Datasheet

SIPS 2 Controller Rack

Description
The Type 7881 Controller is a 4U high, 19" rack-mounting frame, with six slots to accommodate up to six SIPS 2 Controller boards. All boards are plug-in for easy field replacement and any mix of XSRS and HGPS Controller boards can be used.

The plug-in power supply module runs off any 110-240VAC, 50-60Hz supply. The module supplies the backplane with +15, -15 and +5Volts.

The rear panel carries the power connector, BNCs for M/S Sync and Shot-point as well as a 9-pin ‘D’ female for RTS host comms (not used) and a 15-pin ‘D’ female for TEST (factory use).

A rocker switch on the front panel may be set to SIPS or BIRDS. A pair of LED’s indicates the mode of operation as follows:

The green LED is lit when the compass controller is connected to the streamers through the rack; the SIPS communication circuits are isolated. The red LED indicates the Compass controller has been disconnected and SIPS has the lines.

Rear panel controls and connections
The System Controller Rack rear panel is illustrated overleaf. This has a POWER connection for the mains lead and the PSU auto-senses applied mains voltage.

The XSRS streamer inductive communication wire-pairs are plugged into the XSRS Controller IN connectors. If the SIPS system were to control sharing of the lines a compass/Bird controller would be connected to the OUT connectors.

The HGPS transceivers are connected to the HGPS Controller outlets. Since transceiver replies are tagged with the transceiver address, it does not matter which transceiver is connected to which outlet. Power and commands are sent to all outlets in parallel.

The M/S sync (Master/Slave sync) is a BNC socket. It is used to cross-link to another chassis so that synchronisation can be achieved between transceivers controlled through different controller chassis. SHOTPOINT is also a BNC socket. Shot-points are commonly used to synchronise the operation of SIPS with the rest of the instrumentation on board. A shot-point is also referred to as a closure.

The RS232 or RS485 serial ports on the Controllers can be connected to an appropriate serial connector on the host computer.

Key Features
• 19’ Rack Mountable
• Only 4U high
• 110-240V AC
• RS232 & RS485 ports available