
EQUIPMENT SETUP GUIDE FOR THE UDLT FIBER MODEM (UFM)



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ABOUT THE COMPANY

Telecore, Inc. is a telecommunications research and development company. The company's unique vision supports both fundamental research and commercialization activities within one organization, funded by both private resources and programs. The company will achieve its long-term mission -- to be one of the world's telecommunications leaders -- by building on its track record of outstanding technical successes.

Telecore's products will produce a fundamental change in communications, in much the same way that the integrated circuit revolutionized data processing. Telecore's blend of world-class researchers and product developers place it at the forefront of the telecommunications industry.

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Document Change Revision Log

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READ THIS FIRST

Safety Information

Caution
ELECTRICAL SHOCK HAZARD. This equipment is to be serviced by trained personnel only.
DANGER HAZARDOUS VOLTAGES INSIDE. Voltage or current hazard sufficient to cause shock.
The manufacturer requires that the unit be grounded. Ground the unit by attaching a ground wire between a known earth ground and the ground stud, E1, of the unit prior to plugging in the unit. Grounding the unit helps protect against damage caused by static voltage buildup and removes the risk of electric shock.
Never use an extension cord that does not have an earth ground connection. Never use an adapter that does not have an earth ground connection. If necessary, always use a suitable ground adapter. If possible, ground that extra wire on the ground adapter. Never use extension cords with non-polarized plugs or ones with broken off ground pins. Never break off the ground pin on electric equipment.
Always plug the power cord into the UFM first. Only after plugging the power into the UFM, plug the three-pronged AC plug into an AC outlet and power up the unit.
To disconnect the cord, always pull it out by grasping the plug. Never pull it out by the cord.
To avoid the risk of electrical shock, do not remove the cover. There are no user serviceable parts inside. Refer servicing to qualified service personnel. Additionally, opening the unit's cover, changing or modifying the equipment by the user (unless expressly approved by the manufacturer) shall void the warranty.
Use only the power supply cord and cord supplied with the product. The UFM is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. Match the wide blade of plug to wide slot of the outlet and fully insert.
Warning: To prevent fire or shock hazard, do not expose the unit to rain, moisture or corrosive gases.
Utilize safety precautions when installing the UFM. Follow the power installation directions carefully. The UFM like other home electronics contains hazardous voltages, do not attempt to open the UFM to service the unit. There are no user serviceable parts inside the UFM. If a failure occurs, please return through your RMA supply chain.
Operate the unit with the specified voltage. Using the wrong voltage risks fire and electrical shock.
At the first sign of smoke, an unusual smell or other problems indicating breakdown, disconnect external power cords. Should any solid or liquid fall into the unit, disconnect the AC power cord and have unit professionally checked before operating the unit again. Continued use risks fire and electrical shock.
Ventilation openings must not be blocked or covered. Air intake and exhaust openings are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating.

Product Description

The UFM (UDLT Fiber Modem) converts UDLT data to/from fiber. The UFM will provide replacement functionality for the existing UDLT fiber modems designed and built by the Dymec Corporation. The UFM is NOT intended to be a complete form, fit and functional replacement of the original Dymec equipment. The UFM will only operate with another UFM. It's NOT intended to operate or interface to/with a Dymec fiber optic device. The UFM is designed to operate with:

SDS Family

- Quad Telephone Interface (QTI),

DSS Family

- Summing Telephone Interface
- Dual Narrowband Interface (DNI) with Octal UDLT Interface (OUI) daughterboard

(DNI/OUI)

Digital Phone Multiplexer (DPM-1)

Universal Multiplexer (UMUX, UMUX-II, UMUX-III)

Integrated Services Telephone (MLP-2, IST-130, IST-2, TXP)

Digital Speaker Amplifier (DSA).

It should be noted that products which have been obsoleted and are no longer *available from GFE holdings* will NOT be tested or supported.

Equipment Characteristics

Table 1 lists the physical, environmental and electrical characteristics of the UFM. The physical dimensions include the desk stand.

Table 1 UFM Characteristics

Characteristic	Specification
Physical:	
Height	1.00 inches
Width	3.5 inches
Depth	4.75 inches
Weight (excluding external power supply, required at phone end).	1 lbs
Environmental:	
Operating Temperature	0 to 50 degrees C
Non-operating Temperature	-20 to 60 degrees C
Humidity	5 to 95 %, non-condensing
Cooling	Ambient air
Power & Electrical:	
Power (Switch End)	2 Watts, maximum
Power (Phone End) (Includes Phone Power)	15Watts, maximum
External Power Supply AC input voltage	100/220 VAC +/-10%, 50/60 Hz

Installation

Install by connecting the J1 connector of the UFM connector to the switch or other peripheral device, the J2 of other UFM to the phone end instrument, and fiber optic cable between the two UFM devices. An external power adapter, Telecore P/N 2AA-01450, is available for the UFM at the phone end. Figure 1 below illustrates the connection of two UFM to a switch, and IST-130/IST-2/TXP.

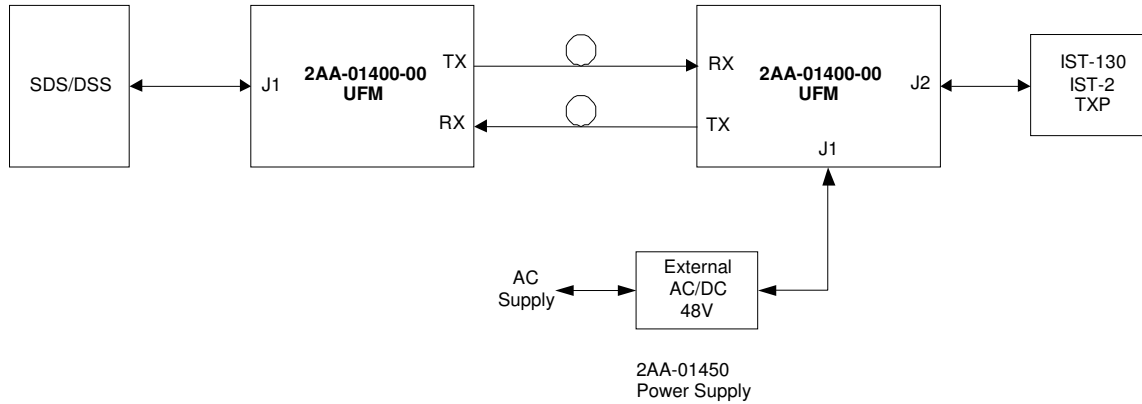


Figure 1 UFM Connection Diagram

Connectors/Pinout

The figures below show the connectors and indicators on the UFM.

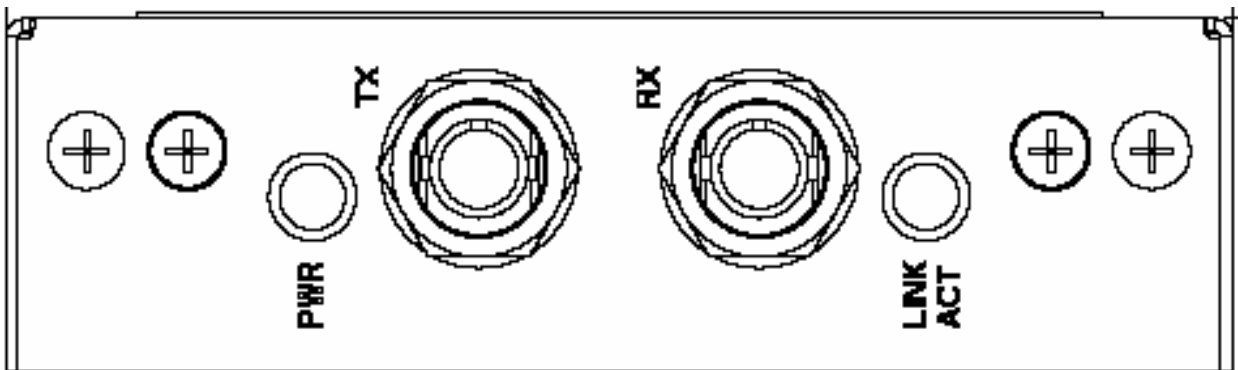
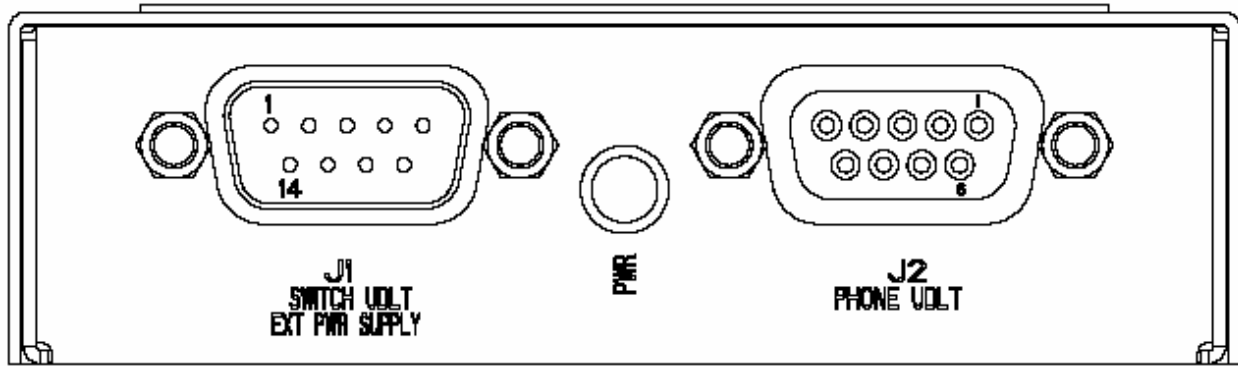




