Integriti/Concept
Small Low Profile Powered Enclosure.
P/N: 995200PEI
INSTALLATION MANUAL

Overview

The Small Low Profile Powered Enclosure can be used wherever Battery-backed 12V supplies are required to power Integriti or Concept Modules and associated devices such as Detectors, Readers and Auxiliary Devices such as Strobes, Sounders, Locks, etc. The Box is designed to house the Transformer, Power Supply PCB, 7AH Battery and a single Module. e.g. 1 Door/2 Door Access Module, 8 Zone Expander, Analogue Module or LAN Isolator. The Power Supply features a high reliability design that offers unconditional stability, and has been designed and tested for compatibility with Proximity readers.
When used with an Integriti LAN Module, Concept 2 Door Access Module or Concept Mini Expander, a single 10-way cable may be used to connect the Power Supply to the Module. Cables are supplied in the installation kit for this purpose. Replacement cables can be purchased separately if required. See the Parts List for Part numbers.
When the 10-way Ribbon Cable is used with the Concept Mini Expander, Zones 7 and 8 are connected to the AC Fail and Low Battery alarm outputs of the Power Supply and cannot be used as general purpose Zone Inputs.

2A Standard Power Supply Electrical Specifications

Input:	16 - 18V AC @ 3A. (From Transformer provided)		
Output Voltage:	13.75V DC +/-5%, up to 2A. (Battery fully charged)		
Maximum Output Current:	2 Amps. Option for 1A Current limit. *See page 4 for details.*		
Recommended Load:	1.3A maximum depending on Battery charging current required. (LK1 set to 2A option)		
"Low Battery" trigger voltage:	11V DC.	Output Ripple:	100mV RMS max. @ Iout = 2A.
Battery capacity:	12V 7AH Sealed Lead Acid.	Load Regulation:	+/- 100mV @ Iout = 0.1A to 2.0A.

Mechanical Specifications

Dimensions:	Length: 252 mm. (Allow 20mm at bottom of case for Mains cable entry)	
	Width: 358 mm.	Depth: 83 mm.
Weight:	7.2 kg. (Includes mains transformer, battery and cover)	
Power Supply PCB dimensions:	95mm X 80mm X 50mm high.	
Operating Environment:	0º to 50º Celsius (Ambient)	15% to 85% Relative humidity (non-condensing)

Fire Protection

This product must be installed onto a non-flammable surface and away from all flammable materials.
Any Conduit entry points that have had the knockout removed but are not used, must also be resealed using Conduit Plugs.

Powered Equipment Box Parts List

- 2A Power Supply PCB assembly, Mains Transformer with associated hardware and wiring mounted in Metal enclosure.
- PCB Mounting plate.
- 2 x Installation Manuals. (This document and the Power Supply installation manual)
- Installation Kit containing:
  - 1 x 2 Way Plug on Screw Terminal.
  - 1 x 8 Way Plug on Screw Terminal.
  - Tamper Switch and Metal bracket.
  - 2 x 6.3mm Tamper switch connectors.
  - Battery connection cable. (P/No: 605051)
  - 1 x Integriti 10-way PSU cable -430mm. (P/No: 996792) *
  - 1 x Concept 10-way Ribbon cable -20cm. (P/No: 605050) *
  - 1 x 1.0 Amp Slow Blow Mains fuse. (Spare)
  - 15 x PCB Mounting Clips. *
  - 15 x M3 screws. *

NOTES: 1) * These items not included in installation kit if this product is supplied with a Module already fitted.
2) If the enclosure and Battery are to be installed in any way other than that shown in Diagram 3 on Page 3, the optional Battery retaining bracket (P/No: 926005) is required.

Installing the Small Low Profile Powered Enclosure.

