



Intercom for Sound, Lighting and Production Professionals



Instructions

An econoCom package consists of a PS4 System Interface, an AD2410 AC/DC adapter, and up to 10 of our standard, full-featured BP1 belt packs. Packages are available with or without headsets. The PS4 takes the 24VDC current from the AD2410 and provides further hum elimination, voltage regulation, and short-circuit protection. It also supplies the necessary 200Ω termination circuit for the intercom path, and three parallel 3-pin XLR-type jacks for connection of head set stations (belt packs).

A standard econoCom system is single-circuit. For tips on how to create a 2-circuit econoCom system, see the next page.

All three XLRs are in parallel. Stations connected to any of the three will be in communication each other. It is also possible to daisy-chain the stations starting with any of the XLRs. Connections must be made using two-conductor shielded microphone cables fitted with 3-pin XLR-type plugs. The gauge of the cable should be a minimum of 20AWG, because smaller gauges can create undesirable capacitance.

Care should be taken to assure that the shield of the cable is connected to pin 1 of the XLRs only, and not to the ground lug in the plug and that all XLRs (male and female) are 'in phase', that is, all the Pin1s are connected to all the other Pin1s and the same for Pins 2 & 3. Failure to confirm this, and a resulting cross between pins is the most common cause of failure in all systems. The result can be internal failure in the belt packs attached to the system.

A front panel LED indicates that smoothed, regulated DC current is being delivered to the connected stations.

Capacity: The AD2410 delivers a maximum of 1AMP of current but because this type of device typically has very rudimentary rectification and hum reduction, drawing any thing close to its full capability will result in excessive hum and possible overheating. By limiting the output by half, to 500mA, within the PS4, these problems are eliminated and adequate headroom is available to the system. Older belt packs with incandescent signal lamps draw more current than those with LED signal lamps. The number of these belt packs which can be used with an econoCom system will be lower. Because loudspeaker type intercom stations may draw as much current as 3 or 4 belt packs, it is recommended that such stations be used very sparingly in an econoCom system. For larger systems we recommend a PS300 or PS301 series power supply. If over-loaded or short-circuited the PS4 will automatically shut down, and the front panel LED will go out. When the over-load or short circuit is removed, the LED will relight, indicating that supply voltage has been restored.

The AD2410 AC adapter provided with your econoCom system has universal input and will work on virtually every electrical system in the world. Contact Pro Intercom for cord sets to be used in various countries. Use of AC/DC adapters other than the AD2410 may result in excessive heat generation, damage to the PS4 and/or noise in the system. Properly polarized, sufficiently smoothed AC/DC adapters putting out not more than 1.0AMP at 24VDC may be substituted, but only in addition to the PS4. Operating an econoCom system directly from an AC adapter or from a generic DC power supply will not work. The system's UL®; CSA®; TUV® and CE® approvals refer only to the AD2410.

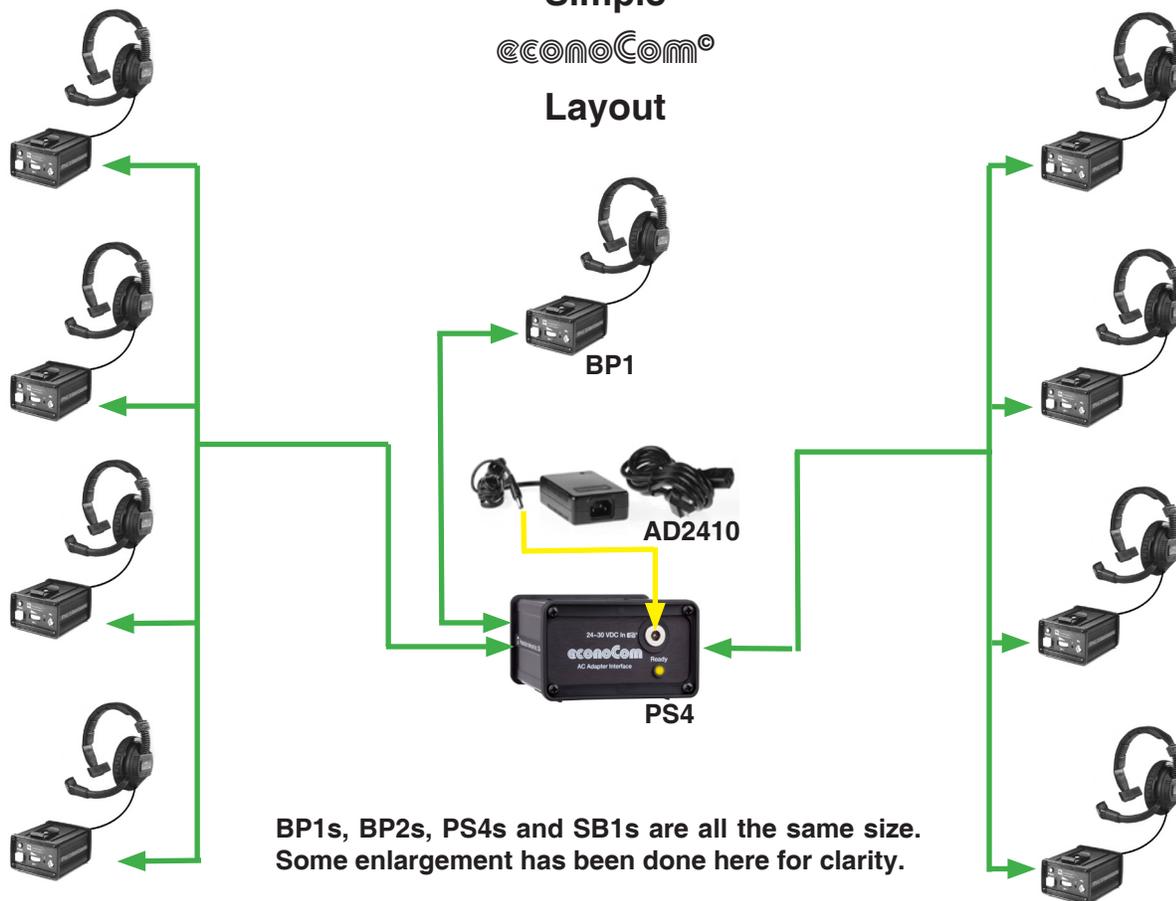
Compatibility: econoCom is plug-in compatible with Clear-Com® and other 200Ω unbalanced, party-line intercom belt packs.

Pro Intercom LLC

PO Box 7035 Algonquin Illinois 60102-7035

Phone: +1 (815) 680-5205 Orders and Tech support: (888) 320-5928 Fax: +1 (815) 526-8689
support@prointercomllc.com Skype: intercom4pros

Simple econoCom® Layout



Creating a 2-Circuit econoCom® System

