

SDC – 6203

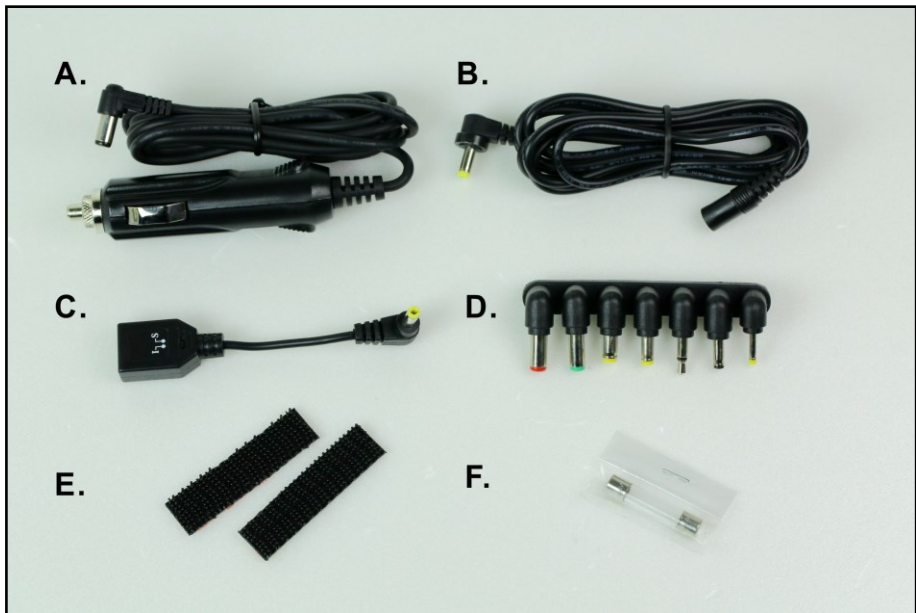
Digital Car Power Adaptor with LCD & DC- USB

User Manual

Introduction

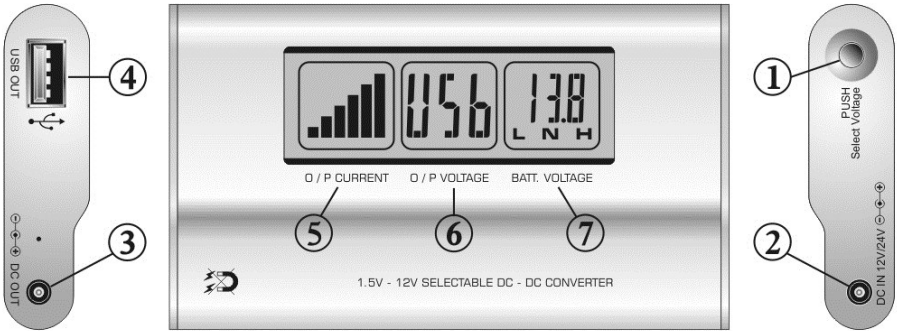
This new car power adapter provides regulated DC Power up to 2 A to iPad & other tablets and up to 3A total power at 7 voltages for most portable electronics such as PSP, DVD player, camcorder. The built in 0.6A standard USB charges iPhone and smart phones. The LCD shows car battery voltage, output voltage, and load current bar chart. It uses micro processor control to protect your car battery from over discharge. It is suitable for car, truck with 12V or 24V system.

Accessories



- A. DC input cable (1.5M) with cigarette plug.
- B. DC output cable (1.5M).
- C. USB Adapter connector (9cm) with slide selection for Apple (I) & Others (S).
- D. 7 pieces of common DC plugs.
- E. One set of dual lock sticker tapes.
- F. One spare 5A fuse for cigarette plug.

Controls and Indications



1. Preset Button

To preset the voltage of DC output ③ and Backlight of the LCD

2. DC Input Socket

For connection with to car cigarette socket with accessory A.

3. DC Output Socket

3.1 for connection with accessory B and respective DC Plugs of D.

3.2 for connection with accessory C for high current USB output for iPad & tablets.

4. Built in USB Output Socket

Standard USB DC power 5V, 0.5 to 0.6 Amp

Suitable for charging "iPhone" and other mobile phones

5. O/P CURRENT window

The bar chart shows roughly the current drawn at the DC Output Socket ③

It does not include the current drawn of ④, the built in USB port.

6. O/P VOLTAGE window

Shows the preset voltage at the DC output ③

7. BATT. VOLTAGE LCD

Shows voltage of the car battery accurately when there is no current drawn by the Car Power Adapter.

Indications of LCD

As your car battery voltmeter, it shows the car battery voltage accurately when the SDC-6203 is **not** charging any mobile devices.



BATT. VOLTAGE

L= Low
N=Normal
H=High

12V system
less than 11.5V
11.5 ~ 13.0V
greater than 13.0V

24V system
less than 23.0V
23.0 ~ 26.0V
greater than 26.0V

When the SDC-6203 is charging, the voltage shown is less than the actual battery terminal voltage due to the load current hence drop across the cable with cigarette plug. Higher the current drawn lower will be the display voltage which is less than the actual car battery voltage.

