

# Multi-Function Laptop AC Adaptor & Charger

LS-PAB90-BC10



Additional tips which are changing the voltage on the power supply and tabs telephone, there are optionally available.

# User Manual

## Product Feature:

1. Charge a laptop battery separate from laptop;
2. Supply power for laptop computers and LCD television and other equipment;
3. Charge or supply power for MP3, mobile phones, digital cameras, camcorders and other related device with standard USB output;
4. LCD screen displays the charging and power status with red and blue dual-colors;
5. 15 exchangeable DC connectors for more than 100 models of laptops and LCD televisions;
6. Provides a wide range of output voltage: 5V 12V 12.5V 14.5V 15V 16V 18.5V 19V 19.5V 20V 22V;
7. Worldwide use with input between 100-265V;
8. With advanced MCU micro-computer chip control, humanity design makes the operation much easier. All the switches are automatic, such as switching to the indicated output voltage, switching to charging function, and indicating battery charging status;
9. 100,000 level of anti-static design, high temperature and fire-proof crust makes it safer;
10. Passed MBTR 5000H test and own its patent with more reliable quality warranty;
11. Safety protection: Over temperature protection reaches at 85°C, Over voltage protection reaches at 24V, Over current protection reaches at 6.5A, and have Short circuit protection & Charging time protection.

## Product Specification:

Input: AC 100-265V~ 1.8A 50-60Hz

Output: ADAPTOR: DC 12-22V 5A (MAX) 90W

CHARGER: DC 12.6V, 16.8V 3A

USB: DC 5V 1A (MAX) 5W

## Product Components:

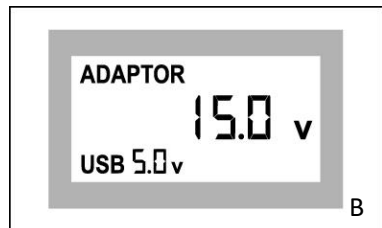
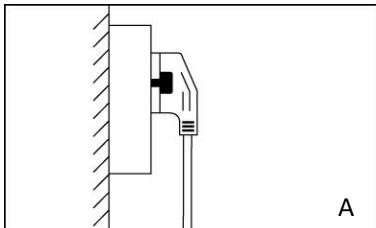
1. Main body of ac adaptor
2. 15 DC connectors(optional): A B C D E F G H I J K L M Q R

3. Charging cables for laptop batteries (optional)
4. Charging cables for mobile phone, MP3, bluetooth and other digital products (optional)
5. USB cable (optional)

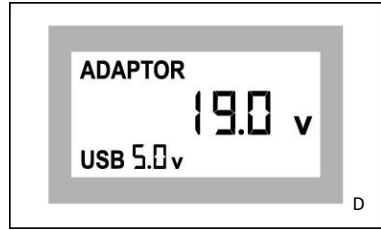
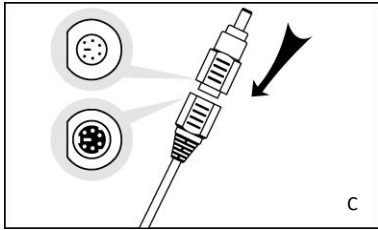
### Product Diagram:



### Operation Instruction:

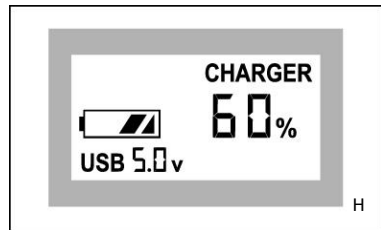
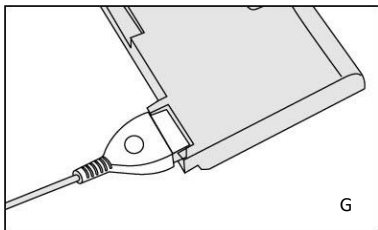
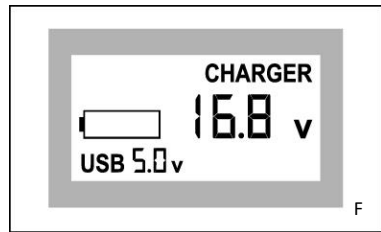
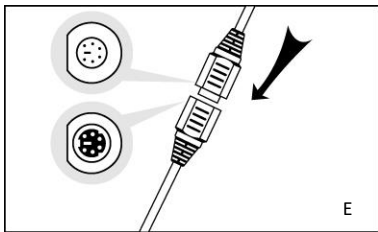


