

For DC screwdrivers



Power Supply

Exclusive power supply is required for HIOS DC screwdrivers.

- Exclusive power supply converts the electric current from AC outlet (on the primary side) to low-voltage output (HI: DC30V) or (LOW: about DC20V) to supply it to the screwdriver.
- Safe and quiet rotation.
- Please use HIOS screwdriver in combination with HIOS power supply for safe screw tightening.
- Stable power supply with multiple inputs (AC100V to 240V).
(Not applicable to CLT-100 and MC-70L)

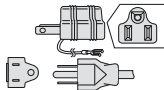
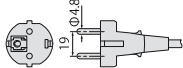
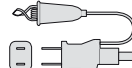
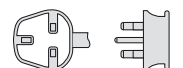
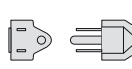
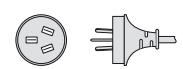

Power supply for HIOS Brushless screwdrivers


● Combination of power supply and screwdriver

Number of connectable screwdrivers		1 unit	
Power supply		T-45BL	T-70BL
Screwdriver (Including OPC type)			
PG Series	PG-3000	—	●
	PG-5000	—	●
	PG-7000	—	●
BLG-BC2 Series	BLG-4000BC2	●	●
	BLG-5000BC2 Series*	●	●
BLG-BC1 Series	BLG-4000BC1	●	●
	BLG-5000BC1 Series*	●	●
BLG Series	BLG-4000	●	●
	BLG-5000 Series*	●	●
	BL-2000	●	●
BL Series	BL-3000	●	●
	BL-5000	●	●
	BL-7000	—	●


*Not applicable to BLG-5000BC2-18, BLG-5000BC1-18 and BLG-5000-18

● Plug type

Type A 100V		Type C 220V-240V	
Type A-1 100V		Type BF 220V-240V	
Type A-2 120V		Type S 220V-240V	
Type A-3 220V-240V			

Model: T-45BL (for one screwdriver)		RoHS	10	CE	UL	CCC
Compatible screwdrivers						
BLG-BC2 Series BLG-BC1 Series BLG Series BL Series (Including OPC type)						
Primary input power source	AC100-240V (47-63 Hz)					
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V (2-step switchable)					
External dimensions (mm)	71.5(W)×146(D)×42.6 (H) mm					
Weight (g)	320 g					
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting hardware (2pcs), Mounting screws (4pcs)					
Plug type	A A-2 A-3/C/BF/S					
Compatible screwdriver	BLG-BC2 Series	BLG-4000BC2, BLG-5000BC2, BLG-5000BC2-15*, BLG-5000BC2-HT*				
	BLG-BC1 Series	BLG-4000BC1, BLG-5000BC1, BLG-5000BC1-15*, BLG-5000BC1-HT*				
	BLG Series	BLG-4000, BLG-5000, BLG-5000-15*, BLG-5000-HT*				
	BL Series	BL-2000, BL-2000SS, BL-3000, BL-3000SS, BL-5000, BL-5000SS, BL-5000-15*, BL-5020*				






Use only 2(HI) power outlet with the ★ models. These models may not perform properly on 1(LOW) power outlet.

Model: T-70BL (for one screwdriver)		RoHS	10	CE	UL	CCC
Compatible screwdrivers						
PG Series BLG-BC2 Series BLG-BC1 Series BLG Series BL Series (Including OPC type)						
Primary input power source	AC100-240V (47-63 Hz)					
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V (2-step switchable)					
External dimensions (mm)	88(W)×210(D)×52 (H) mm					
Weight (g)	685 g					
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting hardware (2pcs), Mounting screws (4pcs)					
Plug type	A A-2 A-3/C/BF/S					
Compatible screwdriver	PG Series	PG-3000, PG-5000, PG-7000				
	BLG-BC2 Series	BLG-4000BC2, BLG-5000BC2, BLG-5000BC2-15*, BLG-5000BC2-18*, BLG-5000BC2-HT*				
	BLG-BC1 Series	BLG-4000BC1, BLG-5000BC1, BLG-5000BC1-15*, BLG-5000BC1-18*, BLG-5000BC1-HT*				
	BLG Series	BLG-4000, BLG-5000, BLG-5000-15*, BLG-5000-18*, BLG-5000-HT*				
BL Series	BL-2000, BL-2000SS, BL-3000, BL-3000SS, BL-5000, BL-5000SS, BL-5000-15*, BL-5020*, BL-7000					




Use only 2(HI) power outlet with the ★ models. These models may not perform properly on 1(LOW) power outlet.