Table 2 below lists the UFM connectors with associated part number and manufacturer. Connector reference designators are identified on the unit.

Table 2 UFM Connectors

Designator	Function	Connector Type	MFG/MFG PN	Mate Type
J1	Switch UDLT OR External Power Supply in Phone Mode	DB-9M	TYCO(AMP) 5747840-4	Standard DB9 Receptacle
J2	Phone UDLT	DB-9F	TYCO(AMP) 5747844-4	Standard DB9 Plug
FO1	RX Fiber Receive	Optical Fiber (850 nm). Plastic Connector. 62.5/125 micron multimode fiber cable compatible. 10 db Fiber Link Budget	HFBR-2416TZ	Fiber ST Connector
FO2	TX Fiber Transmit	Optical Fiber (850 nm). Plastic Connector. 62.5/125 micron multimode fiber cable compatible. 10 db Fiber Link Budget	HFBR-1414TZ	Fiber ST Connector
EGND	CHASSIS GND	#4 ground stud	NA	#4 ground lug

Table 3 J1 Connector I/O Descriptions

J1 UDLT SWITCH/EXTERNAL POWER		
Pin	Name	Description
1	UDLT_P	UDLT+ to DSS/SDS
2	FGND	Frame Ground
3	<i>Unused</i>	
4	EXT_PWR_P	External 48V Source
5	EXT_PWR_N	External 48V Return
6	UDLT_N	UDLT- to DSS/SDS
7	Unused	
8	FGND	Frame Ground
9	<i>Unused</i>	

Table 4 J2 Connector I/O Descriptions

J2 UDLT PHONE		
Pin	Name	Description
1	UDLT_P	UDLT+ to DSS/SDS
2	FGND	Frame Ground
3	<i>Unused</i>	
4	<i>Unused</i>	
5	<i>Unused</i>	
6	UDLT_N	UDLT- to DSS/SDS
7	Unused	
8	FGND	Frame Ground
9	<i>Unused</i>	

Table 5 Indicator Descriptions

Indicators	Description
Power	Green LED on each end of unit to indicate that Power is applied to unit.
Fiber RX link activity	Yellow LED on Fiber port side of unit to indicate Fiber optic Receive data activity.

Warranty Terms and Conditions

Telecore, Inc. provides a manufacturer's warranty that for a period of ninety days commencing on date of shipment: Goods are and will be free from defects in design, material, and workmanship; will conform to and perform in accordance with the Specifications, if any; that it will convey good and valid title to all Goods; and that all Goods are being provided free and clear of any and all liens and encumbrances. This warranty will survive inspection, acceptance, and payment. This warranty shall be null and void in the event the Buyer or any third party attempts to repair or alter the Goods in any way without Telecore, Inc. advanced written authorization, or in the event the Goods are misused, including termination of non-compliant third party equipment on Telecore's interfaces, or damaged by Buyer, or shipped to any country other than that originally specified in Buyer's Purchase Order. Goods not meeting this warranty will be promptly repaired or replaced, at Telecore's option, upon return to Telecore's facility freight prepaid; provided, however, that Buyer has first obtained a return materials authorization number ("RMA Number") from Telecore authorizing such return. The RMA Number shall be placed on the exterior packaging of all returns. Telecore will pay shipping costs to return repaired or replacement Goods to Buyer. **THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF TIUFM, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE HOWSOEVER ARISING.**

Shipping Return Address

Equipment will be shipped to the following Supplier address as directed by the Supplier's Customer Service Department at the time the RMA number is assigned:

ADDRESS:

Telecore Inc
1800 North Glenville Dr.
Suite 116
Richardson, TX 75081-1953
ATTENTION: Customer Service