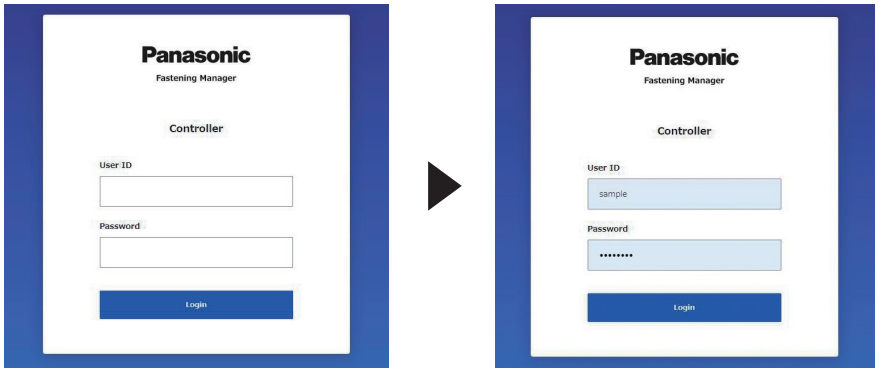
2 选择No.4时，按下控制器上的配对键，取消工具No.4的配对注册。
配对取消时，通信指示灯No.4停止闪烁并熄灭。

通知

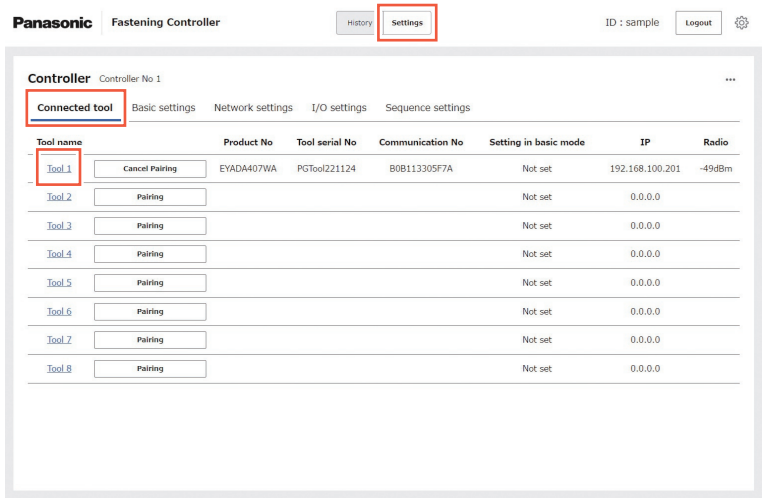
- 除了使用控制器上的配对键之外，您还可以通过在设置屏幕中进行设置来取消配对。
- 关于如何在设置屏幕上取消配对以及控制器操作的详情，请参见随控制器提供的使用说明书。

显示设置画面

1 显示Home画面
请参见控制器（EYARW1）的使用说明书中记载的“使用前的准备”的“显示设置画面”～“经由网络的连接方法”，然后在Web浏览器上进行设置，显示Home画面。



2 显示工具画面
① 单击Home画面（设置画面初始页面）上部的[Settings]，然后选择“Connected tool”选项卡。
② 在“Connected tool”画面中单击对象工具No.。
显示工具No.画面。

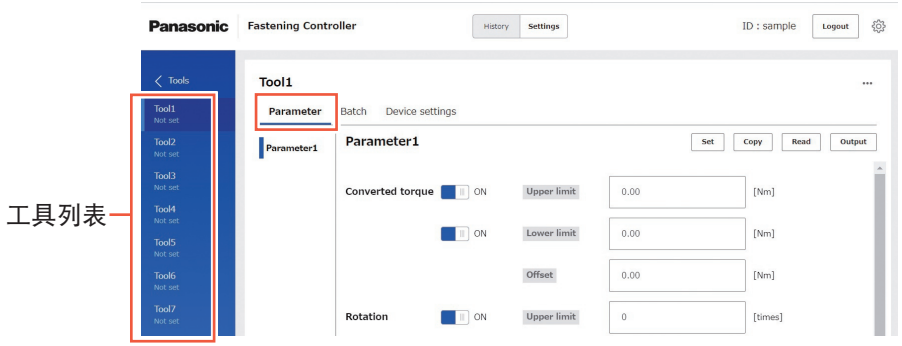


3 显示设置画面

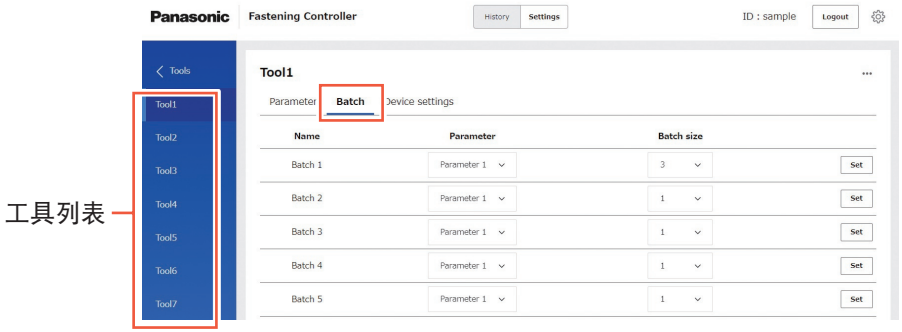
可以从工具No.画面的“Parameter”、“Batch”、“Device settings”选项卡进行参数设置、批处理设置和工具基本设置。

※切换工具时，也可以从工具列表选择。

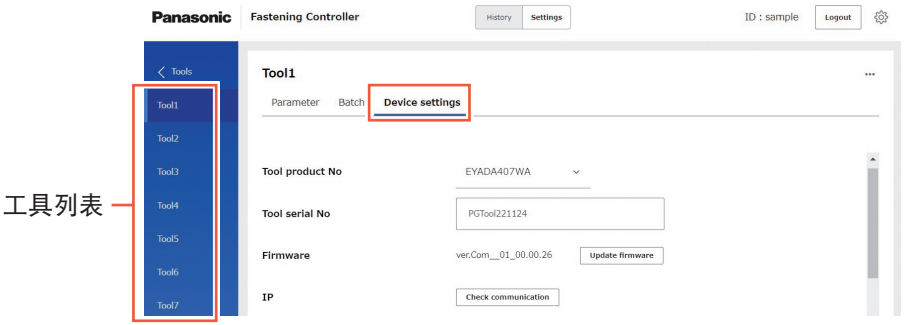
Parameter



Batch



Device settings



参数设置项目

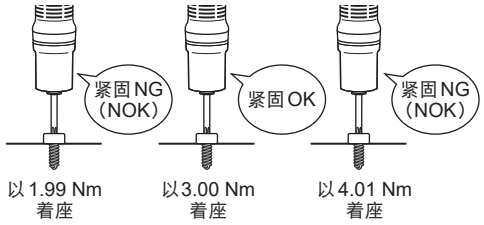
Converted torque（仅WA型号）

[功能概述]

可通过螺丝紧固的扭矩换算值判定紧固状况。
请设置紧固OK的扭矩换算值的下限值和上限值。

- 设置的下限值不可超过上限值。

设置为下限值2.00，上限值4.00时



着座时的扭矩换算值为2.00 Nm～4.00 Nm时，视为紧固OK。

什么是扭矩换算值

与普通螺丝刀相同，使用螺丝刀主体的联轴器确保目标紧固扭矩。

本产品利用联轴器运转时螺丝刀主体的输出（电流、电压、变化量）的相关性，输出联轴器运转时的紧固扭矩作为扭矩换算值（推测值）。

请用作确保紧固结果的证据，以及用于掌握一定期间内紧固扭矩的变动趋势。

[默认值]

- Upper limit **OFF**
- Lower limit **OFF**
- Offset **0.00** Nm

[设定值]

- Upper limit **OFF** 禁用 / **ON** 启用 / **0.00*** Nm～**9.99** Nm
- Lower limit **OFF** 禁用 / **ON** 启用 / **0.00*** Nm～**9.99** Nm
- Offset **–9.99** Nm～**9.99** Nm

输入带（*）的值将禁用此功能。

Converted torque（续）

[设置方法]

扭矩换算值的数据相关注意

- 由于扭矩换算值是根据工具状态量推测的值，因此不可用于严格的扭矩管理和品质记录。
- 换算时需要一定的变化量，因此不支持拧紧和短时间紧固。
- 无法进行换算处理时，扭矩换算值为0。
- 请紧固约0.2秒以上后使用。
- 本产品并非测量仪，不可用于校准。
- 本系统与产品序列号等固有制造编号没有关联。

扭矩换算设置注意

- 需要事先设置（调整）。
- 如果螺丝、配合材料、联轴器档位等作业条件发生改变，则需即时进行设置。
- 设置并进行作业后，请务必确认能否确保目标扭矩以及实际工件的紧固状态。
- 随着时间推移，作业条件和电动螺丝刀的状态也会发生变化。
  请定期进行设置（调整）。

1 事先准备

请根据现场的管理形态，确定最接近设置扭矩值【X】的联轴器档位。

扭矩的管理形态有（A）、（B）2种。
（详情见 P. 24 ）

（A）以实际工件的紧固扭矩值进行管理时

（B）以螺丝刀主体的扭矩值进行管理时

2 获取数据

请用实际工件试打10次以上。

※即使是（B）的管理形态，也务必在实际工件上进行测量。

3 设置

① 计算出平均值【Y】

② 计算差值【Z】=【X】-【Y】

③ 在扭矩修正值中输入【Z】

例1

设置扭矩值【X】	0.8 Nm
扭矩换算值的平均【Y】	1.04 Nm
差值【Z】	-0.24 Nm
修正值	-0.24 Nm

例2

设置扭矩值【X】	1.3 Nm
扭矩换算值的平均【Y】	0.98 Nm
差值【Z】	0.32 Nm
修正值	0.32 Nm

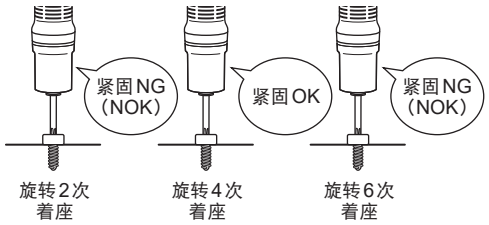
Rotation

[功能概述]

可通过螺丝紧固的旋转次数判定紧固状况。
请设置紧固OK的旋转次数的下限值和上限值。
请参见“作业履历数据”的“Rotation (times)”，根据作业内容合理设置旋转次数。

- 设置的下限值不可超过上限值。
- 旋转次数是旋转开始后，从检测到规定扭矩时起到联轴器运转为止的旋转次数。

设置为下限值3、上限值5时



着座为止的旋转次数为3～5次时，视为紧固OK。

[默认值]

- Upper limit **OFF**
- Lower limit **OFF**

[设定值]

- Upper limit **OFF** 禁用 / **ON** 启用 / **0*** times～**999** times
- Lower limit **OFF** 禁用 / **ON** 启用 / **0*** times～**999** times

输入带（*）的值将禁用此功能。

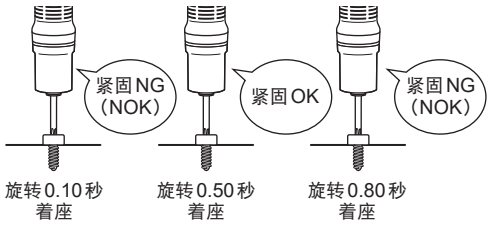
Fastening time

[功能概述]

可通过螺丝紧固的旋转时间判断紧固状况。
请设置紧固OK的紧固时间的下限值和上限值。
请参见“作业履历数据”的“Fastening time (s)”，根据作业内容合理设置旋转时间。

- 设置的下限值不可超过上限值。

设置为下限值0.30、上限值0.60时



着座所用的旋转时间为0.30秒～0.60秒时，视为紧固OK。

[默认值]

- Upper limit **OFF**
- Lower limit **OFF**

[设定值]

- Upper limit **OFF** 禁用
  ON 启用 / **0.00*** s～**9.99** s
- Lower limit **OFF** 禁用
  ON 启用 / **0.00*** s～**9.99** s

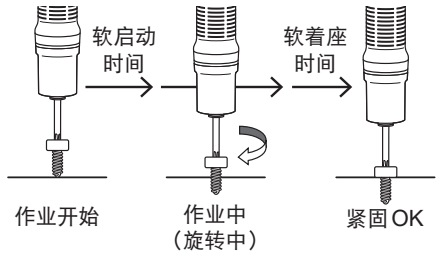
输入带(*)的值将禁用此功能。

Soft start

[功能概述]

可以设置软启动的持续时间和软启动的转速。

- 不可将小于软启动持续时间的时间设置为软着座开始时间。
- 由于电机结构的原因，从软启动转速提升到通常转速时，会发生时间滞后。



什么是软启动
开始紧固螺丝时缓慢旋转，以防出现拧倾，螺丝卡阻。

[默认值]

- Continue time **0.00** s
- Rotation level **10** Lv

[设定值]

- Continue time **0.00*** s～**9.99** s
- Rotation level **1** Lv～**10** Lv

软启动转速等级（转/分钟）

Level（等级）	1	2	3	4	5
EYADA112WA·WB	300	400	500	600	700
EYADA212WA·WB	300	400	500	600	700
EYADA218WA·WB	450	600	750	900	1050
EYADA407WA·WB	160	220	270	330	380
※相对于最大转速	约25%			约50%	

Level（等级）	6	7	8	9	10
EYADA112WA·WB	800	900	1000	1100	1200
EYADA212WA·WB	800	900	1000	1100	1200
EYADA218WA·WB	1200	1350	1500	1650	1800
EYADA407WA·WB	430	490	540	600	650
※相对于最大转速		约75%			约100%

- 数值（转速）仅供参考。

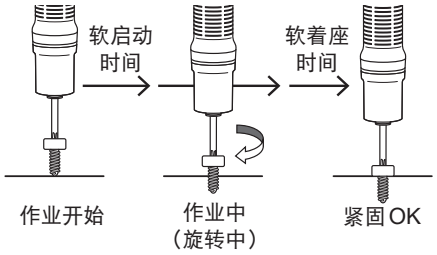
输入带(*)的值将禁用此功能。

Soft snug

[功能概述]

可以设置软着座的开始时间和软着座的转速。

- 不可将小于软启动持续时间的时间设置为软着座开始时间。
- 由于电机结构的原因，从通常转速下降到软着座转速时会发生时间滞后。



什么是软着座

钻头在着座前缓慢旋转，以减少偏离和对基材的影响。

[默认值]

- Start timing **0.00** s
- Rotation level **10** Lv

[设定值]

- Start timing **0.00*** s～**9.99** s
- Rotation level **1** Lv～**10** Lv

软着座转速等级（转/分钟）

Level（等级）	1	2	3	4	5
EYADA112WA·WB	300	400	500	600	700
EYADA212WA·WB	300	400	500	600	700
EYADA218WA·WB	450	600	750	900	1050
EYADA407WA·WB	160	220	270	330	380
※相对于最大转速	约25%			约50%	

Level（等级）	6	7	8	9	10
EYADA112WA·WB	800	900	1000	1100	1200
EYADA212WA·WB	800	900	1000	1100	1200
EYADA218WA·WB	1200	1350	1500	1650	1800
EYADA407WA·WB	430	490	540	600	650
※相对于最大转速		约75%			约100%

- 数值（转速）仅供参考。

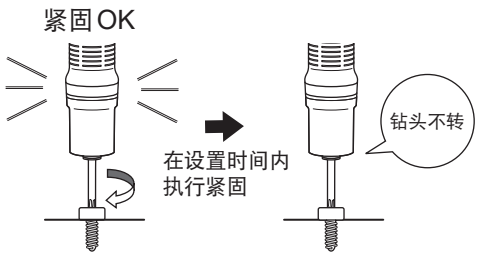
输入带（*）的值将禁用此功能。

Disable fastening time

[功能概述]

可设置为紧固OK后，在设置时间内不启动。

- “Ignore count time”和“Disable fastening time”有效时，“Disable fastening time”优先。



紧固OK后，电动螺丝刀在作业禁止设置中设置的时间内不启动。

[默认值]

0.00 s

[设定值]

0.00* s～**9.99** s

输入带（*）的值将禁用此功能。

批处理设置项目

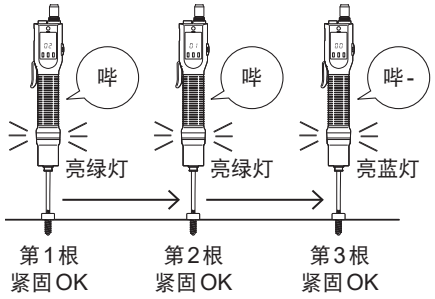
计数数量设置

[功能概述]

设置要进行螺丝紧固的数量。
对紧固OK的螺丝紧固进行计数，达到设置的数量后，会通过蜂鸣器和点亮判定指示灯进行通知。
P. 25

- 作业模式时，在主体的显示屏上显示计数数量。
- 达到设置的数量后，会复位显示屏上的计数。

设为“3”时



可从工具NO.画面中的“Batch”选项卡进行设置。

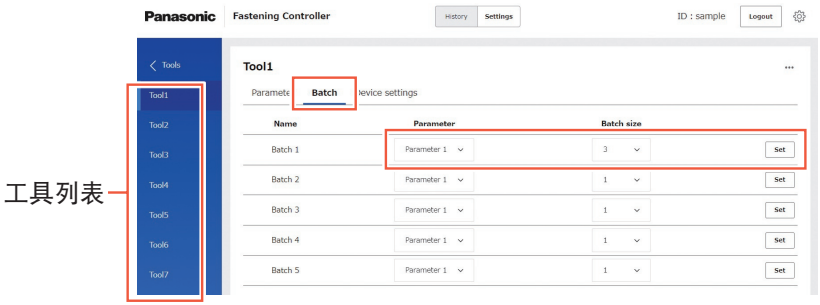
下拉选择“Parameter”，然后设置“Batch size”（紧固数量。最多99个）。进行[Set]后，即可作为“Repeat mode (Basic mode)”时的动作设置。

※ 每台工具（仅1个参数）可注册1种参数。

※ 切换工具时，也可从工具列表选择。

※ 批处理最多可注册5种。

※ 请参见控制器（EYARW1）的使用说明书中记载的“设置工具的紧固参数”、“设置紧固控制模式”。
关于参数项目，请参见“参数设置项目”。
P. 33



[默认值]

1

[设定值]

1～**99**

工具设置项目

Brake

[功能概述]

可以设置联轴器运转前的旋转停止时有无制动器。

[默认值]

ON

[设定值]

ON　有制动器（松开开关后，旋转立即停止）
OFF　无制动器（松开开关后，旋转慢慢停止）

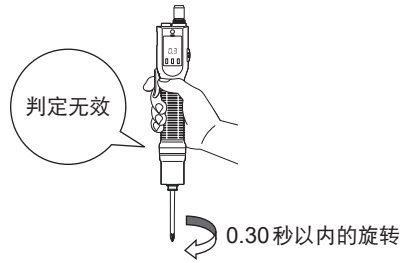
Ignore judgement time

[功能概述]

可将短时间空转及设置按压启动时对准螺丝孔等与作业无关的意外旋转排除在判定之外。
请设置排除在判定之外的旋转时间。

※ 设置计数数量时有效。请将紧固控制模式设置为“Repeat mode”。“Free mode”下功能不运作。

设为“0.30”时



将0.30秒以内的旋转排除在紧固判定之外

[默认值]

0.00 s

[设定值]

0.00* s～**9.99** s

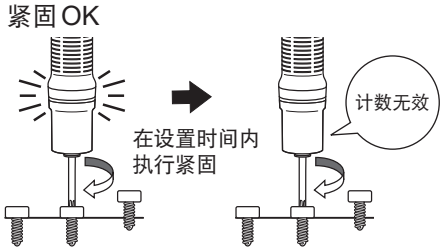
输入带（*）的值将禁用此功能。

Ignore count time

[功能概述]

紧固OK后，可设置为即使进行二次紧固也不计数。
紧固OK后，请设置排除在计数之外的紧固时间。

- 重新操作或拧松等反转作业的计数有效。
- “Ignore count time”和“Disable fastening time”有效时，优先“Disable fastening time”。



