

701 DIGITAL LINK

USER HARDWARE MANUAL

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ATTENTION - READ THIS FIRST!

All personnel involved with the installation, operation, or maintenance of the equipment described in this manual should read and understand the warnings and cautions provided below.

CAUTION! This equipment contains devices that are extremely sensitive to static electricity. Therefore, extreme care should be taken when handling them. Normal handling precautions involve the use of anti-static protection materials and grounding straps for personnel.

WARNING! High Voltage may be present in all parts of the system. Therefore, use caution when the electronics are removed from their containers for servicing.

CAUTION! Operation with improper line voltage may cause serious damage to the equipment. Always ensure that the proper line voltage is used.

Warnings, Cautions, and Notes

Where applicable, warnings, cautions, and notes are provided in this manual as follows:

WARNING! Identifies a potential hazard that could cause injury or death.

CAUTION! Identifies a potential hazard that could damage equipment or data.

NOTE: Recommendations or general information that is particular to the material being presented.



HARDWARE VARIATIONS AND COMPATIBILITY

The 701 Digital Link contains both standard and proprietary hardware. At times, EdgeTech may change the standard components due to their availability or performance improvements. Although the component manufacturers—along with their models and styles—may change from unit to unit, replacement parts will generally be interchangeable.

EdgeTech will make every effort to see that replacement components are interchangeable and use the same software drivers (if applicable). At times, however, direct replacements may not exist. When this happens, EdgeTech will provide the necessary drivers with the replacement part, if applicable.

EdgeTech may also change certain hardware per customer requirements. Therefore, portions of this manual, such as parts lists and test features, are subject to change. These sections should be used for reference only. When changes are made that affect system operation, they will be explicitly noted. Also, some options and features may not be active in the customer's unit at the time of delivery. Upgrades will be made available when these features are implemented.

Contact EDGETECH CUSTOMER SERVICE with any questions relating to compatibility.

ABOUT THIS DOCUMENT

We, the employees at EdgeTech, would like to thank you for purchasing a 701 Digital Link. At EdgeTech, it is our policy to provide high-quality, cost-effective products and support services that meet or exceed your requirements. We also strive to deliver them on-time and to continuously look for ways to improve them. We take pride in the products we manufacture and want you to be entirely satisfied with your equipment.

Purpose of this Manual

The purpose of this manual is to provide the user with information on the setup and use of EdgeTech's 701 Digital Link. Although this manual encompasses the latest operational features of the 701 Digital Link, some features may be periodically upgraded. Therefore, the information in this manual is subject to change and should be used for reference only.

Liability

EdgeTech has made every effort to document the 701 Digital Link in this manual accurately and completely. However, EdgeTech assumes no liability for errors or for any damages that result from the use of this manual or the equipment it documents. EdgeTech reserves the right to upgrade features of this equipment, and to make changes to this manual, without notice at any time.

Revision History

REVISION	DESCRIPTION	DATE	APPROVAL
F	Template Conversion, Picture, Text, BOM Updates	4/28/2020	TS



WARRANTY STATEMENT

All equipment manufactured by EdgeTech is warranted against defective components and workmanship for a period of one year after shipment. Warranty repair will be done by EdgeTech free of charge.

Shipping costs are to be borne by the customer. Malfunction due to improper use is not covered in the warranty, and EdgeTech disclaims any liability for consequential damage resulting from defects in the performance of the equipment. No product is warranted as being fit for a particular purpose, and there is no warranty of merchantability. This warranty applies only if:

- i. The items are used solely under the operating conditions and in the manner recommended in Seller's instruction manual, specifications, or other literature.
- **ii.** The items have not been misused or abused in any manner, nor have repairs been attempted thereon without the approval of EdgeTech Customer Service.
- **iii.** Written notice of the failure within the warranty period is forwarded to Seller, and the directions received for properly identifying items returned under warranty are followed.
- iv. The return notice authorizes Seller to examine and disassemble returned products to the extent Seller deems necessary to ascertain the cause for failure.

