

POWER TOOLS



POWER TOOL Technical Basics



Battery type and variation:

Battery type	Ni-Cd	Ni-Mh	Li-Ion
Nominal Voltage	1.2V	1.2V	3.6V
Energy / Size	300 Wh/L	340 Wh/L	450 Wh/L
Energy / weight	50 Wh/kg	65 Wh/kg	100~160 Wh/kg
Minimum voltage	0.7V	0.7V	2.5V
Operating temperature	-40~60°C	-20~60°C	-20~60C
Cycle durability	500~1000 times	500~1000 times	1000 times
Disadvantage	<ol style="list-style-type: none"> 1. Due to memory effect problem, it needs to be completely recharged and discharged after using ten times. 2. Cadmium pollution problem, please recycle the battery. 3. Lower self-discharging rate: 25~30%/month 	<ol style="list-style-type: none"> 1. It has less memory effect. After fifty times, it needs to be fully recharged and discharged. 2. It makes less environmental pollution 3. The Highest self-discharging rate: 30~35%/month 	<ol style="list-style-type: none"> 1. The elevating temperature shortens its life cycle. 2. Poor in overcharging and discharging 3. Need to have over charging and discharging protection 4. The highest internal resistance and the lowest transient current (Suitable for the products which require low torque and power)
Advantage	<ol style="list-style-type: none"> 1. The recharging efficiency is high. Fast and simple to recharge. 2. The lowest internal resistance and the highest transient current. (Suitable for the products which require high torque and power.) 3. Maintains a constant voltage to terminal when it discharges. 	<ol style="list-style-type: none"> 1. Higher battery capacity than Ni-Cd battery 2. Lower internal resistance, and lower transient current than Li-Ion battery 3. Less memory effect than Ni-Cd battery 4. Less environment pollution than Ni-Cd battery. No Cadmium metal problem 	<ol style="list-style-type: none"> 1. Lack of memory effect no need to fully recharge. 2. Make the least pollution 3. The lowest self-discharging rate: 5%~10%/month.

Battery life measuring method:

Using multimeter to measure: such as **Proskit** MT-1232 or MT-2017

1. Before measuring, charging the battery for one minute.
2. Set the multimeter to DCV function and measure the DC voltage: if the value is between 104~120%, which means the battery still in a good condition. If the value is extremely low, that means battery is almost exhausted.
3. The normal voltage for rechargeable battery: **3.6V**: 3.7V~4.3V, **4.8V**: 5.0V~5.8V, **7.2V**: 7.5V~8.6V, **12V**: 12.5V~14.4V, **14.4V**: 15V~17.3V

▶ PT-1441A / PT-1441F Cordless Drill Driver 14.4V



Variable speed trigger for complete control



Removable battery pack for charging convenience



21+1 Adjustable torque settings

- No-load speed 0-550rpm
- 21 adjustable torque settings for screwing, and extra position for drilling purpose
- Maximum output torque up to 7nm
- 3/8" (10mm) keyless chuck for driver bits or drills
- Magnetic strip on the back for convenient operation
- Removable battery pack for charging convenience
- Variable speed trigger for complete control

Model No.	PT-1441A	PT-1441F	
Main body	Max. Drilling capacity	Steel: Ø6mm Concrete: ø8mm Wood:Ø10mm	
	Torque setting	21+1 positions	
	Rated no load speed	One Gear Speed: 0-550rpm	
	Output torque	7 Nm (71.4 kgf-cm/62.0 lbf-in)	
	Drive (Collet)	3/8" (10mm) Keyless Chuck	
	Special function	Switch for forward or reverse rotation, with drill function	
Overall length	225mm x 245mm		
Battery	Model No.	5PT-1441-BAT	
	Battery type	Ni-Cd	
	Battery voltage	14.4V	
	Battery capacity	1000mAh	
	Charging time	3-5 hours	
Adapter	Free running time	40min	
	Model No.	5PT-1441-ADA	5PT-1441F-ADF
	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 18V 400mA	DC 18V 400mA
Charger	Adapter plug	A F	
	Certificate		
Standard Accessories	Model No.	5PT-1441-CH	
	Voltage	DC 18V 400mA	
Optional bits set	Bits set	6pcs drill: Ø 1.5, 2.5, 3, 4, 5, 6mm 6pcs 25mm Driver Bits: ⊖ 5.0, 6.0 ⊕ #1, #2 ⊕ PZ#1, PZ#2 1 pc Magnetic insert bits holder 1 pc 45mm double ends driver bits ⊕ #2, ⊖ 6.0	
	Individual packing	5PT-1080-P1(13 pcs/set) Color sleeve shrink	