紧固OK后，设为计数无效的时间在二次紧固后仍计数无效

[默认值]

0.00 s

[设定值]

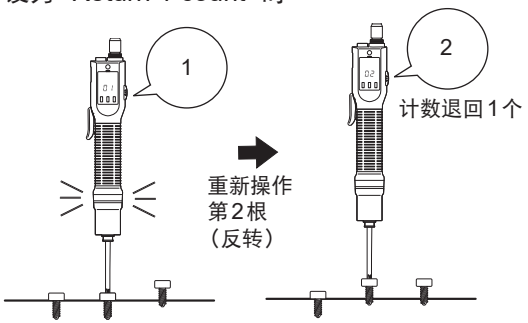
0.00* s～**9.99** s

Count return

[功能概述]

可设置对紧固OK的螺丝紧固进行重新操作、拧松等反转作业时的计数处理。

设为“Return 1 count”时



[默认值]

Return 1 count

[设定值]

Don’t change	反转作业不计数
Return 1 count	反转作业计数退回
Return to start	在反转作业中复位计数

输入带(*)的值将禁用此功能。

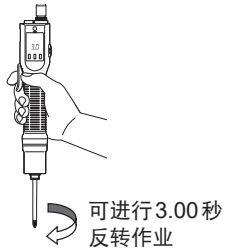
Batch complete judgement waiting time

[功能概述]

可设置最终数量的螺丝紧固变为紧固OK后，到计数完成（计数完毕）判定的待机时间。
设置的待机时间可按照设置的计数数量的最终数量执行反转作业。

- 在待机时间内无法进行正转作业。

设为“3.00”时



按最终数量紧固OK后，可以3.00秒不进行计数，执行松开等重新操作的反转作业。

[默认值]

0.00 s

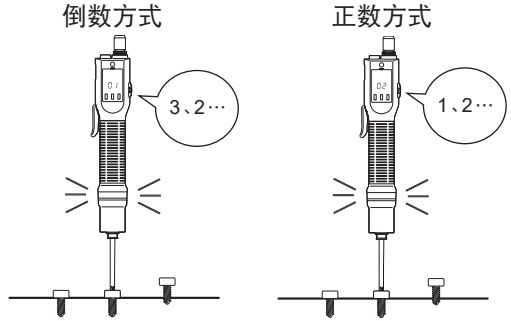
[设定值]

0.00* s～**9.99** s

Count method

[功能概述]

可切换螺丝紧固数量的计数方式。



[默认值]

Count down

[设定值]

Count down	将紧固数量从设定值减少到0进行计数
Count up	将紧固数量从0增加到设定值进行计数

输入带(*)的值将禁用此功能。

Buzzer (Batch complete)

[功能概述]

可设置计数完成（计数完毕）时的蜂鸣器模式。

[默认值]

Long beep

[设定值]

Long beep 哔-（1声长音）
3 short beeps 哔哔哔（3声短音）

Buzzer (Volume)

[功能概述]

可设置蜂鸣器音量。
※紧固OK时的确认音和操作音的通用设置。

[默认值]

ON (Low)

[设定值]

ON 有蜂鸣器 / **Low** 音量小 **Mid** 音量中 **High** 音量大
OFF 消音

Judge LED (Color on OK)

[功能概述]

可设置判定指示灯的亮灯颜色。

[默认值]

OK:Green, Batch complete:Blue

[设定值]

OK:Green, Batch complete（计数完毕）:Blue
OK:Blue, Batch complete（计数完毕）:Green
OFF 熄灭

Judge LED (Color on NG)

[功能概述]

可设置紧固NG（NOK）时及发生错误时，判定指示灯的亮灯模式。

[默认值]

NOK:Steady, Error:Blink

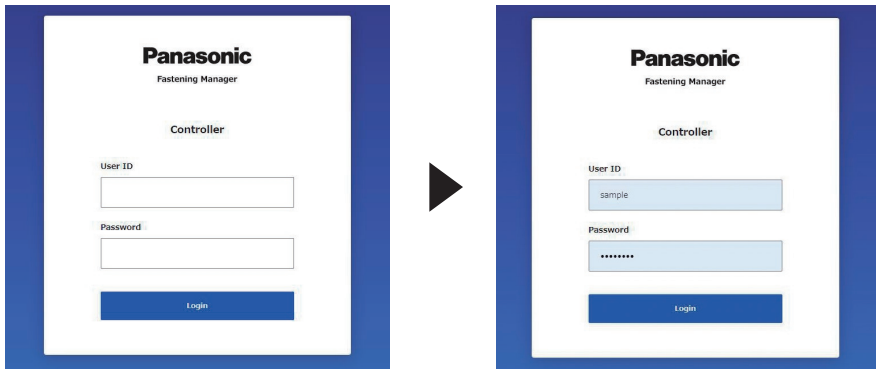
[设定值]

NOK:Steady, Error:Blink
NOK:Blink, Error:Steady
OFF 熄灭

显示作业履历画面

1 显示Home画面

请参见控制器（EYARW1）的使用说明书中记载的“使用前的准备”的“显示设置画面”～“经由网络的连接方法”，然后在Web浏览器上进行设置，显示Home画面。

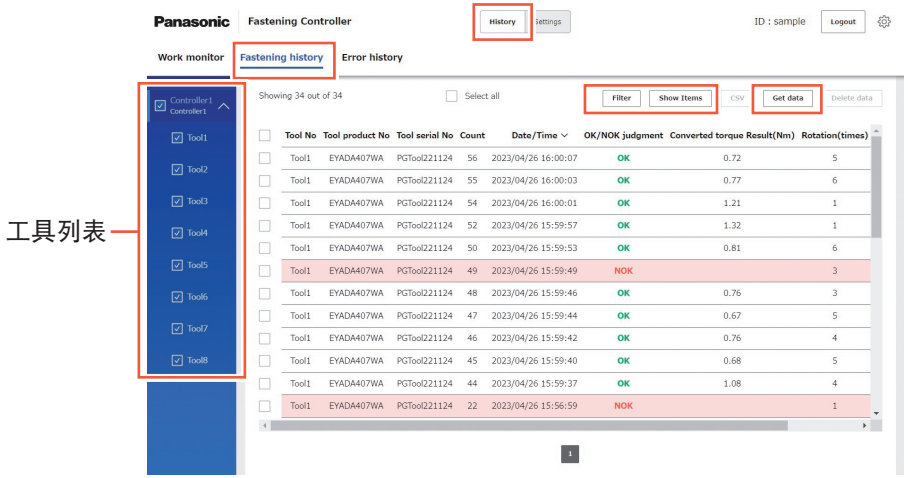


2 显示作业履历画面

单击Home画面（设置画面初始页面）上部的[History]，然后选择“Fastening history”选项卡。

可浏览从工具发送到控制器的紧固履历数据。

要显示数据时，请从左侧的工具列表选择显示对象控制器/工具，然后单击右上方的[Get data]。
按新的顺序显示紧固履历数据。



作业履历数据的项目

Count

[显示概述]

配对后的累计作业次数。
解除与工具的配对即可复位。

Batch size（计数数量）

[显示概述]

控制器的动作模式为“Free mode”时：隐藏。
控制器的动作模式为“Repeat mode”时：批处理的紧固数量。

Batch count

[显示概述]

控制器的动作模式为“Free mode”时：隐藏。
控制器的动作模式为“Repeat mode”时：批处理的数量计数（已紧固数量）。

Date/Time

[显示概述]

显示作业完成的日期。

OK/NOK judgment

[显示概述]

作业结果可用“OK”或“NOK”判定。
OK/NOK的判定基准如下。

OK：　联轴器运转，紧固正常完成。

NOK：　联轴器不运转而停止，或在未满足判定条件的状态下停止。

反转作业时为空白。

NOK message

[显示概述]

作业结果为“NOK”，原因显示“Torque”、“Rotation count”、“Rotation time”、“Clutch”、“Error”。

“NOK”的原因为错误时，紧固履历的“Error Message”项目中会显示详情。
（“NOK信息”的详情见 P. 65 ）

Forward/Reverse

[显示概述]
电动螺丝刀的旋转方向。
正转：　右转
反转：　左转

Upper converted torque Limit (Nm)

[显示概述]
显示作业结果为“OK”的扭矩换算值上限值的设置参数。

Lower converted torque Limit (Nm)

[显示概述]
显示作业结果为“OK”的扭矩换算值下限值的设置参数。

Converted torque Result (Nm)

[显示概述]
显示根据紧固作业中的电流、电压、变化量计算出的扭矩换算值结果。

Offset (Nm)

[显示概述]
显示修正扭矩换算值的设置参数。

Upper Rotation Limit (times)

[显示概述]
显示作业结果为“OK”的旋转次数上限值的设置参数。

Lower Rotation Limit (times)

[显示概述]
显示作业结果为“OK”的旋转次数下限值的设置参数。

Rotation (times)

[显示概述]
显示作业中的电动螺丝刀的旋转次数。

Upper Fastening Time Limit (s)

[显示概述]
显示作业结果为“OK”的旋转时间上限值的设置参数。

Lower Fastening Time Limit (s)

[显示概述]
显示作业结果为“OK”的旋转时间下限值的设置参数。

Fastening Time (s)

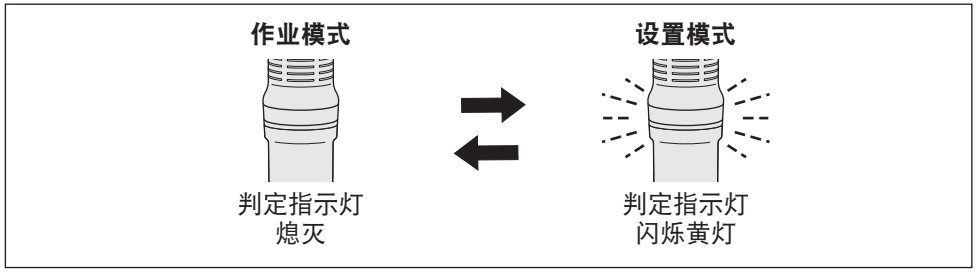
[显示概述]
显示作业中的电动螺丝刀的旋转时间。

Error Message

[显示概述]
作业结果为“NOK”时，显示该错误内容的详情。
（“错误消息”的详情见 P. 65）

1. 切换为设置模式

可根据作业更改本产品设置。
更改设置时,请切换为设置模式。



■切换为设置模式

1 将正/反转扳手设为开关锁定
请设到“○”位置。

2 长按OK按钮
蜂鸣器鸣响2声短音(哔哔),判定指示灯闪烁黄灯。

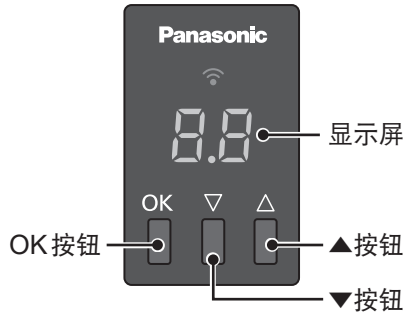
■返回作业模式

1 在设置模式中(判定指示灯闪烁黄灯)长按OK按钮
蜂鸣器鸣响3声短音(哔哔哔),判定指示灯熄灭。

2 从开关锁定切换正/反转扳手
设到F位置为正转(右转),设到R位置为反转(左转)。

2. 选择菜单

在设置模式中按下▼▲按钮,可选择菜单。
在显示屏上显示选中的菜单。
请按下OK按钮确定选中的菜单。



■计数菜单(c+数字)

显示	内容	参照页
c4	数量复位的许可设置	53

■基本设置菜单(b+数字)

显示	内容	参照页
b4	主体复位的许可设置	54
b9	动作模式切换设置	55

主体复位（初始化设置）

将主体的设置恢复为厂家出厂时的状态。

启用本功能时，请将“b4 主体复位的许可设置”设为“__1”。 P. 54

■设置步骤

1 切换为设置模式

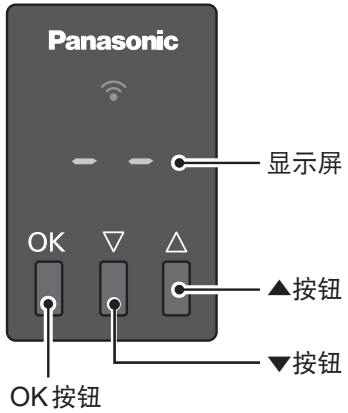
请将正/反转扳手设为开关锁定，长按OK按钮。

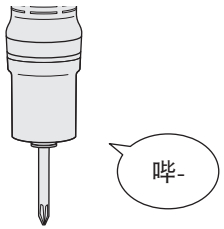
（详情见 P. 50）

2 同时长按OK按钮、▼按钮、▲按钮

蜂鸣器长鸣（哔-），显示屏显示“－－”。

判定指示灯熄灭。



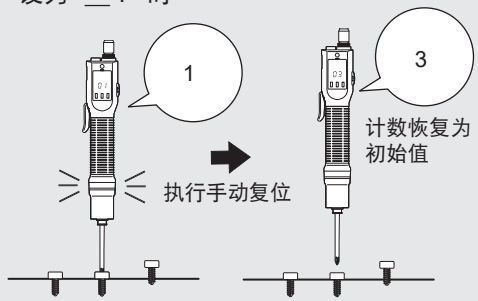


c4 数量复位的许可设置

许可手动复位计数数量。

如果设为“__1”，无需等待在计数数量设置中指定的数量，同时长按▼按钮和▲按钮即可复位计数。

设为“__1”时



■设置步骤

1 切换为设置模式

请将正/反转扳手设为开关锁定，长按OK按钮。

P. 50

2 按▲▼按钮，选择“c4”，再按OK按钮

在显示屏上显示设定值。

3 按▲▼按钮进行设置

初始值为“__1”。

显示	数量复位的许可
▬ ▬	不许可 （手动复位无效）
▬ 1	许可 （许可手动复位。 请同时长按▼按钮和▲按钮进行手动复位）

4 按OK按钮确定

设置完成后，蜂鸣器长鸣（哔-），显示屏返回菜单显示。

5 返回作业模式

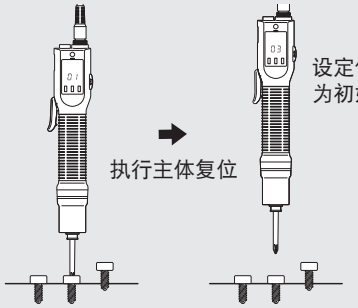
请长按OK按钮。

P. 50

b4 主体复位的许可设置

许可主体复位。
设置为“__1”后，在设置模式下同时长按OK按钮、▼按钮和▲按钮，可将工具初始化。 P. 52

设为“__1”时



■设置步骤

1 切换为设置模式
请将正/反转扳手设为开关锁定，长按OK按钮。
P. 50

2 按▲▼按钮，选择“b4”，再按OK按钮
在显示屏上显示设定值。

3 按▲▼按钮进行设置
初始值为“__1”。

显示	主体复位的许可
▬ ▬	不许可 （主体复位无效）
▬ 1	许可 （许可主体复位。请在设置模式下同时长按OK按钮、▼按钮和▲按钮进行主体复位）

4 按OK按钮确定
设置完成后，蜂鸣器长鸣（哔-），显示屏返回菜单显示。

5 返回作业模式
请长按OK按钮。
P. 50

b9 动作模式切换设置

可切换主体的动作模式。 P. 14

■设置步骤

1 切换为设置模式
请将正/反转扳手设为开关锁定，长按OK按钮。
P. 50

2 按▲▼按钮，选择“b9”，再按OK按钮
在显示屏上显示设定值。

3 按▲▼按钮进行设置
初始值为“__ __”。

显示	动作模式切换设置
▬ ▬	Stand Alone Mode （未连接控制器使用的模式）
▬ 1	Wireless Communication Mode （连接控制器使用的模式）

4 按OK按钮确定
设置完成后，蜂鸣器长鸣（哔-），显示屏返回菜单显示。

5 返回作业模式
请长按OK按钮。
P. 50

主体性能

型号	EYADA112WA EYADA112WB	EYADA212WA EYADA212WB	EYADA218WA EYADA218WB	EYADA407WA EYADA407WB
建议作业	小螺丝: M2～M3.5	小螺丝: M2.5～M4.5	小螺丝: M2.5～M4	小螺丝: M3.5～M5
扭矩设置范围	0.1 N·m～1.0 N·m	0.3 N·m～2.5 N·m	0.3 N·m～2.0 N·m	1.5 N·m～4.4 N·m
扭矩设置档位	96档			
紧固扭矩精度※	±10％			
转速	1200转/分钟 （10档调节）	1200转/分钟 （10档调节）	1800转/分钟 （10档调节）	650转/分钟 （10档调节）

＜测量条件＞ 按本公司规定的测量条件。

※因作业情况不同，紧固扭矩、紧固扭矩精度会发生变动。使用前，请务必通过实际作业进行确认。
※紧固扭矩精度并非扭矩换算值的精度。
※所在地区不供货的型号，请参阅最新总目录。

主体规格

电源	由电源适配器（另售件）供电　AC100-240 V　50/60 Hz
电机	无刷电机（DC30 V）
钻套	单触式钻头锁紧方式 适用钻头（对边6.35 mm六角柄、单头9 mm～13 mm、双头12 mm～17.5 mm）
大小（大概尺寸）	全长：271 mm/握柄直径：ϕ 38 mm
质量（重量）	约630 g
开关方式	拉杆启动方式/按压启动方式 兼用（1台即可切换）
无线通信标准	无线LAN（IEEE.802.11 a/b/g/n）
频带	2.4 GHz频带：　2.412 GHz～2.472 GHz 5 GHz频带：　5.180 GHz～5.240 GHz [仅中国适用] 2.4 GHz频带：　2.412 GHz～2.462 GHz 5 GHz频带：　5.180 GHz～5.240 GHz
通道数	2.4 GHz频带：　1～13通道 5 GHz频带：　36、40、44、48通道 [仅中国适用] 2.4 GHz频带：　1～11通道 5 GHz频带：　36、40、44、48通道
输出信号（※1）	• 紧固OK　• 反转　• 计数数量 • 紧固NG（NOK）　• 工具序列号　• 累计驱动时间 • 计数完成（计数完毕）　• 时间　• 累计数量等 • 时序完成　• 旋转时间　• 扭矩换算值（仅WA型号） • 正转　• 旋转次数
输入信号（※1）	驱动许可信号
操作面板（显示屏）	7段显示
操作按钮	OK按钮/▼按钮/▲按钮
通知（指示灯）	4色显示（判定指示灯）
通知（蜂鸣器）	音量3档
数量计数时的设置	• Count method • Count return • Count reset • Ignore judgement time • Ignore Count Time • Batch complete judgement waiting time
螺丝紧固合格与否判定	• 旋转时间的上限/下限设置 • 旋转次数的上限/下限设置 • 扭矩换算值的上限/下限设置（仅WA型号）
螺丝紧固支持	• Soft start • Soft snug • Disable fastening time
时序控制	可以（需在控制器端设置）
其他	• 可通过控制器管理用软件（另售产品）进行工具批量设置、数据管理、数据简易分析 • 未连接控制器时，可在“Stand Alone Mode”下使用
通用规格	• 旋转方向切换（正转/反转） • 制动器ON/OFF设置
配件	• 螺丝刀电源线（2 m） • 螺丝刀挂具 • 联轴器盖 • 握柄附件（仅EYADA407WA·WB标配）
另售件	• 螺丝刀电源线（2 m/3 m） • 螺丝刀挂具 • 联轴器盖 • 握柄附件 • 电源适配器（带电源线）

此处的规格可能会因性能提高而发生变化。
※1 控制器端的输入输出信号。

电源适配器规格

型号	EYSZP001
输入电压	AC100-240 V　50/60 Hz　2.6 A
输出电压	DC30 V　3 A
待机功率	0.16 W（100 V）　0.21 W（240 V） ※未连接螺丝刀主体的状态
质量（重量）	约590 g
大小（大概尺寸）	全长（长边）177 mm× 全高（厚度）44 mm× 全宽（短边）76 mm
配件	电源线1 m（带接地插头。可从电源适配器主体拆装）