Power supply for Brushed screwdrivers

Combination of power supply with HIOS Brushed screwdriver


Number of connectable screwdrivers		1 unit			2 units		More than 2 MC-70L + CB-105 (SUB) Control box	
Power supply		CLT-45	CLT-60	CLT-80	CLT-100	MC-70L		
Screwdriver								
CL Series	CL-2000	●	●	—	●	●	↑ (Max. 20 units)	
	CL-3000	●	●	—	●	●		
	CL-4000	●	●	—	●	●		
	CL-6000	●	●	—	●	●		
	CL-6500	●	●	—	●	●		
	CL-7000	—	●	—	—	●		↓ (Max. 10 units)
SS Series	SS-2000	●	●	—	●	●	↑ (Max. 20 units)	
	SS-3000	●	●	—	●	●		
	SS-4000	●	●	—	●	●		
	SS-6500	●	●	—	●	●		
	SS-7000	—	●	—	—	●		↓ (Max. 10 units)
α Series	α-4500	●	●	—	●	●	↑	
	α-5000	●	●	—	●	●		
	α-6500	—	●	—	—	●		↓ (Max. 5 units)

Model: CLT-45 (for one screwdriver)

RoHS  CE  




Compatible screwdrivers

CL Series
SS Series
α Series




Primary input power source	AC100-240V (47-63 Hz)		
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V (2-step switchable)		
External dimensions (mm)	71.5(W) × 146(D) × 42.6 (H) mm		
Weight (g)	330 g		
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting hardware (1pcs), Mounting screws (1pcs)		
Plug type	A	A-2	A-3/C/BF/S
Compatible screwdriver	CL Series	CL-2000, CL-3000, CL-4000, CL-6000, CL-6500	
	SS Series	SS-2000, SS-3000, SS-4000, SS-6500	
	α Series	α-4500, α-5000,	

Model: CLT-60 (for one screwdriver)

RoHS  CE  




Compatible screwdrivers

CL Series
SS Series
α Series




Primary input power source	AC100-240V (47-63 Hz)		
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V (2-step switchable)		
External dimensions (mm)	88(W) × 210(D) × 52 (H) mm		
Weight (g)	715 g		
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting hardware (2pcs), Mounting screws (4pcs)		
Plug type	A	A-2	A-3/C/BF/S
Compatible screwdriver	CL Series	CL-2000, CL-3000, CL-4000, CL-6000, CL-6500, CL-7000	
	SS Series	SS-2000, SS-3000, SS-4000, SS-6500, SS-7000	
	α Series	α-4500, α-5000, α-6500	

Model: CLT-80 (for one screwdriver)

RoHS  CE  


Compatible screwdrivers

CL-9000 only




Primary input power source	AC100V-240V (47/63 Hz)		
Secondary output voltage	HI(2) : DC30V, LOW(1):DC20V (2-step switches)		
External dimensions (mm)	114(W) × 215(D) × 52(H)mm		
Weight (g)	1.6kg		
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting hardware (2pcs), Mounting screws (4pcs)		
Plug type	A	A-2	A-3/C/BF/S
Compatible screwdriver	CL Series	CL-9000	

Model: CLT-100 (for two screwdrivers)


RoHS 

Compatible screwdrivers

CL Series
SS Series
α Series

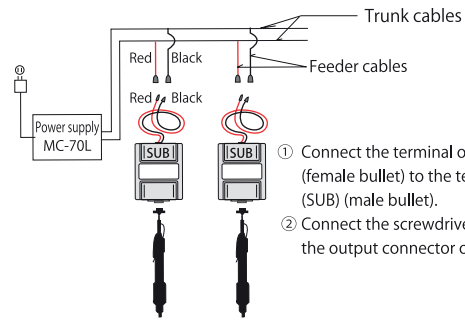


Primary input power source	AC100V (50/60Hz)	AC120V (50/60Hz)	AC220-240V (50/60Hz)
Secondary output voltage	HI(2): approx. DC30V, LOW(1): approx. DC20V (2-step switchable)		
External dimensions (mm)	182(W) × 145(D) × 132(H)mm		
Weight (g)	4kg		
Accessories	Power supply cord 1.8m with ground wire (1pc)		
Plug type	A-1	A-2	A-3/C/BF/S
Compatible screwdriver	CL Series	CL-2000, CL-3000, CL-4000, CL-6000, CL-6500	
	SS Series	SS-2000, SS-3000, SS-4000, SS-6500	
	α Series	α-4500, α-5000	