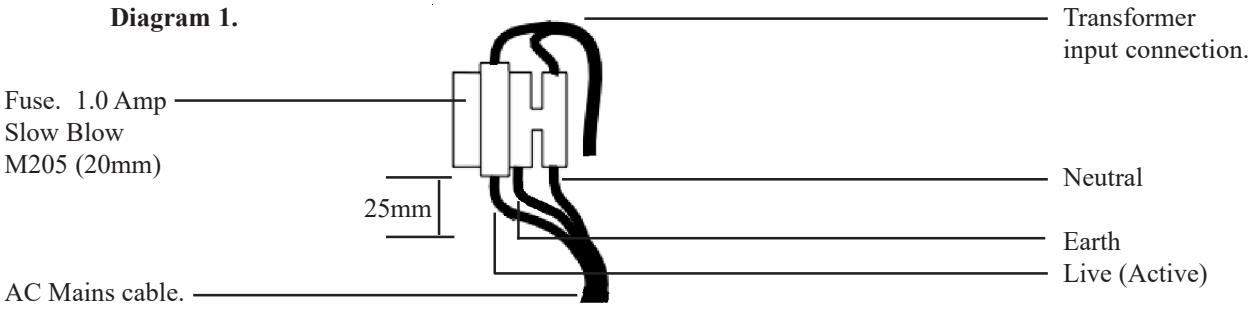
Electrical AC Mains Power connection.

In countries where the module is supplied without a mains power cord, a suitable mains power cord for connection to the 240V AC Mains supply must be installed by a suitably qualified electrician or technician.

1. Strip 30mm of the sheath from the end of the power cord. Trim 5mm from the ends of the Active and Neutral conductors so that the Earth conductor remains slightly longer.
2. Strip 5mm of insulation from each of the conductors and feed at least 100mm of the power cord through the AC mains cable entry hole in the bottom of the chassis.
3. Terminate the power cord in the terminal and fuse block as illustrated in Diagram 1 below. Note that the Active wire is always connected into the termination nearest to the fuse.
4. Determine the appropriate length of power cord between the terminal block and the cable entry hole. (Approx. 100mm) Working from the bottom of the chassis, fit the plastic grommet (supplied) around the power cord and apply pressure to both sides of the grommet to clamp the cable. The grommet can now be inserted into the AC mains cable entry hole.

IMPORTANT NOTE: An AC Mains socket-outlet shall be installed near the equipment and shall be easily accessible for connection of the mains power cord.

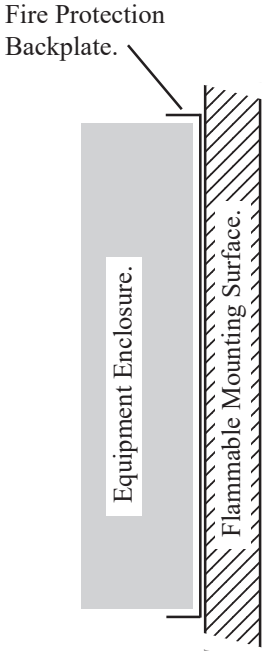
Diagram 1.



Mounting the Unit. See Diagram 3 on the following page.

1. Installation environment should be maintained at 0º to 40º Celsius and 15% to 85% Relative humidity (non-condensing)
2. The enclosure must be secured to a flat, vertical surface using fasteners through the four "keyhole" mounting holes in the chassis. We recommend mounting the enclosure with the Mains Cable entry and Transformer at the bottom as shown in Diagram 3.
3. When mounting this product onto flammable surfaces, a fire protection backplate MUST BE INSTALLED. *(See Diagram 2)* Any Conduit entry points that have had the knockout removed but will not be used, must also be resealed using 25mm Conduit Plugs.
4. Fit the tamper switch into the tamper switch bracket. Install this assembly by placing the tamper switch plunger in the hole provided in the base, and the tongue on the bracket through the slot provided in the lip in the top of the chassis.
5. The Battery is normally installed in the bottom of the enclosure. *(See Diagram 3)* An optional Battery retaining bracket (Part Number: 926005) can be used if the enclosure is not mounted as recommended in Step 2.
6. The metal chassis is electrically earthed and the Circuit Board Assembly is electrically isolated from the chassis. When mounting and wiring the Module, the Installer must ensure that this isolation is maintained.

Diagram 2.
Refer to "Mounting the Unit", Step 3.



Connecting Power to the PCB. See Diagram 3.

1. The connection between the AC mains transformer output (A) and the "AC" Input connections on the PCB (B) is pre-wired in the factory.

