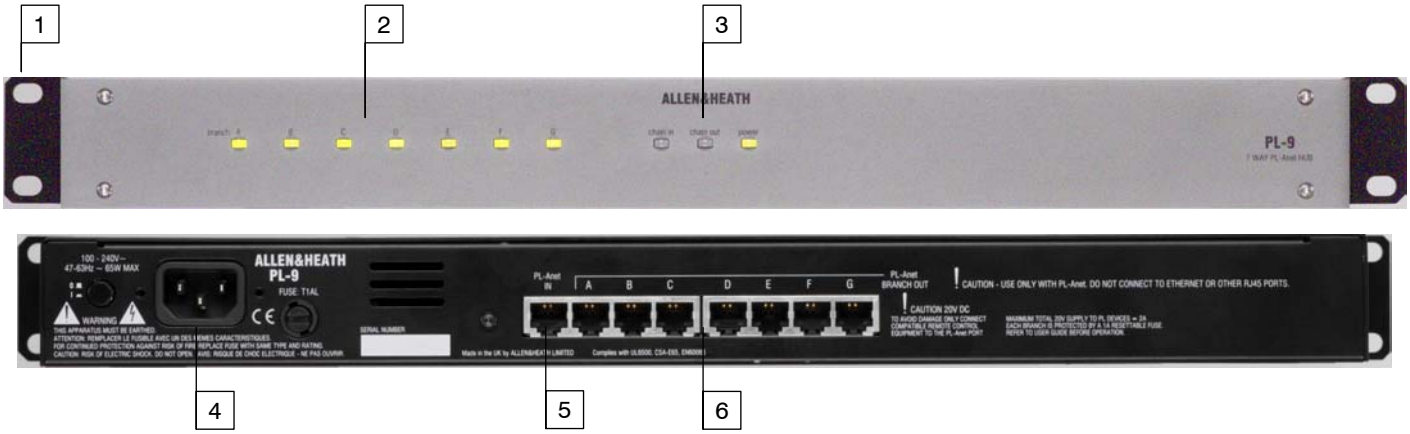
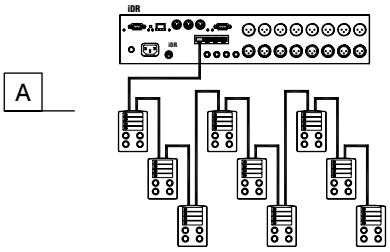
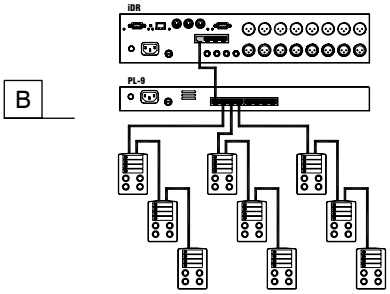
PL-9 Hub for PL-Anet

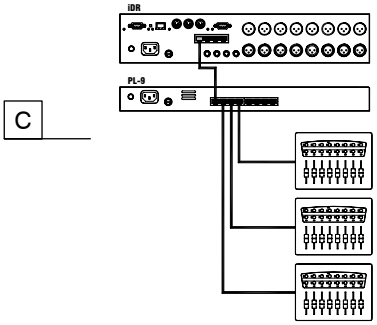
AP5271

User Guide









PL-Anet is the proprietary Allen & Heath system for daisy chaining remote controllers. It is an RS485 serial connection that uses CAT5 STP cable to communicate between devices over long distances. PL-Anet only works with Allen & Heath **PL** devices. The port provides +20V DC to power the connected devices.

Introduction The **PL-9** is a 7 way PL-Anet hub which extends the capabilities of the Allen & Heath **PL Series** of wall plates and remote controllers. It can address up to 15 **PL** devices per branch up to a system maximum of 24 depending on the type of devices and distances involved. It has a built-in mains power supply to boost the PL-Anet 20V fed down each cable to power the devices. This means that larger systems can be created and connected over longer distances. It can also simplify and reduce the wiring required by allowing a 'star point' connection scheme. In smaller systems the **PL-9** can allow individual devices to be connected independently to the **iDR** audio processor using single cables rather than being chained together.

A This example shows several **PL** devices daisy chained in the normal way through the installation. A maximum of 15 devices may be connected on the single PL-Anet feed dependent on their type and distances involved.

B This example shows the addition of the **PL-9** hub which simplifies the cable routing by providing direct feeds to three chains. It also provides more power and addressing allowing more than 15 devices to be connected. Further **PL** devices may be added using the other branches.

C This example shows **PL** fader controllers each with their own connection. Each may be plugged and unplugged without affecting the other. Up to 7 devices could be independently connected in this way.

Panel Layouts

1 Removable rack ears for 19" rack or desk top operation.

2 Individual branch status indicators light to indicate that 20V power is available over PL-Anet. Each branch is protected against installation faults with a resettable fuse. The indicator turns off if the fuse has tripped. Remove the fault and power down for 1 minute to reset the fuse.

