



Skyinbow Duo-Power IIB Balanced Active Transducer System Owner's Manual

Thank you for purchasing your Skyinbow Duo-Power IIB Balanced Active Transducer System.

In order to get the best results from your new system, please read this Owner's Manual carefully as it outlines the operation of your Duo-Power IIB Active Transducer System.

This Quick Start Guide assumes that you have already fitted your Duo-Power IIB Balanced Active Transducer System to your instrument. If you have not done so, please see the Fitting Guide for your particular instrument.

The Duo-Power IIB's preamplifier automatically switches on when a jackplug is inserted, detects where its power is coming from and configures itself to optimise operation with that power. Please note that only one source of power can be used at any one time.

SECTION 1

The Onboard Rechargeable System Power Source

In the Duo-Power IIB the original Skyinbow onboard rechargeable supercapacitor power source has been completely redesigned and upgraded using the latest power management techniques, technology and circuit design from within the computer industry. This redesign now allows Skyinbow to offer more sustainable and environmentally friendly methods of recharging the System Power Source by using either a 9V/1Amp **Centre Positive** power supply, or a **Centre Positive** USB to 9V/1Amp Voltage Converter Cable (requires a 5V/2Amp USB mobile phone/tablet charger or power bank). Suitable power supplies, USB to DC converters, phone/tablet chargers and power banks are easily available from both online and "bricks and mortar" retailers.

Included as part of your new Skyinbow Duo-Power IIB Active Transducer System is a V2 System Recharge Cable (SRC).

The V2 SRC is made up of two parts:

- a 9V (PP3) battery clip connected to a 5.5mm/2.1mm Barrel DC jack plug and
- a 5.5mm/2.1mm Barrel DC jack socket connected to a ¼" TRS (Tip- Sleeve) jack plug.

Charging/Recharging The Onboard System Power Source

Method 1 (9V Battery)

1. Connect both parts of the V2 SRC together
2. Plug a new 9V battery into the SRC battery Clip.

3. Plug the V2 SRC's TRS jack into the output socket of your Duo-Power IIB and leave it there for one to two minutes. If you leave it for longer than that you will not damage the Duo-Power IIB. However, you will run down the 9V/PP3 battery unnecessarily as the Duo-Power preamplifier's recharge circuit will continue to draw power after the supercapacitor is fully charged.
4. Remove the V2 SRC from the output jack of your Duo-Power IIB. The system should now be fully-charged. Although you can expect approximately 8 hours of continuous operation from a full charge we do recommend that you recharge the Duo-Power IIB before each performance just in case your battery is running low and not fully-charging the capacitor inside the normal minute or so.

Please note that a 9V battery will "run down" over time, and eventually will lose the ability to fully-charge or recharge the supercapacitor. If you feel either that the continuous operating time of your Duo-Power IIB is decreasing, or that the output volume level is dropping, please replace the 9V battery as soon as possible. Ideally, you should always carry a spare PP3 battery just in case.

Method 2 (9V Power Adapter)

1. This method uses the 5.5mm/2.1mm Barrel DC jack socket connected to a ¼" TRS (Tip- Sleeve) jack plug portion of the V2 SRC
2. Plug a 9V/1Amp **Centre Positive** power supply fitted with a 5.5mm/2.1mm Barrel DC jack plug into the V2 SRC. Plug the power supply into a wall outlet and switch on.
3. Plug the V2 SRC's TRS jack into the output socket of your Duo-Power IIB and leave it there for one to two minutes. If you leave it for longer than that you will not damage the Duo-Power IIB. However, you will use electricity unnecessarily as the Duo-Power preamplifier's recharge circuit will continue to draw power after the supercapacitor is fully charged.
4. Remove the V2 SRC from the output jack of your Duo-Power IIB. The system should now be fully-charged. Although you can expect approximately 8 hours of continuous operation from a full charge we do recommend that you recharge the Duo-Power IIB before each performance just to be on the safe side.

Method 3 (USB 5V/2Amp to 9V/1Amp Voltage Converter Cable)

1. This method uses the 5.5mm/2.1mm Barrel DC jack socket connected to a ¼" TRS (Tip- Sleeve) jack plug portion of the V2 SRC
2. Plug a **Centre Positive** USB 5V/2A to 9V/1 Voltage Converter Cable with a 5.5mm/2.1mm Barrel DC jack plug into the V2 SRC. Insert the USB connector into a suitable 5V/2A USB mobile phone/tablet charger or power bank and switch on.
3. Plug the V2 SRC's TRS jack into the output socket of your Duo-Power IIB and leave it there for one to two minutes. If you leave it for longer than that you will not damage the Duo-Power IIB. However, you will use electricity unnecessarily as the Duo-Power preamplifier's recharge circuit will continue to draw power after the supercapacitor is fully charged.

