

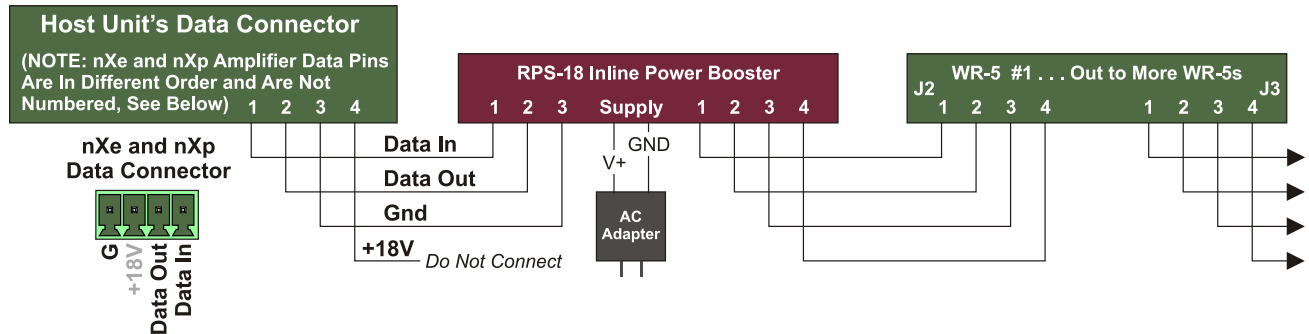


# RPS-18 WR-5 Inline Power Booster

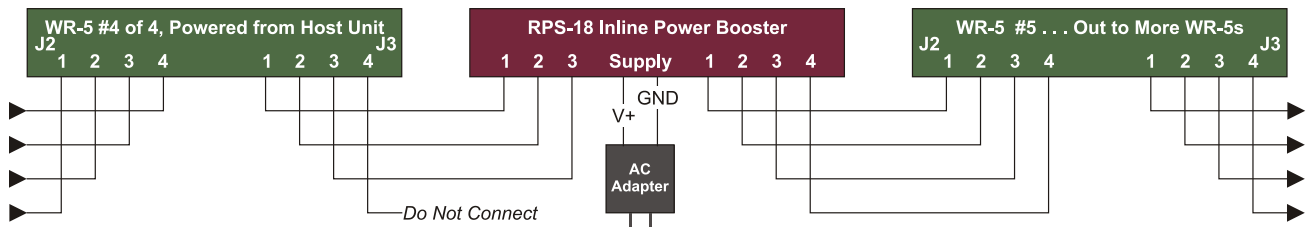
The Remote Data Port on Ashly products provides power for up to four WR-5 remotes. If connecting more than four remotes, an external DC power supply must be used. The power supply must provide at least 13VDC and no more than 35VDC, measured across WR-5 J2-INPUT jack terminals 3 & 4. In addition, each WR-5 requires 30mA of current. To determine the minimum current rating of the power supply in milliamps, multiply 30 times the number of WR-5 remotes to be used.



Ashly offers the RPS-18 Inline Power Booster for a 100-240V, 50-60Hz AC adapter providing 24VDC and 625mA maximum current. It uses euroblock terminals on both ends for easy insertion between the host unit's Remote Data Connection and WR-5 Input jack as shown below:



Alternatively, the RPS-18 can be inserted between the J3-LINK jack of any of the first four WR-5 remotes and the J2-INPUT jack of the next WR-5 in the chain. This latter application can be useful to overcome voltage losses, caused by long cable runs to multiple remotes.



As shown above, do not connect +18V from the host unit (or any WR-5 that is subsequently phantom powered by that host unit) to any WR-5 that is powered with an RPS-18. *The host unit's +18V and the RPS-18 +18V power supply must remain separate.*

**Cable Length:** Two things to consider when running cable to the WR-5 are data integrity and power supply voltage. Active buffers (line drivers) in the WR-5 maintain data integrity, and allow up to 1,000ft (304m) of cable length between devices. In other words, a maximum cable length up to 1,000ft may be used between the Remote Data Port and WR-5 remote, and another cable up to 1,000ft may be used from the WR-5 Link jack to an additional WR-5 remote, and so on. Each WR-5 essentially functions as a data repeater.

However, long cable runs act as resistors, which reduce the power supply voltage delivered to the WR-5. Each WR-5 requires a minimum of 13VDC measured across J2-INPUT jack terminals 3 and 4, so it is important to monitor power supply voltage drop across each successive cable run to those pins. Typical CAT5 (24AWG) wire has a resistance of 0.026 ohms per foot. Since there are two power conducting wires (V+ and GND) the resistance is doubled to 0.052 ohms per foot. Therefore, voltage drop across CAT5 wire can be computed as  $Voltage\_drop = current * 0.052 * cable\ length\ in\ feet$ , where current is 0.03 times the number of WR-5 remotes used. Make sure the voltage drop will not decrease the supply voltage below 13VDC, or the WR-5 at the end of the wire will not power up.

**TIP:** Use multiple conductors for V+ and GND, (WR-5 terminals 3 & 4). CAT5 wire has a total of eight 24AWG conductors. Use one pair for wiring up the two data terminals. Use three conductors in parallel for V+. Use the three remaining conductors for GND. This effectively reduces the power supply voltage drop by a factor of three.

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## Ashly Audio Inc. LIMITED WARRANTY (USA ONLY)

**(Other countries please contact your respective distributor or dealer.)**

**For units purchased in the USA,** warranty service for this unit shall be provided by ASHLY AUDIO, INC. in accordance with the following warranty statement.

ASHLY AUDIO, INC. warrants to the owner of this product that it will be free from defects in workmanship and materials for a period of FIVE years from the original-date-of-purchase. ASHLY AUDIO INC. will without charge, repair or replace at its discretion, any defective product or component parts upon prepaid delivery of the product to the ASHLY AUDIO, INC. factory service department, accompanied with a proof of original-date-of-purchase in the form of a valid sales receipt. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

**EXCLUSIONS:** This warranty does not apply in the event of misuse, neglect, or as a result of unauthorized alterations or repairs made to the product. This warranty is void if the serial number is altered, defaced, or removed. ASHLY AUDIO, INC. reserves the right to make changes in design, or make additions to, or improvements upon, this product without any obligation to install the same on products previously manufactured.

Any implied warranties, which may arise under the operation of state law, shall be effective only for FIVE years from the original-date-of-purchase of the product. ASHLY AUDIO, INC. shall be obligated to only correct defects in the product itself. ASHLY AUDIO, INC. is not liable for any damage or injury, which may result from, or be incidental to, or a consequence of, such defects. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion, or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

### **OBTAINING WARRANTY SERVICE:**

For warranty service in the United States, please follow this procedure:

1) Return the product to ASHLY AUDIO, INC. freight prepaid, with a written statement describing the defect and application that the product is used in. ASHLY AUDIO, INC. will examine the product and perform any necessary service, including replacement of defective parts, at no further cost to you.

2) Ship your product to:

ASHLY AUDIO, INC.  
Attention: Service Department  
847 Holt Road

Webster, NY 14580-9103

**Ashly Audio Inc 847 Holt Rd Webster NY 14580**  
**585-872-0010 toll free 800-828-6308 fax 585-872-0739 www.ashly.com**

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