The warranties expressed herein are exclusive. There are no other warranties, either expressed or implied, beyond those set forth herein, and Seller does not assume any other obligation or liability in connection with the sale or use of said products. Any product or service repaired under this warranty shall be warranted for the remaining portion of the original warranty period only.

Equipment not manufactured by EdgeTech is supported only to the extent of the original manufacturer's warranties.

CAUTION! If your product is a portable topside, never attempt to ship it in its case alone. Shipping portable topsides without an exterior shipping crate will void the warranty.

SOFTWARE SERVICE OVERVIEW

EdgeTech provides software services free of charge. This software agreement does not address customerspecified modifications or enhancements. These services may be ordered separately. Furthermore, EdgeTech software upgrades are meant for the sole use of EdgeTech customers. Any reproduction of EdgeTech-supplied software or file sharing is strictly prohibited.

Software Updates and Enhancements

EdgeTech customers can download new software releases with all modifications and enhancements from the EdgeTech FTP site. Major software issues, should they occur, will be reported directly to the customer. New software releases consist of the following:

- Software enhancements that are not on the price list
- Software fixes and changes
- Product integration
- Documentation updates to on-line help
- Tests for compatibility with other modules

Software patches consist of software that has undergone the following:

- Minor software enhancements
- Software fixes and changes

EdgeTech customers are entitled to contact **EDGETECH CUSTOMER SERVICE** by telephone, facsimile, or e-mail to report a difficulty, to discuss a problem, or to receive advice on the best way to perform a task. When contacted, EdgeTech Customer Service will do the following:

- Respond within 24 hours via Telephone, Facsimile, and E-mail Support
- Immediately attend to serious problems affecting operations
- Attempt to find an immediate workaround





RETURNED MATERIAL AUTHORIZATION

Before returning any equipment to EdgeTech, a Returned Material Authorization (RMA) Number must be obtained from **CUSTOMER SERVICE**.

RMA Purpose

The RMA Number identifies returned equipment when it arrives at our receiving dock and enables tracking while at our facility. Refer to the RMA number on all documentation and correspondences.

All returned materials must be shipped prepaid. Freight collect shipments will not be accepted. All equipment should be adequately insured for shipping, but equipment belonging to EdgeTech must be insured for full value.

If there is more than one item per consignment, include a packing with the shipment. An invoice can double as a packing slip only when the contents are clearly numbered and identified on the invoice.

CAUTION! Never attempt to ship a Portable Topside in its Storm CaseTM alone. Although rugged, these cases are not intended to be used as shipping containers, and the delicate internal components could be damaged. Shipping in this manner will void any warranties.

NOTE: All shipping charges shall be the responsibility of the customer, unless under warranty, as EdgeTech will pay for return shipping.

NOTE: For International Shipments valued over \$1000, the following Shipper's oath must be sent with the invoice.

Shipper's Oath:

"I,______, declare that the articles herein specified are the growth, produce, or manufacture of the United States; that they were exported from the United States from the port of ______, on or about ______; that they are returned without having been advanced in value or improved in condition by any process of manufacture or any other means; and that no drawback, or allowance has been paid or admitted hereof."

Signed _____

CUSTOMER SERVICE

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Customer service personnel at EdgeTech are always eager to hear from users of our products. Your feedback is welcome and is a valuable source of information which we use to continually improve these products. Therefore, we encourage you to contact EdgeTech Customer Service to offer any suggestions or to request technical support:

	NOTE: Please has contacting Cust	e have your system Model and Serial Number available when ustomer Service.	
r moile		corries @odgetech.com	
E-mail:		service@edgetecn.com	
Mail:		4 Little Brook Road West Wareham, MA 02576	
Telephone:		(508) 291-0057	
Facsimile:		(508) 291-2491	
24-Hour Emergency Technical Support Line:		(508) 942-8043	

For more information, please go to <u>www.EdgeTech.com</u>.



COMPANY BACKGROUND

EdgeTech (formerly EG&G Marine Instruments) traces its history in Underwater Data Acquisition and Processing back to 1966. EdgeTech has designed, developed, and manufactured products, instruments, and systems — for the acquisition of underwater data, including marine, estuarine, and coastal applications — for over 50 years.

