ORION ®

rf link™ Instruction Sheet
PLEASE READ BEFORE OPERATING

I.   INTRODUCTION

The ORION rf link data transfer device allows information to be sent from your ORION instrument to a printer or personal computer, for data-logging purposes, without the use of printer cables. rf link does not use an AC adapter or a battery to draw power, instead it is automatically powered when connected to your meter and printer. rf link has a maximum transmission range of approximately 25 feet.   This range may be reduced depending on the potential obstructions in the area surrounding the modules. For optimal results, keep both the *Transmit Module* and *Receive Module* free and clear of solid, metal objects. This will reduce the likelihood of signal interference.

II.   PRODUCT COMPONENTS

When unpacking the product, check that the following items are included. If any items are missing please call Orion Customer Service immediately at 800-225-1480.

QUANTITY	DESCRIPTION
1	Transmit Module
1	Receive Module
2	Cables (Transmit & Receive)
1	DataCOLLECT™ Software Disk
1	20 DB / 9 DB Computer Adapter
2	Adhesive Strips
1	Instruction Sheet

III.   OPERATING INSTRUCTIONS

Connecting Transmit Module to Instrument:

<Diagram of Transmit module, a transmit cable & a meter >

Compatible Orion Products: *115, 125, 145, 150, 162A, 250A, 290A, 330, 350, 370, 420A, 520A, 525A, 550A, 620, 710A, 720A, 810, 850, 862A and 920A*

1.   To connect the *Transmit Cable*, align the arrow on the connector **(1A)** with the arrow found on the underside of the *Transmit Module*, insert and tighten the thumbscrews.

2.   Connect the opposite end **(1B)** to the RS232 port of the instrument.

WARNING: Make sure that the instrument is turned OFF before connecting the rf link Transmit Module.

Connecting Receive Module to Printer/Computer:

<Diagram of Receive module, cable & PRT300 printer>

The rf link™ Receiver Module is designed to be compatible with the ORION model PRT300 printer although it will support any printer with a RS-232C/D compliant serial port, so long as it conforms to the following conditions:

Transmit Levels	± 5 V min, ± 15 V max
Receiver Sensitivity	± 3 V
Load Impedance	3 to 7kΩ

Data Transmission Settings

Baud Rate	1200
Parity (PC Only)	None
Data Bits (PC Only)	8
Stop Bit (PC Only)	1
Start Bit	1

1. To connect the *Receive Cable*, align the arrow on the connector **(2A)** with the arrow found on the underside of the *Receive Module*, insert and tighten the thumbscrews.

2. Connect the opposite end **(2B)** to the printer port.

WARNING: *When connecting the rf link Receive Module to a printer, it is important to ensure that the printer is turned OFF. Connecting when the printer is on could cause erratic printer operation.*

<Diagram of cable connected to rf link module, adapter & computer >

3. To connect the rf link *Receive Module* to a PC, plug the DB25-F/DB9-F adapter **(3)** into the cable end **(2B)** before connecting to a computer port.

IV. DataCOLLECT™ Software Installation

DataCOLLECT Software permits unattended data collection from a variety of ORION instruments. This program collects data and allows you to export that data into programs such as Excel †, Lotus ‡ and Access † for your convenience.   DataCOLLECT is compatible with the following ORION Meter Models: *125, 150, 250A, 370, 520A, 525A, 720A, 810, 850, 920A and 940.*

To install DataCOLLECT software onto your PC, complete the following steps:

Windows 3.1

1. Insert disk into drive.
2. From File Manager, select RUN in the File menu.
3. in the command line, type {drive}:\setup, selecting the designated drive.
4. Click OK.

Windows 95 & NT

1. Insert disk into drive.

2 Click on [Start]

3. Select [Run...]

4. in the command line, type {drive}:\setup, selecting the designated drive.

5. Click OK.

Note: Complete instructions on how to use DataCOLLECT are explained in the Help section of the DataCOLLECT program window.

V. Troubleshooting

If the rf link™ units are not responding to the print function, check to make sure the following criteria have been met.

1. Make certain that the units are within the specified transmission range.

2. If it appears that certain objects might be contributing to signal interruption, try adjusting the position of the modules.

3. Make certain that all cables are properly and securely connected to the appropriate ports.

4. When transmitting data to a computer, make certain that the computer program is operating in receive mode.

5. When transmitting data to a printer, make certain that the printer is powered.

If the previous items have been checked but the problem persists, call ORION Technical Service at 800-225-1480.

†   Registered Trademark of Microsoft Corporation
‡   Registered Trademark of Lotus Development Corporation

VI. NOTICE OF COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

The Transmitter portion of the device has a FCC ID of OFXCRFLINK000.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe B respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

VII. DECLARATION OF CONFORMITY

PROVIDED BY QA (See Attached Sheet)

VIII. WARRANTY

Drop in Text from 1999 Product Catalog

IX. ORDERING INFORMATION

Order Number	Description
RFLINK	rf link™ Data Transmission Device **Includes:** TRANSMIT MODULE & CABLE, RECEIVE MODULE & CABLE, PC ADAPTER, DATACOLLECT™ SOFTWARE, ADHESIVE STRIPS
Accessories	
RFLK01	Transmitter Cable
RFLK03	Receiver Cable
RFLK04	PC Adapter
RFLK05	DataCOLLECT Software

Orion Research, Inc.
Declaration of Conformity

Manufacturer:

Orion Research, Inc.
500 Cumming Center
Beverly, MA 01915 U.S.A

hereby declares that the product

rf link Data Transfer Device

conforms with the following standards and documents

Emissions: FCC Part 15 Class B Subpart B
FCC Part 15 Class B Subpart C
Industry Canada Notice ICES-003, Issue 2

These products have been manufactured in compliance with the provisions of the relevant Orion manufacturing and test documents and processes. Further, these documents and processes are recognized as complying with ISO 9002 by QMI, listed as File # 001911.

Place and date of issue:
Beverly, MA.
April 22, 1999

John Meserve
Quality Assurance Manager

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