▶ PT-1201A / PT-1201F Cordless Drill Driver 12V



Variable speed trigger for complete control



Removable battery pack for charging convenience



16+1 adjustable torque settings

- No-load speed 0-550rpm
- 16 adjustable torque settings for screwing, and extra position for drilling purpose
- Maximum output torque up to 6nm
- 3/8" (10mm) keyless chuck for driver bits or drills
- Removable battery pack for charging convenience
- Variable speed trigger for complete control

Model No.	PT-1201A	PT-1201F	
Main body	Max. Drilling capacity	Steel: Ø6mm Concrete: ø8mm Wood:Ø10mm	
	Torque setting	16+1 positions	
	Rated no load speed	One Gear Speed: 0-550rpm	
	Output torque	6Nm (61.2 kgf-cm / 53.11 lbf-in)	
	Drive (Collet)	3/8" (10mm) Keyless Chuck	
	Special function	Switch for forward or reverse rotation, with drill function	
Overall length	225mm x 245mm		
Battery	Model No.	5PT-1201-BAT	
	Battery type	Ni-Cd	
	Battery voltage	12V	
	Battery capacity	1000mAh	
	Charging time	3-5 hours	
Adapter	Free running time	35min	
	Model No.	5PT-1201-ADA	5PT-1201-ADF
	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 15V 400mA	DC 15V 400mA
Charger	Adapter plug	A F	
	Certificate		
Standard accessories	Model No.	5PT-1201-CH	
	Voltage	DC 15V 400mA	
Optional bits set	Bits set	6pcs drill: Ø 1.5, 2.5, 3, 4, 5, 6mm 6pcs 25mm Driver Bits: ⊖ 5.0, 6.0 ⊕ #1, #2 ⊕ PZ#1, PZ#2 1 pc Magnetic insert bits holder 2 pcs 45mm double ends driver bits ⊕ #2, ⊖ 6.0 ⊕ #1, ⊖ 5.0	
	Individual packing	5PT-1080-P1(13 pcs/set) Color sleeve shrink	

PT-1080A / PT-1080F Li-ion Cordless Drill Driver 10.8V



- No-Load speed 0-350/0-1100 rpm
- 21 adjustable torque settings for screwing, and extra position for drilling purpose
- Maximum output torque up to 14Nm
- 3/8" (10mm) keyless chuck for driver bits or drills
- Removable battery pack for charging convenience
- Variable speed trigger for complete control

Model No.	PT-1080A	PT-1080F	
Main body	Max. Drilling capacity Steel: Ø6mm Wood: Ø16mm		
	Torque setting 21+1 positions		
	Rated no load speed two gear speed : 0-350/0-1100 rpm		
	Output torque 14 Nm (142.8 kgf-cm/123.9 lbf-in)		
	Drive (Collet) 3/8" (0.8-10mm) Keyless chuck		
	Special function Switch for forward or reverse rotation, with drill function 2 gear-speed switch LED battery power indicator		
Overall length 215 mm x 210 mm			
Battery	Model No. 5PT-1080-BAT		
	Battery type Li-ion		
	Battery voltage 10.8V		
	Battery capacity 1300mAh		
	Charging time 3-5 hours		
Free running time 30min			
Adapter	Model No.	5PT-1080-ADA	5PT-1080-ADF
	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 12V 500mA	DC 12V 500mA
	Adapter plug	A (I)	F (◁▷)
Certificate CE, RoHS, EMC, UL LISTED			
Charger	Model No. 5PT-1080-CH		
	Voltage DC 12V 500mA		
Standard Accessories	Model No. 5PT-1080-P1(13 pcs/set)		
	Bits set 6 pcs Drills: Ø 1.5/2.5/3/4/5/6mm 6 pcs 25mm Driver bits: ⊕ 5.0, 6.0 ⊕ #1, #2 ⊕ PZ#1, #2 1pc Magnetic insert bits holder		
	Others Adapter and Charger / Blow-molded case		
Individual packing Color sleeve shrink			



LED light provides convenient work in dark



Battery power indication



21+1 adjustable torque setting

PT-0721A / PT-0721F Cordless Pocket Screwdriver 7.2V



- Two gear speed : 0-200rpm/0-400rpm
- 1300mAh Li-ion battery. Long life battery pack, anti-pollution
- 15+1 Adjustable torque settings.
- Maximum output torque up to 5nm
- Quick release chuck
- Switch for forward or reverse rotation.
- Battery power indication
- LED light provides convenient work in dark
- Handy and easy to carry in a tool belt
- Over charging and discharging protection