1. Switch on the AC power (picture A). Without DC connectors in the DC port, the LCD screen background shows a blue color, with letters same as (picture B)



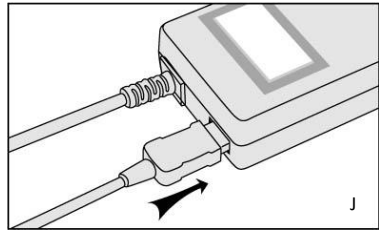
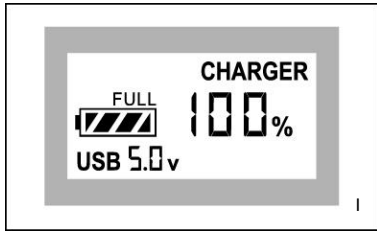
2. When this device supply power for the laptops as an adaptor:

- a. LCD screen indicates in blue
- b. According to the user manual of the laptop and the specification of the DC connectors, choose the right DC connector for your laptop and join in them together, then the LCD indicates the relative output voltage (picture C and D)
- c. Connect it to the laptop



3. When this device connects to the laptop battery as a charger:

- a. Select the related charging cable according to your laptop battery model number and connect one end to the DC joint of adapter. Now the LCD screen indicates Charger status with blue background, showing the charging voltage and the battery sign will show battery level.
- b. Put the other end of charging cable to the laptop battery, the LCD screen indicates the remaining power in Red background and the charging process works as each grade indicates 5% of the power (picture E, F, G, H)
- c. When the battery is full, the LCD turns blue to indicate it is done. (picture I)



4. When using the USB function, connect the charging cable of mobile phone, MP3 or other relative device to the USB output of ac adaptor, then it can be used for charging. (picture J)

**Notice:**

Please check that the components size and voltages will be compatible according to your laptop computer's manual instruction and read this manual instruction carefully before using. We are not responsible for any damage caused by incorrect operation.

**Caution:**

1. This device is for indoor use only, don't put or use it in high temperature and high moisture environment;
2. It's a common phenomenon for the unit to feel hot when using;
3. Avoid falling and bumping otherwise the electrical components will be damaged;
4. Don't try to disassemble or open the cover under any circumstance in order to avoid danger.

## DC connectors Specification of LS-PAB90-BC10

No	Output Voltage	Range Voltage	Output Current (max)	Connectors Spec.	Replacement
A	19V	18.0-20.2V	4.74A	4.8*1.7*10.7 mm DC-F	<b>HP/COMPAQ:</b> 18.5V/2.7A, 18.5V/3.5A, 18.5V/3.8A, 18.5V/4.9A; <b>DELTA:</b> 19V/2.64A; <b>ASUS:</b> 19V/2.64A; <b>NEC:</b> 19V/2.64A etc.
B	15V	14.0-16.2V	5A	6.3*3.0*10.7 mm	<b>TOSHIBA:</b> 15V/3A, 15V/4A, 15V/5A, 15V/6A; <b>NEC:</b> 15V/6A etc.
C	19V	18.0-20.2V	4.74A	5.5*2.1*10.7 mm DC-F	<b>ACER:</b> 19V/3.16A, 19V/3.42A, 19V/4.74A; <b>LITEON:</b> 19V/3.16A, 19V/3.42A; <b>NEC:</b> 19V/3.16A etc.
D	19V	18.0-20.2V	4.74A	5.5*2.5*10.7 mm DC-F	<b>IBM:</b> 19V/4.2A; <b>DELL:</b> 19V/3.16A, 19V/3.42A; <b>COMPAQ/HP:</b> 18.5V/4.9A, 19V/4.9A; <b>DELTA:</b> 19V/2.64A.; <b>TOSHIBA:</b> 19V/3.16A, 19V/3.42A, 19V/4.74A; <b>ASUS:</b> 19V/4.74A. <b>LS:</b> 20V/3.25A; <b>LITEON:</b> 19V/3.16A, 19V/3.42A, 19V/3.95A, 19V/4.74A; <b>NEC:</b> 19V/2.64A, 19V/3.16A; <b>GATEWAY:</b> 19V/3.16A, 19V/3.42A, 19V/3.68A, 19V/4.74A etc.
E	16V	15.0-17.2V	5A	5.5*2.5*10.7 mm DC-F	<b>IBM:</b> 16V/2.2A, 16V/3.36A, 16V/3.5A, 16V/4.5A etc.
F	19V	18.0-20.2V	4.74A	5.5*3.0*10.7mm pin1.0	<b>SAMSUNG:</b> 19V/3.16A, 19V/3.75A, 19V/4.22A, 19V/4.74A etc.
G	16V	15.0-17.2V	5A	6.0*4.3*10.7 mm pin1.0	<b>SONY:</b> 16V/3.42A, 16V/3.75A, 16V/4A. <b>FUJITSU:</b> 16V/3.36A, 16V/3.75A etc.
H	20V	19.0-21.2V	4.5A	6.0*4.3*10.7mm pin1.0	<b>SONY:</b> 19.5V/2.7A, 19.5V/3A, 19.5V/4.1A, 19.5V/4.7A; <b>FUJITSU:</b> 19V/3.16A, 19V/3.69A, 19V/4.22A etc.
I	19V	18.0-20.2V	4.74V	5.5*1.7*10.7mm DC-F	<b>TOSHIBA:</b> 19V/3.95A; <b>ACER:</b> 19V/3.42A; <b>DELTA:</b> 20V/3.5A etc.
J	19.5V	18.5-20.7V	4.62V	7.4*5.0*12.5 mm pin0.6	<b>DELL:</b> 19.5V/3.34A, 19.5V/4.62A etc.
K	20V	19.0-21.2V	4.5A	W7.3*7.4 mm	<b>DELL:</b> 20V/3.5A, 20V/4.5A etc.
L	22V	21.0-23.2V	2.04A	3.5*1.35*9.5 mm	<b>SHARP:</b> 22V/1.8A, 22V/2.04A etc.
M	20V	19.0-21.2V	4.5A	7.9*12 φ9.5 mm	<b>IBM/LENOVO:</b> 20V/4.5A, 20V/3.25A etc.
Q	18.5V	17.5-19.7V	4.9A	7.4*5.0*12.5 mm pin0.6	<b>HP/COMPAQ:</b> 18.5V/4.9A etc.
R	12V	11.2-13.2V	5A	5.5*2.5*10.7 mm DC-F	<b>LCD</b>

## Specification of Charging Cables for Laptop Batteries

Brand	Model No.	Relevant Model of Laptop	Spec. & Model No. of Laptop Battery
FOR DELL	DL-X300	Dell Latitude X300 series	Li-ion Voltage:14.8V Capacity:1900mAh; F0993/W0391/W0465/P0382/312-0106/312-0148/451-10148/G0767/
	DL-1691	DELL cpi/cpx/c series	Li-ion Voltage:14.8V Capacity:4500mAh; 1691P/312-3250/5081P/53977/75UYF/1K500/3H352/3H625/8M815/2M400/3K120/77TCJ/851UY/312-0009/5208U/3149C/6H410/53977/
	DL-4E368	DELL C400 series	Li-ion Voltage:11.1V Capacity:3600mAh; 4E368/4E369/0J268/09H348/312-4609
	DL-D620	Dell Latitude D620/630 series	Li-ion Voltage:11.1V Capacity:4400mAh; PC764/UD088/PD685/RD301/312-0383/312-0384/312-0386/JD648/JD634/TC030 /PD685/RD301/TD117/TD175/UD088
	DL-X1	Dell Latitude X1 series	Li-ion Voltage:11.1V Capacity:2400mAh; U6256
FOR IBM	IB-X60	IBM ThinkPad X60 series	Li-ion Voltage:14.4V Capacity:2600mAh; ASM 92P1168/FRU 92P1167
	IB-X20	IBM ThinkPad X20/21/22/23	Li-ion Voltage:10.8V Capacity:4400mAh; 02K6651/02K6710/02K6758/02K6760/02K6845
	IB-R32	IBM ThinkPad R32/R40 series	Li-ion Voltage:14.4V Capacity:4400mAh; 02K6928/02K7053/02K7054/02K7055/02K7056
	IB-R30	IBM ThinkPad R30/R31 series	Li-ion Voltage:10.8V Capacity: 4400mAh; 02K6821/02K6824/02K6829/02K6830/02K6832
	IB-R50	IBM ThinkPad R50/T40 series	Li-ion Voltage:10.8V Capacity:4400mAh; 08K8192/08K8193/08K8195/08K8214/92P1011/T40
FOR LENOVO	LEN-E370	E100/E370/Y100 series	Li-ion Voltage:11.1V Capacity:4400mAh; BATEFL31L6
FOR SAMSUNG	SS-P10C	SENS P10/P20/P25 series	Li-ion Voltage:14.8V; SSB-P10CLS
	SS-P30L	P30/P35 series	Li-ion Voltage:14.8V Capacity:4400mAh; SSB-P30LS/SSB-P30LS/E/SSB-P30LS/C
FOR HP/COMPAQ	HCP-F4486	HP: Pavilion Xf Series/ ZE1000Series; ACER: Aspire 1300Series	Li-ion Voltage:14.8V Capacity:4400mAh; HP:CGR-B1870AE/F4486/F4486-60001/F4486A/F4486B;ACER:BT A0302001
	HCP-F4809	COMPAQ: NOTEBOOK NX9000 series; HP: F4641h series	Li-ion Voltage:14.8V Capacity:4400mAh; COMPAQ: 319411-001 HP: 361742-001/371785-001/371786-001/383615-001/916-2150/F4098A/F4809-60901/F4809A/F4812A
	HCP-I B01	HP NC6000/NX5000	Li-ion Voltage:10.8V Capacity:4400mAh; series hstn-ib01 346886-001
FOR FUJITSU	FT-255-3S	A-1640/A-7640/M-1405 /etc.	Li-ion Voltage:10.8V Capacity: 4400mAh; 255-3S4400-F1P1, 255-3S4400-G1L1, 255-3S4400-S1S1
FOR ASUS	AU-A42	A42-M2/M2000/M2400 series	Li-ion Voltage:14.8V Capacity:4400mAh; A42-M2/70-N651B1001/90-N651B1010/AS-M2000NL/M2A/E-1A
FOR ACER	AR-2300	TravelMate 2300/2310/2350/4000 series	Li-ion Voltage:14.8V Capacity:4400mAh; BT.T5003.001/BT.T5003.002/BT.T5005.001 /BT.T5005.002/BT.T5007.00 /BT.T5007.001 /LCBTP03003