无线通信注意事项

使用WLAN设备的注意事项

该设备的工作频带与其他类型的设备（包括工业、科研和医疗设备，如微波炉）和电台（如工厂生产线中用于移动识别的驻地电台（有证）和低功率电台（无证）以及业余电台（有证））使用的频带相同。

1. 使用该设备前，请确认附近没有正在工作的移动识别用驻地电台、低功率电台或业余电台。
2. 如果设备对移动识别用驻地电台造成有害干扰，请立刻停止使用该频带并向以下支持中心咨询解决干扰的方案（例如安装隔断）。
3. 如果设备对移动识别用驻地电台、低功率电台或业余电台造成有害干扰或存在类似其他问题，请咨询支持中心。

■以下环境条件下可能产生噪声、无线电覆盖范围缩短或故障。

- 存在阻碍电波在无线工具单元与控制器之间正常传播的障碍物（如金属物体、钢筋混凝土物体）。
- 控制器天线被金属覆盖。
- 操作人员的身体干扰操作器（无线工具单元）与控制器之间的无线电传播。
- 附近存在导致噪声的微波炉、PC或任何其他设备。
- 无线工具单元和控制器附近有人使用手机或个人手持电话。

维护、保管

维护

■用软布擦拭

从插座中拔出电源插头，然后从主体拆下螺丝刀电源线，用干燥的软布擦拭。
请勿使用湿布、稀释液、苯、酒精等挥发性物品。
（否则会造成变色、变形、开裂）

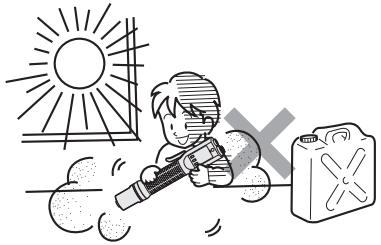
■实施定期检查

- 请定期检查螺丝是否存在松动、破损、动作异常等情况。
- 请定期检查电源适配器是否破损。

保管

■请避免以下条件进行保管

- 车内等高温场所
- 阳光直射的场所
- 有水和潮湿等的场所
- 垃圾和粉尘多的场所
- 儿童可以触及的场所
- 有汽油等易燃物的场所
- 有掉落危险的场所



更新固件

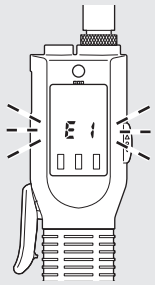
请参见控制器（EYARW1）的使用说明书中记载的“更新固件”。

主体错误显示

如有异常，主体的显示屏会闪烁错误标记。
请进行以下检查及处理。

- “E1”～“E9”：
  按下OK按钮，错误显示消失。
- “EE”及“F2”～“Fb”：
  按下OK按钮，或者通过操作开关，错误显示即会消失。

如果处理后仍有异常，请立即停止使用。
请将产品携至您所购买的销售店。



显　示	可能的原因	处　理
E1	主体内部的存储器或通信线异常等。	请先关闭电源，等待10秒后重新打开电源。 如无法恢复，请前往修理。
E3	主体发烫。	请中断作业，待温度下降后再使用。
E4	内部的保护传感器故障。	请前往修理。
E5	过载、电机故障等。	请消除发生过载的条件，重新进行确认。 如果仍未恢复，请前往修理。
E6	电源线类连接不正确。	请确认电源线类的连接情况以及是否存在断线。 如果电源线类未发现异常，则可能是电源适配器存在异常，请前往修理。
E7	主体电路发生异常、故障等。	请前往修理。
E9	• 未与控制器配对。 • 控制器解除了工具的配对。	请与控制器配对。 P. 28
	• 控制器与工具的距离过远。 • 与控制器之间有遮挡物。	确认控制器与工具的距离。 确认工具或控制器的周边是否有遮挡物。 ※ 与控制器之间的建议通信距离（2.4 GHz时：约16 m，5 GHz时：约10 m）以内
	• 未打开控制器电源。 • 控制器的安装场所、天线方向不正确。	确认控制器的电源是否打开。 确认控制器的天线状态。 （参见控制器的使用说明书中的“安装注意事项”）
	工具的异常、故障以及控制器的异常、故障等。	打开、切断电源。 （若无法恢复，请前往修理）
EE	未设置工具的紧固参数。	从控制器设置工具的紧固参数。 （参见控制器的使用说明书中的“设置工具的紧固参数”）

显　示	可能的原因	处　理
E E	未设置紧固控制模式。	从控制器设置紧固控制模式。 （参见控制器的使用说明书中的“设置紧固控制模式”）
	控制器的动作模式设置为“Repeat mode (Basic mode)”，未注册批处理。	从控制器进行批处理注册。 （参见控制器的使用说明书中的“设置紧固控制模式”）
	控制器的动作模式设置为“Repeat mode (Sequence mode)”，处于依次等待中。	确认时序设置。 （参见控制器的使用说明书中的“设置紧固控制模式”）
	控制器的动作模式设置为“External control mode”，没有来自外部设备的控制指示。	确认控制器的I/O输入、外部设备（PLC等）。 （参见控制器的使用说明书中的“设置紧固控制模式”）
	工具的内部配线断线。	请前往修理。
	快速操作开关几次。	在接收到控制器的信号之前不要进行开关操作。 请稍后再操作。

■作业中发生时的错误显示

显　示	可能的原因	处　理
F 2	在紧固作业中，联轴器运转之前主体停止。	这并非产品异常。 请让主体动作，直至联轴器运转。
F 3	在紧固作业中，超过了旋转时间的上限、下限值范围。	这并非产品异常。 请确认工件及旋转时间的设定值。 P. 36
F 4	在紧固作业中，旋转次数超过上限、下限值的范围。	这并非产品异常。 请确认工件以及旋转次数的设定值。 P. 35
F 5	在紧固作业中，扭矩换算值超过上限、下限值的范围。	这并非产品异常。 请确认工件以及扭矩换算值的设定值。 P. 33
F 6	在紧固作业中更改正/反转扳手。	请勿在紧固作业中操作正/反转扳手。
F 8	在紧固作业中，发生过载、电机故障。	请消除发生过载的条件，重新进行确认。 如果仍未恢复，请前往修理。

显　示	可能的原因	处　理
F 9	在紧固作业中，电源线类发生连接不良。	请确认电源线类的连接情况以及是否存在断线。 如果电源线类未发现异常，则可能是电源适配器存在异常，请前往修理。
F A	在紧固作业中，内部保护传感器发生故障。	请前往修理。
F b	在紧固作业中，主体发烫。	请中断作业，待温度下降后再使用。

紧固履历的错误信息

可通过web浏览器访问控制器，从作业履历画面确认紧固履历。 P. 46

	NOK信息	错误消息	原因	措施
1	Error	High temperature	• 工具达到高温，保护停止	• 冷却后再使用（注意不要产生结露） ＜连续异常时＞ • 重新评估作业环境 • 确认材料条件 • 重新评估电源适配器
2	Error	Motor sensor error	• 工具的温度传感器或电流传感器检测到异常	• 频发确认 - 如果频发，请前往修理（电路故障）
3	Error	Tool locked	• 工具的电机不旋转，保护停止 - 作业环境所致 - 主体所致	• 重新评估作业环境（有无异常负荷、作业人员的工具使用方法）
4	Error	Low voltage	• 在电源周围检测到异常电压，保护停止 - 作业环境所致 - 电源适配器或主体所致	• 重新评估电源适配器 • 保养端子部（确认灰尘附着、端子磨损） • 频发确认 - 如果频发，请前往修理
5	Error	Overcurrent	• 工具检测到异常电流，保护停止 - 作业环境所致 - 主体所致	• 重新评估作业环境（有无异常负荷、作业人员的工具使用方法）

	NOK信息	错误消息	原因	措施
6	Error	Rotation direction changed	• 在作业中，正/反转扳手设置变化，保护停止	• 重新评估作业环境（作业人员的工具使用方法）
7	Error	Parameter error	• 参数不在设置范围内	• 确认参数设置 • 重新设置参数
8	Torque	Torque exceeded	• 紧固时的扭矩换算值超过上限扭矩换算值设置	• 确认设置内容 • 重新评估构件条件 • 禁用上限扭矩换算值设置
9	Torque	Torque insufficient	• 紧固时的扭矩换算值低于下限扭矩换算值设置	• 确认设置内容 • 重新评估材料条件 • 禁用下限扭矩换算值设置
10	Rotation count	Rotation count exceeded	• 紧固时的工具前端部旋转次数超过上限旋转次数设置	• 确认设置内容 • 重新评估材料条件 • 禁用上限旋转次数设置
11	Rotation count	Rotation count insufficient	• 紧固时的工具前端部旋转次数低于下限旋转次数设置	• 确认设置内容 • 重新评估材料条件 • 禁用下限旋转次数设置
12	Rotation time	Rotation time exceeded	• 紧固时的工具前端部旋转时间超过上限旋转时间设置	• 确认设置内容 • 重新评估材料条件 • 禁用上限旋转时间设置
13	Rotation time	Rotation time insufficient	• 紧固时的工具前端部旋转时间低于上限旋转时间设置	• 确认设置内容 • 重新评估材料条件 • 禁用下限旋转时间设置
14	Clutch	Stop before clutch actuation	• 联轴器运转前紧固结束 - 紧固时，在联轴器运转之前停止了主体 - 紧固时，因其他NOK停止	＜在联轴器运转之前停止了主体时＞ • 重新评估作业环境 • 确认材料条件 ＜显示为其他紧固NOK时＞ • 确认紧固NOK内容后处理

索引

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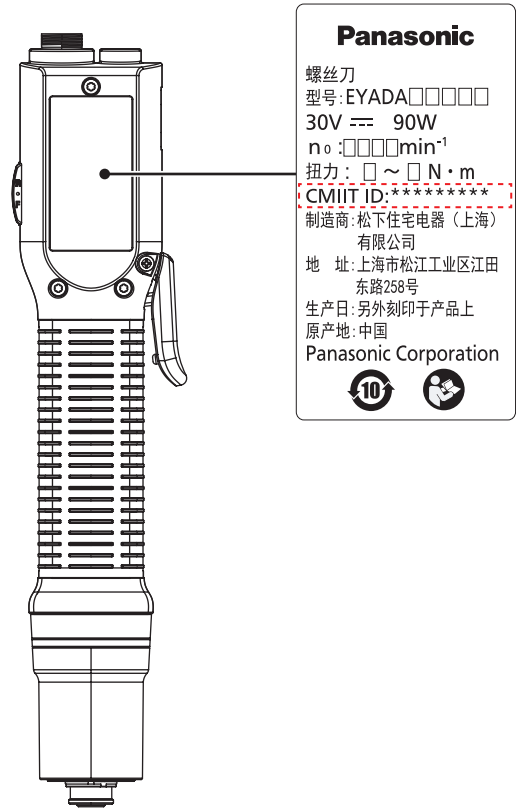


■无线功能作用:

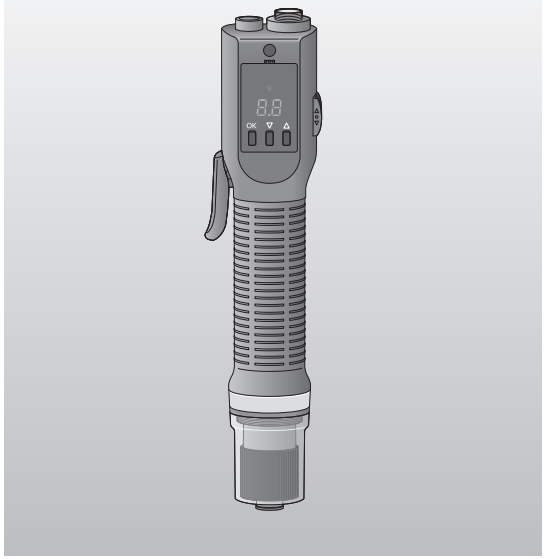
在工具和控制器间进行无线通信的配对及数据双向通信（工具的设置信息、紧固作业结果等）

Panasonic

Operating Instructions

Electric Screwdriver

Model No.: EYADA Series
Model No. WA
Model No. WB



IMPORTANT
Read and follow the safety and operating instructions before using this product.
Do not use the wireless function outside the country where you purchased the product. Doing so may violate the local laws and regulations.
In your area , including models that are not on sale. Please refer to the latest general catalogue.

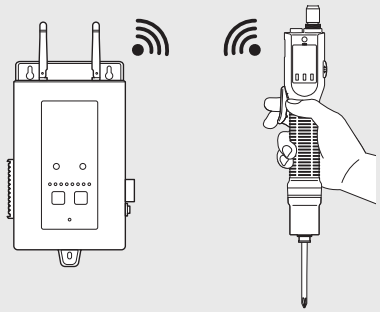
Original instructions: English
Translation of the original instructions: Other languages

Table of Contents

This unit is a compact and easy-to-grip Electric Screwdriver equipped with a brushless motor.

It handles well and is very easy to maintain because there is no need to replace a brush, thereby providing a comfortable working experience.

* Connecting tools to the controller allows collective setting of functions.
  (Be sure to connect them to the controller before starting collective setting)

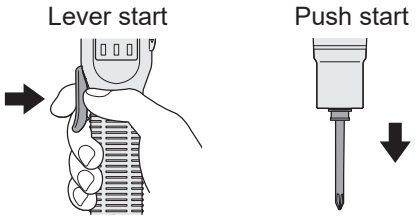


■ To prevent leaving screws unfastened P. 40
Set the number of screws to fasten.

■ To check the fastening status P. 25
Set the detection lamp.

■ To perform fastening quality judgement P. 33 to 36
Set the upper and lower limits of parameters.

■ To select lever start or push start P. 21
Set the start mode.

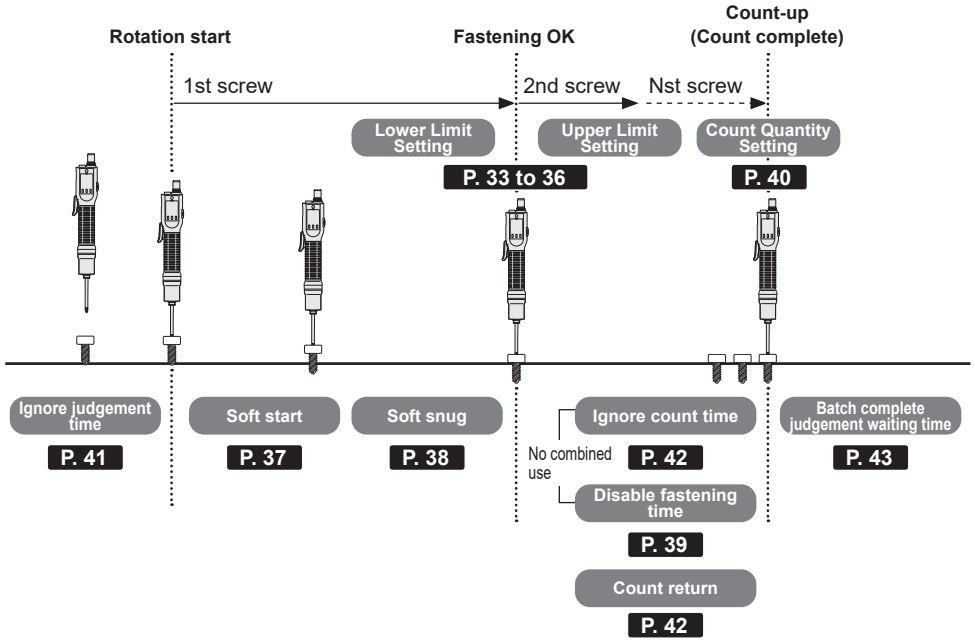


■ To prevent tool mix-ups
Set the order of using tools.
* Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller (EYARW1).

■ To check or save the fastening data
Check the fastening history data via a web browser on a PC.
Use the separately sold Controller Management Software to automate collection of the fastening history data and conduct simple data analysis.

■ To check or save the fastening torque values P. 33
Save the converted torque. You need to set an offset. (Model No. WA only)

■ Support functions helpful for screw fastening



Task	Support function	Reference page
Ignore unexpected momentary rotations when performing judgement.	Ignore judgement time	41
Slow the rotation rate at the start (to prevent galling, etc.).	Soft start	37
Slow the rotation rate before snugging (to minimise an impact, etc.).	Soft snug	38
Prevent counting refastenings (during a specific period).	Ignore count time	42
Prevent refastenings (during a specific period).	Disable fastening time	39
Set how to count reverse rotations.	Count return	42
Set how reverse rotations should be treated after the last screw is fastened.	Batch complete judgement waiting time	43

SAFETY PRECAUTIONS Always adhere to the instructions

Below are the instructions you should always adhere to, to prevent human harm and property damage.

■ **The severity of harm and damage caused by incorrect use is presented with the following.**

⚠ **WARNING**	May cause death or serious injury.
⚠ **CAUTION**	May cause minor injury or property damage.

■ **The content that should be observed is presented with the following symbols. (The following are examples)**

⃠	You MUST NOT do the action.
❗	You MUST do the action.

⚠ WARNING

Mandatory

- **Perform daily management of torque.**
  Failure to observe this may cause loose screws due to torque fluctuations, resulting in an accident.
- **When interrupting work or when not using the tool, ensure that it is not operating.**
- **When replacing a bit or accessories, or when storing the tool, always set the forward/reverse lever to the trigger switch lock position, and disconnect the power cord.**
  Failure to observe this may cause unexpected operation, resulting in an accident.
- **Hold the tool securely to avoid being swung around during use.**
  Failure to observe this may cause injury.
- **Wear ear protectors such as earplugs or earmuffs in noisy work environments.**
  Failure to observe this may adversely affect hearing.
- **Use protective glasses during work.**
  Failure to observe this may cause injury to the eyes or throat.
- **Insert the power plug all the way seated.**
  Incomplete insertion may cause electric shock or heat generation resulting in fire.
  Do not use a damaged plug or loose socket.

⚠ WARNING

Mandatory

- **Clean dust off the power plug routinely.**
  Accumulated dust on the plug may absorb moisture and cause poor insulation resulting in fire.
  Disconnect the power plug and wipe it with dry cloth.
- **Use the specified accessories and attachments.**
  Failure to observe this may cause injury.
- **Keep the workplace sufficiently bright.**
  Poor visibility in a dark workplace may lead to an accident or injury.
- **Fix the workpiece firmly.**
  Failure to observe this may cause unexpected movement, resulting in injury.
  For safety, use clamps or vices for fixing it.
- **If the tool malfunctions or makes abnormal noises during use, immediately turn off the trigger switch and stop using it.**
  Consult your dealer or Panasonic Customer Support Centre. Using it as is may result in injury.
- **Following the Operating Instructions, attach a bit or other pointed tools, and accessories securely.**
  Failure to securely attach them may cause detachment, resulting in injury.
- **Before use, remove a key, wrench, and other tools used for adjustment.**
  Failure to observe this may cause unexpected detachment, resulting in injury.
- **Work in proper attire.**
  - Do not wear baggy clothing or accessories such as a necklace, because they may get caught in rotating parts.
  - When working outdoors, you are recommended to use footwear with non-slip soles.
  - Cover long hair with a cap or a hair cover.
- **When working at heights, thoroughly check that there are no people below and use wires or others to prevent the tool from falling.**
  Otherwise someone may be injured if the tool falls.
- **Use only the screwdriver cord, power adapter, and power cord designed specifically for our screwdrivers.**
  Failure to observe this may cause an accident or injury.

⚠ WARNING

Prohibited

- **Do not use a socket or wiring device in the manner of exceeding the rated value. Use only within electrical rated range.**
  Exceeding the rated value due to an overloaded socket may cause heat generation resulting in fire.
- **Do not damage the screwdriver cord, power cord, or power plug. (Avoid damaging, breaking, modifying, putting close to a heat source, bending with force, twisting, pulling, putting a heavy load on it, pinching, or binding.)**
  Using the damaged cord or plug may result in electric shock, short circuit, or fire.
  Check the cord and plug periodically and if any damage, consult your dealer.
- **When smoke is emitted from the tool, do not inhale the smoke.**
  It may be harmful to your body.
- **Immediately after work, do not touch a bit or other pointed tools, screws, or chips.**
  They are hot and may cause burns.
- **Do not use the tool for any other purpose than intended.**
  Failure to observe this may cause injury.
- **Do not use the tool with oil or other foreign material attached to it.**
  Otherwise an accident may occur if the tool falls.
  Also, such oil or other foreign material may enter the inside, resulting in generation of heat, fire, or burst.
- **While using a bit or other rotating parts, keep your body or a part of your body away from the rotating parts or chips.**
  You may be injured when an unexpectedly detached or damaged bit or chips hit you. Replace a bit or other pointed tools periodically.
- **Do not use the screwdriver cord, power adapter, or power cord designed specifically for our screwdrivers to operate other devices.**
  Failure to observe this may cause an accident or injury.
- **Do not use the tool in an environment where asbestos exists nearby (including an environment where asbestos is being removed).**
  Doing so may adversely affect health.
  Great care should be given to asbestos, because this substance causes lung cancer or other serious health damage.

