



AC/DC COMBO POWER ADAPTER

This guide provides information on using Lind combination AC/DC power adapters. We strongly recommend you read this guide before using the adapter even if you are already familiar with mobile devices and their power sources.

This high-quality adapter should provide years of reliable performance as well as several advantages when using your electronic device.

- Rugged construction allows use in tough operating environments.
- Accepts power from AC and DC voltage sources. (See label)
- Sealed and potted to resist moisture and high humidity.
- Extended life of the device battery by using DC power in mobile devices.
- Replaceable input and output cables (most models).
- Operation over wide temperature range.
- Short circuit protection.
- Output overvoltage and overcurrent protection.

NOTE: Please read the precautions noted in this manual.



SPECIAL USE WARNING

Do not use this adapter with a lighter plug splitter or extender cable. These devices can cause the adapter cigarette lighter plug to become very hot. The plastic case of the splitter receptacle traps the heat in the plug and does not allow it to dissipate.

For assistance call Lind Technical Support at (800) 659-5956 or (952) 927-6303.

USING AN AC POWER SOURCE

To connect the adapter to your system from an AC voltage source: (Reference: Figure 1)

1. Firmly plug the snap-in connector of the DC output cable into adapter output jack.
2. Plug the connector of the DC output cable into the mating DC input connector on the electronic device you are to power.
3. Plug the AC power cord into the Lind power adapter.
4. Plug the outlet end of the AC power cord into your AC wall outlet.
5. Confirm that the green “Output Present” LED is on and that power is now being supplied to the device.

This connection sequence may be altered without an effect on operation. You can now use your system with the power supplied by the adapter.

Cautionary Notes when using AC Power:

When using the Lind ruggedized combination AC/DC adapter, follow these precautions:

- When using the AC power input, use a power cord conforming to local safety standards.
- The rated AC input voltage is between 90 VAC and 264 VAC. The input voltage need not be changed with a transformer or the like.
- Never attempt to disassemble or modify the adapter.
- In the event of failure, contact a Lind service representative.
- Never use a multi-plug adapter to plug multiple power plugs in the same outlet. If it is used, a short circuit or electric shock may result.
- The metal case of the adapter can get quite warm during normal use, particularly when operating in high ambient temperatures. Use caution when handling and mounting the adapter. Do not cover or restrict airflow around adapter in any manner. Excessive adapter temperature may result.
- Do not damage, stretch, or excessively bend the power cord. A fire or electric shock may result.
- If you detect smoke or unusual smell, turn your device off and unplug the power plug immediately. Contact a Lind service representative.
- When unplugging the power plug, grasp the plug, not the cord. Pulling the cord forcibly can damage the cord and consequently cause a fire or electric shock.
- Never attempt to plug or unplug the power plug or the connector of the AC adapter when your hands are wet. An electric shock may result.

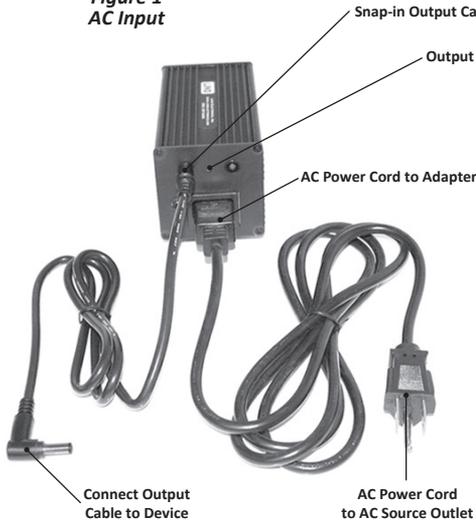
USING A DC POWER SOURCE

To connect the adapter to your system from a DC voltage source: (Reference: Figure 2)

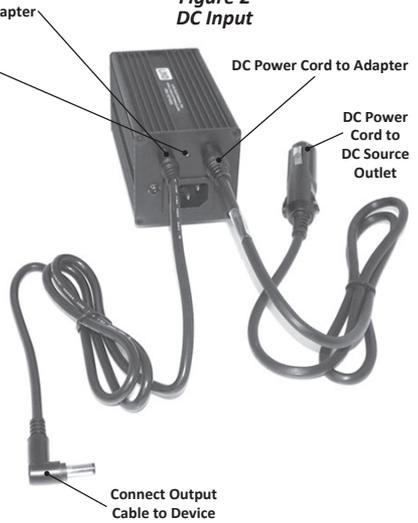
1. Firmly plug the snap-in connector of DC output cable into adapter output jack.
2. Plug the connector of the DC output cable into the mating DC input connector on the electronic device you are to power.
3. Insert the supplied DC input cable into the Lind power adapter.
4. Insert the supplied DC input cable into the DC voltage source. The input cable options may be a cigarette lighter connector, a Nato slave connector, a custom DC input connector or the connection may be wired directly to the appropriate fused DC source. Observe voltage polarity when wiring. (Black wire = ground)
5. Confirm that the green “Output Present” LED is on and that power is being supplied to the device from a DC source.