The SDC-6203 takes into account of the above to prevent your car battery from over discharged and flashing LCD with red back light warning before finally cuts off all output current.



O / P VOLTAGE

This “US b” icon at the middle window shows 3A output is ready for plug in of the USB adapter connector port to charge iPad and other tablet. You will see more of this icon unless DC output cable (B) is plugged in.



O / P VOLTAGE

When output socket (3) is plugged in with DC output cable (B), this middle window shows preset output voltage.



O / P CURRENT

This left LCD window shows current level used by plugged in devices at the . Each bar is roughly 0.4 Amp on average via the USB ADAPTER ©

The bar chart in the window roughly indicates the current drawn at the DC Output Socket © It does not include the current drawn of ④, the built in USB port.



shows 0.2 A to 0.7 A



shows 0.7 A to 1.2A



shows 1.2 A to 1.7A



shows 1.7 A to 2.2A



shows 2.2 A to 2.7A



shows larger than 2.7A

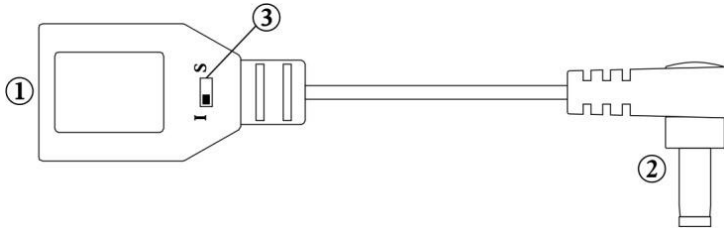
Operation Procedures

A. Powering up the SDC-6203

1. Insert the accessory (A) into the DC-IN (2) and to your car cigarette socket when your car electric power is on.
2. The LCD should light up showing **USB** and battery voltage. If LCD is not on, check the connections at both ends are secured.

B. Charging iPad, other tablets and mobile devices that demand high USB current

Plug in the short (c) USB Adapter connector into DC OUT ③, Check USB Adapter(3) :
I for Apple iPad, S for Samsung or other tablets .



C. Presetting the 3 Amp DC OUT voltage

1. Plug in the DC input cable (A) and the LCD should show USB and battery voltage.
2. Then plug in the DC Output cable (B) into the DC OUT ③.
The LCD middle window should show the default output voltage instead of USB.
3. Press and hold the Preset Button at the side for a few seconds until numbers at the middle window flashes then release button.
4. The flashing numbers are ready for resetting.
5. One quick press (click) at the button will move to the next voltage:
Cyclic order: 1.5V → 3.0V → 4.5V → 5V → 6V → 7.5V → 9V → 12V
6. Stop pressing at the desired voltage setting and wait till the flashing stops.
7. The preset output voltage is set and confirmed as shown in the middle window.
8. This newly preset voltage is fixed until further new presetting.

Remarks:

Do not select 12V output for 12V system as the output will always be 2V less than the input voltage in a 12 V battery for this setting of 12V output.

WARNING!

***** When using the USB Adapter connector, make sure that no magnetic material touches the DC Output socket ③. It is advisable to set the DC Output voltage to 5V if in doubt.**

***** Make sure your DC plug is connected with the right polarity setting**

D. Finding and setting the right polarity for your portable dc devices.

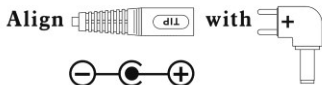
1. Finding out whether your portable is center POSITIVE or center NEGATIVE.
Most portables have the following markings on or near the Input Socket showing voltage and polarity.



When the center is linked to a + sign, it is then center POSITIVE
When the center is linked to a - sign, it is then center NEGATIVE

- Setting the chosen polarity for the output plug.
 - There is only one engraved marking on the cable socket it is **TIP**
 - But each of the supplied output plugs has two engraved markings, + and – sign just above pins.

FOR CENTER POSITIVE SETUP



FOR CENTER NEGATIVE SETUP



- Double check for polarity and voltage of your portable and adapter setting.

INCORRECT OUTPUT VOLTAGE, POLARITY MAY DAMAGE YOUR PORTABLE

- DO NOT** use this connector if you are not sure of the polarity or voltage of portable.
- DO NOT** use this adapter for portable that consumes more than 3000mA.
- DO NOT** use this adapter while starting the vehicle.
- DO NOT** cover this adapter or put it near any heat source.

E. Connecting the Portables

Before connecting to your portable double check on:

- The output voltage as display in the middle window of LCD matches your portable's voltage.
- Make sure the polarity of is correct.
- Any mismatch of the above 2 important points will or may damage your portable.

F. Using the built in USB power output

The USB output is made to the USB power standard of 5VDC and 0.6A.

You can power up or charge your portables such as iPod, MP3 which have USB power connectors for getting dc power from PC (Personal Computer).

G. Changing the Backlight Color of LCD

- First disconnect power to adapter by removing either the cigarette plug or DC-IN
- Press and hold the preset button and at the same time reconnect power to adapter.
- When the LCD is lit up again, release the preset button
- Then quick press on the Preset Button will change the backlight color.
- When desired color is found, disconnect power to adapter as in 1.
The last appeared color will be the newly selected backlight color.

