

DC/DC-1

Modular Signal Conditioning System

Order No. 745-10x
Users Manual

Publication No. 745-10x-UM-0101
Issue 1

Unpacking and Special Handling Instructions

This PepCard product is carefully designed for a long and fault-free life; however, its life expectancy can be drastically diminished or even reduced to none by improper treatment during unpacking or at the first-use stage.

Please observe standard anti-static precautions when changing piggybacks, ROM devices and jumper settings, etc.

Therefore we ask you to read this manual carefully before unpacking or fitting the module into your VMEbus or IUC/VIUC system.

If the product contains primary or secondary batteries for RTC or memory back-up purposes, extra care is required not to place the board on conductive surfaces. These include anti-static plastics or sponges, which can cause shorts and damage to the batteries or tracks on the board.

Furthermore, please do not exceed the operational temperature ranges given in the specifications for the board version ordered. Where batteries are present, their temperature restrictions must be taken into account.

When fitting the board into a system, remove all power by switching off the power mains. Do not disconnect the mains however, since ground connection prevents chassis floating with static voltages, which could damage the board as you push it home.

Keep all of the original packaging material for future storage or warranty shipments of the board. If storage or shipment of the board is necessary, please re-pack the board as it was originally packed.

We wish you, your application, and your PepCard a long and successful life. We are certain that if you take the time to read through this manual beforehand you will, in all likelihood, save yourself time and aggravation later on.

Revision History				
Manual/Product Title		VMCI Users Manual		
Publication Number		745-10x-UM-0101		
Issue	Brief Description of Changes	PCB Index		Date of issue
1	Issue	01	01	April. '92
1	Order numbers changed	01	01	August 1993

Issue No. = Manual Issue Number (Capital letters = Drafts) (P) = Preliminary versions.
 Lower case letters suffixed to the issue number on the title page indicates a minor correction status.

PCB Index No. = Printed Circuit Board/Schematics Revision Number
 "/n" numbers suffixed to the index number show modifications to a local instruction note (addition of wires).

Two columns provide a valid "from—to" range for the PCB index covered by each issue. These numbers combine to form the manual range group of numbers found at the end of the publication number.

Date of issue, gives the release date of any issue containing corrections or improvements, but does not necessarily reflect the date those improvements were first made.

A thick bar to the right of any text, signifies that the text has been corrected with regard to that in the previous issue of the manual. (see right for example) **|**

A double thin bar to the right is used to show where new text (paragraphs) have been added. (see example on the right) **||**

Drawings and boxed text such as notes, or jumper setting tables cannot be marked in the above described way, and so the above described marking system will be reserved for normal "body text" changes.

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A customer who has not excluded his eligibility for this warranty may, in the event of any claim, return the product at the earliest possible convenience, together with a copy of the original proof of purchase, a full description of the application it is used on, and a description of the defect; to the original place of purchase. Pack the product in such a way as to ensure safe transportation (we recommend the original packing materials), whereby PEP undertakes to repair or replace any part, assembly or sub-assembly at our discretion; or, to refund the original cost of purchase, if appropriate.

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1. INTRODUCING THE DC/DC-1

1.1 Product Overview

The DC/DC-1 is a 20W DC/DC converter with 24V input and a single 5V output voltage. The DC/DC converter is fully isolated and offers overvoltage and short circuit protection. The module was developed to supply PEP's IUC and IUC 9000 systems. The DC/DC-1 is produced in two versions:

- as a modular, plug-in 8TE (21mm) module or.
- as an open frame power supply to be fitted in the rear of system housings.

A typical system consists of a 42TE (211mm) 19" enclosure, an IUC Intelligent Universal Controller and a CXC8, capable of having up to 7 controller extension I/O modules (CXM) fitted.

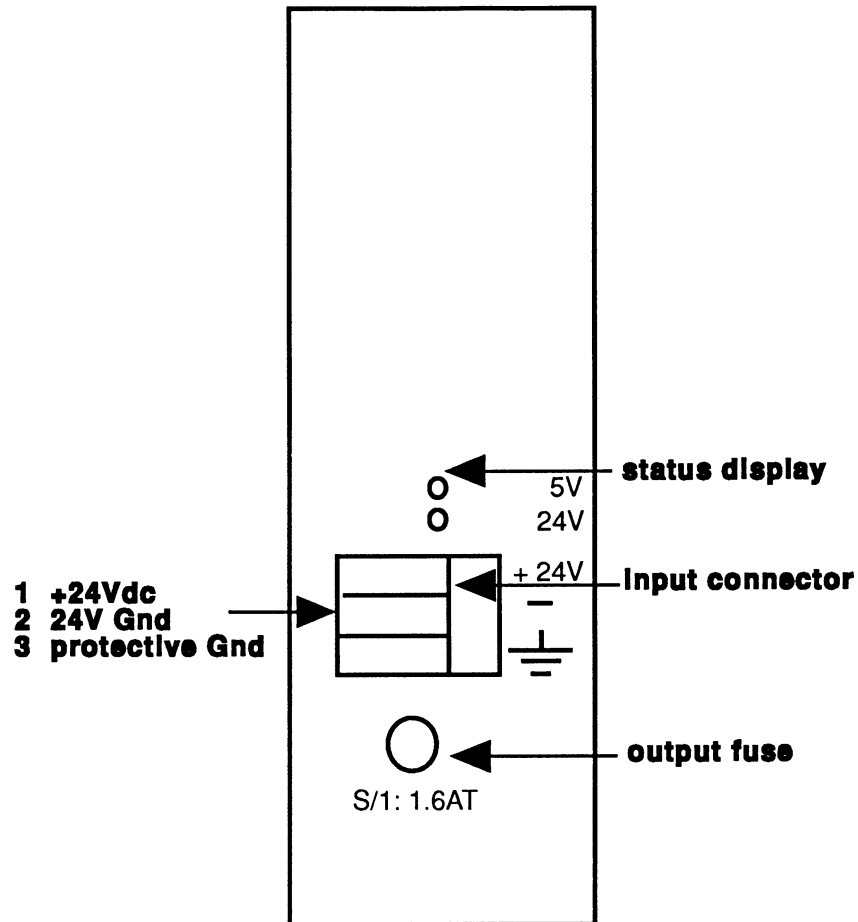
1.2 Order Information

Name	Description	Order-Number
DC/DC-1	DC/DC Converter 18/36Vdc in, 5V/4A out	745-101
DC/DC-1	DC/DC Converter 18/36Vdc in, 5V/4A out with 8TE front panel	745-102

1.3 Specifications

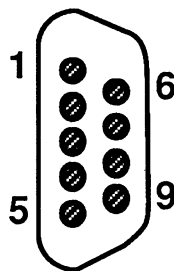
Input	18-36Vdc
Input nominal	24Vdc/2A
Output nominal	5Vdc/4A +0,25Vdc -0,15Vdc 24Vdc/2A (connected directly to the input) Ripple (at full load) < 10mVss Short circuit protection.
Input over voltage protection	5V fuse 1,6AT 24V fuse 3,15AT
Input peak cut off	40V
Input filter	PI Network
Insulation strength	primary - secondary 1,5 KVeFF primary - secondary 0,5 KVeFF secondary - ground 0,5 KVeFF
Interference suppression	VDE 0871 K1.B
Performance at full load	≥ 70%
Temperature range	storage -25°C - +85°C operating 0°C - +70°C derating 0.2W/K over 40°C
Power supply buffering	≥ 2ms at full load
Monitoring	green LED for operating 24V green LED for operating 5V
Pinout input	Screw-terminal 1 +24Vdc 2 (24V)Ground 3 Protective Ground
Pinout output	9-pin DSUB female 1,6 +5Vdc 2,7 (5V)Ground 3 open 4 (24V)Ground 5 Protective Ground 8 open 9 +24Vdc

