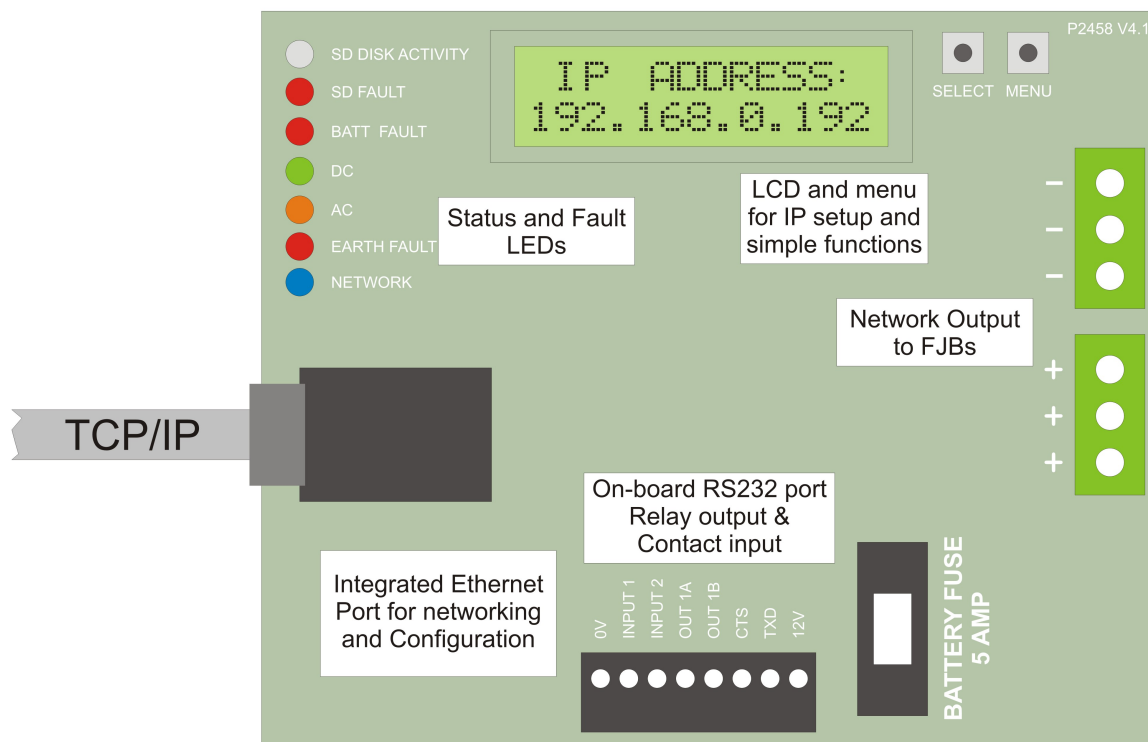
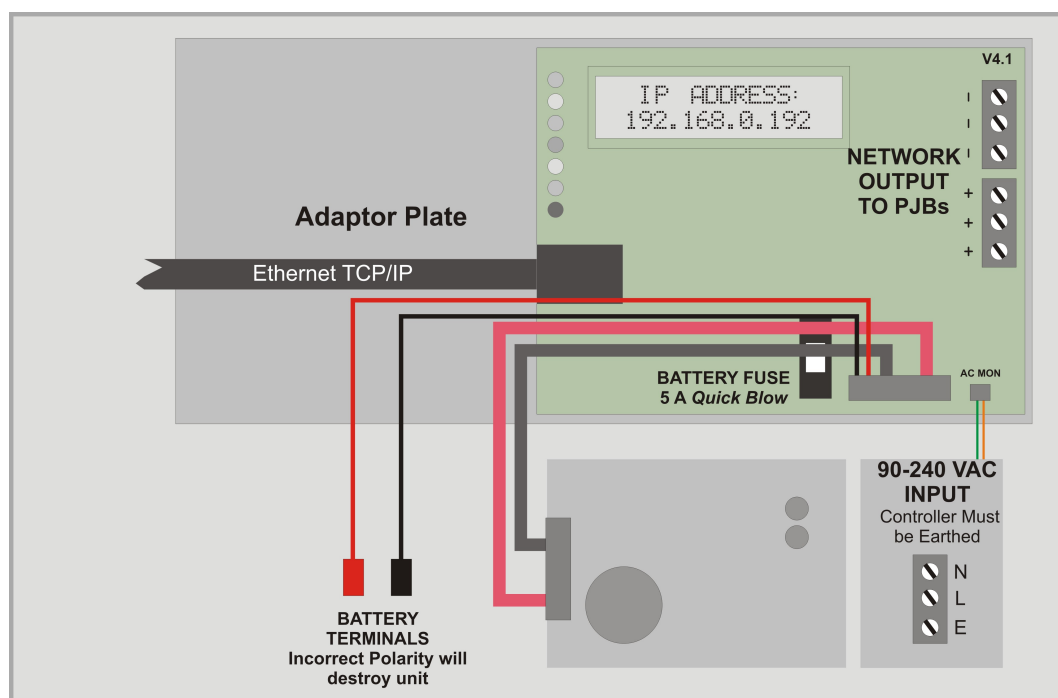