## Specification of Charging Cables for mobile phone, MP3, Bluetooth and other digital products

P/N	Brand	Compatible Model number
01A	FOR Nokia	E50,E61,E62,E65,E90,N70,N71,N72,N73,N75,N76,N77,N80,N83,N90,N92,N93,N95,S60,W70 ,1255,2865,3110,3152,3250,5300,5500,6070,6080,6085,6101,6102,6103,6111,6125,6126,61 31,6152,6265,6268,6288,6270,6275,6280,6300,7360,7370,7373,Bluetooth
01B	FOR Nokia	1100, 1110, 1600, 2100, 2280, 2300, 2310, 2325, 2610, 2626, 3100, 3105, 3018, 3120, 3200, 3220, 3230, 3300, 3315, 3330, 3410, 3510, 3530, 3560, 3610, 3650, 5100, 5110I,5140,5210,5200,5510,6020,6021,6030,6060,6100,6108,6110,6111,6150,6170,6200,62 20,6225,6230,6232,6235,6250,6255,6260,6340,6500,6510,6600,6610,6630,6650,6670,6680, 6681,6708,6800,6820,6822,7110,7200,7210,7250,7250I,7260,7270,7280,7380,7390,7600,76 10,7650,7700,7710,8210,8250,8310,8800,8810,8850,8910I,9110,9210C,9300,9500,9810,N- GAGE Bluetooth Capitel 009
02A	FOR Motorola	A668,A732,A7780,A1200,C168,C305,C335,C350,C362,C363,C381,C550,E375,E380,E680,E 680I,E680G,E690,E770,E1070,F3,L2,L6,L6G,L6I,L7,L7C,L7E,L9,Q,U6,V3,V3C,V31,V31E,V3 X,V3M,V6,V150,V191,V320,V360,W220,W355,W375, KRZR:K1,K2, MAXX:V3,V6,MPX,MPX220, ROKR:E2,E3,E6,E9, RIZR:Z3 Z6 Z8, Bluetooth NEC170 PAS:OK315, UT227
03A	FOR Samsung	D528,D808,D828,D838,D848,D900,D908,E258,E428,E488,E698,E778,E878,E898,E900,E90 8,F300,F369,F519,I320,I718,M359,P308,P310,X828, Z550
03C	FOR Samsung	D418,D428,D608,E378,X168,X488,X508,X708
05A	Sony Ericsson	J100,J220,J230,K200,K220,K310,K320,K510,K550,K610,K618,K620,K750,K758,K790,K800, K818,P990,M600,M608C,V630,W200,W300,W550,W600,W610,W700,W710,W800,W810,W8 30C,W850,W880,W888C,W900,W950,W958C,Z310,Z520,Z530,Z550,Z558,Z610,Z710C
22A	USB Standard	Kinds of digital products with USB input