EdgeTech responds to the needs of the Scientific, Naval, and Offshore communities by providing industryleading equipment — such as Sub-Bottom Profilers, Side Scan Sonar, Acoustic Releases, USBL Positioning Systems, and Bathymetric Systems — that have become standards in the industry.

EdgeTech consistently anticipates and responds to future needs with an active Research and Development Program. Current efforts are focused on adapting new cutting-edge acoustic technology.

TABLE OF CONTENTS

ATTENTION – READ THIS FIRST!
Warnings, Cautions, and Notesiii
HARDWARE VARIATIONS AND COMPATIBILITYiv
ABOUT THIS DOCUMENTv
Purpose of this Manualv
Liabilityv
Revision Historyv
WARRANTY STATEMENT
SOFTWARE SERVICE OVERVIEWvii
Software Updates and Enhancements vii
RETURNED MATERIAL AUTHORIZATIONviii
RMA Purpose viii
CUSTOMER SERVICEix
COMPANY BACKGROUNDx
TABLE OF CONTENTS
LIST OF FIGURES
LIST OF TABLES
1.0 OVERVIEW1-1
1.1 Applications1-1
2.0 SPECIFICATIONS
3.0 SETUP AND ACTIVATION
3.1 Unpacking and Inspection
3.2 Installing the 701-DL
3.2.1 Connecting the 701-DL
3.2.1.1 Connecting to the 701-DL
3.2.1.2 Connecting to the 701-DL With Computer
3.2.2 701-DL Controls, Indicators, and Connections
3.2.3 701-DL with Computer Controls, Indicators, and Connections
3.3 Activating the 701-DL
3.4 Post Recovery



4.0	MAINTENANCE4-1
5.0	TROUBLESHOOTING
5.1	701-DL Digital Link Troubleshooting Guide5-1
5.2	701-DL with 2U Computer Troubleshooting Guide5-2
5.3	Part Numbers for Major Components5-2
A.0	COMPUTER SYSTEM RESTORE
B.0	PRINTERSB-1

LIST OF FIGURES

Figure 3-1: 701-DL Front and Back Panels	3-5
Figure 3-2: 701 With Computer Front Panel	3-7
Figure 3-3: 701 DL With Computer Rear Panel	3-8



LIST OF TABLES

Table 2-1: 701-DL Specifications	.2-3
Table 3-1: 701-DL Controls, Indicators, and Connections	.3-4
Table 3-2: 701 DL With Computer Controls, Indicators and Connections	.3-6
Table 5-1: 701-DL Digital Link Troubleshooting Guide.	.5-1
Table 5-2: 701-DL Rackmount Troubleshooting Chart	.5-2

1.0 OVERVIEW

The 701 Digital Link (701-DL) provides an interface between a computer running EdgeTech's Discover sonar acquisition software, and EdgeTech towfish. The 701-DL is self-contained with all interface and power supply electronics housed within. Communication between the computer and the 701-DL is an Ethernet LAN connection using TCP/IP protocols. The data and control interface between the 701-DL and the towfish is via TCP/IP protocols over the ADSL link using the 701-DL Ethernet connection and ADSL modem. A Sync Trigger port provides an interface with an external TTL trigger. EdgeTech Discover software interfaces with the 701-DL, monitors and controls the attached towfish and displays and records acquired sonar and sensor data. The 701-DL fits a 19-inch rack and is delivered mounted independently in a rugged 2U-SKB case or mounted with an EdgeTech provided computer in a rugged 6U case.

1.1 Applications

The 701 Digital Link has many applications, including:

- Fisheries research
- Mine countermeasures
- Hydrographic surveys
- Cable and pipeline surveys
- Channel conditioning/clearance surveys
- Geo-hazard surveys
- Geological/geophysical surveys
- Route surveys
- Archaeological surveys
- Search and recovery



2.0 SPECIFICATIONS



701-DL DIGITAL LINK (IN 2U-SKB CASE)



RACK MOUNT (701-DL AND 2U COMPUTER IN 6U CASE)

	With 2U-SKB Case:	17.8 cm (7 in.) high
	15.75 cm (6.20 in.) high	43.2 cm (17 in.) wide
	56.90 cm (22.40 in.) wide.	45.7 cm (19 in.) deep
Cine	60.96 cm (24 in.) wide	
Size	Without Case:	
	8.3 cm (3.25 in.) high	
	48.3 cm (19 in.) wide	
	43.2 cm (17 in.) deep	
	With 2u-SKB Case:	19.5 kg (43 lb.)
	10.80 kg (23.8 lb.)	
Weight	Without Case:	
	6.4 kg (14 lb.)	
Case construction	Aluminum 19-inch rack mount	Aluminum 19-inch rack mount
Shipping Container	Carton	Sealed high impact polyurethane case
Туре		
	61 cm (24 in.) high	71.1 cm (28 in.) high
Shipping Container Size	61 cm (24 in.) wide	66.0 cm (26 in.) wide
	30.5 cm (12 in.) deep	50.8 cm (20 in.) deep
Shipping Weight	11.3 Kg (25 lb.)	47.7 kg (105 lb.)
Operating Temp.	0–45°C (32–113°F)	0–45°C (32–113°F)
Storage Temp.	-10-60°C (14-140°F)	-10-60°C (14-140°F)
Operating relative	5–90% (non-condensing)	5–90% (non-condensing)
humidity		
Non exercise starses	5-90%	5-90%
Non-operating storage		
relative numidity		
Input voltage	100-264 VAC, 50/60 Hz, auto-switching	100-264 VAC, 50/60 Hz, auto-switching
Input power	~ 120W	~ 120 W
Power to Towfish	400 VDC	400 VDC
Processor	_	Intel Core, I7, 3.6 GHz Quad-Core
Memory	_	4 GB, 1333 MHz
	_	DVD/RW drive
Data storage		1-TB hard drive (data)
-		500-GB hard drive (OS)
Display	-	23.6-inch LCD monitor

Keyboard	-	High impact industrial keyboard
Pointing device	-	High impact industrial trackball
External trigger		
	(1) Ethernet	(1) Ethernet
	(1) Trigger	(3) RS-232
I/O ports		(6) USB 2
		(2) USB 3
		(1) Trigger

Table 2-1: 701-DL Specifications

3.0 SETUP AND ACTIVATION

EdgeTech designed the 701 Digital Link to be easily set up and activated for operation. Instructions for this process are provided in the subsections to follow.

3.1 Unpacking and Inspection

Before unpacking the system components, inspect the shipping containers for any damage. Report any damage to the carrier and EdgeTech.

If the shipping containers appear free of damage, carefully unpack the components and inspect them for damage as well. Also, check the packing list, verifying that all the items on the list are included. If any damage is found, report it to the carrier and EdgeTech. If any items are missing, immediately contact **EDGETECH CUSTOMER SERVICE**. Do not install or operate any equipment that appears to be damaged.

After unpacking the system components, store the shipping containers, including any packing materials, in a safe place for later use. When transporting or storing the system, pack all items in their original shipping containers in the same way they were originally shipped. Store the system in a dry environment when not in use.

3.2 Installing the 701-DL

The 701 DL is delivered installed in protective cases and should be located in an area free from sea spray, precipitation, and potentially damaging UV rays (sunlight). Furthermore, the unit should be located near the topside computer and in an area where the operator can see the deck crew deploying the towfish for easy communication. If desired, the 701-DL can be Installed in a standard 19" rack.

3.2.1 Connecting the 701-DL

All Edgetech Towfish products are supplied with Hardware and Software Manuals that provide specific connection, activation, and testing instructions for each model. General instructions are provided below.

WARNING! Never power up the 701-DL with the tow cable disconnected from the tow vehicle. A severe electric shock could occur. This also applies to post-recovery, as disconnecting the towfish while the power is still on could result in bodily injury or death.

NOTE: The 701-DL will automatically switch off power to the towfish if the two remain disconnected for an extended period. The power will also shut off if an overcurrent or undercurrent condition exists. To reactivate the power to the towfish, turn the POWER switch off and then on again.

