AC2 POWER CONTROL ACCESSORY
INSTALLATION INSTRUCTIONS

© Copyright Dionex Corporation, 1994

Now sold under the
Thermo Scientific brand

Thermo
SCIENTIFIC

Document No. 034983
Revision 01
May 1994
© 1994 Dionex Corporation
All rights reserved worldwide
Printed in the United States of America

This publication is protected by federal copyright law. No part of this publication may be copied or distributed, transmitted, transcribed, stored in a retrieval system, or transmitted into any human or computer language, in any form or by any means, electronic, mechanical, magnetic, manual, or otherwise, or disclosed to third parties without the express written permission of Dionex Corporation, 1228 Titan Way, Sunnyvale, California 94088-3603 U.S.A.

DISCLAIMER OF WARRANTY AND LIMITED WARRANTY

THIS PUBLICATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. DIONEX CORPORATION DOES NOT WARRANT, GUARANTEE, OR MAKE ANY EXPRESS OR IMPLIED REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE, OF THIS PUBLICATION IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHERWISE. FURTHER, DIONEX CORPORATION RESERVES THE RIGHT TO REVISE THIS PUBLICATION AND TO MAKE CHANGES FROM TIME TO TIME IN THE CONTENT HEREINOF WITHOUT OBLIGATION OF DIONEX CORPORATION TO NOTIFY ANY PERSON OR ORGANIZATION OF SUCH REVISION OR CHANGES.

PRINTING HISTORY

Revision 01, May 1994
1.0 Introduction

The AC2 Power Control Accessory (P/N 046057) provides two AC power outlets and two TTL inputs for on/off control of power to devices that cannot be directly controlled by relays or TTLs.

The TTL inputs on the AC2 connect to TTL outputs on a controlling device, such as a DX 500 Chromatography Module, a UI20 Universal Interface Module, a 4400 Integrator, or a DX-100 Ion Chromatograph. TTL signals from the controlling device can then turn the power on and off to the devices connected to the AC outlets.

NOTE
The controlling device must provide at least 20 mA current. The TTL outputs on the Dionex Advanced Computer Interface (ACI) do not provide this minimum amount. They can be modified, however, for use with the AC2. Contact the nearest Dionex office for more information.

2.0 Description

The AC2 front panel contains two LEDs that indicate when the power is on for each outlet.

The AC2 rear panel contains the following features:

- **TTL IN (1, 2):** Two 0 to 5 V TTL logic level inputs for turning power on and off to the AC2 outlets. The TTL inputs work independently of each other. The controlling device connected to the TTL inputs must supply a minimum of 20 mA current.

- **CONTROLLED AC OUT (1, 2):** Two IEC standard power outlets. The maximum current allowed per outlet is 5 A.

- **AC IN:** An IEC standard power socket. The AC2 is compatible with input voltages and frequencies over the range of 90 to 265 Vac and 47 to 63 Hz. A fuse holder below the socket contains two IEC127 fast-blow fuses (P/N 954746), rated 10 A at 250 Vac.
3.0 Installation

3.1 AC IN Connection

1. Locate the AC2 power cord (P/N 960708) provided in the AC2 Ship Kit (P/N 048387).

2. Connect the AC2 power cord to the AC IN socket on the rear panel (see Figure 1). Connect the other end to an AC grounded power source.

![CAUTION]

A grounded receptacle must be used to avoid electrical shock. Do not operate or connect AC power mains without an earth ground connection.

---

Connect the TTL IN to the TTL output on the controlling device (observe polarity)

Connect a power cord from the AC OUT to the power input of the device to be controlled

Connect the AC2 power cord to a grounded power source

---

*Figure 1. AC2 Rear Panel Connections*
3.2 Controlled AC Out Connection

NOTE
Power cords for the CONTROLLED AC OUT connection are not provided with the AC2; they must be ordered separately.

Connect the main input from each device to be controlled to one of the CONTROLLED AC OUT sockets on the AC2. The correct power cord depends on the type of input connector on the device:

- To control a device with an IEC standard input connector, use an IEC-outlet-to-IEC-input power cord (P/N 960748).
- To control a device with a U.S. plug input connector, use an IEC-outlet-to-U.S.-input power cord (P/N 960749).

3.3 TTL Connection

Each TTL input has a signal (+) pin and an active ground (-) pin.

TTL connector plugs (P/N 921370) and assembly wires are provided in the AC2 Ship Kit. Strip the ends of the wires and insert into the plug. Connect a red signal wire to the + pin on the AC2 and a black ground wire to the - pin. Connect the other ends to the corresponding TTL output signal and ground pins on the controlling device. Refer to the documentation for the controlling device for information about the TTL outputs.
4.0 Service

4.1 Replacing the AC Fuses

1. Disconnect the main power cord from its source and also from the AC IN socket on the AC2.

2. Find the recessed lock on each side of the fuse holder, which is located directly below the AC IN socket. Using a small screwdriver or your fingernails, push each lock toward the center to release it. The fuse holder will pop out approximately 2 mm when the locks release. When both locks are released, pull the fuse holder straight out of its compartment.

3. Remove both fuses and replace them with new IEC127 fast-blow fuses (P/N 954746), rated 10 A at 250 Vac. Dionex recommends replacing both fuses even though only one is open; the other fuse has been stressed and could fail even under normal operation.

4. Reinsert the fuse holder into its compartment and push evenly against the holder to engage the two locks. The holder will be flush against the panel when both locks are engaged.

5. Reconnect the main power cord.