Model: MC-70L (for multiple screwdrivers)		RoHS	
Compatible screwdrivers CL Series SS Series α Series			
			
Primary input power source	AC100V (50/60Hz)	AC120V (50/60Hz)	AC220-240V (50/60Hz)
Secondary output voltage	HI(2): about DC30V, LOW(1): about DC20V (2-step switchable)		
External dimensions (mm)	320(W) × 220(D) × 153(H)mm		
Weight (kg)	12kg		
Accessories	Power supply cord 1.8m with ground wire (1pc), Trunk cable 20m (1 set, black & red), Feeder cable 0.5m (10 sets, black & red), U-element (Scotch lock) #560B (20 pcs)		
Plug type	A-1	A-2	A-3 / C / BF / S
Supported models	Up to 20 units	CL-2000, CL-3000, CL-4000, SS-2000, SS-3000, SS-4000	
	Up to 10 units	CL-6000, CL-6500, CL-7000, SS-6500, SS-7000 α-4500, α-5000	
	Up to 5 units	α-6500	

How to connect CB-105 (SUB)

There should be an appropriate clearance between the trunk cables laid along the assembly line and branch wires.



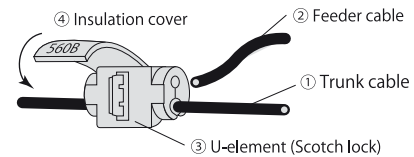
- ① Connect the terminal of the feeder cables (female bullet) to the terminal of CB-105 (SUB) (male bullet).
- ② Connect the screwdriver's connector to the output connector of CB-105 (SUB).

(Note)

The trunk cables (included) of MC-70L should be used with the length within 20m. If you make it longer than 20m, there may be voltage reduction and cause failure of the screwdriver.

How to use U-element (Scotch lock)

It is recommended to use U-element (included in this product) to attach a feeder cable to the trunk cable.



- ① While push-opening the slot at the bottom of the U-element, push in the trunk cable into the groove.
- ② Insert the end of the feeder cables through the upper hole from the right side and push it in all the way to the opposite end.
- ③ Insert the end of the feeder cable through the upper hole from the right side and push it in all the way to the opposite end.
- ④ Snap on the insulation cover.

Control Box CB-105(SUB)



When you use MC-70L, you need to connect a control box (CB-105, optional) between a screwdriver and MC-70L. CB-105 is a compact control box to control the current in response to the clutch motion of a driver.

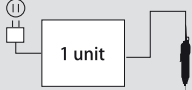
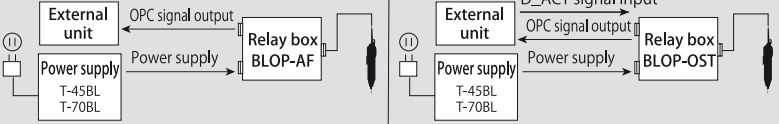




Primary input power source	DC20V/31V
Secondary output voltage	Same as the primary input power source
External dimensions (mm)	70(W) × 42(D) × 100 (H) mm
Weight (g)	240 g
Input cord length	2m with a bullet terminal (1pc, fixed to the body)
Accessories	Mounting hardware (2pcs)

《Accessories》 LEAD KIT for MC-70L Part No. MCCB-SET

- U-element 20pieces ● Feeder cables 10pieces (Black&Red)
- Trunk cables 20m 1piece each (Black&Red)