4pcs 50mm Driver Bits

Model No.	PT-0721A	PT-0721F	
Main body	Torque setting 15+1 Position		
	Rated no load speed two gear speed:0-200rpm/0-400rpm		
	Output torque 5Nm (51 kgf-cm / 44.26 lbf-in)		
	Drive (collet) 1/4 quick release chuck		
	Special function Switch for forward or reverse rotation, quick release chuck, LED light, battery power indicator		
	Overall length: angled 160mm x 180mm		
Battery	Battery type Li-ion		
	Battery voltage 7.2V		
	Battery capacity 1300mAh		
	Charging time 3-5 hours		
	Free running time >70 min		
Adapter	Model No.	5PT-0721-ADA	5PT-0721-ADF
	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 9V 300 mA	DC 9V 300 mA
	Adaptor plug	A (I)	F (◁▷)
Certificate CE, RoHS, EMC, UL LISTED			
Standard accessories	Model No. 5PT-1361-P1		
	Bits set 4pcs 50mm Driver Bits: ⊕ 5.0, 6.0 ⊕ #1, #2		
	Other Adapter		
Individual packing Double blister card			



LED light provides convenient work in dark



Battery power indication



15+1 adjustable torque settings

PT-1362U USB Li-ion Cordless Screwdriver 3.6V



- Powerful motor comes with 350RPM/3 Nm, provides plenty of power for a variety of applications.
- The durable metal gear features small volume, high torsion and not easy to wear.
- Equipped with SANYO power cell series li-ion batter, offer high performance and long service life.
- Compact design for easy access to narrow space.
- LED light increased visibility in dark areas.
- Charging protective circuit design for quickly charging and over current protection.



Accessories

Model No.	PT-1362U
Rated no load speed	350 rpm
Output torque	3 Nm (31 kgf-cm/26.9 lbf-in)
Special function	LED charging indicator
Overall length: angled	140(L)x110(H) mm
Battery	Li-ion 3.6V 1100 mAh
Charging time	1.5-2 hours (5V/2A)
Free running time	30 min
Accessories	5pcs 50mm driver bits: ⊕ 6.0 ⊕ #1, #2 ⊕ 3.0, 4.0 Micro USB charging cord
Individual packing	Double blister



BEST Value

Full metal gearbox
Powerful 350RPM/3 Nm Motor
Japan SANYO Li-ion battery



Product Video



Full metal gearbox



Japan SANYO Li-ion battery



USB charging

PT-1361A / PT-1361F Li-ion Cordless Screwdriver 3.6V



- Battery power indication
- LED light provides convenient work in dark
- 1300mAh Li-ion Battery. Long life battery pack, anti-pollution.
- Dual angle adjustment allows straight and angle use
- 6+1 Adjustable torque settings, maximum output torque up to 3 Nm
- Quick release chuck, switch for forward or reverse rotation.

Model No.	PT-1361A	PT-1361F	
Main body	Torque setting	6+1 positions	
	Rated no load speed	200 rpm	
	Output torque	3 Nm (30.6 kgf-cm/26.55 lbf-in)	
	Drive (Collet)	Hex 1/4 (6.3mm) quick release chuck	
	Special function	Switch for forward or reverse rotation, 2 different angle settings Includes LED Light. LED Battery Power Status Indicator	
Battery	Overall length: straight	235mm (L)	
	Overall length: angled	170(L)x145(H)mm	
	Battery type	Li-ion	
	Battery voltage	3.6V	
Adapter	Battery capacity	1300mAh	
	Charging time	3-5 hours	
	Free running time	60 min	
	Model No.	5PT-1361-ADA	5PT-1361-ADF
Certificate	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 6V 300mA	
Standard Accessories	Adapter plug	A I	F ← →
	Bits set	4pcs 50mm driver bits: ⊕ 5.0, 6.0 ⊕ #1, #2,	
Individual packing	Double blister		



4pcs 50mm Driver Bits



LED light provides convenient work in dark



Battery power indication



Dual Angle

▶ **PT-1136A / PT-1136F Cordless Lighted Screwdriver 3.6V**



- High quality motor. Speed gear (operating ratio 1:80). 200rpm. Smooth and quiet operation
- Equipped with 3.6V, 1000mAh, rechargeable NI-MH anti-pollution battery. Charging time: 5-7 hrs.
- Maximum output torque up to 25kgf.cm. Ideal for computer, electronic and home repair.
- Adjustable 3 different angle to meet different application's demand.
- Switch for forward or reverse rotation. Easy to screw / unscrew.
- Ergonomic design. Soft grip is easy to handle.
- LED light provides convenient work in the dark area.