⚠ WARNING

Prohibited

- **Disconnect the power plug between uses.**
  Failure to observe this may cause poor insulation resulting in electric shock or fire from electric leakage.

No touching

- **If it is thundering, do not touch this unit or the power plug.**
  Failure to observe this may result in electric shock.

No disassembly

- **Do not modify the tool. Do not disassemble or repair the tool.**
  Doing so may cause fire, electric shock, or injury.
  For repair, consult your dealer or our customer support team.

Keep dry

Avoid the following use of tools.

- **Do not use or leave them exposed to rain or moisture.**
- **Do not use them immersed under water.**
  Failure to observe this may cause smoke, fire, or burst.

No wet hand

- **Do not use a wet hand to connect or disconnect the power plug to or from the outlet.**
  Failure to observe this may cause electric shock.

⚠ CAUTION

Mandatory	● **If the tool becomes hot, interrupt the work and wait for it to cool down before use.** Failure to observe this may cause burns.
	● **To disconnect the power plug, always hold the power plug without pulling the cord.** Pulling the cord may cause electric shock or short circuit.
	● **Before use, check the tool, pointed tool, and other parts for any damage and confirm their normal operation.** Failure to observe this may cause damage, resulting in injury.
	● **Keep the workplace clean.** A disordered workplace or work table may lead to an accident.
	● **Consider well how to handle and work, pay attention to the surrounding environment, and use common sense during work.** Failure to observe this may cause an accident or injury.
	● **When installing the power adapter on a wall, securely screw it to prevent it from falling.** Otherwise, the power adapter may fall, injuring someone.
Prohibited	● **Do not put the tool in a place accessible by a child.** Failure to observe this may cause an accident or trouble.
	● **Do not store the main body in a place where the temperature may rise to 50 °C or higher.** Failure to observe this may lead to abnormal operation.
	● **Do not use the tool in such a forceful manner that causes the motor to lock.** Failure to observe this may cause smoke or fire. In order to work safely and efficiently, work at a speed that matches the ability.

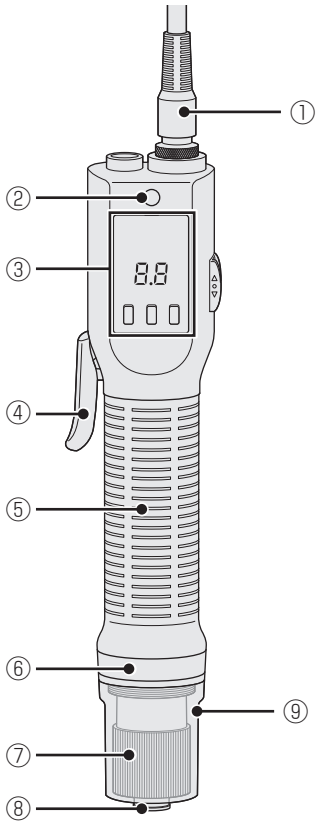
⚠ CAUTION

Prohibited	● **Do not work in an unusual position.** Otherwise you may fall over and be injured. Always stand on a stable footing and keep a good balance.
	● **Do not use the tool when you are tired.** Failure to observe this may cause an accident or injury.
	● **Do not allow a child or any other person who is not an operator to come near the workplace or touch the tool.** Doing so may cause injury.
	● **Do not hold only the cord to carry the tool.** Doing so may cause the tool to fall, resulting in injury.

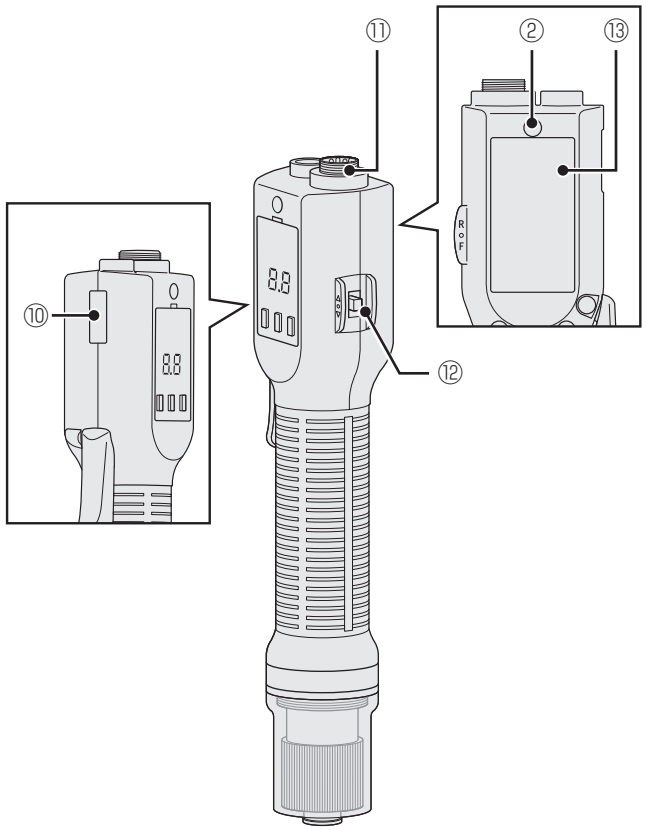
NAMES OF PARTS

Tool

■ Front View



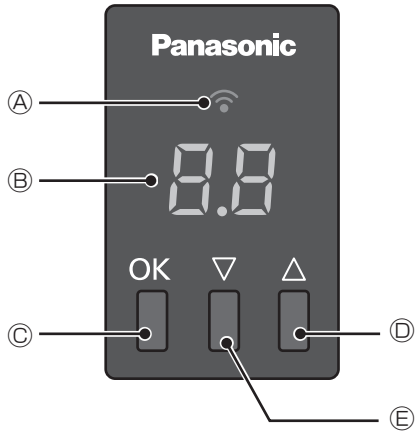
■ Side View



①	Screwdriver cord
②	Screwdriver hanger mounting hole
③	Operation panel
④	Lever trigger switch
⑤	Grip
⑥	Detection lamp
⑦	Clutch handle

⑧	Bit holder (for hex shaft, 6.35 mm)
⑨	Clutch cover
⑩	Serial plate
⑪	Screwdriver cord connector
⑫	Forward/Reverse lever
⑬	Rating, warning, and caution indications

■ Operation panel



Ⓐ	Communication lamp
Ⓑ	Display
Ⓒ	OK button

Ⓓ	▲ button
Ⓔ	▼ button

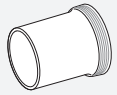
Accessories (No bit is supplied.)

■ **2 m Screwdriver Cord**

■ **Grip Attachment**

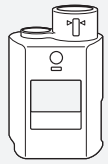
* Supplied for EYADA407WA·WB only

■ **Clutch Cover**



■ **Screwdriver Hanger**

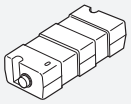
■ **Mode setting button cover**



* Not included for mainland Chinese markets.

Separately sold items

■ **Power Adapter** (EYSZP001)



[For China only] Power Cord 1 m

[For Malaysia only] Power Cord 1 m

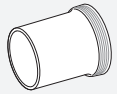
[For Thailand only] Power Cord 1 m

[For Indonesia only] Power Cord 1 m

[For India only] Power Cord 1 m

■ **Screwdriver Hanger** (EYSXA100)

■ **Clutch Cover** (EYSXA101) (EYSXA104)

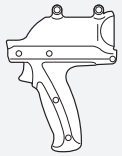


■ **2 m Screwdriver Cord** (EYSXC120)

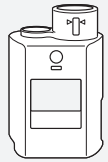
■ **3 m Screwdriver Cord** (EYSXC130)

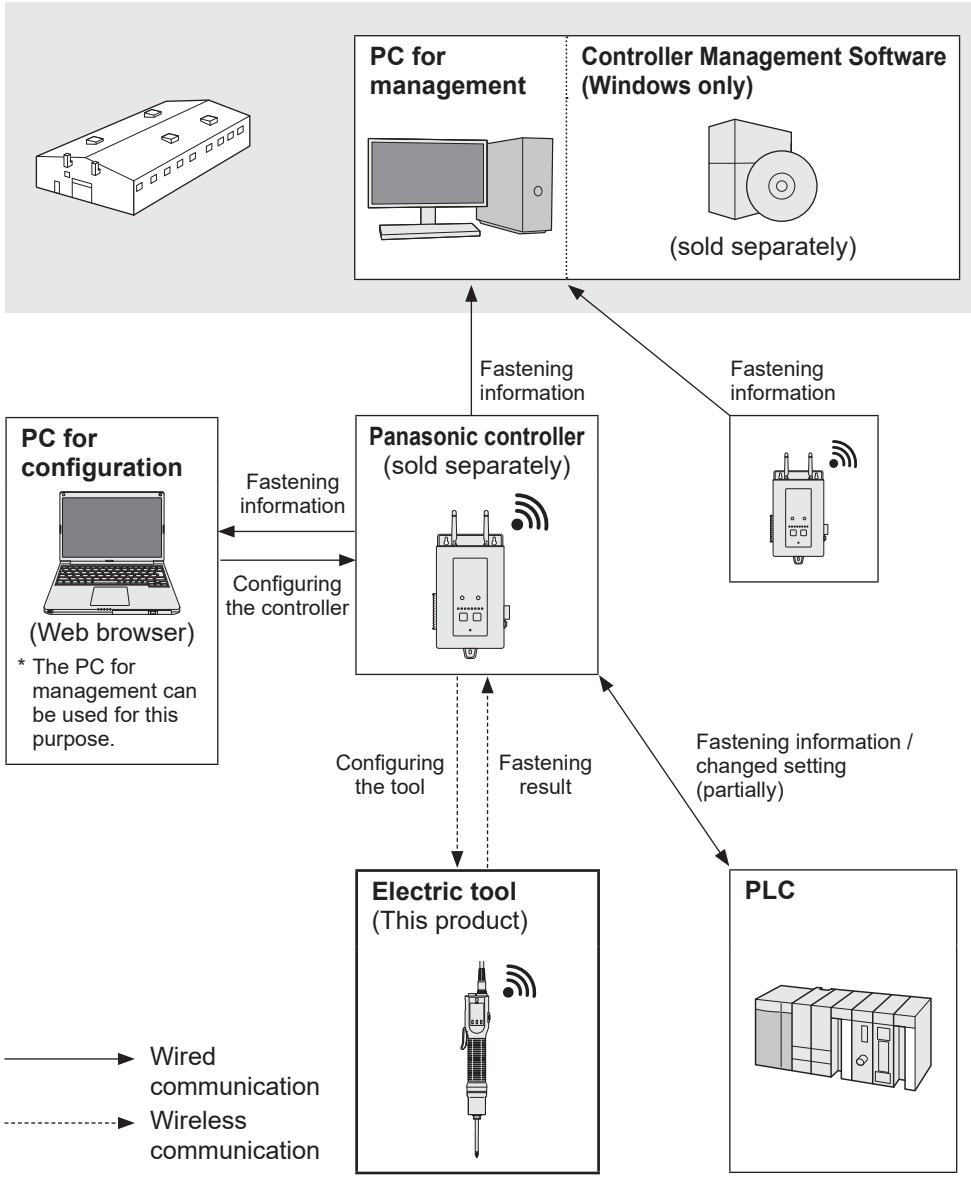
■ **Grip Attachment** (EYSXA102)

* For information about the components, see P. 19



■ **Mode setting button cover** (EYSXA103)





* Use the system within your local network (with no Internet connection).

* Be sure to check the IP address setting for network of the controller before starting use. (Change the default if necessary)

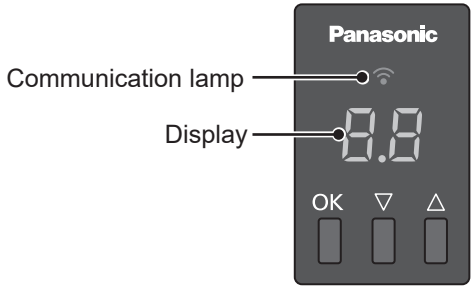
RUNNING MODE

This tool runs in one of the modes below.

The current mode is shown by the communication lamp and in the display on the control panel.

To enable all functions, pair the tool with the controller and use it in the “Wireless Communication Mode”.

To switch the running mode, refer to “b9 Running Mode Switching Setting”. P. 55



Stand Alone Mode * Initial setting

The tool is not connected to the controller in this mode.

Communication lamp	Display	Details
Off		Allows screw fastening with clutch. The history is not saved.

Pairing Mode

The tool is ready to connect to the controller in this mode. P. 28

Communication lamp	Details
Blinking rapidly (0.2 s cycle)	Pairing is in progress.
Solid on	Pairing has been completed and the tool is connected to the controller.
Blinking slowly (1 s cycle)	The tool is retrying to connect and waiting for a wireless signal.

Wireless Communication Mode

The tool is connected to the controller in this mode.

Communication lamp	Display	Details
Solid on		Operation is prohibited. (in the sequence mode without parameters set) In this state, the tool does not start operation. * Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller (EYARW1).
Solid on		Counting is in progress. The number of remaining screws to be fastened or the number of fastened screws is shown on the display.
Solid on		The unit is running in the Free mode that does not manage the quantity to fasten.
Solid on		An overcurrent warning, component failure, or out-of-wireless coverage warning occurred. A code of E with a number is shown in the display. P. 60
Solid on		The tool stopped without clutch activated or did not satisfy the fastening quality judgement conditions. A code of F with a number is shown in the display. P. 63

1 Checking the operation

P. 17 to 27

After purchasing the unit, check the operation in the “Stand Alone Mode” as described in pages 17 (PREPARATION BEFORE USE) to 27 (HOW TO USE) before connecting it to the controller.

2 Pairing the tool

P. 28 to 30

After checking the operation, pair the tool by following the Operating Instructions of the controller and make basic settings about the controller to enable use in the “Wireless Communication Mode”.

* The mode can be switched between the “Stand Alone Mode” and “Wireless Communication Mode” depending on the work site.

3 Setting via a web browser

P. 31 to 49

Information about parameters and history data specific to this tool is described in these Operating Instructions since the controller supports other types of tools as well.
Refer to these instructions together with the Operating Instructions of the controller when making settings.

4 Setting on the tool

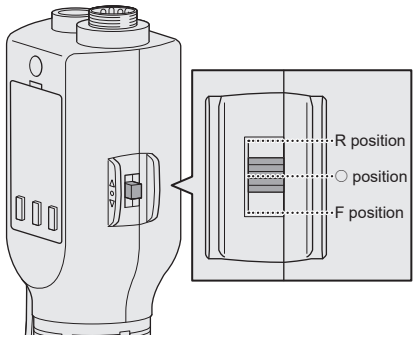
P. 50 to 55

Some functions can be set on this tool while many functions are usually set on the controller.
Make settings on this tool if necessary.

Using Forward/Reverse Lever

With the forward/reverse lever, you can change the rotation direction of the Electric Screwdriver or lock the start.

Trigger switch position	Rotation direction
R	Reverse (Anticlockwise)
○	Trigger switch locked
F	Forward (Clockwise)



Trigger switch lock

When you switch the forward/reverse lever to the “○” position, the start of the Electric Screwdriver is locked and it does not rotate.
When attaching accessories or a bit, or when not working, switch the forward/reverse lever to the “○” position to lock the trigger switch.

NOTE

- If the forward/reverse lever is switched while the motor is in action, the motor is forcibly stopped to rotate.

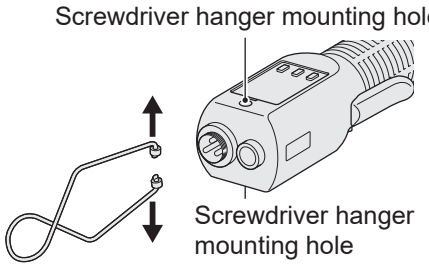
Attaching Screwdriver Hanger

1 Pull the screwdriver hanger lightly on both sides.

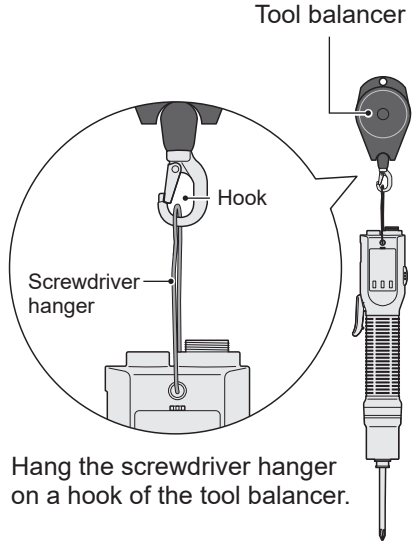
Pulling the screwdriver hanger hard may prevent it from returning to its original position.

Perform attachment and removal with necessary force.

2 Put it into the screwdriver hanger mounting hole.



Attach the screwdriver hanger and the tool balancer as shown in the figure.

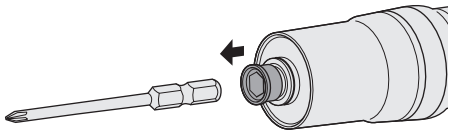


Attaching Bit

ATTENTION

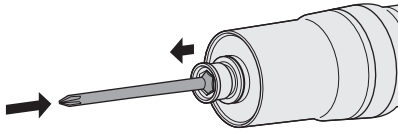
- When attaching or removing a bit, set the forward/reverse lever to the "○ (Trigger switch locked)" position, and turn OFF the power switch of the power adapter. P. 17, 20

1 Pull the bit holder.



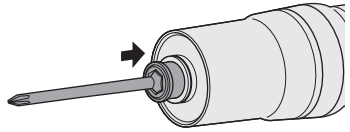
2 Insert a bit.

Insert it with the bit holder pulled.

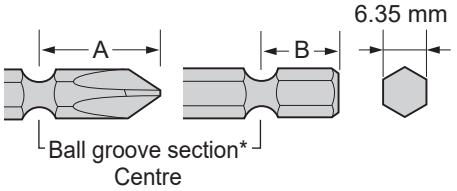


3 Release the bit holder.

Check that the bit does not come off, by pulling it lightly.



■ Bits That Can Be Attached to This Unit



* Straight bits without a ball groove section cannot be used.

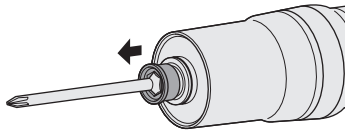
Length of A (Double-ended bit)	12 mm to 17.5 mm
Length of B (Single-ended bit)	9 mm to 13 mm

Removing Bit

ATTENTION

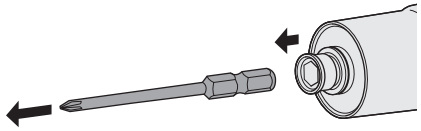
- Immediately after work, do not touch a bit or other pointed tools, or screws. They are hot and may cause burns.

1 Pull the bit holder.



2 Remove the bit.

Pull it out with the bit holder pulled.

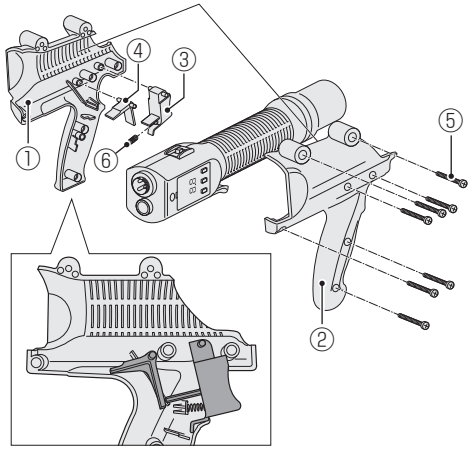


Attaching Grip Attachment

The grip attachment can be attached to all models.
(Supplied for EYADA407WA·WB only)
It can absorb the reactive force during clutch activation, which helps reduce fatigue.