Special Power Supply • Relay Box




● Combination of power supply and screwdriver






Classification		Brushed screwdriver		Brushless screwdriver	
Number of connectable screwdrivers		 1 unit			
Specifications		Power supply with complete signal terminal		I/O Signal Relay Box	
Power supply		CLT-50AF	CLT-75AF	BLOP-AF	BLOP-OST
Screwdrivers					
CL Series	CL-2000	●	—	—	—
	CL-3000	●	—	—	—
	CL-4000	●	—	—	—
	CL-6000	●	—	—	—
	CL-6500	●	—	—	—
	CL-7000	—	—	—	—
	CL-9000	—	●	—	—
SS Series	SS-2000	●	—	—	—
	SS-3000	●	—	—	—
	SS-4000	●	—	—	—
	SS-6500	●	—	—	—
	SS-7000	—	—	—	—
α Series	α-4500	●	—	—	—
	α-5000	●	—	—	—
	α-6500	—	—	—	—
BLG-BC2 Series	BLG-4000BC2	—	—	—	—
	BLG-5000BC2	—	—	—	—
BLG-BC1 Series	BLG-4000BC1	—	—	—	—
	BLG-5000BC1	—	—	—	—
BLG Series	BLG-OPC specification	—	—	●	●
BL Series	BL-OPC specification	—	—	●	●







● Power supply with Complete Signal + I/O Signal Relay Box

Use these products to prevent screw tightening skipping or manufacturing line control including a screw counter.

Model: CLT-50AF (for one screwdriver)		RoHS 
Output signal  T-UP (finish)		
Compatible screwdrivers CL Series SS Series α Series 		
Primary input power source	AC100V (50/60Hz)	
Secondary output voltage	HI (2): about DC30V, LOW (1): about DC20V, 2-step switchable	
External dimensions (mm)	105(W) × 185(D) × 91(H)mm	
Weight (kg)	About 2.7kg	
Accessories	Power supply cord: 1.8m with ground wire (1pc)	
Plug type	A-1	
Compatible screwdrivers	CL Series	CL-2000, CL-3000, CL-4000, CL-6000, CL-6500
	SS Series	SS-2000, SS-3000, SS-4000, SS-6500
	α Series	α-4500, α-5000

Model: CLT-75AF (for one screwdriver)		RoHS 
Output signal  T-UP (finish)		
Compatible screwdrivers Exclusive for CL-9000 		
Primary input power source	AC100V(50/60Hz)	
Secondary output voltage	HI (2): about DC30V	
External dimensions (mm)	182(W) × 220(D) × 133(H)mm	
Weight (kg)	6kg	
Accessories	Power supply cord: 1.8m with ground wire (1pc)	
Plug type	A-1	
Compatible screwdrivers	CL Series	CL-9000

Model: BLOP-AF (I/O Signal Relay Box)		RoHS 
Output signals  FOR (forward)  REV (reverse)  T-UP (finish)		
Compatible screwdrivers BLG Series (OPC type) BL Series (OPC type) 		
The signals (FOR, REV and T-UP) from the screwdrivers of OPC-type screwdriver with signal output function, can be extracted with this unit to connect to an external unit such as a sequencer.		
Primary input power source	DC30V	
Secondary output voltage	Same as the primary input	
External dimensions (mm)	70(W) × 42(D) × 100(H)mm	
Weight (g)	160g	
Accessories	Screwdriver cable 1.5m (1pc) Mounting hardware (2pcs), Plug for I/O	
Compatible screwdrivers	BLG Series	BLG-4000-OPC, BLG-5000-OPC
	BL Series	BL-2000-OPC, BL-3000-OPC, BL-5000-OPC

Model: BLOP-OST (I/O Signal Relay Box for Automation)		RoHS 
Input signals  D_ACT (Start) Output signals  FOR (forward)  REV (reverse)  T-UP (finish)		
Compatible screwdrivers BLG Series (OPC type) BL Series (OPC type) 		
The signals (FOR, REV and T-UP) from the OPC-type screwdriver can be output with this box to connect to an external device such as a sequencer. Also power delivery to the screwdriver can be controlled.		
Primary input power source	DC30V	
Secondary output voltage	Same as the primary input	
External dimensions (mm)	70(W) × 42(D) × 100(H)mm	
Weight (g)	160g	
Accessories	Screwdriver cable 1.5m (1pc) Mounting hardware (2pcs), Plug for I/O	
Compatible screwdrivers	BLG Series	BLG-4000-OPC, BLG-5000-OPC
	BL Series	BL-2000-OPC, BL-3000-OPC, BL-5000-OPC

● Plug type

Voltage	100V		120V	220-240V			
	Type A	Type A-1	Type A-2	Type A-3	Type C	Type BF	Type S
Plug type	