This connection sequence may be altered without an effect on operation. You can now use your system with the power supplied by the adapter.

**Figure 1
AC Input**



**Figure 2
DC Input**



COMMON QUESTIONS ABOUT LIND'S AC/DC ADAPTERS

Q: If the LED on the automobile power plug or the output LED on the adapter does not light when plugged in, what is wrong?

A: Some vehicles must be running or must have the key ON to have power at the lighter socket. It is also possible that one of the safety circuits in the adapter has been activated. Also, check the fuse in the input power cable.

Q: Is it normal for the adapter to get warm in use?

A: Yes. Restricted air flow around the adapter may even cause the adapter to overheat and shut down. This is a safety feature and does no harm to the adapter or your mobile device. Do not place the adapter in the vehicle glove compartment or cover it with anything in such a way that heat can not dissipate.

Q: Does it matter which cable gets plugged in first? A: No.

Q: Can I plug the computer in when it is running? A: Yes.

Q: Is it OK to start or stop the vehicle engine with the adapter plugged in?

A: Yes, but do not jump start the vehicle with the adapter in place. Many jump start systems use high voltages that will normally shut down the adapter output but extreme voltage spikes may damage the adapter circuitry. Starting the vehicle may turn the adapter off. After a ten second delay, the adapter will start back up.

Q: Can this adapter be used with a multi output cigarette plug splitter?

A: Use extreme caution with lighter plug splitter cables. These devices can cause the cigarette lighter plug on the adapter to become very hot. The plastic cases of these splitters can entrap the heat and not allow it to dissipate. Call us for alternate ways of connecting more than one device to your DC source.

Replacement and direct input connection cables are available from Lind. Call Lind with your needs. Replacement fuses can be obtained from Lind or from auto parts stores.

TECHNICAL INFORMATION

Input Voltage:	90-264 VAC, VDC (noted on label)
Input Fuse:	Noted on Input Cable Label
Indicators:	LED on Lighter Plug on some Models (input present) LED on Adapter (output power present)
Frequency:	47-63 hertz or 47-440 Hz (see lable on AC adapter)
Input Current:	1.5 Amperes Maximum
Ouput Voltage/Current:	See Adapter Label
Weight/Size:	31.3 ounces / 6.0 x 1.75 x 1.75 inches
Operating Ambient Temp:	-40° C —40° C * (*operating below 0° C may result in higher ripple voltage until adapter has warmed)
Storage Temp:	-40° C —85° C
Operating Rel. Humidity:	5—95% Non-Condensing
Features:	Output Short Circuit Protected Output Current Limit Internal Overtemperature Shutdown (DC input only) Low Input Voltage Shutdown (DC input only) Automatic Reset of Safety Shutdown

LIMITED WARRANTY

Lind Electronics, Inc. (LIND) warrants the circuit assembly portion of products manufactured by it to be free of defects in material and workmanship for a period of 1 year from the date of purchase under normal use. During this warranty period, LIND will, at its option, repair or replace the product at no charge for parts or labor when the product is returned postage paid as a complete unit to LIND. Proof of purchase and a letter explaining the problem must accompany the returned unit.

This warranty does not apply if any part of the adapter, its cables or connection jacks have been altered, subjected to abuse, accident or misuse. This warranty excludes incidental or consequential damage resulting from the product or the use of the product. This warranty is in lieu of all other warranties expressed or implied and no person is authorized to assume for LIND any other liability in conjunction with this product. The warranty gives you, the purchaser, specific legal rights and you may have other rights which may vary from state to state and country to country.

The LIND product you are purchasing has not been designed for, or certified for use in, life support applications. Any such use is at your own risk. LIND ELECTRONICS, INC. HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Lind Electronics, Inc. will not be liable for any claims, awards, damages or other liability arising out of the use of LIND products for life support applications whether in the nature of direct, indirect, consequential, special or punitive damages.



Lind Electronics, Inc.

www.lindelectronics.com

info@lindelectronics.com

techsupport@lindelectronics.com

Phone: (800) 659-5956

Lind, Lind Electronics, and the Lind logo are trademarks of Lind Electronics, Inc. All other registered trademarks and trademark names are the property of their respective owners.