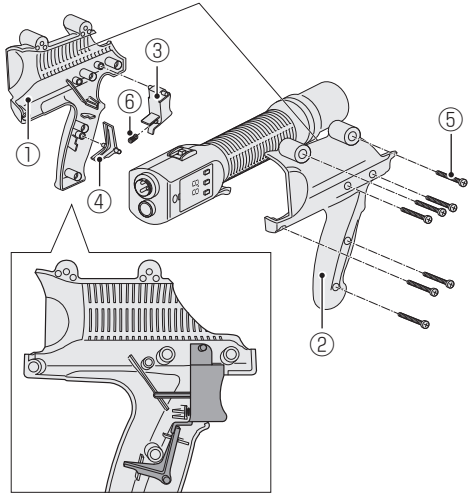
Use in lever start mode

Align grooves in the grip attachment with ribs on the grip.



Use in push start mode

Align grooves in the grip attachment with ribs on the grip.



Components of the attachment

①	Grip attachment (A) × 1
②	Grip attachment (B) × 1
③	Trigger × 1
④	Joint × 1
⑤	Screw × 7
⑥	Spring × 1

ATTENTION

- When attaching or removing the grip attachment, set the forward/reverse lever to the "○ (Trigger switch locked)" position, and turn OFF the power switch of the power adapter. P. 17, 20
- Remove the bit before attaching or removing the grip attachment.
- After fixing the grip attachment with screws, check for any loose screws, backlash, or misalignment.

1 Align grooves in the grip attachment (A) with ribs on the tool grip.

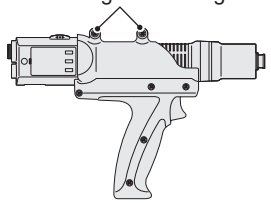
2 Attach the trigger and the joint to the positions shown in the figure.

3 Align grooves in the grip attachment (B) with ribs on the tool grip.

4 Fasten the screws.

Check for any loose screws, backlash, or misalignment.

Screwdriver hanger mounting hole (x 2)



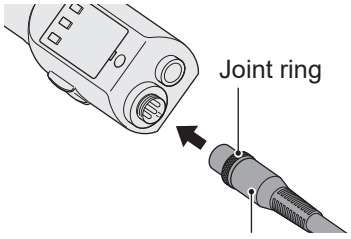
Connecting to Power Supply

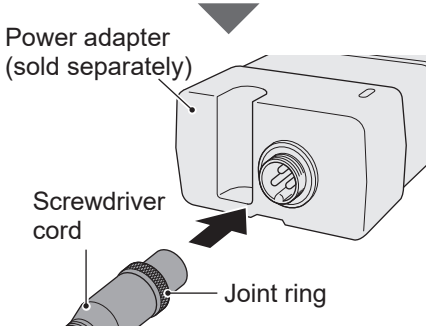
ATTENTION

- Before connection, set the forward/reverse lever to the "◯" position to lock the trigger switch. P. 17
- Use only our power supply (screwdriver cord, power adapter, and power cord).
  Also, do not use the power supply or cord designed specifically to this unit to operate other devices.
- When not using the tool for a long time, you are recommended to disconnect the power cord from the outlet. This unit consumes power even while it is turned off.

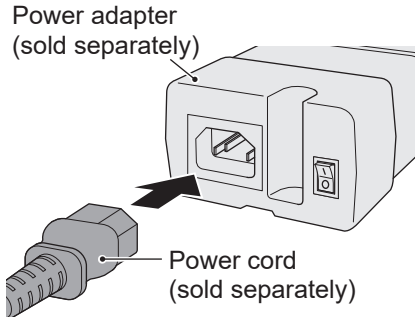
1 Connect the screwdriver cord to the power adapter and this unit.

Check the orientation of the connector and attach it correctly.
Fix it with a joint ring.



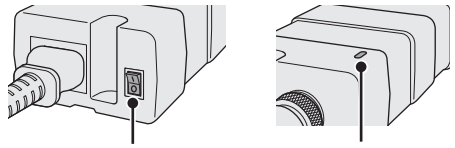


2 Attach the power cord to the power adapter.

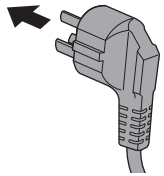


3 Check that the power switch of the power adapter is OFF.

When the power supply is OFF, the power lamp is off.



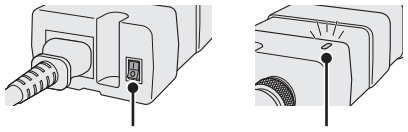
4 Connect the power plug to the outlet.



Example: For China

5 Turn ON the power switch of the power adapter.

The power lamp lights up green.



Switching Start Modes

This unit has two modes for rotation start.
Switch them according to the work before use.
(The factory default is lever start mode.)

■ Switching to Lever Start Mode

1 Set the forward/reverse lever to the "◯" position.

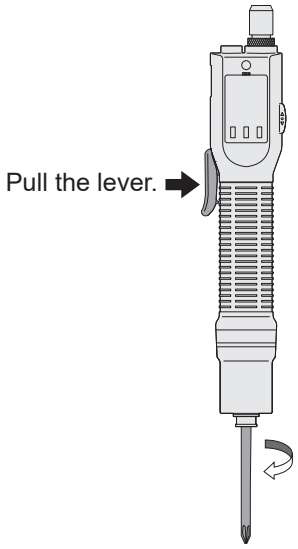
The trigger switch gets locked.
P. 17

2 Keep the lever depressed (for approximately 5 seconds) until the detection lamp lights up in yellow (for approximately 1 second).

Then, the buzzer emits three short beep sounds.

What is lever start mode?

Rotation starts when you pull the lever. Rotation stops when you release the lever.



■ Switching to Push Start Mode

1 Set the forward/reverse lever to the "◯" position.

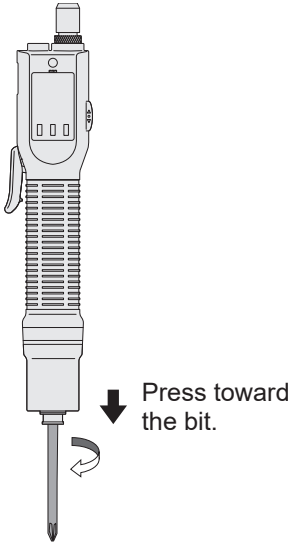
The trigger switch gets locked.
P. 17

2 Press the bit end against a work table or the like (for approximately 5 seconds) until the detection lamp lights up in yellow (for approximately 1 second).

Wait for a moment with the bit holder slightly sunk.
Then, the buzzer emits three short beep sounds.

What is push start mode?

Rotation starts when you push the Electric Screwdriver toward the bit.
Rotation stops when you stop pushing.

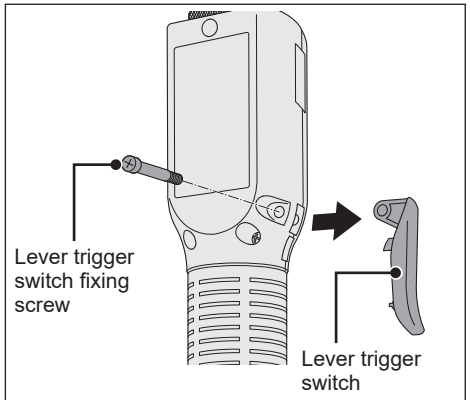


NOTE

- Only the selected start mode is enabled. The unselected start mode is disabled.

NOTE

- The lever trigger switch can be removed as shown in the following figure.



Before removing the lever trigger switch, check that the power switch of the power adapter is OFF.

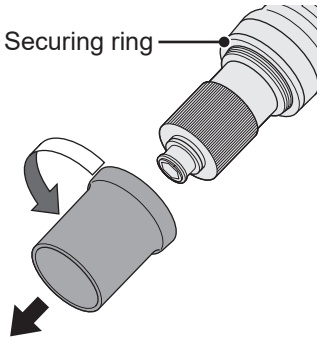
Setting Fastening Torque

According to the work, the clutch torque can be adjusted in 96 steps.

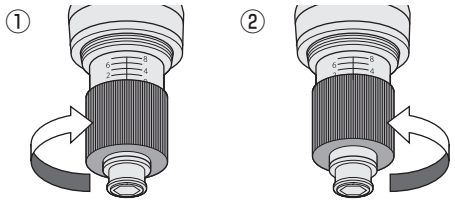
■ Setting Procedure

1 Remove the clutch cover.

Turn the clutch cover anticlockwise.



2 Adjust the torque with the clutch handle.



① To increase the output torque, turn the clutch handle clockwise.

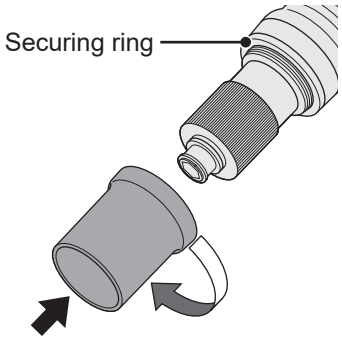
② To decrease the output torque, turn the clutch handle anticlockwise.

To ensure long and safe use without causing any failure, observe the following:

- **Set the torque according to the recommended fastening torque chart.** **P. 23**
- **Do not use the tool in such a manner that causes the motor to lock.**

3 Attach the clutch cover.

Turn the clutch cover clockwise.

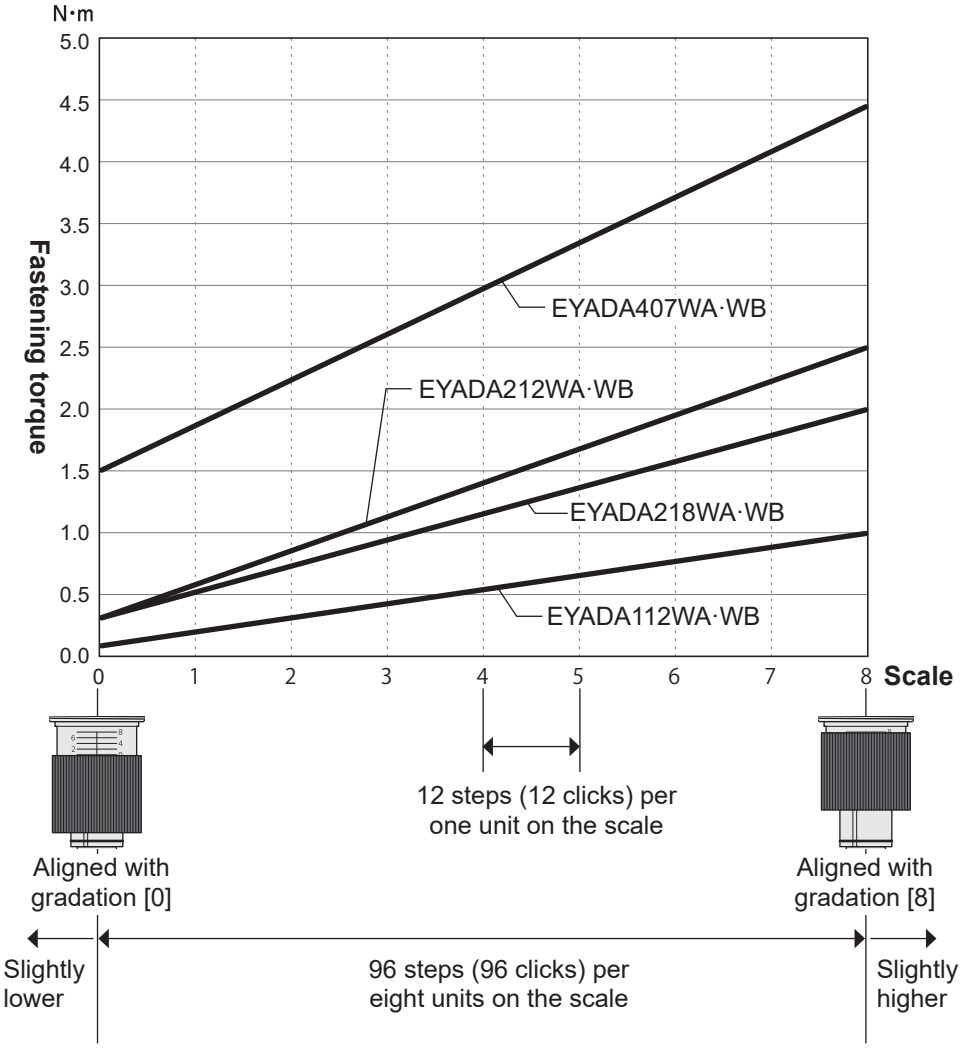


ATTENTION

- Attach the clutch cover during use so as to prevent the clutch setting from being changed unintentionally.
- Fasten the securing ring if it is loose.

Recommended Fastening Torque Chart (Reference Values)

These data are reference values measured under the following measurement conditions.
In actual work, they vary depending on the surrounding conditions (such as screws, materials, and fixing methods).



Measurement conditions	Based on our specified measurement conditions.

* In actual work, they vary depending on the surrounding conditions (such as screws, materials, and fixing methods). You are recommended to make a prior confirmation in actual work.

■ Fastening torque

The torque exercised on a screw fastened to an actual workpiece generally differs from the torque of the screwdriver measured by a torque gauge.

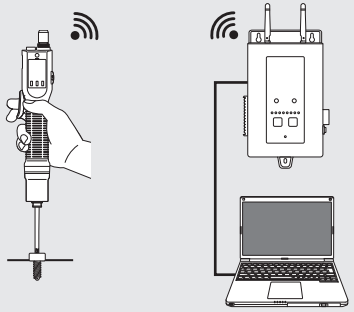
* This is because the work conditions differ between when using an actual workpiece and when measuring torque with a torque gauge.
  Torque exercised on a screw changes depending on the work conditions.
  (E.g., screw size/material, workpiece material, presence of pilot hole, finished condition, working posture, etc.)

■ Recommended method to set the clutch step and manage (store) the torque

There are two kinds of torque to manage (store): “torque (A) exercised on a screw fastened to an actual workpiece” and “torque (B) of the screwdriver”.

① **Fasten a screw to an actual workpiece using the screwdriver**

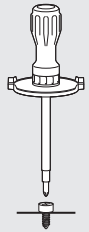
② **Using a gauge that can measure the torque exercised on the fastened screw, check the difference from the set torque** (by means of loosening torque check, refastening torque check, etc.)



③ **Repeat setting of the clutch step to find the one with a smallest difference**

➡ To store the torque indicated by the gauge, i.e. the “torque (A) exercised on a screw fastened to an actual workpiece”

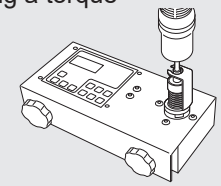
Fasten a screw to an actual workpiece and measure using a gauge



④ **With the clutch step found above, measure the torque of the screwdriver using a torque gauge**

➡ To store the torque indicated by the torque gauge, i.e. the “torque (B) of the screwdriver”

Measure using a torque gauge

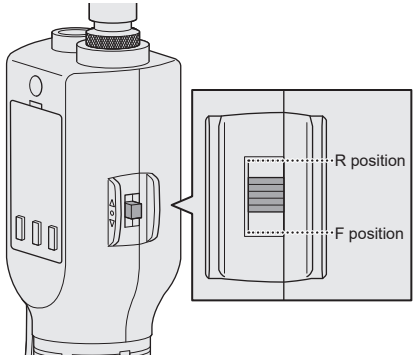


* The conditions in ③ and ④ differ, resulting in different torque.
  (“Torque (A) exercised on a screw fastened to an actual workpiece” in ③ ≠ “torque (B) of the screwdriver” in ④)
* Perform measurement more than once taking into account variation in the work conditions.
* Perform measurement periodically as the work conditions may change over time.

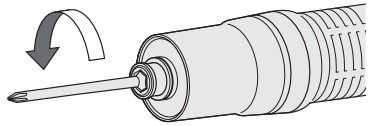
Starting Work

1 Set the rotation direction with the forward/reverse lever.

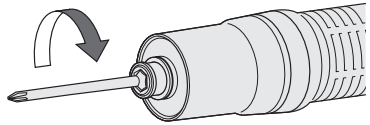
When you set it to the “F” position and the “R” position, the motor rotates forward (clockwise) and reverses (anticlockwise) respectively.



Forward (Clockwise)



Reverse (Anticlockwise)



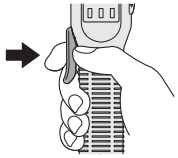
NOTE

- If the forward/reverse lever is switched while the motor is in action, the motor is forcibly stopped to rotate.

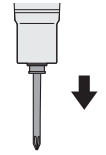
2 Start rotation.

In “lever start” mode, pull the lever.
In “push start” mode, push toward the bit.

Lever start



Push start



- **There may be a slight delay in the rotation startup at the start, but it is not a failure.**
- **In case of quick ON/OFF, the rotation startup will be late a little for that.**
- **You can select “lever start” or “push start” for start mode.** P. 21

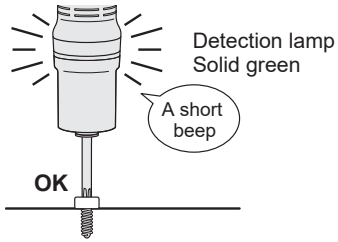
Checking Fastening Status

This unit notifies you of the work status with a buzzer and the detection lamp.

■ Fastening OK

When the clutch activates and the screw is normally fastened, the buzzer emits a short beep and the detection lamp lights up in green to tell you that the screw has been normally fastened.
You can also use the rotation time in combination as determination criteria.

- The detection conditions can be changed via a web browser. P. 33 to 36
- The lighting colour of the lamp can be changed via a web browser. P. 45

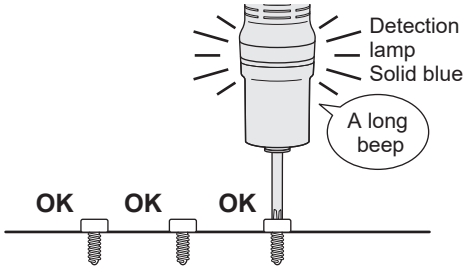


OPERATION

■ Count-up (Count finished)

The number of fastened screws determined as OK has reached the set count quantity.
With a buzzer (a long beep) and the blue detection lamp, you are notified that the set number of screws has been fastened successfully.

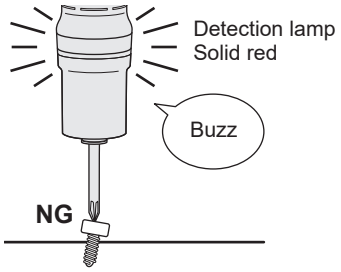
- Set the count quantity. P. 40
- The lighting colour of the lamp can be changed via a web browser. P. 45
- The buzzer pattern can be changed via a web browser. P. 44
- The buzzer (volume) can be changed via a web browser. P. 44



■ Fastening NG (NOK)

The tool stopped without clutch activated or detection conditions satisfied.
The buzzer emits a buzz and the detection lamp lights up in red to tell you that the screw has not been properly fastened.

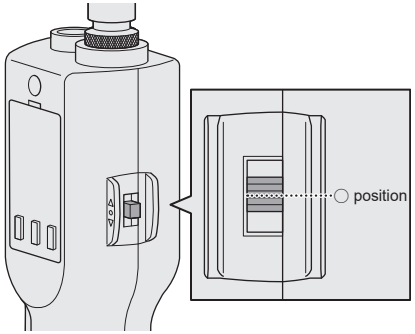
- Pressing the OK button will clear the error display.
- The lighting pattern of the lamp can be changed via a web browser. P. 45



Finishing Work

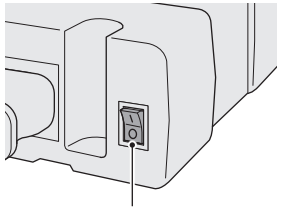
1 Set the forward/reverse lever to the trigger switch lock position.

Set it to the "○" position.



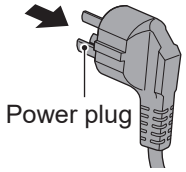
2 Turn OFF the power switch of the power adapter, or disconnect the power plug from the outlet.