3.2.1.1 Connecting to the 701-DL

Refer to subsection **701-DL CONTROLS, INDICATORS, AND CONNECTIONS** for the location of the connectors while performing the steps below:

- **1.** Verify that the 701-DL is not connected to AC power.
- 2. Verify that the tow cable is properly connected and attached to the towfish, and then connect the tow cable to the SEA CABLE connector.
- **3.** Connect the Ethernet patch cable to the DATA connector of the 701-DL Digital Link and to the Ethernet connector of the computer (2U, Getac Semirugged laptop, or user-supplied). This cable may be extended up to 100 feet using a Category 5 Ethernet crossover or straight patch cable.
- Set the IP address of your computer to 192.9.0.nnn, where nnn is any integer from 1 to 100. EdgeTech configures supplied computers to use 192.9.0.99. Do not use the reserved IP addresses: 192.9.0.22, 192.9.0.225, 192.9.0.101, and 192.9.0.102.
- **5.** If a navigation system will be used, connect the navigation system output to an available serial communications port on the Getac, 2U, or the user-supplied computer.
- **6.** If an external source will be used to trigger the 701-DL Digital Link, connect the trigger output of this source to the SYNC connector.
- 7. Connect the AC power cord to the LINE VAC connector and the AC power source.

3.2.1.2 Connecting to the 701-DL With Computer

Refer to subsection **CONNECTING TO THE 701-DL WITH COMPUTER** for the location of the connectors while performing the steps below:

- 1. Verify that the 701-DL and computer are not connected to AC power.
- **2.** Verify that the tow cable is properly connected and attached to the towfish, and then connect the tow cable to the SEA CABLE connector.
- 3. Connect the LCD monitor to the MONITOR connector.
- 4. Connect the trackball to a back-panel USB connector.
- 5. Connect the keyboard to a back-panel USB connector.
- **6.** If a navigation system will be used, connect the navigation system output to the COM 1 serial connector on the attached computer.
- **7.** If an external source will be used to trigger the 4205 701-DL with 2U CPU, connect the trigger output of this source to the SYNC connector on the rear panel of the 701-DL.
- 8. Connect AC power cord for 2U Processor and 701DL to VAC INPUT connector and AC power source.
- 9. Connect an AC power cord to the LCD monitor and the AC power source.

At this point, perform any pre-deployment checks as prescribed by the towfish hardware manual, such as a rub test. Operation instructions for the topside and towfish can also be found in the supplied user manuals.

3.2.2 701-DL Controls, Indicators, and Connections

This rocker switch turns the 701-DL Link on or off.		
nes continuously when an Ethernet connection is		
es while the 701-DL Digital Link is establishing a ns link with the Towfish. Illuminates continuously unications link with the Towfish is established.		
ited when the 701-DL Digital Link is on, and the tow nected to it.		
nated when the 701-DL Digital Link is on.		
ver cord.		
es AC power to POWER switch on the front panel of		

The 701-DL's (digital link) controls, indicators, and connections are described below:

FRONT PANEL	
Data Connector	RJ-45 Standard Ethernet connection for connecting to the external topside processor.
Sync Connector	It provides an input connection for a TTL external trigger that is sent to the towfish.
Sea Cable Connector	SubConn MCBH4F female connector to sea cable going out to tow vehicle.
	Table 3-1: 701-DL Controls, Indicators, and Connections

Figure 3-1: 701-DL Front and Back Panels

3.2.3 701-DL with Computer Controls, Indicators, and Connections

The 4205-Rack Mount (701-DL and 2U-CPU Combo) controls, indicators, and connections are described below:

FRONT PANEL 701-DL		
Power Switch	Rocker switch. Turns the 701-DL Link on or off.	
LAN Indicator Light	Green indicator. Flashes continuously when an Ethernet connection is established.	
LINK Indicator Light	Green indicator. Flashes while the 701-DL Digital Link is establishing a reliable communications link with the Towfish. Illuminates continuously when a reliable communications link with the Towfish is established.	
Fish Power Indicator Light	Red Indicator. Illuminated when the 701-DL Digital Link is on, and the tow vehicle is properly connected to it.	
PWR Indicator Light	Green indicator. Illuminated when the 701-DL Digital Link is on.	
BACK PANEL 701-DL		
Line VAC Connector	Connection for AC power cord.	
Line Power Switch	Rocker switch. Switches AC power to POWER switch on the front panel of the 701-DL Digital Link.	
AC Fuse	AC power fuse.	
Data Connector	RJ-45 Standard Ethernet connection for connecting to the external topside processor.	
Sync Connector	It provides an input connection for a TTL external trigger that is sent to the towfish.	
Sea Cable Connector	SubConn MCBH4F female connector to sea cable going out to tow vehicle.	
Grounding Lug	Grounding Lug.	
FRONT PANEL COMPUTER		
USB Connectors	(2) USB connectors. Four on the back panel and two on the front. Located on CPU.	
DVD Drive	DVD\RW drive.	
BACK PANEL COMPUTER		
Line VAC Connector	CEE-type AC input connector. Connects to 100-264 VAC, 50/60 Hz power.	
Power Switch	Rocker switch. Turns the 2U-CPU computer on or off.	
USB Connectors	(6) USB connectors. Four on the back panel and two on the front. Located on CPU.	
Ethernet Connector	RJ-45 connector. It provides a 10/100BaseT Ethernet connection. Located on CPU and 701-DL.	
Video card	Video card with 4 Mini DP (Display)Connectors. Provides video display to the monitor.	
COM-1 NAV Connector	DB-9 female connector. RS-232 serial port that connects to the navigation system. Located on CPU.	
COM-3 Connector	DB-9 female connector. RS-232 serial port that can be used to connect to the navigation system. Located on CPU.	
Table 3-2:7	201 DI With Computer Controls Indicators and Connections	

Table 3-2: 701 DL With Computer Controls, Indicators and Connections

Figure 3-2: 701 With Computer Front Panel

Figure 3-3: 701 DL With Computer Rear Panel

3.3 Activating the 701-DL

To activate the 701-DL Digital Link System:

- **1.** Turn on the computer and launch the Discover application.
- **2.** Turn on the line power switch on the back panel of the 701-DL Digital Link. This switch can be left in the on position at all times if desired.
- **3.** Turn on the power switch on the front panel.
- 4. The fish power indicator should illuminate; the LAN indicator should flash continuously, and the LINK indicator should flash while a reliable communications link with the towfish is being established and then illuminate continuously when the link is found. Also, the NET Radio Indicator Tab in the lower control panel of the Discover application UI should display:

NET: ON

3.4 Post Recovery

After recovering a tow vehicle from a survey, power down the topside computer and 701-DL. The unit can then be safely disconnected from the tow vehicle. If the next survey is not for an extended time period, EdgeTech recommends storing the unit in its original shipping container in a safe and dry environment

4.0 MAINTENANCE

The 701 Digital Link is ruggedly designed and built, and therefore requires little maintenance. However, to ensure long-lasting, reliable service, some periodic maintenance is recommended.

Maintenance of the system should be performed regularly or as often as necessary, depending on use. However, most of the maintenance is performed after each deployment and recovery cycle.

5.0 TROUBLESHOOTING

In the unlikely event that the system requires troubleshooting, this section provides instructions for disassembling and reassembling the unit, along with tips for identifying and correcting operational problems.

For questions or guidance with using this section, contact **EDGETECH CUSTOMER SERVICE**.