Model No.	PT-1136A	PT-1136F	
Main body	Torque setting	None	
	Rated no load speed	200 rpm	
	Output torque	2.5 Nm(25.5 kgf-cm/ 22.13 lbf-in)	
	Drive (collet)	6.35mm (1/4") Hex Bit Shank	
	Special function	Switch forward or reverse rotation, LED light Handle can be used in 3 different position	
	Overall length: straight	270mm (10-13/16")	
Battery	Overall length: angled	210x140mm (7-23/32")	
	Battery type	NI-MH	
	Battery voltage	3.6V	
	Battery capacity	1000mAh	
	Charging time	5-7 hours	
Adapter	Free running time	30-35 min. (unload speed)	
	Input voltage	120V AC 60Hz	230V AC 50Hz
	Output voltage	DC 6V 300mA	DC 6V 300mA
	Adaptor plug	A (I)	F (◁▷)
Standard accessories	Certificate		
Individual packing	2 pcs magnetic insert bits holder 11 pcs 25mm driver bits: Ⓢ 3.0, 4.0, 5.0, 6.0, 7.0 Ⓢ #1, #2, #3 Ⓢ T10, T15, T20 Adapter		

▶ **PT-5721A / PT-5721F Mini Grinder Set 7.2V**



- 1000mAh Li-ion Battery, long life battery pack, anti-pollution.
- Low vibration, high torque and lightweight ergonomically designed
- Adjustable speed settings, Quick Release Chuck
- Battery Power Indication, LED light provides convenient work in dark
- Ideal for lightweight grinding, drilling, cutting, polishing, sanding, milling, sharpening, engraving and many other uses



Standard accessories: 9PT-5721-P2 (16pcs/set)



Model No.	PT-5721A	PT-5721F	
Main body	Max. diameter	Ø3.2	
	Rated no load speed	5000rpm-18000rpm	
	Battery Type	Li-ion	
	Battery voltage	7.2V	
Battery	Battery capacity	1000mAh	
	Charging Time	3-5 hours	
	Free running time	60 min	
	Adapter and charger	Model No.	5PT-5721-ADA
Input voltage		120V AC 60Hz	230V AC 50Hz
Output voltage		DC 9V 300mA	DC 9V 300mA
Adaptor plug		A (I)	F (◁▷)
Standard accessories	Certificate		
Individual packing	Model No. 9PT-5721-P2 (16pcs / set)		
	2pcs brass collet (Ø2.4x1, Ø3.2x1) 3pcs high speed drills (3/32" Ø2.4x 2, 1/8" Ø3.2 x1) 2pcs Engraving bits (Ø2.4x 2) 2pcs diamond bits (Ø3.2 x 2) 2pcs nylon brush (Ø2.4, Ø3.2) 4pcs grinding stones (Ø2.4x 2, Ø3.2 x2) 1pc sanding band (Ø2.4 x1)		

PT-5501A / PT-5501I Variable Speed Rotary Tool Kit



Powerful variable speed and 40-piece accessories to meet most applications.

- Powerful variable speed from 10,000 to 32,000RPM
- Flexible shaft and cable attachment allows precision work
- 40-piece multipurpose accessories and carrying case included
- Outer carbon brush for replacement convenience
- Cutting, sanding, polishing, drilling, burr removal.



Comes with flexible shaft



Polishing



Model No.	PT-5501A	PT-5501I
Maximum Output	135 W	
No Load Speed	10,000-32,000 rpm	
Collet Chuck Capacity	3.2mm and 2.5mm	
Available Voltages	120V, 60Hz	230V, 50Hz
Plug	A (I) (I)	I (I) (I)
Carrying Case Size	285x235x80(mm)	
Individual packing	Color sleeve shrink	

PT-5202A / PT-5202F Mini Grinder Set



- Build-in LED light provides illumination during use.
- Includes 19 accessories and 2 stencils for most tasks.
- Durable plastic storage case for easy organized.



Storage case



Engraving



Drilling



Model No.	PT-5202A	PT-5202F
Main body	Collet size	Max. Ø 3.2mm
	No-load speed	15,000 rpm
	Working voltage	18V DC
	Acoustic pressure	< 70dB
	Overall length	Ø43x127 mm
	Weight	123 g
Switch adaptor	Input voltage	100-240VAC 50/60Hz 0.5A Max.
	output voltage	18V DC 400mA
	Adaptor plug	A (I) (I) F (I) (I)
Certificate	c (UL) US	CE (I) (I)
Accessories	19 accessories and 2 stencils	
Carrying Case	142x137x57mm (5.6"x5.4"x2.3")	

PT-5201A / PT-5201B Mini Grinder



- Naturally and comfortable operation body shape.
- The quick-change chuck is ideal for drilling, polishing, engraving, routing, shaping, sanding and milling.
- Low vibration, high torque & lightweight ergonomically design.