Turn OFF the power switch.



Power switch

Disconnect the power plug from the outlet.



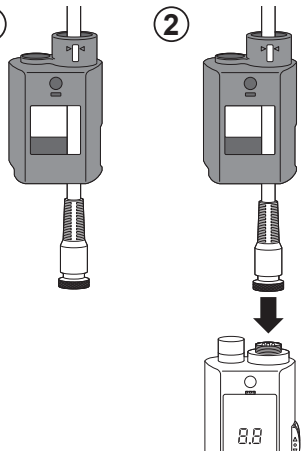
Power plug

Example: For China

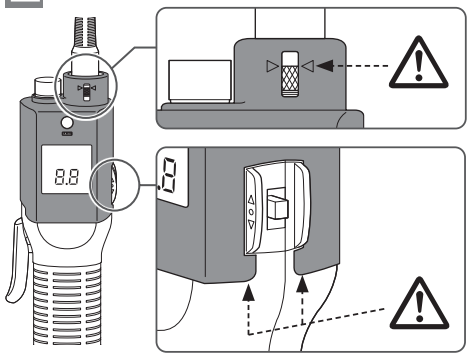
How to mount protection covers (separately sold items)

■ EYSXA103 Mode setting button cover

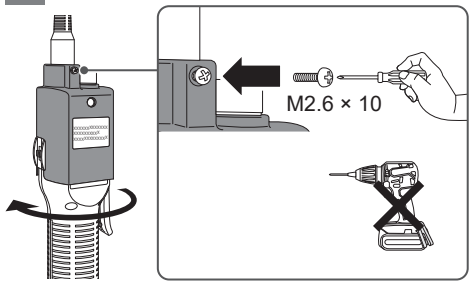
1



2

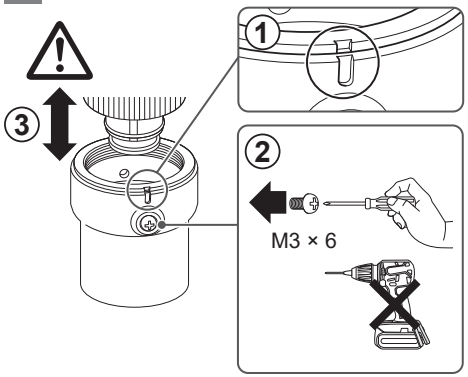


3



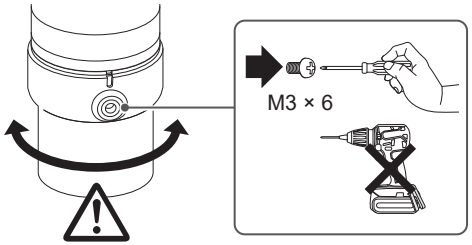
■ EYSXA104 Clutch cover

1



⚠ Fasten the clutch cover to screwdriver body firmly.

2



- Remove the screw after attaching clutch cover to screwdriver body.

⚠ Be sure the clutch cover rotates free, not by coming off screwdriver body.

Enabling Pairing

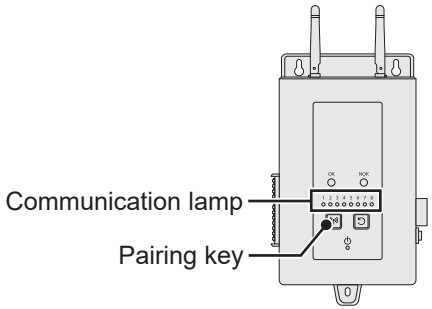
Use the Paring key on the controller unit (EYARW1).

Select the communication lamp of the number with no registration (lamp off) and hold the Pairing key down to enter the pairing mode.

During 2 minutes of the pairing mode, start the pairing mode on a tool within the coverage to automatically establish pairing.

If pairing is not established within the time, the pairing mode will end.

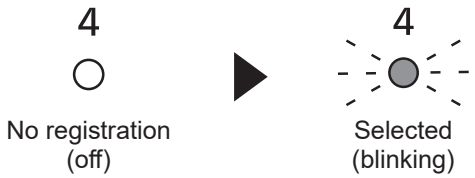
* After you attempt to start pairing, it may take some time until the controller enters the pairing mode.



(To register Tool No. 4)

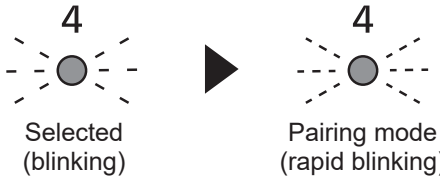
1 Press the Paring key on the controller 4 times to select Tool No. 4.

Communication lamp No. 4 blinks.

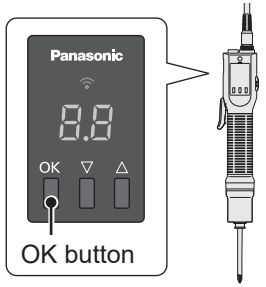


2 While No. 4 is selected, hold down the Paring key on the controller to enter the pairing mode of Tool No. 4.

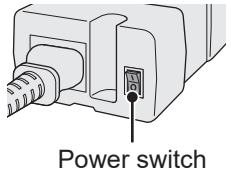
In the pairing mode, Communication lamp No. 4 starts blinking rapidly.



3 While holding down the OK button of the tool, turn ON the power switch of the power adapter.



Power Adapter (sold separately)

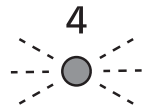
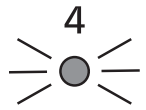


The tool enters the pairing mode.

Wireless communication is automatically established and paring registration is completed, which is notified by a buzzer from the controller.

* For details, refer to the controller's Operating Instructions.
* If pairing fails, cancel pairing on the controller and then try again.

Connect the screwdriver cord to the power adapter and the tool and then connect the power plug to the outlet before starting operation.

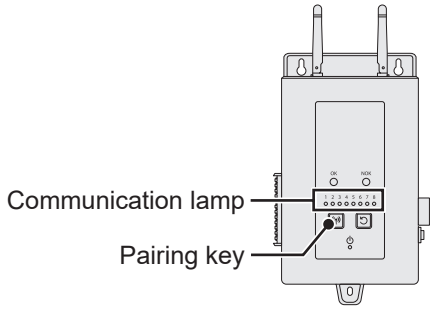
Communication lamp	Pairing mode (rapid blinking)	Registered (on)
Controller		
Tool (this unit)		

NOTE

- You can enable pairing by setting in the setting screen in addition to using the key on the unit.
- For how to enable pairing in the setting screen and details on operation of the controller, see the Operating Instructions supplied with the controller.
- There may be a lag between when the lamp switches to "registered" on the controller and that on the tool (this unit).

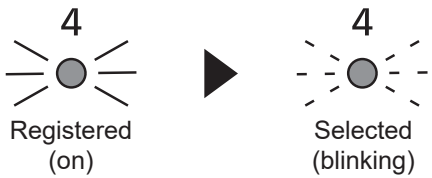
Cancelling Pairing

Use the Paring key on the controller unit (EYARW1).
Select the communication lamp of the tool number you want to cancel registration (lamp on) and hold the Pairing key down to cancel pairing registration.



(To cancel Tool No. 4)

1 Press the Paring key on the controller 4 times to select Tool No. 4.
Communication lamp No. 4 blinks.



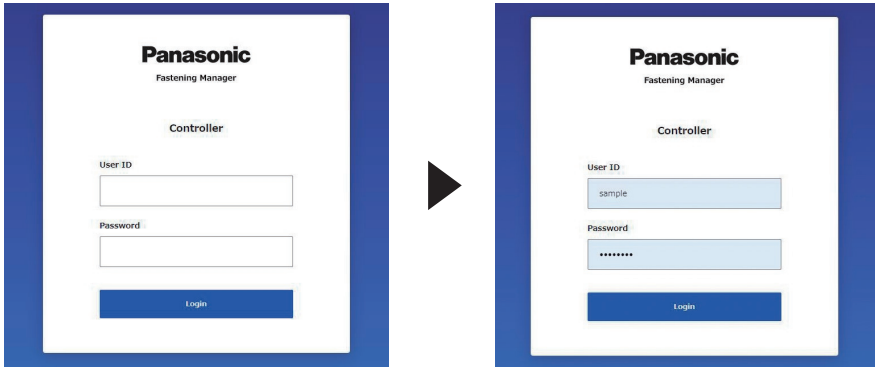
2 While No. 4 is selected, hold down the Paring key on the controller to cancel pairing registration of Tool No. 4.
When pairing is cancelled, Communication lamp No. 4 stops blinking and turns off.

NOTE

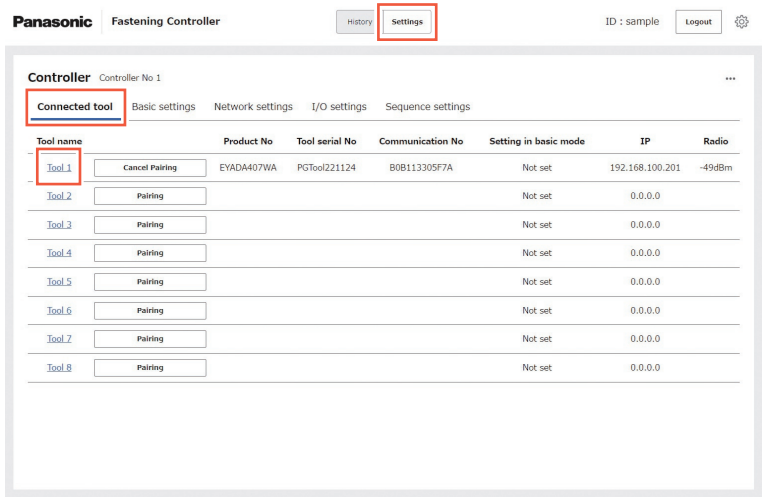
- You can cancel pairing by setting in the setting screen in addition to using the key on the unit.
- For how to cancel pairing in the setting screen and details on operation of the controller, see the Operating Instructions supplied with the controller.

Displaying the Setting Screen

1 Displaying the Top Page.
Refer to “Displaying the Setting Screen” to “Connecting via Network” in “PREPARATION BEFORE USE” of the Operating Instructions of the controller (EYARW1) and make settings via a web browser to display the top page.



2 Displaying the Tool Screen.
① In the top page (the initial page of the setting screen), click [Settings] on the top and select the “Connected tool” tab.
② In the “Connected tool” screen, click the desired tool number.
The screen for the tool number is displayed.



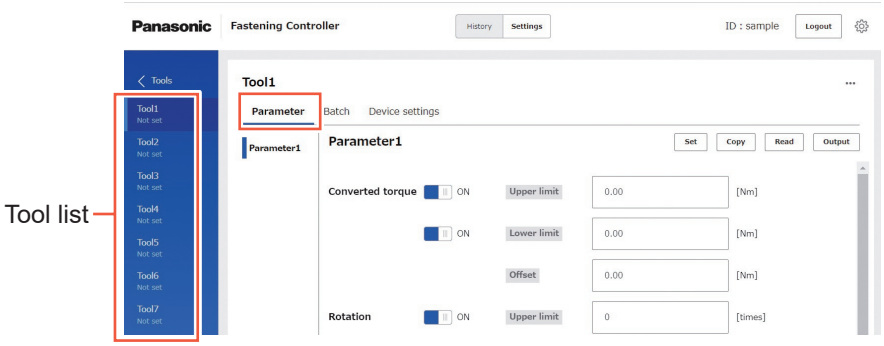
OPERATION

3 Displaying the Setting Screen.

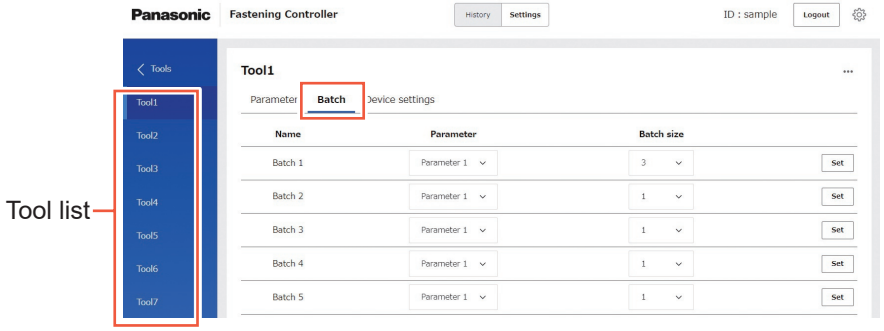
From the “Parameter”, “Batch”, and “Device settings” tabs in the screen for the tool number, make settings of Parameter, Batch, and Device settings.

* To switch the tool, select the desired one from the tool list.

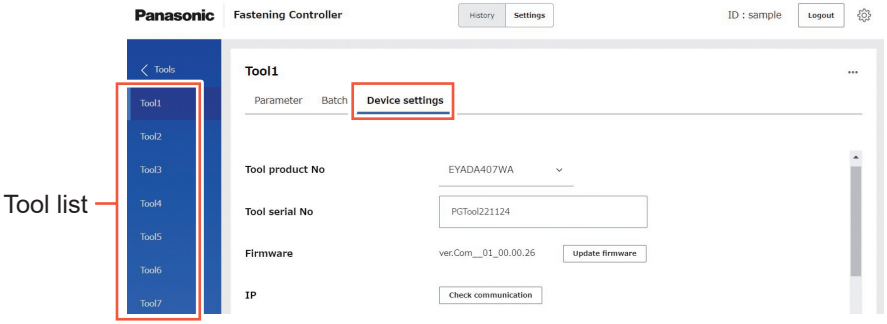
Parameter



Batch



Device settings



Parameter Items

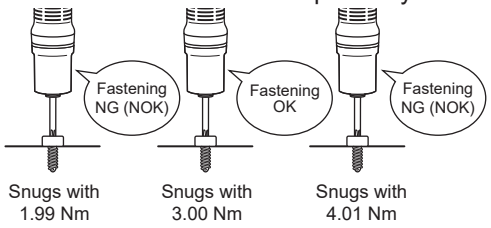
Converted torque (Model No. WA only)

[Functional overview]

You can determine the fastening status by the converted torque of screw fastening.
Set the lower limit and upper limit of the converted torque that is judged as Fastening OK.

- The lower limit setting must not be higher than the upper limit setting.

When the lower limit and the upper limit are set to 2.00 and 4.00 respectively



Fastening OK if the converted torque when snugging is within 2.00 Nm to 4.00 Nm.

What is converted torque?

As with a general screwdriver, the screwdriver’s clutch is used to obtain the desired fastening torque.

Based on the correlation of the screwdriver’s outputs (current, voltage and variation) at the time of clutch activation, this tool converts the fastening torque at the time of clutch activation into a converted torque (estimated value) and outputs it.

Use the value as evidence for the fastening result or to capture the trend of the fastening torque variation during a specific period.

[Default value]

- Upper limit **OFF**
- Lower limit **OFF**
- Offset **0.00** Nm

[Setting value]

- Upper limit **OFF** Disable
  ON Enable / **0.00*** Nm to **9.99** Nm
- Lower limit **OFF** Disable
  ON Enable / **0.00*** Nm to **9.99** Nm
- Offset **–9.99** Nm to **9.99** Nm

Entering the value with (*) will disable the function.

Converted torque (cont.)

[Setting procedure]

Notes about converted torque data

- Converted torque is only estimation from the tool's state quantities and therefore cannot be used for accurate torque management or quality recording.
- Conversion requires a specific amount of variation and therefore does not support refastening or momentary fastening.
- The converted torque becomes 0 if conversion failed.
- Use conversion when fastening at intervals of 0.2 or more seconds.
- This tool is not a gauge and cannot be calibrated.
- This system does not support mapping of serial numbers or such other unique product numbers.

Notes about the converted torque setting

- Make settings (adjustments) beforehand.
- Change the settings whenever you change the screw or workpiece material, the clutch step, etc.
- After setting, test and check the fastening status using an actual workpiece to confirm the desired torque is obtained.
- The work conditions and the Electric Screwdriver conditions change over time.
  Adjust the settings on a regular basis.

1 Make preparations.

Depending on the management method on site, find the clutch step that generates a torque closest to the set torque [X].

There are two torque management methods.
(for details, refer to P. 24)
(A) Method that manages the torque exercised on a screw fastened to an actual workpiece
(B) Method that manages the torque of the screwdriver

2 Collect data.

Try fastening 10 or more screws to an actual workpiece.

* Always use an actual workpiece even when you use method (B) for management.

3 Make settings.

(1) Calculate the average [X].
(2) Subtract [Y] from [X] to calculate the difference [Z].
(3) Input [Z] as an offset of torque.

Example 1

Set torque [X]	0.8 Nm
Average of converted torque [Y]	1.04 Nm
Difference [Z]	-0.24 Nm
Offset	-0.24 Nm

Example 2

Set torque [X]	1.3 Nm
Average of converted torque [Y]	0.98 Nm
Difference [Z]	0.32 Nm
Offset	0.32 Nm

Rotation

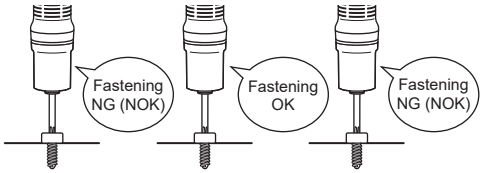
[Functional overview]

You can determine the fastening status by the rotation (times) of screw fastening.
Set the lower limit and upper limit of the rotation (times) that is judged as Fastening OK.

For the rotation (times), refer to "Rotation (times)" in "History Data" and set an appropriate value depending on the work.

- The lower limit setting must not be higher than the upper limit setting.
- Rotation (times) means the number of rotations from when the specified torque is detected after the start of rotation to when the clutch is activated.

When the lower limit and the upper limit are set to 3 and 5 respectively



Fastening OK if the number of rotations before snugging is within 3 to 5.

[Default value]

- Upper limit **OFF**
- Lower limit **OFF**

[Setting value]

- Upper limit **OFF** Disable
  ON Enable / **0*** times to **999** times
- Lower limit **OFF** Disable
  ON Enable / **0*** times to **999** times

Entering the value with (*) will disable the function.

Fastening time

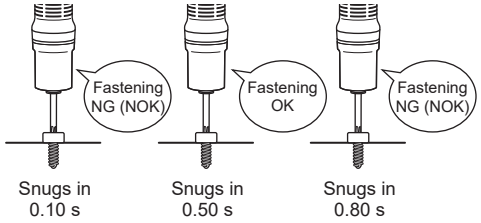
[Functional overview]

You can determine the fastening status by the rotation time of screw fastening.
Set the lower limit and upper limit of the fastening time that is judged as Fastening OK.

For the rotation time, refer to "Fastening time (s)" in "History Data" and set an appropriate value depending on the work.

- The lower limit setting must not be higher than the upper limit setting.

When the lower limit and the upper limit are set to 0.30 and 0.60 respectively



Fastening OK if the rotation time until snugging is within 0.30 to 0.60 s.

[Default value]

- Upper limit **OFF**
- Lower limit **OFF**

[Setting value]

- Upper limit **OFF** Disable
  ON Enable / **0.00*** s to **9.99** s
- Lower limit **OFF** Disable
  ON Enable / **0.00*** s to **9.99** s

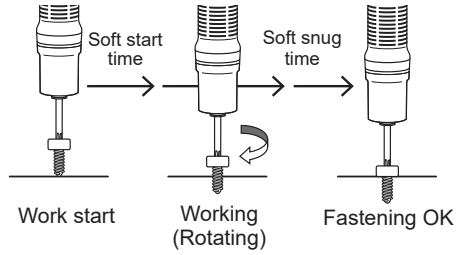
Entering the value with (*) will disable the function.

Soft start

[Functional overview]

You can set the duration of soft start and the number of rotations during soft start.

- The duration of soft start must not be shorter than the start time of soft snug.
- Because of the structure of the motor, it requires some time to increase the speed of the soft start to the normal speed.



What is soft start?

In order to prevent cross threading and screw galling, initially a screw is rotated slowly at the beginning of fastening.