L7700 IP Power Supply Controller.

The L7700 has the capacity to power an entire Intercall system with provision in the enclosure to accommodate a 12Volt 12AH battery for system backup requirements. The unit features an integrated **embedded web server** used to configure the system configuration, datalog access and remote monitoring. The Ethernet port may be used to connect IP controllers together, provide an interface to other Intercall IP devices and for connection to third party products such as IP/DECT phones & message paging etc. In addition, the unit features; onboard calendar clock and disk drive which records all system activity and configuration settings. Day/Night alarm settings may be automatically switched by the on-board clock or by manual switch. The unit features programmable volt free contact inputs and a volt free contact output together with an RS232 output which can be configured for many baud rate and data formats. The integral float charger supports a single 12Volt 12AH battery and the AC, DC, Battery and Earth continuity are monitored continuously. **IMPORTANT The L7700 is Not compatible with the L737 Booster Power Supply.**



Above showing the printed circuit board detail and below showing the board in the case.



L7700 IP Power Supply Controller LCD Screen.

The on-board LCD screen, together with the Menu and OK buttons provides access to essential Local Area Network and Power Supply status, together with control over the basic settings of the IP controller. In quiescent condition, the LCD Displays INTERCALL IP and the date and time, to scroll through the menu screens, press the Menu button to activate one of the settings press the Select/OK button.

<u>Menu</u>	<u>Settings</u>	<u>Description</u>
INTERCALL IP16 17/3 10:32:12		In quiescent condition, the LCD Displays INTERCALL IP and the date and time. Press the Menu button to move onto the next setting.
IP ADDRESS: 192.168.0.192		Displays the current IP address for the IP Controller. <i>(The factory default fixed IP Address is 192.168.0.192 and DHCP is disabled)</i>
SERIAL NUMBER: IC001A7A0000123		Displays the unique Serial Number / MAC Address
FREE DISK SPACE: 100%		Displays the percentage of available Space on the Data Log,
DC RAIL: 13.8V		Displays the voltage of incoming DC Supply Rail to the IP16 Printed Circuit Board
BATTERY CHARGE: DETECTED		Displays the status of the sealed lead acid battery charger. A non-charging or not connected battery will show as NOT DETECTED and a fault will be raised.
UNIT TEMPERATURE: 25.6 Deg		Displays the ambient temperature of the IP16 controller circuit board.
FIRMWARE VERSION: 1.0.0.2		Displays the current installed software version of the IP16 controller.
DEVICE RESET: "OK" TO CONFIRM		Press OK button to reset all network devices connected to this controller.
FULL RESET: "OK" TO CONFIRM		Press OK button to reset IP16 controller and all network devices connected to this controller.

L7700 Revert to Factory Defaults.

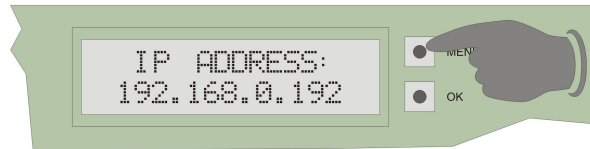
The IP16 can be reverted to factory defaults switching the unit on while holding down the **Menu** button, the following screens will appear on the LCD screen. If a new disk is inserted, the IP16 will automatically go through this process, in which case you must press OK to the first two screens but you may retain the current LAN settings.