Connecting the Battery to the PCB. See Diagram 3.

1. Place the battery into position. If required, fit the optional Battery retaining bracket by inserting the tab at the Left Hand end of the bracket into the slot provided near the Mains Transformer. Insert the tab at the Right Hand end of the bracket into the other slot by gently pushing inwards and down on the side of the bracket.
2. Connect the supplied Battery Cable between the "+" and "-" connections of "T2" (BAT) on the Power Supply PCB (C) and the Battery terminals (D), observing correct polarity.

Fitting the Cover.

In order to comply with regulations, the cover must be fitted and the screw provided to fix the cover to the chassis must be tightly secured.

Power Supply connections.

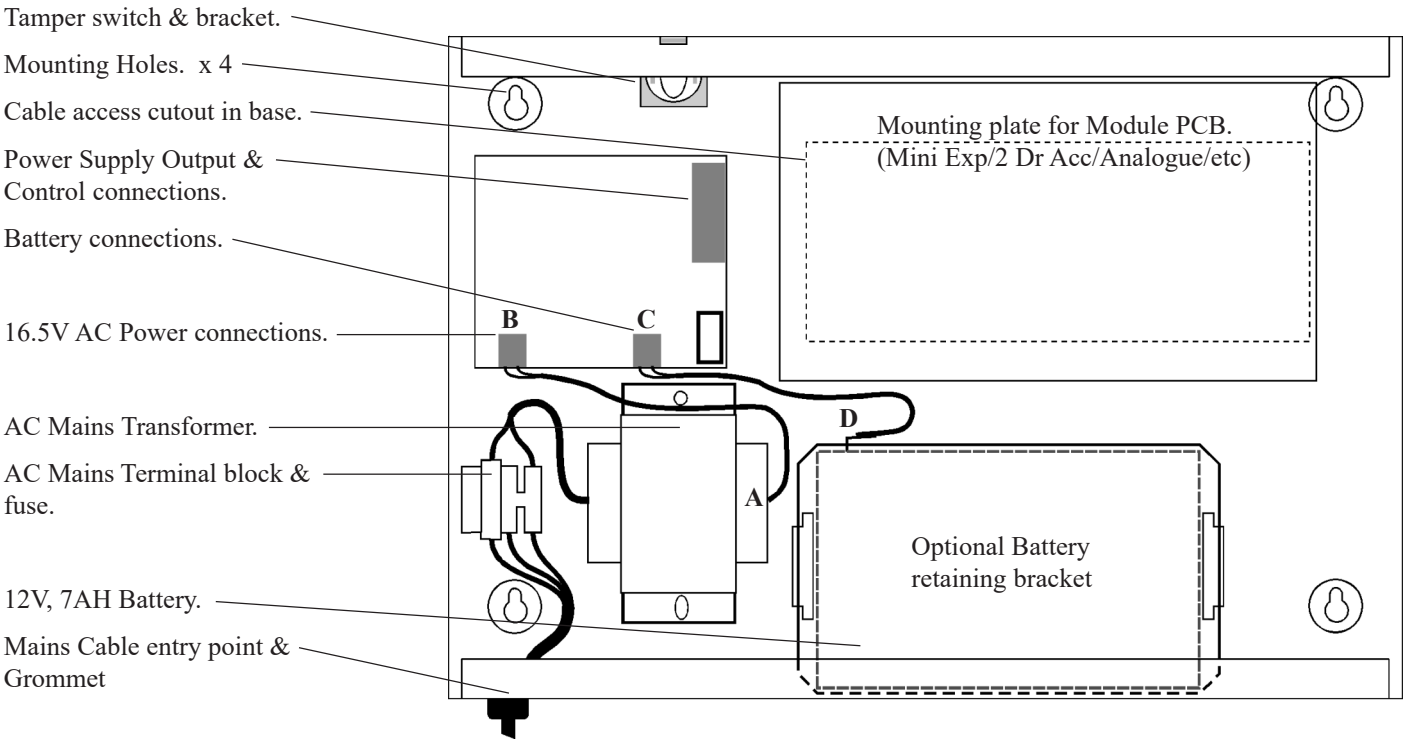
This product is currently supplied with the Integriti/Concept 2A Standard Power Supply.
This power supply is identified by its Red PCB, the addition of the Integriti Direct PSU Cable Connector and the PCB Revision of Revision L or later.

