# **MOD HUB series**

A Line of Modular Active Hubs for ARCNET® Local Area Networks

# **Expansion Modules Installation Instructions**

#TD471100-0II



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#### Disclaimer

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#### INTRODUCTION

This document provides instructions for installing and removing expansion modules to be used in the MOD HUB series of modular ARCNET active hubs. More detailed information regarding the MOD HUB Series can be obtained by referring to Contemporary Controls' *MOD HUB Series User Manual*.

# CABLING CONSIDERATIONS

The MOD HUB Series is a line of modular active hubs for ARCNET local area networks. These hubs support several cabling types including coaxial, twisted-pair and glass fiber optics.

As far as topology is concerned, each MOD HUB expansion module is designed for use in star or distributed star configurations. Expansion modules can be used to extend the length of coaxial and twisted-pair bus segments by connecting the expansion module at the end of bus segments.

The cabling types supported by the MOD HUB Series are listed on the following page with their corresponding model numbers.

Model Number	Description	
EXP-CXS	4-port coaxial star expansion module	
EXP-CXS/FG3-ST	Coax/1300 nm fiber expansion module	
EXP-CXS/FOG-SMA	2-port coax/fiber SMA expansion module	
EXP-CXS/FOG-ST	2-port coax/fiber ST expansion module	
EXP-CXS/485	2-port coax/485 expansion module	
EXP-CXS/485X	2-port coax/485X expansion module	
EXP-FOG-SMA	4-port fiber SMA expansion module	
EXP-FOG-ST	4-port fiber ST expansion module	
EXP-TPS	4-port twisted-pair expansion module	
EXP-TPS/CXS	2-port twisted-pair/coax expansion module	
EXP-TPS/FOG-SMA	2-port twisted-pair/fiber SMA expansion module	
EXP-TPS/FOG-ST	2-port twisted-pair/fiber ST expansion module	
EXP-485	4-port DC EIA-485 expansion module	
EXP-485/FOG-SMA	2-port 485/fiber SMA expansion module	
EXP-485/FOG-ST	2-port 485/fiber ST expansion module	
EXP-485X	4-port AC EIA-485 expansion module	
EXP-485X/FOG-SMA	2-port 485X/fiber SMA expansion module	
EXP-485X/FOG-ST	2-port 485X/fiber ST expansion module	

# REMOVING MODULES FROM THE MOD HUB

Before removing the modules from the MOD HUB, turn the unit off by depressing the power switch located on the front panel of the MOD HUB. Unplug the power cord from the wall outlet. Disconnect the cables from the connectors on the module that is being removed.

# **Dislodging Modules From The MOD HUB**

Loosen the module from the MOD HUB unit by unscrewing both of the captive screws with your fingers. The captive screws are located on each end of the module. Loosen the captive screws until they are unthreaded to the point where they hang freely from the module.

With your fingers, grasp each of the module's captive screws and pull the module out of the MOD HUB unit until it is free from the unit. (If you are removing a blank panel, simply unscrew the two fasteners.)

# INSTALLING MODULES INTO THE MOD HUB

Before installing modules into the MOD HUB, turn the unit off by depressing the power switch located on the front panel of the MOD HUB. Unplug the power cord from the wall outlet.

# **Loading Modules Into The MOD HUB**

Remove any of the blank panels or modules being replaced from the MOD HUB. Unpackage the module to be installed into the MOD HUB, taking care not to harm the module.

Grasp the module by the faceplate (with the circuitry on the module facing to the left) and gently place the module into the empty slot on the MOD HUB. Push the module into the MOD HUB (you may need to exert some force to seat the module into position) until the module's face plate is seated against the unit.

Tighten the captive screws on the module panel with your fingers and fasten them in the locking position.

Attach the cables running from each device in the ARCNET LAN to the appropriate module connectors on the newly-installed expansion module.

Refer to the *MOD HUB Series User Manual*, Chapter 2, to test the module for proper working operation.

#### **APPENDICES**

# **Appendix A-Declaration of Conformity**

# **Applied Council Directives:**

Low Voltage Directive 72/23/EEC Council Directive as amended by Council Directive 93/68/EEC

Electromagnetic Compatibility Directive, 89/336/EEC Council Directive as amended by Council Directive 92/31/EEC & Council Directive 93/68/EEC

# Standard to which Conformity is Declared

EN 55022:1995 CISPR22: 1993, Class A, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment

EN 55024:1998, Information Technology Equipment — Immunity Characteristics — Limits and Methods of Measurement

EN 60950, IEC 950 Safety of Information Technology Equipment Including Electrical Business Equipment

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# **Authorized Representative:**

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# **Type of Equipment:**

Industrial local area network modular hub and associated expansion modules

M- 1-1	Directive *	
Model	EMC	LVD
MODHUB-16E	Yes	Yes
MODHUB-16EF	Yes	Yes
EXP-CXS	Yes	N/R
EXP-CXS/FG3-ST	Yes	N/R
EXP-CXS/FOG-SMA	Yes	N/R
EXP-CXS/FOG-ST	Yes	N/R
EXP-FOG-SMA	Yes	N/R
EXP-FOG-ST	Yes	N/R
EXP-TPS	Yes	N/R
EXP-TPS/FOG-ST	Yes	N/R

<sup>\*</sup> Yes — product is certified to this directive N/R — this directive is not required for this product

# Year of CE Marking (low voltage directive) May 1996

# Technical File TD401600-0FA

I, the undersigned, hereby declare that the product(s) specified above conforms to the listed directives and standards.

George M. Thomas, President

September 15, 2003