<u>Menu</u>	<u>Settings</u>	<u>Description</u>
DISK FORMAT OK = Continue		Press OK to format the SD card and clear <i>all</i> user defined data. This screen will automatically appear if a new SD card is fitted.
CLEAR DATALOG OK=continue MENU=skip		Clears all entries from the datalog, press MENU button to Skip or OK button to continue. If this is a new SD card you must press OK to continue.
LAN DEFAULTS OK=continue MENU=skip		The LAN settings are held within the IP16 circuit board and not in the SD card, so if the card is changed, the network settings can be retained. Press OK to load default settings.

L7700 IP Power Supply Controller Connections.

You can make a simply one-to-one connection with your laptop computer using a Ethernet cross-over cable. This will allow access to the on-board web pages for system configuration. No special software is required; access is via a standard web browser such as Internet Explorer or Firefox. To make a one-to-one connection with your laptop, you may need to alter the IP settings on your laptop and set a manual IP Address. More information is contained within the L7700 manual and there is much information on the internet on how to set a manual IP address on your laptop.

To show the controllers IP Address
Press the Menu button ONCE



MAIN SUPPLY INPUT:	90 – 264VAC 47-440HZ TYPICAL LOAD 0.72A/230VAC 1.2A/115VAC <i>Remove protective cover to gain access to these terminals.</i>
OUTPUT:	13.8VDC 5.1A Including Battery Charger
REQUIRED BATTERY:	12Volt 12Amp Hour Sealed Lead Acid. OBSERVE POLARITY!
BATTERY CHARGER:	Float charger designed to <i>maintain</i> a 12Volt 12Amp battery, <i>see previous page.</i>
OUTPUT TERMINALS:	Three terminals provided, connect to network spines (min 1.5mm ² cable)
ETHERNET:	IEEE 802.3 Compatible 10Base-T interface using copper RJ45 connector.
LCD:	Two line LCD with menu for essential status & configuration.
MENU & SELECT/OK:	Buttons for navigating the LCD Menus.
INPUT TERMINALS:	
INPUT 1:	Programmable Input No 1 active when connected to 0V.
INPUT 2:	Programmable Input No 2 active when connected to 0V.
RELAY OUTPUT TERMINALS:	
OUT 1A & 1B:	Programmable Volt Free Normally Open Output Max 24V DC 500mA
SERIAL RS232 OUTPUT TERMINALS:	
TXD:	RS232 Output Data which can be many baud rates & data streams.
CTS:	RS232 Flow Control Input which can be disabled and/or inverted.
STATUS LEDs:	
NET:	Blue pulsing indicating the Intercall network processor is running.
EARTH*	Indicates too low resistance between the network & protective earth.
AC:	Yellow to indicate Mains Supply detected.
DC:	Green to indicate DC supply is operating within limits.
BATT*	Battery backup fault, battery is not charging.
SD*	Fault reported by on-board disk.
DISK:	Indicates activity read/write to the on-board SD Disk.
<i>(*Red LEDs indicate Fault Conditions)</i>	
Onboard Fuse:	5Amp 20mm Quick Blow protection for Battery, Charger is current limited.
Installation:	Self Contained Surface Mounted Case. <i>(See Below)</i>
Size & Weights:	370mm x 260mm x 110 mm 4.5Kg

L7700 IP Power Supply Contact Inputs.

The L7700 features two on-board independent closing contact inputs which may be configured for the following operations:

Input Mode:

Input 1

- Disabled
- Disabled
- Apply Event
- Reset Unit
- Reset Slots
- Reset OP 1
- Reset NET

APPLY EVENT – Create a call on the system, Call type, address and user may be specified using the fields on screen.

RESET UNIT - Perform a hard reset to the L7700.

