

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

USER MANUAL

Accessory F1

UMAC 24Vdc INPUT POWER SUPPLY

3Ax-603909-xUxx

August 23, 2006



DELTA TAU
Data Systems, Inc.
NEW IDEAS IN MOTION ...

Single Source Machine Control *Power // Flexibility // Ease of Use*
21314 Lassen Street Chatsworth, CA 91311 // Tel. (818) 998-2095 Fax. (818) 998-7807 // www.deltatau.com

Copyright Information

©2006 Delta Tau Data Systems, Inc. All rights reserved.

This document is furnished for the customers of Delta Tau Data Systems, Inc. Other uses are unauthorized without written permission of Delta Tau Data Systems, Inc. Information contained in this document may be inaccurate due to product improvements and may not conform in every respect to former products.

To report errors or inconsistencies, call or email:

Delta Tau Data Systems, Inc. Technical Support
Phone: (818) 717-5656
Fax: (818) 998-7807
Email: support@deltatau.com
Website: http://www.deltatau.com

Operating Conditions

All Delta Tau Data Systems, Inc. motion controller products, accessories, and amplifiers contain static sensitive components that can be damaged by incorrect handling. When installing or handling Delta Tau Data Systems, Inc. products, avoid contact with highly insulated materials. Only qualified personnel should be allowed to handle this equipment.

In the case of industrial applications, we expect our products to be protected from hazardous or conductive materials and/or environments that could cause harm to the controller by damaging components or causing electrical shorts. When our products are used in an industrial environment, install them into an industrial electrical cabinet or industrial PC to protect them from excessive or corrosive moisture, abnormal ambient temperatures, and conductive materials. If Delta Tau Data Systems, Inc. products are directly exposed to hazardous or conductive materials and/or environments, we cannot guarantee their operation.

REVISION HISTORY				
REV.	**DESCRIPTION**	**DATE**	**CHG**	**APPVD**
1	FUSE & OPERATING SPEC REVISIONS	08/23/06	CP	J. SCHATZ

Table of Contents

INTRODUCTION **1**

SETUP OF ACC-F1 ..... **2**

POWER LED DISPLAY **2**

JUMPERS **3**

FUSE **3**

CONNECTOR PINOUTS **4**

Connector P1 – Backplane Interface Connector 4

Connector TB1 – User Supplied Power Input Connector 4

Connector TB2 – Power Supply Output Tap 4

SPECIFICATIONS **5**

Environmental Specifications 5

Physical Specifications 5

Power Supply Input Specifications 5

Power Supply Output Specifications 6

INTRODUCTION

The ACC-F1 power supply module is an accessory card that provides the UMAC backplane with system operating power. The purpose of this accessory card is to allow a UMAC application to operate at a low voltage of 24Vdc.

This power supply accessory has a 24Vdc input connector and an output connector that provides the regulated +5Vdc and ±15Vdc that is also supplied to the backplane.

The ACC-F1 power supply also comes pre-configured for remote voltage sense on the 5Vdc bus: A function that has been installed on the UMAC backplanes since their inception.

LEDs on the front panel indicate the presence of +5Vdc, +15Vdc, and –15Vdc.



FRONT PANEL OF ACC-F1 SHOWING POWER LEDs



SIDE PANEL SHOWING POWER CONNECTORS

SETUP OF ACC-F1

The ACC-F1 UMAC power supply comes from the factory configured to operate in the UMAC rack.

The 5Vdc remote voltage sense is configured to operate in the factory default configuration.

This power supply should only need to be plugged in at the power supply connector of the UMAC back plane.

WARNING

24dc Input power must not be supplied while plugging the power supply accessory card into the back plane! Damage may occur if the power supply is hot-plugged into a load!

POWER LED DISPLAY

There are 3 LEDs on the front panel to indicate that the power supply is operating correctly.

Refer to the cutout photo below for the positioning of the LEDs on the front panel:



JUMPERS

Jumpers are configured as follows:

Pin#	Signal Name	Factory Setting
W1	SENSE-	Jumper Installed
W2	SENSE+	Jumper Installed

FUSE

Fuse F1 is a 7A Slo-Blo type fuse.

This fuse is a 3AG 7A or 313007 (Littelfuse) ¼" x 1 ¼" cartridge fuse and is user replaceable.

WARNING

Damage may occur if the input fuse is not replaced with a fit, form, function equivalent. Incorrect fuse replacement may affect the warranty of the product.

CONNECTOR PINOUTS

Connector P1 – Backplane Interface Connector

This is a ERNI connector. This is the UMAC power supply interface connector.

Pin#	Signal Name	Description
2	CHGND	Chassis GND
5	SENSE-	5Vdc Sense- input
8	SENSE+	5Vdc Sense+ input
11		Not Used
14	GND	5Vdc Return
17	+5Vdc	+5Vdc power
20	-15Vdc	-15Vdc power
23	+15Vdc	+15Vdc power
26	AGND	±15Vdc Return (Analog Ground)
29	+5Vdc	+5Vdc power
32	GND	5Vdc Return

Connector TB1 – User Supplied Power Input Connector

This is a 3 pin Phoenix Combicon connector. This is the UMAC power supply interface connector.

Pin#	Signal Name	Description
1	+24Vdc	User supplied 24 volt input
2	CHGND	Chassis Ground
3	24VRET	User supplied 24 volt return

Connector TB2 – Power Supply Output Tap

This is a 6 pin Phoenix Combicon connector. This is a supply output connector which has 10A rated contacts.

Pin#	Signal Name	Description
1	+15Vdc	+15Vdc power
2	+5Vdc	+5Vdc power
3	+5Vdc	+5Vdc power
4	AGND	±15Vdc Return (Analog Ground)
5	GND	5Vdc Return
6	-15Vdc	-15Vdc power

SPECIFICATIONS

Please note that these are design specifications. Performance may differ slightly from these design specifications.

Environmental Specifications

Description	Unit	Specification
Operating Temperature	ºC	0°C to 45°C, 41°C to 70°C derate to 50%
Storage Temperature	ºC	-25°C to 70°C
Humidity	%	10% to 95 % non-condensing

Physical Specifications

Item	Specification
Dimensions	Length: 16.256 cm (6.4 in.) Height: 10 cm (3.94 in.) Width: 6.1 cm (2.4 in.)
Weight (max)	240g (approx)
Terminal Block TB1	MSTBW 2.5/3-G-5.08 from Phoenix Contact UL 94V-0 rating
Terminal Block TB2	MSTBW 1.5/6-G-5.08 from Phoenix Contact UL 94V-0 rating
The width is the width of the front plate. The length and height are the dimensions of the PCB.	

Power Supply Input Specifications

Description	Unit	Specification
User Supplied Input	V	24 Vdc nominal (20Vdc – 36Vdc)
Input Current Max	Arms	6 Arms (approx.)

Power Supply Output Specifications

Description	Unit	Specification
Power Output	W	80W without fan 115W with fan
DC Output	V @ A	+5Vdc @ 14A with fan +15Vdc @ 1.5A with fan -15Vdc @ 1.5A with fan

The power supply has a replaceable cartridge slow-blow fuse rated at 7A. Replace only with same rated fuse.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP