

Technical service bulletin 24

November 15, 2006

Subject

Using shielded twisted pair (STP) cable to connect Phason networkable devices



Affected products

Any Phason products that are networked

Issue

The advantage of using shielded twisted pair (STP) cable is that it can improve communications by reducing electromagnetic interference.

The drawback of STP cable is that it requires more care during installation. If the shielding is connected incorrectly, shielded cable can cause more problems than it solves.

Resolution

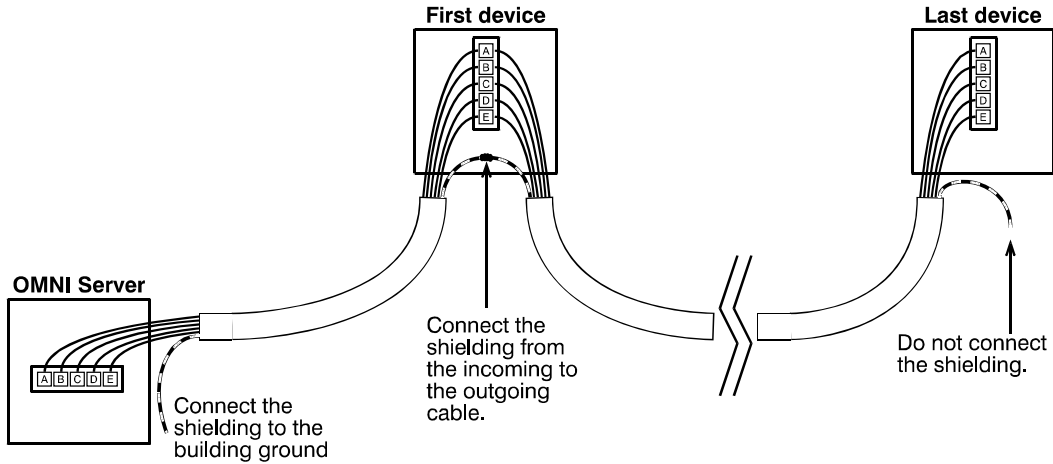
When installing shielded cable, you must connect the shielding to the building ground at one end only. Phason recommends connecting the cable to the building ground near the computer or OMNI Server.

When connecting the devices along the communication channel (daisy-chain), connect the shielding of the incoming cable to the shielding of the outgoing cable. Do not connect the shielding to the device or to anything else. At the last device on the daisy chain, do not connect the shielding; leave it unconnected.

The diagrams on the next page show how to connect shielded cable.

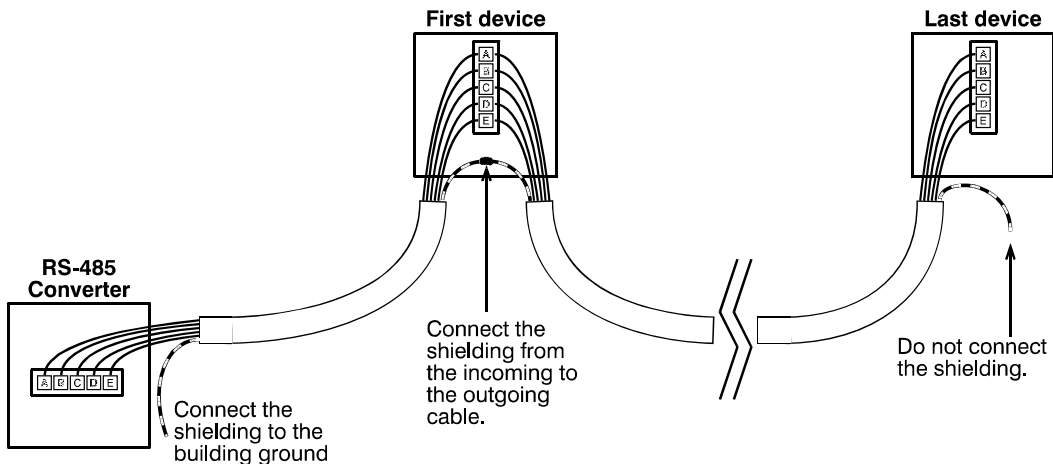
Shielding, communication, and common reference connections for OMNI-4000 systems

OMNI-4000 systems can have up to eight communication channels. When using shielded cable in an OMNI-4000 system, connect the cabling for each channel as shown below.



Shielding, communication, and common reference connections for all other Phason systems

All other Phason systems (for example, SupraWare, Pro-Sort) have a single communication channel. Connect the cabling as shown below.



For more information, see the installation guide for each device. If you have any questions, contact Phason Customer Support.