RESET SLOTS - Reset all incoming events on a bridged or distributed system

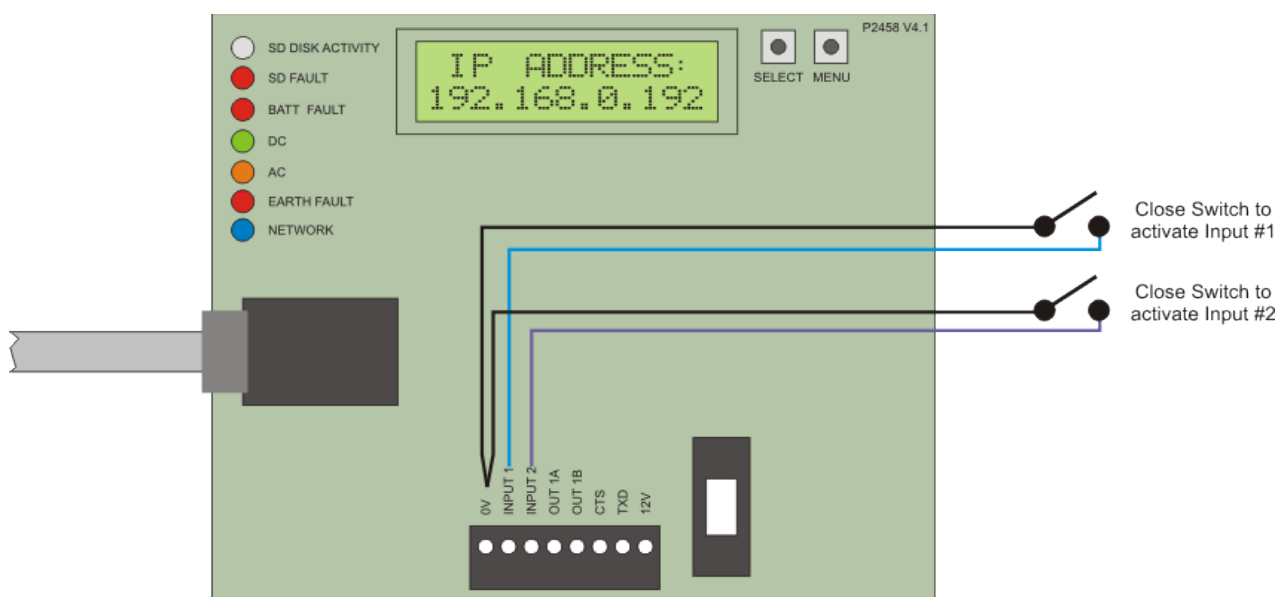
RESET OP1 For example an output can be used to activate a strobe or sounder, the input can be configured to reset that output to act as a mute or reset button/key.

RESET NET. Reset all devices (Call Points, Displays etc) on the L7700 Output Network.

The screenshot shows the 'Setup' page for 'Intercall-IP [INTERCALLIP]'. The 'Inputs' section displays 'Current Input States: (Use your browser 'Refresh' button to update)' with [1]: OFF and [2]: OFF. Below this, there are configuration fields for Input 1 and Input 2. For Input 1, the 'Input Mode' is set to 'Disabled', the 'Event' is '128: Reset', the 'Addr' is '0', the 'User' is '0', and the 'Invert?' checkbox is unchecked. Input 2 has identical settings. A 'Save' button is at the bottom left. On the right, 'Other Settings' includes links for 'Inputs' and 'Output', and 'Additional Info' explains that there are two programmable contact inputs and describes the 'Apply Event' function.

CONNECTING THE INPUTS

The inputs are simply closing contacts taken to 0V, there is a 10K pull up resistor to 3.3V on each contact input. Do not apply voltage to these inputs, if connected to other systems they **must be isolated** using a relay or similar.