3 Power and Communication status indicators. POWER lights when the unit is turned on. CHAIN IN lights when the **iDR** or previous **PL** device is ready to communicate. CHAIN OUT lights when the **PL-9** is ready to communicate with its connected **PL** devices.

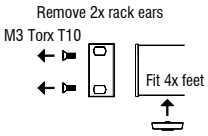
4 Mains power input with ON/OFF switch, IEC connector and fuse. Heed the warnings printed in this guide and on the rear panel.

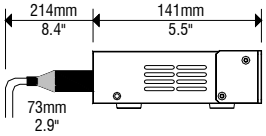
5 PL-Anet input RJ45 socket. Connects to the end of the PL-Anet chain from the **iDR** unit.

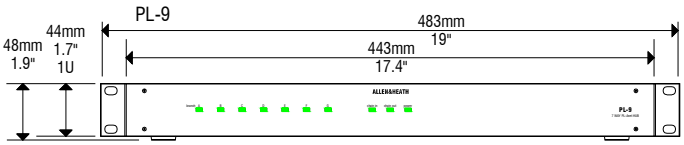
6 7x PL-Anet output branch RJ45 sockets A to G.

Planning the system

Decide the type and quantity of **PL** devices required and the wiring distances involved. Use the **PL Calculator** spreadsheet available from the Allen & Heath web site (www.allen-heath.com) to check that your configuration is possible. Plan the use of the **PL-9** branches for the shortest and most efficient cable runs.

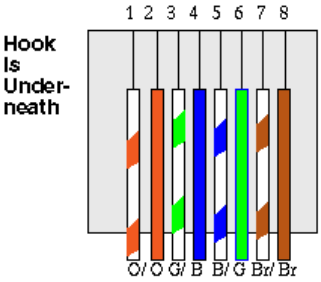






Installing the PL-9

The **PL-9** can be used free standing or mounted in a 1U 19" rack space. For free standing operation remove the two rack ears using a T10 Torx head screwdriver and insert the four plastic feet supplied by pressing them into the underside. Allow a minimum of 73mm clearance behind the unit for the connectors and cables. Ensure adequate ventilation to the side of and behind the unit.



Wiring the system

Use flame retardant CAT5 STP (shielded twisted pair) cable fitted with RJ45 connectors. A standard 2 metre cable is provided with the **PL-9** for connection to the **iDR**. Do not use UTP cable. We recommend the multi-stranded rather than solid conductor type. The connection follows the EIA/TIA 568B wiring colour scheme. Ensure all ports and cables in the system are wired to this scheme. The last **PL** device in each branch should have its terminator fitted. Unused branches do not require termination. Before connecting, read the information provided with the **PL** devices used.

IMPORTANT:

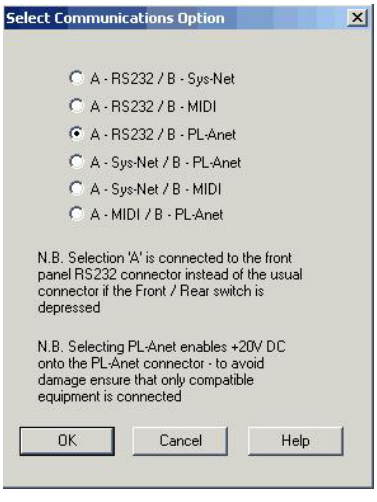
Check that your local mains supply is compatible with that printed on the rear panel of the unit.

Observe the local standards which may apply to the installation regarding the grade of cable and installation methods. Do not install the equipment where it is subject to moisture, heat or vibration.

To ensure operator safety ensure that any exposed metal plates, chassis and surfaces are correctly bonded to ground. The PL-9 chassis is grounded through its mains lead. Do not remove this connection to ground.

Connect the PL-9 to the Allen & Heath PL-Anet port only. Do not connect it to Ethernet, DR-Link or other RJ45 ports.

Before powering up the system make sure all the wiring is inspected and continuity tested. This is important as wiring errors may result in damage to the equipment.



Working with the iDR

With the system connected, power up the **iDR** audio processor. Check that iDR System Manager software version V3.30 or later is running on both the **iDR** and the PC. Check that the PL-Anet port is active. If not, use the File/Preferences/Communications Options menu to select the PL-Anet port.

Switch on the **PL-9** by pressing its rear panel ON/OFF switch. Check that the POWER, CHAIN IN and CHAIN OUT indicators light up green indicating that communication is established with the **iDR**. Check that the branch indicators A to G are on indicating that power is available to the PL-Anet cables. If any of these are turned off then unplug and test the cables for faults. Power down for 1 minute to reset the branch fuses.

The iDR System Manager recognises the **PL-9** hub and the connected **PL** devices, giving each a unique address and identification. Each **PL** device can be named with up to 16 characters. Configure the function of the **PL** devices using the iDR System Manager software. For further information refer to the Help file provided within the software.

CE This product complies with the European Electromagnetic Compatibility directives 89/336/EEC & 92/31/EEC.

NOTE: Any changes or modifications to the equipment not approved by Allen & Heath could void the compliance of the equipment. Whilst we believe the information in this guide to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.