[Default value]

- Continue time **0.00** s
- Rotation level **10** Lv

[Setting value]

- Continue time **0.00*** s to **9.99** s
- Rotation level **1** Lv to **10** Lv

Soft start speed level (Rotations/minute)

Level	1	2	3	4	5
EYADA112WA·WB	300	400	500	600	700
EYADA212WA·WB	300	400	500	600	700
EYADA218WA·WB	450	600	750	900	1050
EYADA407WA·WB	160	220	270	330	380
* Relative to the maximum number of rotations	About 25%			About 50%	

Level	6	7	8	9	10
EYADA112WA·WB	800	900	1000	1100	1200
EYADA212WA·WB	800	900	1000	1100	1200
EYADA218WA·WB	1200	1350	1500	1650	1800
EYADA407WA·WB	430	490	540	600	650
* Relative to the maximum number of rotations		About 75%			About 100%

- The values (numbers of rotations) are only guidelines.

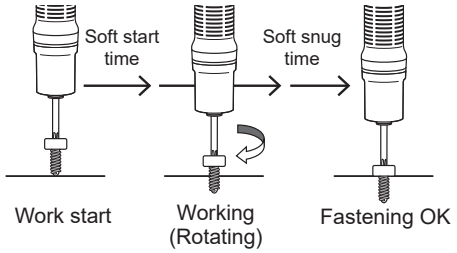
Entering the value with (*) will disable the function.

Soft snug

[Functional overview]

You can set the start time of soft snug and the number of rotations during soft snug.

- The duration of soft start must not be shorter than the start time of soft snug.
- Because of the structure of the motor, it requires some time to decrease the normal speed to the speed of soft snug.



What is soft snug?

In order to prevent bit detachment and minimize the impact on the base material, the bit is rotated slowly before snugging.

[Default value]

- Start timing **0.00** s
- Rotation level **10** Lv

[Setting value]

- Start timing **0.00*** s to **9.99** s
- Rotation level **1** Lv to **10** Lv

Soft snug speed level (Rotations/minute)

Level	1	2	3	4	5
EYADA112WA·WB	300	400	500	600	700
EYADA212WA·WB	300	400	500	600	700
EYADA218WA·WB	450	600	750	900	1050
EYADA407WA·WB	160	220	270	330	380
* Relative to the maximum number of rotations	About 25%			About 50%	

Level	6	7	8	9	10
EYADA112WA·WB	800	900	1000	1100	1200
EYADA212WA·WB	800	900	1000	1100	1200
EYADA218WA·WB	1200	1350	1500	1650	1800
EYADA407WA·WB	430	490	540	600	650
* Relative to the maximum number of rotations		About 75%			About 100%

- The values (numbers of rotations) are only guidelines.

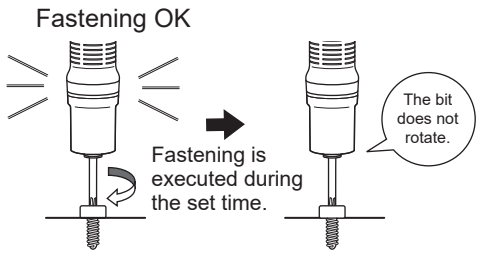
Entering the value with (*) will disable the function.

Disable fastening time

[Functional overview]

You can set the tool not to start during the set time after fastening is determined as OK.

- When both the “Ignore count time” and the “Disable fastening time” are enabled, the “Disable fastening time” takes precedence.



After fastening is determined as OK, the Electric Screwdriver does not start during the time set in the Disable fastening time.

[Default value]

0.00 s

[Setting value]

0.00* s to **9.99** s

Entering the value with (*) will disable the function.

OPERATION

Batch Items

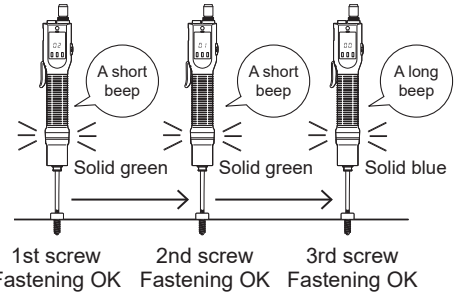
Count Quantity Setting

[Functional overview]

The number of screws to fasten is set. The number of fastened screws determined as OK is counted, and when it reaches the set quantity, you are notified of that with a buzzer and the lighting detection lamp. P. 25

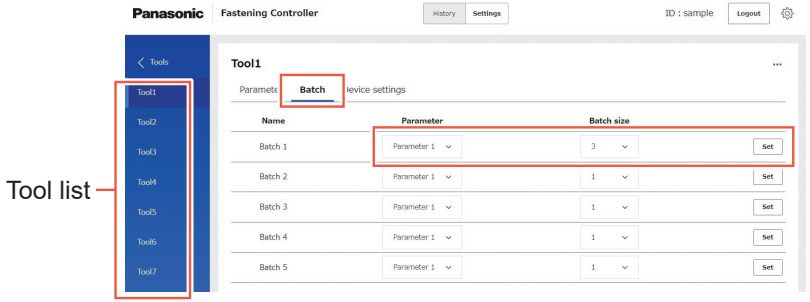
- The count quantity appears on the tool display in operation mode.
- When it reaches the set quantity, the count on the display will be reset.

When it is set to “3”



In the screen for the tool number, select the “Batch” tab and make settings. Select a parameter from the “Parameter” pull-down menu and set “Batch size” (quantity to fasten, up to 99). Click [Set] to set the values for “Repeat mode (Basic mode)”.

* One type (one parameter only) per tool can be registered.
* To switch the tool, select the desired one from the tool list.
* Up to 5 batches can be registered.
* Refer to “SETTING FASTENING PARAMETERS OF TOOLS” and “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller (EYARW1).
  For parameters, refer to “Parameter Items”. P. 33



[Default value]

1

[Setting value]

1 to **99**

Device settings Items

Brake

[Functional overview]

You can enable or disable braking when rotation stops before clutch activation.

[Default value]

ON

[Setting value]

ON	Braking disabled (Rotation stops immediately when you release the trigger switch.)
OFF	Braking disabled (Rotation stops slowly when you release the trigger switch.)

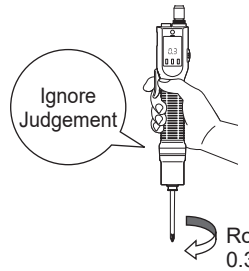
Ignore judgement time

[Functional overview]

You can exclude unexpected rotations that are unrelated to work, such as brief idling and screw hole alignment in push start mode, from detection.
Set the duration of rotations to exclude from detection.

* Effective when setting the count quantity. Be sure to set the fastening control combination to "Repeat mode". It does not work when the combination is set to "Free mode".

When it is set to “0.30”



Rotations within 0.30 s are excluded from fastening detection.

[Default value]

0.00 s

[Setting value]

0.00* s to **9.99** s

Entering the value with (*) will disable the function.

OPERATION

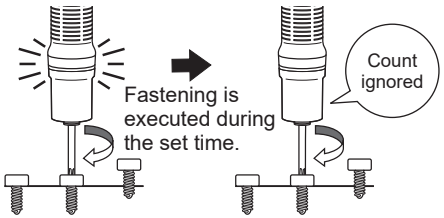
Ignore count time

[Functional overview]

You can set screws not to be counted even if they are fastened again after being determined as OK. Set the duration of fastening to exclude from counting after fastening is determined as OK.

- Counting is still enabled when you reverse rotations to redo or loosen screws.
- When both the “Ignore count time” and the “Disable fastening time” are enabled, the “Disable fastening time” takes precedence.

Fastening OK



After being determined as OK, screws will not be counted during the time to ignore counting even if they are fastened again.

[Default value]

0.00 s

[Setting value]

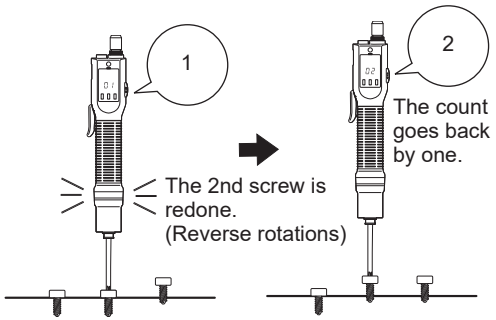
0.00* s to **9.99** s

Count return

[Functional overview]

You can set how fastened screws determined as OK are counted when reversing rotations to redo or loosen them.

When it is set to “Return 1 count”



[Default value]

Return 1 count

[Setting value]

Don’t change	Reverse rotations are not counted.
Return 1 count	The count is put back by reverse rotations.
Return to start	The count is reset by reverse rotations.

Entering the value with (*) will disable the function.

Batch complete judgement waiting time

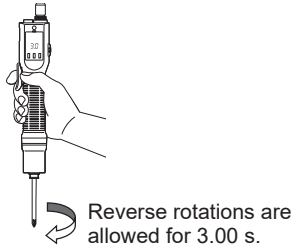
[Functional overview]

You can set the waiting time from when the last screw fastening is determined as OK to when it is determined as count-up (count complete).

During the set waiting time, you can reverse rotations after finishing the last screw set in the count quantity.

- Forward rotations are not allowed during the waiting time.

When it is set to “3.00”



After the last screw fastening is determined as OK, no count-up will occur for 3.00 s, allowing you to reverse rotations to redo or loosen screws.

[Default value]

0.00 s

[Setting value]

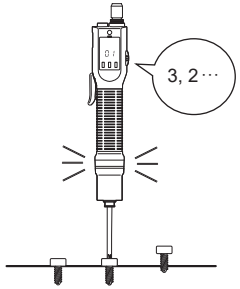
0.00* s to **9.99** s

Count method

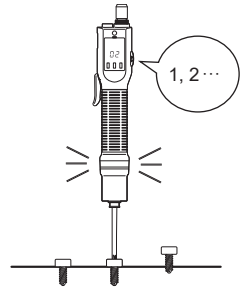
[Functional overview]

You can switch count methods for screw fastening.

Count-down mode



Count-up mode



[Default value]

Count down

[Setting value]

Count down	The number of fastened screws is counted from the set value down to 0.
Count up	The number of fastened screws is counted from 0 up to the set value.

Entering the value with (*) will disable the function.

Buzzer (Batch complete)

[Functional overview]

You can set the buzzer pattern for count-up (count complete).

[Default value]

Long beep

[Setting value]

Long beep A long beep
3 short beeps Three short beeps

Buzzer (Volume)

[Functional overview]

You can set the buzzer (volume).
* This is a common setting for the confirmation sound and operation sound at the time of fastening OK.

[Default value]

ON (Low)

[Setting value]

ON Buzzer enabled / **Low** Low volume **Mid** Medium volume **High** High volume
OFF Muted

Judge LED (Color on OK)

[Functional overview]

You can set the lighting colour of the detection lamp.

[Default value]

OK:Green, Batch complete:Blue

[Setting value]

OK:Green, Batch complete (Count-up) **:Blue**
OK:Blue, Batch complete (Count-up) **:Green**
OFF Off

Judge LED (Color on NG)

[Functional overview]

You can set the lighting pattern of the detection lamp for fastening NG (NOK) and error occurrence.

[Default value]

NOK:Steady, Error:Blink

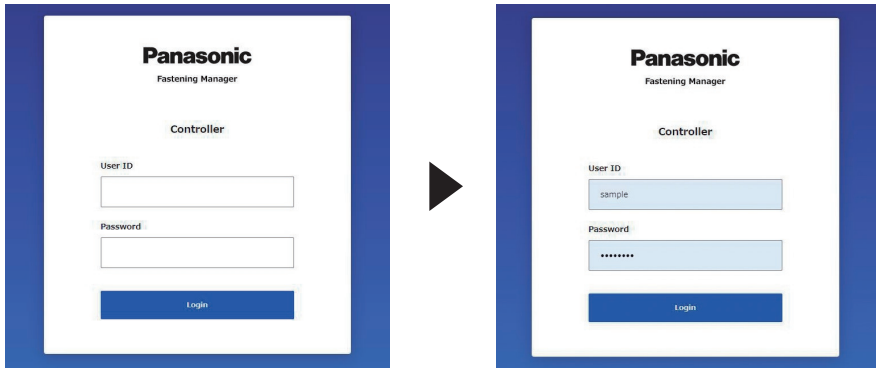
[Setting value]

NOK:Steady, Error:Blink
NOK:Blink, Error:Steady
OFF Off

Displaying the History Screen

1 Displaying the Top Screen.

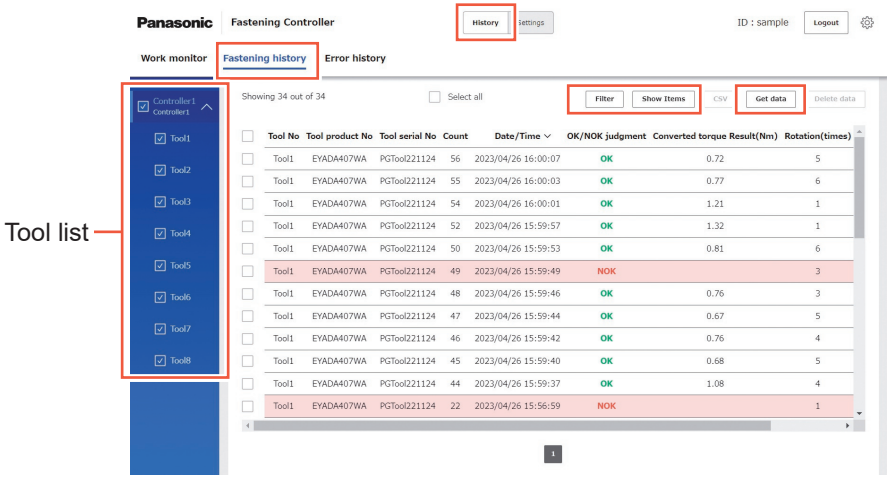
Refer to “Displaying the Setting Screen” to “Connecting via Network” in “PREPARATION BEFORE USE” of the Operating Instructions of the controller (EYARW1) and make settings via a web browser to display the top page.



2 Displaying the History Screen.

In the top page (the initial page of the setting screen), click [History] on the top and select the “Fastening history” tab.
You can view the fastening history data sent from tools to the controller.

To display the data, select the desired controller and tools from the tool list on the left and click [Get data] on the upper right.
The fastening history logs are displayed from newest to oldest.



History Log Item List

Count

[Display overview]

The accumulated number of times of fastening after pairing is established.
This is reset when the tool is unpaired.

Batch size (Count quantity)

[Display overview]

When the controller’s running mode is “Free mode”: Hidden
When the controller’s running mode is “Repeat mode”: Target quantity of the batch

Batch count

[Display overview]

When the controller’s running mode is “Free mode”: Hidden
When the controller’s running mode is “Repeat mode”: Count (fastened quantity) of the batch

Date/Time

[Display overview]

This shows the date when work was done.

OK/NOK judgment

[Display overview]

The work result is shown as “OK” or “NOK”.
The OK/NOK criteria are as below:

OK: Clutch was activated and fastening is successfully completed.

NOK: The tool stopped without clutch activated or detection conditions satisfied.

Reverse rotation results in blank.

NOK message

[Display overview]

When the work result is “NOK”, the cause is shown as “Torque”, “Rotation count”, “Rotation time”, “Clutch”, or “Error”.

If “NOK” is considered to be caused by “Error”, error details are shown in “Error message” of the fastening history.
(For details on “NOK message”, refer to P. 65.)

Forward/Reverse

[Display overview]

Rotation direction of Electric Screwdriver.
Forward: Clockwise
Reverse: Anticlockwise

Upper converted torque Limit (Nm)

[Display overview]

The parameter of the upper limit of the converted torque that is judged as “OK”.

Lower converted torque Limit (Nm)

[Display overview]

The parameter of the lower limit of the converted torque that is judged as “OK”.

Converted torque Result (Nm)

[Display overview]

The converted torque calculated from the current, voltage, and variation during fastening.

Offset (Nm)

[Display overview]

The parameter to correct the converted torque.

Upper Rotation Limit (times)

[Display overview]

The parameter of the upper limit of the rotation (times) that is judged as “OK”.

Lower Rotation Limit (times)

[Display overview]

The parameter of the lower limit of the rotation (times) that is judged as “OK”.

Rotation (times)

[Display overview]

The rotation (times) of the Electric Screwdriver during work.

Upper Fastening Time Limit (s)

[Display overview]

The parameter of the upper limit of the rotation time that is judged as “OK”.

Lower Fastening Time Limit (s)

[Display overview]

The parameter of the lower limit of the rotation time that is judged as “OK”.

Fastening Time (s)

[Display overview]

The rotation time of the Electric Screwdriver during work.

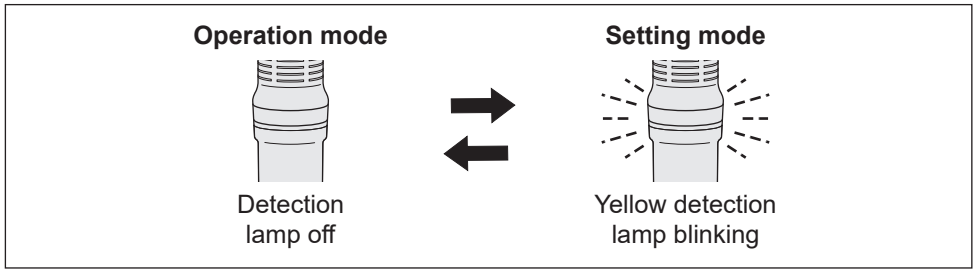
Error Message

[Display overview]

Details of the error that caused the “NOK” result.
(For details on “Error message”, refer to P. 65.)

1. Switching to Setting Mode

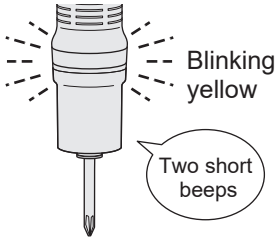
This unit can change settings according to the work.
To change settings, switch to setting mode.



■ Switching to Setting Mode

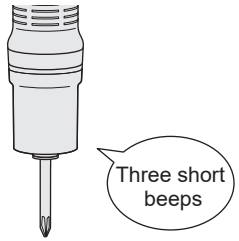
1 Set the forward/reverse lever to the trigger switch lock position.
Set it to the "○" position.

2 Hold down the OK button.
A buzzer sounds short twice (two short beeps), and the detection lamp blinks yellow.



■ Back to Operation Mode

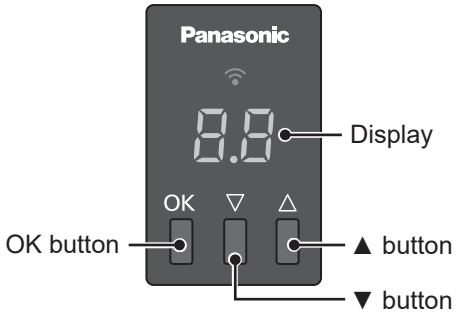
1 Hold down the OK button while you are in setting mode (the detection lamp is blinking yellow).
A buzzer sounds short three times (three short beeps), and the detection lamp turns off.



2 Release the forward/reverse lever from the trigger switch lock position.
When you set it to the F position and the R position, the motor rotates forward (clockwise) and reverses (anticlockwise) respectively.

2. Selecting Menu

You can select a menu by pressing the ▼ and ▲ buttons while you are in setting mode.
A menu to be selected appears on the display.
Press the OK button to confirm the selected menu.



■ Count Menu (c + Number)

Display	Description	Reference page
c 4	Quantity Reset Permission Setting	53

■ Basic Setting Menu (b + Number)

Display	Description	Reference page
b 4	Tool Reset Permission Setting	54
b 9	Running Mode Switching Setting	55

Tool Reset (Initialisation Setting)

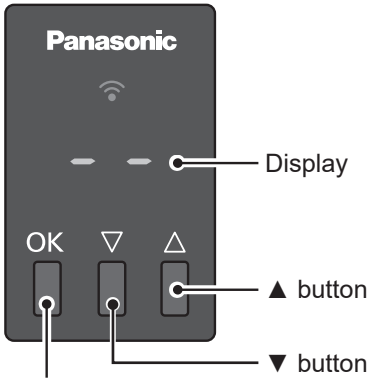
Put the tool settings back to the manufacturer default settings.