5.1 701-DL Digital Link Troubleshooting Guide

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
	The POWER switch is not turned on.	Verify the POWER switch is on.
The green POWER indicator on the topside does not	No AC power. When using the AC power connector.	Verify that the topside processor is connected to AC power. Check the AC power source. Verify that the fuse is good.
illuminate when the unit is turned on.	5 amp Fuses on the rear panel of topside ac connection bad.	Check fuses for continuity. Replace if necessary.
	The indicator is not operating.	Open the topside processor and check the indicator and wiring.
The Green LAN indicator on the	There is no connection between the topside and the computer.	Check LAN connections between topside and laptop.
topside does not illuminate when the unit is turned on.	The indicator is not operating.	Open the topside processor and check the indicator and wiring.
Green LINK indicator on the topside flashes	Tow cable between topside and Towfish is disconnected or faulty.	Check connections and tow cable.
when the topside is turned on. After 1- minute flashing should	Modem settings on the topside are incorrect.	Refer to the manual for modem settings.
stop, and the indicator should remain lit.	4205 Towfish is faulty.	Check topside on different Towfish.
Table 5-1: 701-DL Digital Link Troubleshooting Guide.		

5.2 701-DL with 2U Computer Troubleshooting Guide

This troubleshooting section is for the 701-DL and Computer Combo.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION	
Blue Power Indicator on 2U CPU does not illuminate	The POWER switch is not turned on.	Verify that the POWER switch located in rear off CPU is in the on position.	
	No AC power.	Verify that the 2U CPU is connected to AC power. Check the AC power source.	
	The indicator is not operating.	Open topside processor and check indicator and wiring.	
Table 5-2: 701-DL Rackmount Troubleshooting Chart			

5.3 Part Numbers for Major Components

0003117 ASSY TOP KIT SPARES 701 DL DIGITAL LINK			
Part	MTL	Description	Qty
10	0012635	ASSY SUB MODEM 701 D-LINK DSL	1
30	0011860	PCB ASY TOP POWER SUPPLY ANALOG POWER BOARD 4200 P /566 P	1
40	0006372	POWER SUPPLY CHASSIS CONVERTER AC-DC 115/230 INPUT 24 OUTPUT	1
50	0004228	CORD POWER	1
70	0003728	CIRCUIT PROTECT HOLDER FUSE 5X20MM 5A 250V FAST	5

A.0 COMPUTER SYSTEM RESTORE

The following section outlines the procedures for backing up and restoring the system drive.

CAUTION! All data will be lost upon restoring the system to factory settings. Be sure to backup all data before performing the procedure below.

- **1.** Ensure that the topside is off.
- 2. Insert USB3 flash drive in the blue USB3 port.
- 3. Start topside and be prepared to press F** key when prompted:
 - **a.** If the topside is rack mount, press F11.
 - **b.** If the topside is a laptop, press F12.
- **4.** Under Please select boot device: By using up/down arrow keys, select EUFI: Corsair Voyager 3.0 000A, then press Enter.
- 5. Wait for Paragon Backup & Recovery 14 Home screen to appear, then click Restore icon.
- 6. On Welcome to the Restore Wizard screen, click Next.

Browse for Archive and click the specific image (the file ending with the extension ".pbf"). When the Archive File Details window appears, click Next.

- 7. At What to restore window, click Basic MBR Hard Disk 0, click Next.
- **8.** At Where to restore window, ensure that Basic MBR Hard Disk 0 is already selected (brown box around it). If it is not, use up/down arrow keys to select. Click Next.
- 9. At Restore results window, make no selection and click Next.
- **10.** At the Ready to restore from the archive window, select O Yes, apply the changes physically. Click Next. *Restoring will begin.*
- **11.** At completing the restore wizard, click Finish. Click Shutdown.
- **12.** Remove the USB3 flash drive and restart the topside.
- **13.** Re-boot and click on the Windows icon and navigate to Control Panel > System. Activate Windows using the supplied key code on the rear of the laptop or 2U rack mount computer.

B.0 PRINTERS

Printers connect to the system via an ETHERNET cable. The following ETHERNET-only printers work well with the system:

- EPC HSP 100
- EPC 1086-NT
- EPC 9206
- iSys V8.5
- iSys v12
- Ultra 200
- Ultra 120
- Ultra 120-HD
- Ultra 200 HD
- EPC 1086
- EPC 1086 Old
- Geoprinter 975
- TDU 850

NOTE: EdgeTech Topsides support the ETHERNET-only Printers listed above. Consult manufacturer's operating manual for printer requirements and set up.