The basic Power Supply connections are shown in the drawing below and on the following page.

Full specifications and connection details are found in the Integriti/Concept 2A Standard Power Supply Installation Manual supplied with this product. Document Part No: 636090 Rev. 2.0 or later.

NOTE:
Earlier versions of this product manufactured prior to May 2015, were supplied with the Concept 2A Power Supply.
This power supply is identified by its Green PCB, and the PCB Revision will be Rev. A to Rev. J.
Connection details for this Power Supply are found in the Concept 2A Power Supply Installation Manual which can be downloaded from the Training & Support section of the Inner Range Website. Document Part No: 634050.

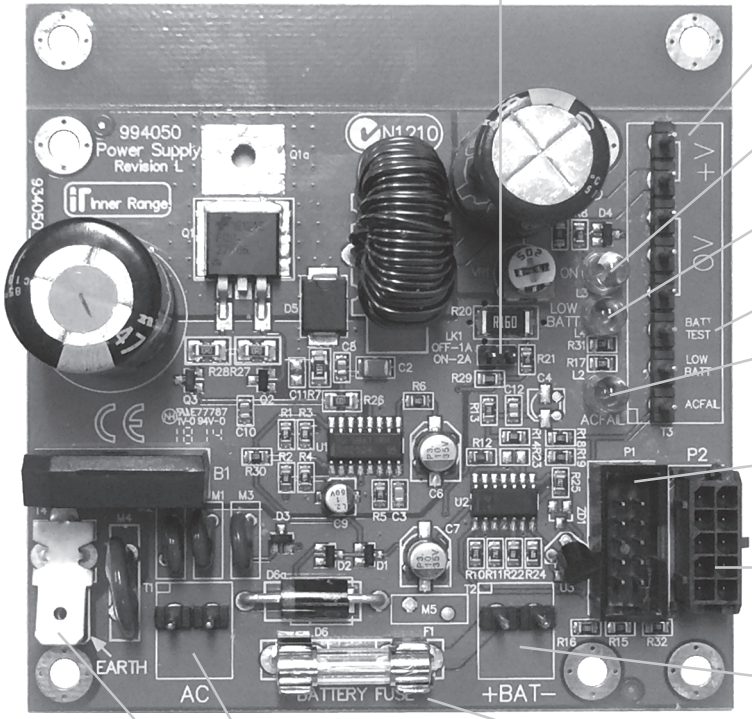
Diagram 3.



THE INTEGRITI/CONCEPT 2A STANDARD POWER SUPPLY PCB

See the "Integriti/Concept 2A Standard Power Supply Installation Manual" supplied with this product (Document Part No. 636090 Rev. 2.0 or later) for full connection details and specifications.
The manual can also be downloaded from the Training & Support section of the Inner Range Website.

LK1. Current Limit select.
Fitted: Current Limit = 2A.
Removed: Current Limit = 1A.



T3. Power Supply output

L3. ON LED.
On if power supply output is present.

L4. LOW BATT.
On when Battery Voltage Low.

T3. Alarm outputs and Control input.

L2. AC FAIL.
On when there is no AC Input and power is being supplied by the backup Battery.

P1. Direct ribbon cable Connection to compatible Concept Modules.

P2. Direct PSU cable Connection to compatible Integriti Modules.

T2. Battery +/-
12V. SLA Battery. 6.5 - 7.0 AH.

F1. Battery Protection Fuse.
5A Fast Blow.

T1. 16-18 VAC I/P.

T5. Earth connection.

NOTE:
Earlier versions of the Small Low Profile Powered Enclosure (P/N:996500PE) manufactured prior to May 2015, were supplied with the Concept 2A Power Supply.
Connection details for this Power Supply are found in the Concept 2A Power Supply Installation Manual which can be downloaded from the Training & Support section of the Inner Range Website. Document Part No: 634050.