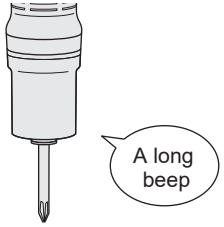
To enable this function, set "b4 Tool Reset Permission Setting" to "_1".
P. 54

■ Setting Procedure

1 Switch to setting mode.
Set the forward/reverse lever to the trigger switch lock position, and hold down the OK button.
(For details, see P. 50)

2 Hold down the OK button, ▼ button, and ▲ button at the same time.
A buzzer sounds long (a long beep), and "--" appears on the display.
The detection lamp turns off.



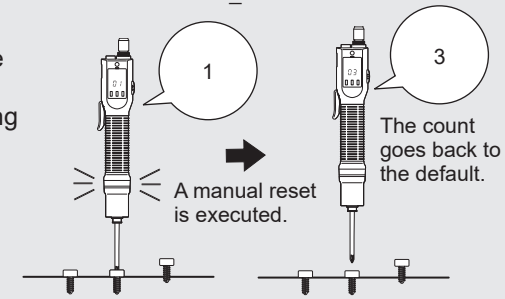


c4 Quantity Reset Permission Setting

A manual reset of the count quantity is permitted.

When it is set to "_1", you can reset the count by holding down the ▼ and ▲ buttons at the same time, without having to wait for the end of the quantity specified in the count quantity setting.

When it is set to "_1"



■ Setting Procedure

1 Switch to setting mode.
Set the forward/reverse lever to the trigger switch lock position, and hold down the OK button.
P. 50

2 Choose "c4" by pressing the ▲ and ▼ buttons, and press the OK button.
A set value appears on the display.

3 Select a desired one by pressing the ▲ and ▼ buttons.
The default is "_1".

Display	Quantity reset permission
_ _	Not permitted (Manual reset disabled)
_ 1	Permitted (The manual reset is permitted. To execute the manual reset, hold down the ▼ and ▲ buttons at the same time.)

4 Press the OK button to confirm it.
When the setting is completed, a buzzer sounds long (a long beep), and the display returns to the menu screen.

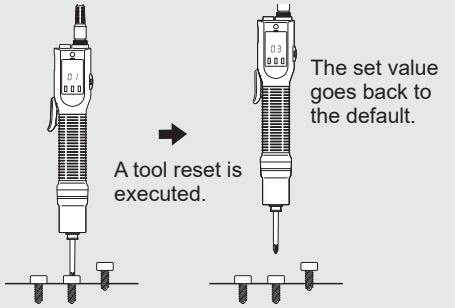
5 Back to Operation Mode.
Hold down the OK button.
P. 50

b4 Tool Reset Permission Setting

A tool reset is permitted.

When you set it to "_1", you can initialise the tool by holding down the OK button, ▼ button, and ▲ button at the same time in setting mode. P. 52

When it is set to "_1"



■ Setting Procedure

1 Switch to setting mode.
Set the forward/reverse lever to the trigger switch lock position, and hold down the OK button.
P. 50

2 Choose "b4" by pressing the ▲ and ▼ buttons, and press the OK button.
A set value appears on the display.

3 Select a desired one by pressing the ▲ and ▼ buttons.
The default is "_1".

Display	Tool reset permission
_ _	Not permitted (Tool reset disabled)
_ 1	Permitted (The tool reset is permitted. To execute the tool reset, hold down the OK button, ▼ button, and ▲ button at the same time.)

4 Press the OK button to confirm it.
When the setting is completed, a buzzer sounds long (a long beep), and the display returns to the menu screen.

5 Back to Operation Mode.
Hold down the OK button.
P. 50

b9 Running Mode Switching Setting

You can switch the running mode of the tool. P. 14

■ Setting Procedure

1 Switch to setting mode.
Set the forward/reverse lever to the trigger switch lock position, and hold down the OK button.
P. 50

2 Choose "b9" by pressing the ▲ and ▼ buttons, and press the OK button.
A set value appears on the display.

3 Select a desired one by pressing the ▲ and ▼ buttons.
The default is "__ __".

Display	Running Mode Switching Setting
_ _	Stand Alone Mode (The tool is not connected to the controller in this mode.)
_ 1	Wireless Communication Mode (The tool is connected to the controller in this mode.)

4 Press the OK button to confirm it.
When the setting is completed, a buzzer sounds long (a long beep), and the display returns to the menu screen.

5 Back to Operation Mode.
Hold down the OK button.
P. 50

Tool Capacity

Model No.	EYADA112WA EYADA112WB	EYADA212WA EYADA212WB	EYADA218WA EYADA218WB	EYADA407WA EYADA407WB
Recommended Work	Machine screw: M2 to M3.5	Machine screw: M2.5 to M4.5	Machine screw: M2.5 to M4	Machine screw: M3.5 to M5
Torque Setting Range	0.1 N·m to 1.0 N·m	0.3 N·m to 2.5 N·m	0.3 N·m to 2.0 N·m	1.5 N·m to 4.4 N·m
Torque Setting Steps	96 steps			
Fastening Torque Accuracy*	±10%			
Speed	1200 revolutions per minute (10-step adjustment)	1200 revolutions per minute (10-step adjustment)	1800 revolutions per minute (10-step adjustment)	650 revolutions per minute (10-step adjustment)

<Measurement conditions>
Based on our specified measurement conditions.
* Fastening torque and fastening torque accuracy vary depending on the work status. Be sure to check them with actual work before use.
* The accuracy of fastening torque is not the accuracy of converted torque.
* In your area, including models that are not on sale. Please refer to the latest general catalogue.

Tool Specifications

Power Supply	Power supplied by power adapter (sold separately) 100 to 240 V AC 50/60 Hz
Motor	Brushless motor (30 V DC)
Bit Holder	One-touch bit locking mechanism Applicable bits (hex shank of 6.35 mm across flats, single-ended 9 mm to 13 mm, double-ended 12 mm to 17.5 mm)
Size (Estimated Dimensions)	Overall Length: 271 mm / Grip diameter: ϕ38 mm
Mass (Weight)	About 630 g
Trigger Switch Mode	Both lever start mode and push start mode available (Switchable on a single unit)
Wireless Communication Standard	Wireless LAN (IEEE802.11a/b/g/n)
Frequency Band	2.4 GHz: 2.412 GHz to 2.472 GHz 5 GHz: 5.180 GHz to 5.240 GHz [For China only] 2.4 GHz: 2.412 GHz to 2.462 GHz 5 GHz: 5.180 GHz to 5.240 GHz
Number of channels	2.4 GHz: 1 to 13 channels 5 GHz: 36, 40, 44, 48 channels [For China only] 2.4 GHz: 1 to 11 channels 5 GHz: 36, 40, 44, 48 channels
Output Signals*1	• Fastening OK • Fastening NG (NOK) • Count-up (Count complete) • Sequence complete • Forward • Reverse • Serial numbers of tools • Time • Rotation time • Rotation (times) • Count quantity • Accumulated driving time • Accumulated quantity, etc. • Converted torque (Model No. WA only)
Input Signals*1	Drive permission signal
Operation Panel (Display)	7-segment display
Operation Button	OK button / ▼ button / ▲ button
Notification (Lamp)	4-colour display (Detection lamp)
Notification (Buzzer)	3 steps of volume
Settings for Quantity Count	• Count method • Count return • Count reset • Ignore judgement time • Ignore Count Time • Batch complete judgement waiting time
Screw Fastening Quality Determination	• Rotation time upper/lower limit setting • Rotation (times) upper/lower limit setting Converted torque upper/lower limit setting (Model No. WA only)
Screw Fastening Support	• Soft start • Soft snug • Disable fastening time
Sequence Control	Possible (Setting required on the controller side).
Others	• Collective setting of tools, data management, and simple data analysis is possible with the Controller Management Software (sold separately) • Able to run in the “Stand Alone Mode” when not connected to the controller.
Common Specifications	• Rotation direction switching (Forward/Reverse) • Braking ON/OFF setting
Included Items	• Screwdriver cord (2 m) • Screwdriver hanger • Clutch cover • Grip attachment (Supplied for EYADA407WA·WB only)
Separately Sold Items	• Screwdriver cord (2 m/3 m) • Screwdriver hanger • Clutch cover • Grip attachment • Power adapter (with a power cord)

These specifications are subject to change for performance improvement.
*1 Input/output signals on the controller side.

Power Adapter Specifications

Model No.	EYSZP001
Input Voltage	100 - 240 V AC, 50/60 Hz 2.6 A
Output Voltage	30 V DC, 3 A
Standby Power	0.16 W (100 V) 0.21 W (240 V) * When the screwdriver itself is not connected
Mass (Weight)	About 590 g
Size (Estimated Dimensions)	Overall Length (Long Side) 177 mm × Overall Height (Thickness) 44 mm × Overall Width (Short Side) 76 mm
Included Items	Power cord 1 m (With grounding plug. Detachable from power adapter itself)

Cautions for using a WLAN device

The device uses a frequency band shared with other types of equipment including industrial, scientific, and medical devices (e.g., a microwave) and radio stations such as a premises radio station (licenced) and low-power radio station (unlicenced) for mobile identification used in factory manufacturing lines and an amateur radio station (licenced).

1. Before using the device, confirm that there is no premises or low-power radio station for mobile identification or no amateur radio station operating in the vicinity.
2. If the device causes harmful interference with a premises radio station for mobile identification, stop use of the band immediately and consult the support centre below for the solution of the interference problem (e.g., installing a partition).
3. If the device causes harmful interference with a premises or low-power radio station for mobile identification or an amateur radio station or such other problems, consult the support centre.

■ There may be noise, shorter radio coverage, or malfunction occurring in the following environmental conditions.

- There is an obstruction (e.g., a metal or reinforced concrete object) that prevents smooth radio propagation between the wireless-enabled tool unit and the controller.
- The antennas of the controller are covered with metal.
- An operator's body is interfering with radio propagation between an operator (the wireless-enabled tool unit) and the controller.
- There is a microwave, PC, or any other device causing noise in the vicinity.
- A cell-phone or PHS phone is used near the wireless-enabled tool unit and the controller.

Cleaning

■ Wiping with Soft Cloth

Disconnect the power plug from the outlet, remove the screwdriver cord from the tool, and then wipe it with dry soft cloth.
Do not use wet cloth, thinner, benzine, alcohol, or other volatile liquids.
(Cause of discolouration, deformation, or crack)

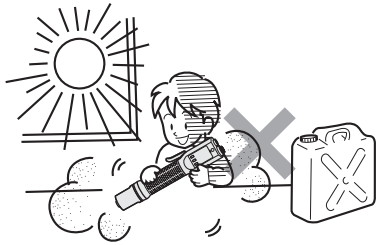
■ Conducting Periodic Inspection

- Periodically inspect for any loose screws, damage, or abnormal operation.
- Periodically inspect the power adapter for any signs of damage.

Storage

■ Avoid the following conditions during storage.

- Car cabin or other hot places
- Places exposed to direct sunlight
- Places exposed to water or dampness
- Places with a lot of foreign bodies or dust
- Places within reach of children
- Places with gasoline or other flammables
- Places with risk of fall



Updating the Firmware

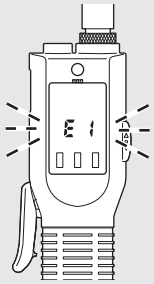
Refer to "Updating the Firmware" in the Operating Instructions of the controller (EYARW1).

Error Display on the Tool

If there is any problem, an error code blinks on the display of the tool.
Consult the table below and take a necessary action.

- [E1] to [E9]
  Pressing the OK button will clear the error display.
- [EE] and [F2] to [Fb]:
  Press the OK button. Or pressing a switch will clear the error display.

If the problem persists, stop the use immediately.
Bring it to your dealer.



Display	Possible cause	Action
E1	An error occurred in the tool's internal memory or the communication line.	Turn the power off and wait approximately 10 seconds before turning it on again. When this does not eliminate the problem, send the tool for repair.
E3	The tool is hot.	Interrupt the work and wait for it to cool down before use.
E4	The internal protective sensor is out of order.	Send the tool for repair.
E5	The tool is overloaded or the motor is out of order, for example.	Eliminate the condition(s) that caused the overload and recheck the condition. When this does not eliminate the problem, send the tool for repair.
E6	A cord or cords are not correctly connected.	Check whether the cords are correctly connected and whether no cords are broken. When no abnormality is found in the cords, the power adapter may be failed. Send the tool for repair.
E7	The tool circuit is failed or out of order, for example.	Send the tool for repair.
E9	• The tool is not yet paired with the controller. • The controller unpaired the tool.	Pair the tool with the controller. P. 28
	• The controller is too far from the tool. • There is an obstacle between the tool and the controller.	Check the distance between the controller and the tool. Check for any obstacle around the tool and the controller. * Within the recommended distance between the tool and the controller (approximately 16 m for 2.4 GHz and 10 m for 5 GHz)
	• The controller is powered off. • The installation place or antenna direction of the controller is inappropriate.	Check if the controller is powered on. Check the status of the controller's antenna. (Refer to "Cautions for Installation" in the Operating Instructions of the controller.)
	An error or failure occurred in the tool or the controller.	Turn the power off and then on. (When this does not eliminate the problem, send the tool for repair.)
EE	Fastening parameters are not yet set for the tool.	On the controller, set fastening parameters for the tool. (Refer to "SETTING FASTENING PARAMETERS OF TOOLS" in the Operating Instructions of the controller.)

Display	Possible cause	Action
E E	The fastening control mode is not yet set.	On the controller, set the fastening control mode. (Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller.)
	The running mode is set to “Repeat mode (Basic mode)” on the controller and a batch is not yet registered.	On the controller, register a batch. (Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller.)
	The running mode is set to “Repeat mode (Sequence mode)” on the controller and the tool is in a queue.	Check the sequence setting. (Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller.)
	The running mode is set to “External control mode” on the controller and the tool has not received a control input from the external device.	Check the I/O input on the controller and the external device (PLC, etc.). (Refer to “SETTING THE FASTENING CONTROL MODE” in the Operating Instructions of the controller.)
	The tool’s internal wiring is broken.	Send the tool for repair.
	A switch was operated quickly several times.	A switch was operated before the reception of the signal from the controller. Wait a moment before operation.

■ **Error codes for errors that occur during work.**

Display	Possible cause	Action
F 2	During a fastening process, the tool was stopped before the clutch activated.	Nothing is wrong with the product. Keep the tool in action until the clutch activates.
F 3	During a fastening process, the rotation time has become higher than the upper limit or lower than the lower limit.	Nothing is wrong with the product. Check the workpiece and the setting for the rotation time. P. 36
F 4	During a fastening process, the number of rotations has become higher than the upper limit or lower than the lower limit.	Nothing is wrong with the product. Check the workpiece and the rotation (times) setting. P. 35
F 5	During a fastening process, the converted torque has become higher than the upper limit or lower than the lower limit.	Nothing is wrong with the product. Check the workpiece and the converted torque setting. P. 33
F 6	During a fastening process, the forward/ reverse lever was switched.	Do not switch the forward/ reverse lever during a fastening process.
F 8	During a fastening process, the tool was overloaded or the motor failed.	Eliminate the condition(s) that caused the overload and recheck the condition. When this does not eliminate the problem, send the tool for repair.

Display	Possible cause	Action
	During a fastening process, a cord or cords became poorly connected.	Check whether the cords are correctly connected and whether no cords are broken. When no abnormality is found in the cords, the power adapter may be failed. Send the tool for repair.
	During a fastening process, the internal protective sensor became out of order.	Send the tool for repair.
	During a fastening process, the tool became hot.	Interrupt the work and wait for it to cool down before use.

Fastening History Error Messages

You can check the fastening history in the history screen by accessing the controller via a web browser. P. 46

	NOK message	Error message	Cause	Action
1	Error	High temperature	• Operation stopped to protect the tool from high heat.	• Cool it down before using it again. (Prevent condensation, etc.) <If the error persists> • Check the work environment. • Check the workpiece conditions. • Check the power adapter.
2	Error	Motor sensor error	• The temperature sensor or current sensor of the tool detected an error.	• Check for frequency. - If the problem occurs frequently, send the tool for repair (due to circuit failure).
3	Error	Tool locked	• Operation stopped to protect the tool since there is no motor rotation. - Caused by the work environment - Caused by a failure in the tool	• Check the work environment. (Check for abnormal load and check how the operator is using the tool.)
4	Error	Low voltage	• Operation stopped to protect the tool since abnormal voltage around the power supply was detected. - Caused by the work environment - Caused by a failure in the power adapter or the tool	• Check the power adapter. • Check the terminal (for dust and wear). • Check for frequency. - If the problem occurs frequently, send the tool for repair.
5	Error	Overcurrent	• Operation stopped to protect the tool since abnormal current was detected. - Caused by the work environment - Caused by a failure in the tool	• Check the work environment. (Check for abnormal load and check how the operator is using the tool.)

	NOK message	Error message	Cause	Action
6	Error	Rotation direction changed	• Operation stopped to protect the tool since the forward/reverse lever setting was changed during work.	• Check the work environment. (Check how the operator is using the tool.)
7	Error	Parameter error	• The set parameter is outside the setting range.	• Check the parameter. • Set the parameter again.
8	Torque	Torque exceeded	• The converted torque has become higher than the set upper limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set upper limit of the converted torque.
9	Torque	Torque insufficient	• The converted torque has become lower than the set lower limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set lower limit of the converted torque.
10	Rotation count	Rotation count exceeded	• The number of rotations of the tool's tip has become higher than the set upper limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set upper limit of the rotation (times).
11	Rotation count	Rotation count insufficient	• The number of rotations of the tool's tip has become lower than the set lower limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set lower limit of the rotation (times).
12	Rotation time	Rotation time exceeded	• The rotation time of the tool's tip has become longer than the set upper limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set upper limit of the rotation time.
13	Rotation time	Rotation time insufficient	• The rotation time of the tool's tip has become shorter than the set lower limit during fastening.	• Check the setting. • Check the workpiece conditions. • Disable the set lower limit of the rotation time.
14	Clutch	Stop before clutch actuation	• Fastening ends before clutch is activated. - During fastening, the tool stopped before clutch is activated. - During fastening, the tool stopped due to NOK caused by any other reason.	<When the tool stopped before clutch is activated> • Check the work environment. • Check the workpiece conditions. <When fastening NOK due to any other reason is indicated> • Check the content of the fastening NOK and take necessary actions.

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−MEMO−

[India Only]
Information on hazardous constituents as specified in sub-rule1 of rule16 in electrical and electronic equipment.
Declaration of Conformity with the requirements of the E-Waste (Management) Amendment Rules, 2023 with the sub-rule1 of rule16 limits with respect to Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls, Polybrominated diphenyl ethers.
The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste (Management) Second Amendment Rules, 2023:

1. Lead (Pb) – not over 0.1% by weight.
2. Cadmium (Cd) – not over 0.01% by weight.
3. Mercury (Hg) – not over 0.1% by weight.
4. Hexavalent chromium (Cr6+) – not over 0.1% by weight.
5. Polybrominated biphenyls (PBBs) – not over 0.1% by weight.
6. Polybrominated diphenyl ethers (PBDEs) – not over 0.1% by weight.

For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler of recycler, or Panasonic service center when disposing of this product. Customer care number (Toll free) : 080-6984-1333 Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll-free number
https://www.panasonic.com/in/corporate/e-waste-management.html

	Do's & Don'ts	
No.	Do's	Don'ts
1	All electrical and electronic products are required to be handed over only to the Authorized recycler.	The product should not be opened by the user himself / herself, but only by authorized service personnel.
2	The product should be handed over only to authorized recycler for disposal.	The product is not meant for re-sale to any unauthorized agencies / scrap dealers / kabariwalas.
3	Keep the product in an isolated area, after it becomes non-functional / unrepairable so as to prevent its accidental breakage.	The product is not meant for mixing into household waste stream.
4	Refer to Operating Instructions for handling of end of life products	Do not keep any replaced spare part(s) from the product in an exposed area.
5	Always dispose of products that have reached end of life at Panasonic Life Solutions India Authorized Service Centre.	Do not donate old electronic items to anybody. Do not dispose of your product in garbage bins along with municipal waste that ultimately reaches landfill.
6	Wherever possible or as instructed, separate the packaging material according to responsible waste disposal options and sorting for recycling.	Do not give e-waste to informal and unorganized sectors like Local Scrap Dealers / Rag Pickers.

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