1.4 Front Panel



1.5 Output Connector

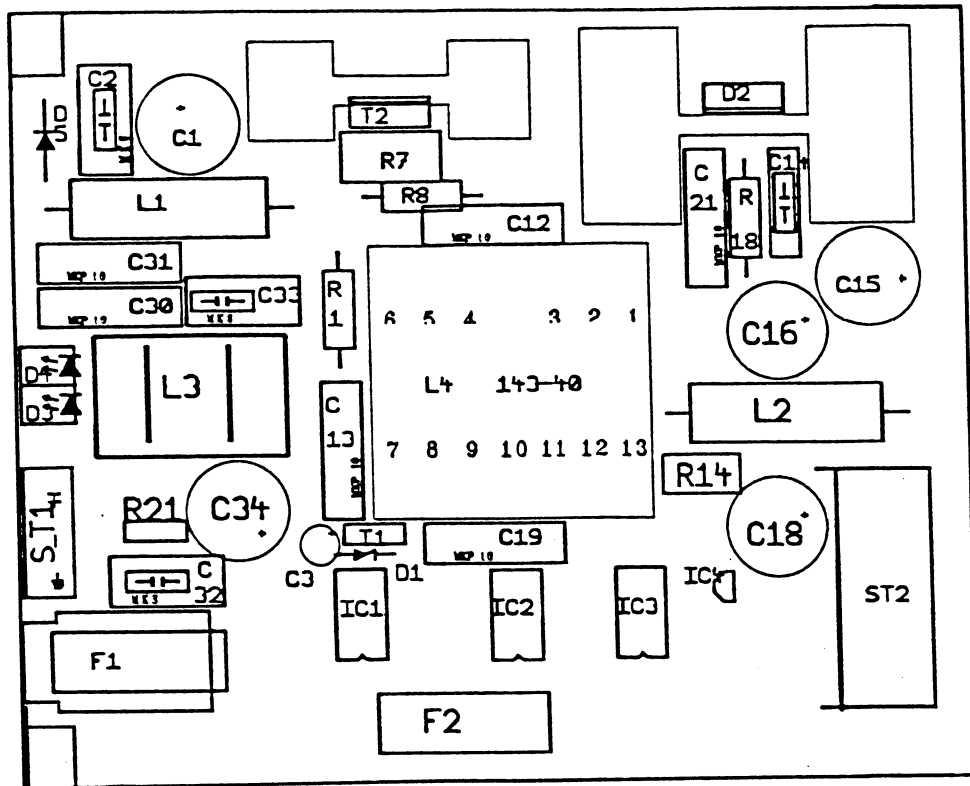
Output connector



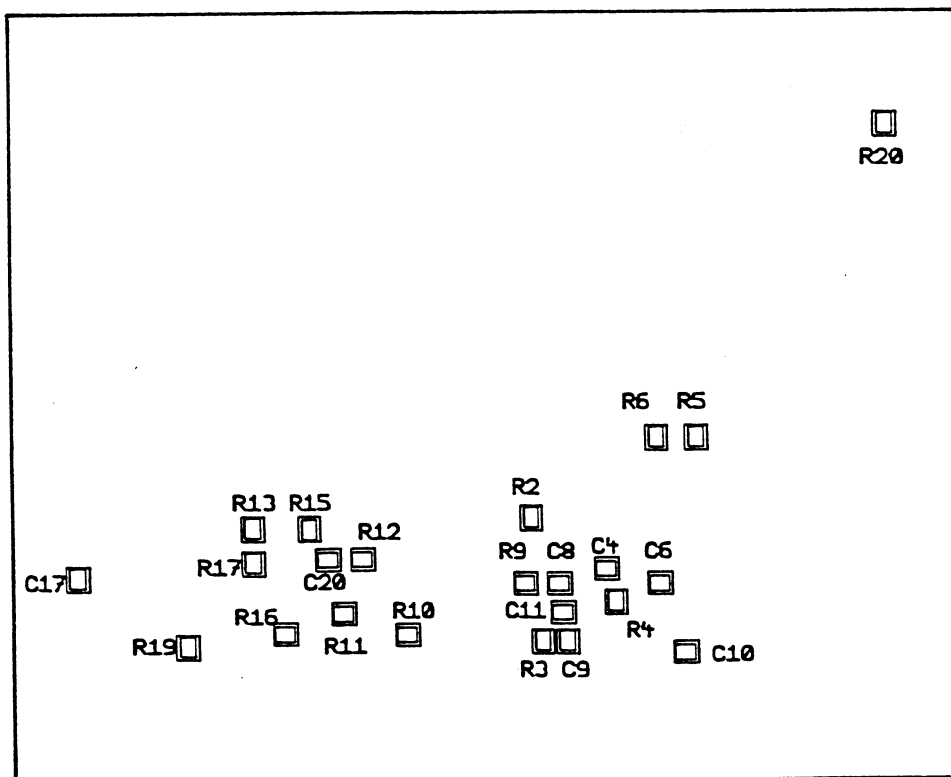
- 1,6 +5Vdc
- 2,7 5V Gnd
- 3 open
- 4 24V Gnd
- 5 protective Gnd
- 9 + 24V

1.6 Features:

- smart input voltage 18-30Vdc
- output supply 24V/2A
- overvoltage protection



B - Seite / B - side



L - Seite / L - side

* entspr. Bestell-Nr. / according to order-no 144 - 93

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