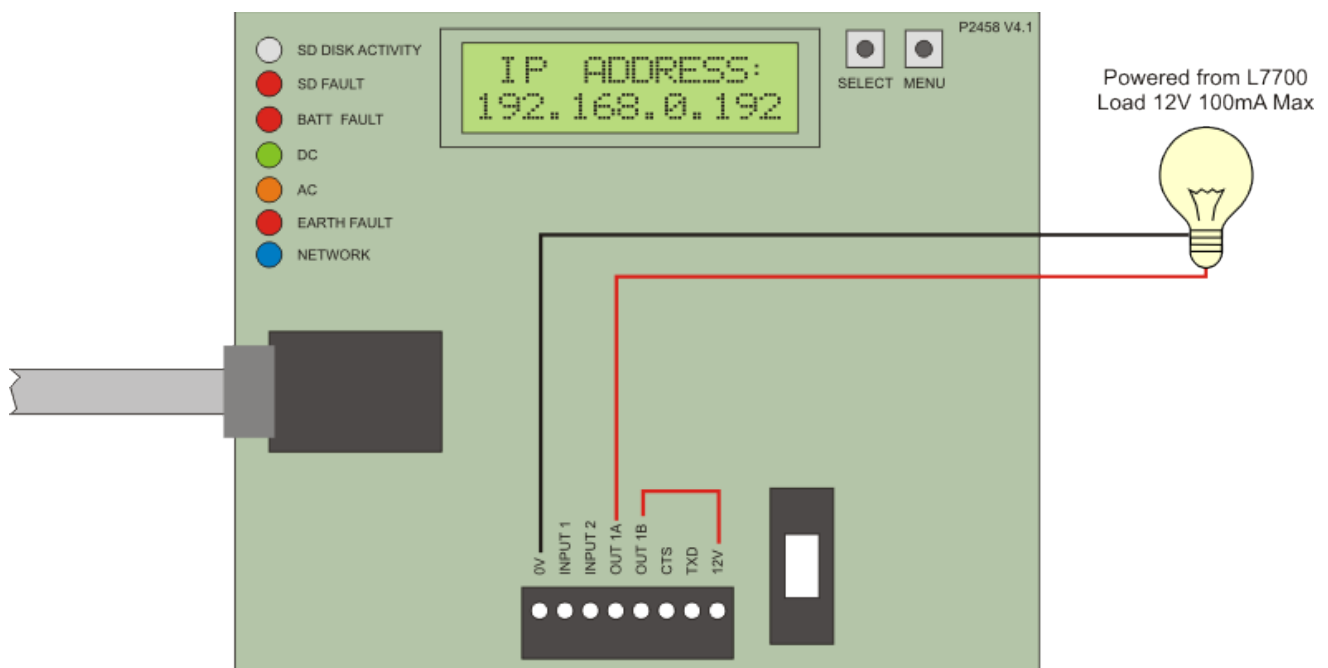
L7700 IP Power Supply Relay Output.

The L7700 features a single normally open volt free relay. This may be used in conjunction with the on-board 12V supply to power up to 100mA, Alternatively, an external power supply may be used to power an external device such as a strobe or sounder etc. As the on-board relay provides isolation, this may be directly connected to third party equipment up to 24V DC 500mA.



CONNECTING THE RELAY OUTPUT.

The L7700 features a single normally open volt free relay, this may be used in conjunction with the on-board 12V supply to operate a 12V up to 100mA load. Larger loads up to 500mA may be switched using an external supply or switched via a power relay.



L7700 IP Power Supply on-board RS232 Serial Port.

The IP16 Power Supply contains a dedicated RS232 Serial Port which is used to send messages to Scope Pagers and other serial devices. The global settings for the serial port are accessed from the Despatch screen and Serial Settings. Here the Baud Rate, Data Bits, Flow Control (CTS) etc are configured. You must tick Enable Serial Port before any data can be sent.

The screenshot shows the 'Intercall-IP [L7700 DEMO]' web interface. At the top, there are links for 'Home' and 'Logout'. Below the header, a navigation bar contains tabs for 'Status', 'Activity Monitor', 'Datalog', 'Search', and 'Setup'. The 'Setup' tab is active, and a breadcrumb trail shows the path: 'System' > 'LAN' > 'Time' > 'Device Settings' > 'Communications' > 'Despatch' > 'I/O' > 'Command'. The main content area is titled 'Serial Settings' and contains the following configuration options:

- Enable Serial Port: ☒
- Honour CTS: ☐
- Invert CTS: ☐
- BAUD: 1200 (dropdown menu)
- Data Bits/Parity: 8 Data Bits, No Parity (dropdown menu)
- 2 Stop Bits: ☐
- CTS Timeout (Secs): 0 (text input)

Below these settings is a 'Save' button. To the right, under 'Other Settings', there are links for 'Despatch Settings' and 'Serial Settings'. Under 'Tools', there is a link for 'Test Message'. At the bottom right, there is an 'Additional Info' section.

Connecting the Scope Transmitter to the L7700 RS232 Port.

The Pager transmitter is connected directly to the L7700 PCB using the on-board RS232 port. The diagram below shows the connections required. Note the CTS line is optional and may not be required – refer to Scope/Paging equipment manual for more information.