Model No.	PT-5201A	PT-5201B
Max. diameter	ø 3.2mm	
No load speed	8000-18000 rpm adjustable	
Adaptor Voltage	Output: DC 18V 400mA Input: AC 120V 60Hz	Output: DC 18V 400mA Input: AC 230V 50Hz
Adaptor plug	A (I) (I)	F (I) (I)
Adaptor certificate	CE emc (I) (I)	CE (I) (I) c (UL) US LISTED
Replacement accessories	9PT-5201-P2 (10 pcs/set)	
Replacement adaptor	9PT-5201A-P	9PT-5201B-P
Individual packing	Double blister card	



9PT-5201-P2

Contents (10 pcs/set):

- 2 pcs diamond bits
- 2 pcs grinding stones
- 2 pcs sanding bands
- 1 pc collet (Ø 2.4/ Ø 3.2 mm)
- 1 pc nylon brush
- 1 pc engraving bit
- 1 pc connective post for sanding band

▶ PT-5203A / PT-5203I Electric Engraver



9 position stroke setting
Speed 7100 spm
LED light

BEST Value



- 9 position stroke setting regulates engraving depth from fine lines to deep grooves.
- Soft TPR handle provides extra comfort and control.
- Comes with LED light allows operating even in dark area.
- Replaceable solid carbide point gives you the power to engrave on different surfaces.
- Light and compact design provides comfortable use for precision engraving performance.
- Ideal for engraving or decorating metal, glass, stone and more.



Accessories:
2 solid carbide tips $\Phi 3.0 \times 20$ mm and 1 hex wrench included
1. A round needle tip for deep or thread engraving.
2. A flat tip for general and large area engraving.



Model No.	PT-5203A	PT-5203I
Voltage	AC 120V 60Hz	AC 220V-240V 50Hz
Consumption	10 W	
Speed	7,100 spm	
Stroke setting	9 Position	
Engraver point holder	$\Phi 3.0$ mm	
Standard plug	A	I
Individual packing	Double blister card	

▶ Super Drill Set



- Features in performance include low vibration, high torque and lightweight ergonomically designed.
- The quick-change chuck is ideal for drilling, polishing, engraving, routing, shaping, sending and milling.
- A super mill electric drill with an efficient, high speed motor and encased in a rugged high impact polystyrene body.

1PK-500-1



Contents:

- 5 pcs high speed steel drills ($\Phi 0.5, 1.0, 1.5, 2.5, 3.0$ mm)
- 5 pcs brass collets ($\Phi 0.5, 1.0, 1.5, 2.5, 3.0$ mm)
- Adaptor output:
DC 12V/0.8A

1PK-500A-2 / 1PK-500C-2



Contents:

- 5 pcs high speed steel drills ($\Phi 0.5, 1.0, 1.5, 2.5, 3.0$ mm)
- 5 pcs brass collets ($\Phi 0.5, 1.0, 1.5, 2.5, 3.0$ mm)
- 4 pcs grindstones with arbour
- 1 pc super thin grinding wheel
- Adaptor output: DC 12V/0.8A

1PK-500B-2



Model No.	Chuck	Torque	No-load speed	Adapter				Certificate	Case(mm)	Individual packing
				Model No.	Input Voltage	Output Voltage	Plug			
1PK-500-1	$\Phi 0.5-\Phi 3.0$ mm	530 gf-cm	9000~11000 rpm	-	-	-	-		165x120x45	Color label shrink
1PK-500A-2				9500-012A	120V AC 60HZ	DC 12V 800mA	A		215x150x70	
1PK-500B-2				9500-013B	100-240V AC 50/60HZ	DC 13V 800mA	F			
1PK-500C-2				9500-012C	230V AC 50HZ	DC 12V 800mA	C			

▶ 1H055-T Accessories



High speed steel drill bits designed for precision drilling applications in wood, non-ferrous metals and plastics. Available in pack, each containing 5 different drill sizes.



Model No.	Size (mm)	Individual packing
1H055-T (5pcs/set)	$\Phi 0.5$	Blister card
	$\Phi 1.0$	
	$\Phi 1.5$	
	$\Phi 2.5$	
	$\Phi 3.0$	