4. Remove the V2 SRC from the output jack of your Duo-Power IIB. The system should now be fully-charged. Although you can expect approximately 8 hours of continuous operation from a full charge we do recommend that you recharge the Duo-Power IIB before each performance just to be on the safe side.

Method 4 (In Case Of Emergency - No V2 SRC Cable Required)

1. This method allows you to charge your Duo-Power IIB even if you've left your SRC cable, power supply, charger or power supply at home. You'll need a 9V (PP3) battery and a standard TS (Tip-Sleeve) jack guitar/instrument lead.
2. Plug the TS jack lead into the output socket of your Duo-Power IIB.
3. Hold the positive (small) terminal of the 9V battery against the Tip of the jack on the other end of the cable, and the negative (large) terminal against its Sleeve
4. Hold the 9V battery in that position for one to two minutes.
5. The system should now be fully-charged. Although you can expect approximately 8 hours of continuous operation from a full charge we do recommend that you recharge the Duo-Power IIB before each performance just in case your battery is running low and not fully-charging the capacitor.

Using The Onboard Rechargeable System Power Source – Unbalanced Output

If you wish to connect your Duo-Power IIB to an effects pedal, amplifier, mixing console, audio interface, multi-effects unit, wireless transmitter, or any other unit that has an unbalanced input you should use a standard TS (Tip-Sleeve) guitar lead.

Guitar leads are easily available in various lengths from both online and bricks-and-mortar musical instrument retailers.

To switch on the power to your Duo-Power IIB, plug one end of the TS lead into its output jack socket. This switches in the Rechargeable System Power Source. When your Duo-Power IIB is running under rechargeable system power with a TS lead connected, it will provide an unbalanced output signal.

You can then plug the other end of your TS lead into the instrument input of your effects pedal, amplifier, mixing console, audio interface, multi-effects unit, wireless transmitter,

If you wish to connect your Duo-Power IIB to a balanced XLR microphone level input using the TS lead, we recommend the use of a DI box, either passive or active.

Using The Onboard Rechargeable System Power Source – Balanced Output

If you wish to use the rechargeable system power source and to connect your Duo-Power IIB directly to the balanced XLR microphone input of a mixing console, audio interface, multi-effects unit, acoustic instrument amplifier or any other unit with a balanced microphone input. you should use a ¼" TRS (Tip-Ring-Sleeve) jack to male XLR connector cable.

Some mixers and audio interfaces use TRS jack sockets instead of XLR sockets as microphone inputs. If you wish to connect to one of those, you can use either a TRS to TRS lead or a TRS to male XLR lead (as above) with a female XLR to male TRS jack adapter.

Both these cables and the XLR-TRS jack adapter are easily available in various lengths from both online and “bricks-and-mortar” musical instrument and PA system retailers.

To switch on the power to your Duo-Power IIB, plug the TRS jack into its output jack socket. This switches in the Rechargeable System Power Source. When your Duo-Power IIB is running under rechargeable system power with a TRS to XLR lead connected, it will provide a balanced output signal. You can then plug the male XLR into the microphone input of your mixing console, audio interface, multi-effects unit, acoustic instrument amplifier

If you need to plug or unplug your Duo-Power IIB whilst it is connected to a mixing console etc., please ensure that that input has been muted before doing so.

SECTION 2

Using 48V Phantom Power

To use your Duo-Power IIB with 48V phantom power, you will need a ¼” TRS (Tip-Ring-Sleeve) jack to male XLR connector cable to link your Duo-Power IIB to a balanced XLR microphone input on your mixing console, audio interface, acoustic instrument amplifier etc. and ensure that phantom power supply to that input has been switched on

These cables are easily available in various lengths from both online and “bricks-and-mortar” musical instrument and PA system retailers.

To use 48V phantom power simply plug the TRS jack into the output socket of your D-PWR IIB, plug the male XLR connector directly into a microphone-level XLR input on your mixing console etc, and ensure that the phantom power supply to that input is switched on.

Your Duo-Power IIB will automatically sense the presence of 48V phantom power and its preamplifier will switch on immediately.

When running under 48V phantom power, your Duo-Power IIB produces an electronically balanced output signal, which ensures maximum sound fidelity.

When plugging in your Duo-Power IIB whilst it is connected to a mixing console etc. input with active phantom power, please ensure that that input (or the whole console) is muted.

NB - 48V Phantom Power Cannot Recharge The Onboard Rechargeable System Power Source.

If you have any questions or come across any issues in using your Pure Acoustic Duo-Power IIB Active Transducer System, please check out our website or contact us directly by either email or telephone. We will be only too pleased to assist you.

Pure Acoustic Limited

16 Beaudesert, Leighton Buzzard, Bedfordshire, UK LU7 1HZ

Email: info@pureacoustic.com Tel: +44 (0) 1525 217875 / +44 (0) 7831 112433

www.pureacoustic.com