Safeguarding your battery

This unique function protects your car battery from over-discharged by current draining portables.

You will not be left stranded with a flat battery.

The Micro-Processor keeps on checking the battery voltage and charge state of your car (12V system) or your truck (24V system).

When it detects your battery drops to a critically low level, the LCD backlight first changes to flashing red and all outputs (3A DC output and USB) are cut off.

Protections

A. Short circuit & overload protections

When the DC output or the USB is shorted circuited or draws more than the maximum current the current limiting protection will be activated to limit the output current hence the adapter.

B. Over voltage (output) Protection)

This is to protect voltage sensitive expensive portables from high DC output voltage. When the actual output voltage is about 1volt higher than the preset value for DC output The LCD backlight will turn Red , followed by cut off of both main output and USB output.

C. Thermal fuse protection

There is a 5Amp thermal fuse in the cigarette plug for over current at the input.

Trouble Shooting

1. LCD is not ON

POSSIBLE CAUSES:

- A. No DC power from the Cigarette Lighter socket. Check with the cigarette lighter if it works.
- B. Cigarette Lighter Socket may be loose.
- C. Contact metal strips are not in contact with socket.
Check Spring Action of metal strip and turn plug slowly until LCD turns On.
- D. Cigarette Plug Fuse burnt off, replace the 5Amp fuse.
Hold the top metal sleeve and turn the plastic body anti-clockwise to get to the fuse.

2. LCD is On, but connected portable is not working.

POSSIBLE CAUSES:

- A. Check portable has been turned on.
- B. Check voltage and polarity settings.
- C. Check connection to the portable is secure.

3. **Selected 12V output for 12V Battery******

Do not use this selection as 12V Main Output Voltage is about 2V Lower than Input Voltage

Specifications:

Input DC voltage range : 12 to 32V
Output regulated DC voltage selection : 1.5/ 3 /4.5/ 5/ 6/ 7.5/ 9/ 12V** dc

Micro-processor control of battery protection, digital selection and monitoring of output voltage, and load current.

LCD with selectable back light, continuous monitoring and displaying of selected output voltage, battery voltage and load current.

Dual outputs:

Maximum DC output current 3A

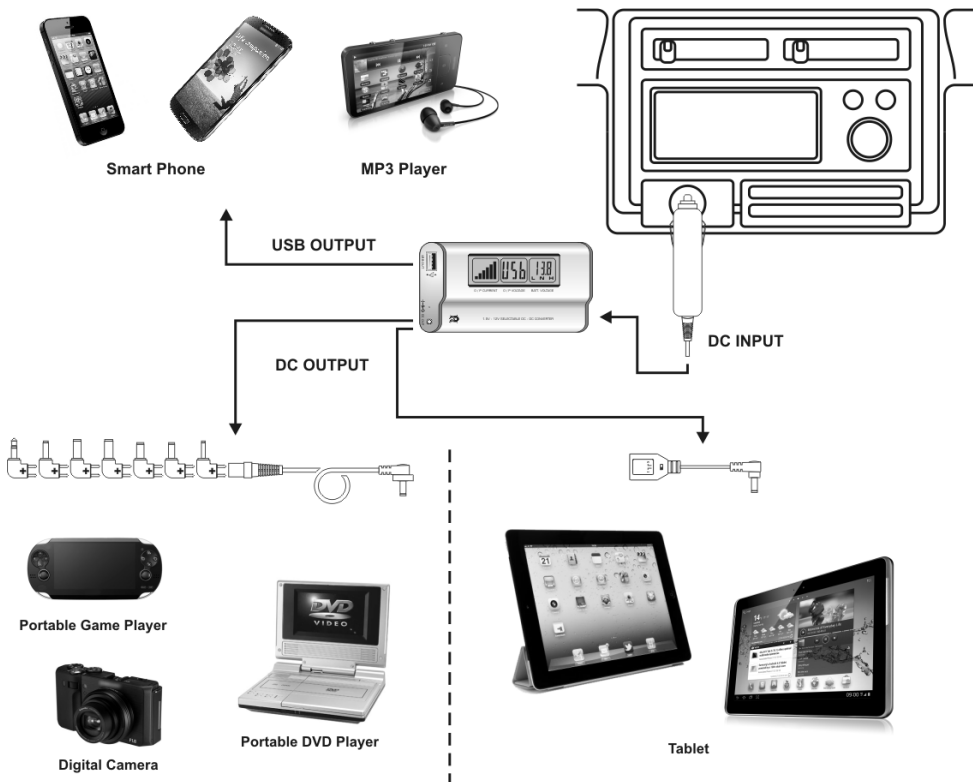
Maximum current from USB port: 0.6A.

Both the DC output and USB port can operate at the same time giving a total current of 3.6A.

Applications

DVD player, iPod#, SONY PSP#, All portables with USB link cable for charge or power, all Portable Multi-media players with 3A max. load, GPS, handheld telecom with max. 3A load.

iPod and SONY PSP are registered trade marks of corresponding corporations.



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