ProPlex®

DATA DISTRIBUTION

EZ-LAN Unity 20

USER MANUAL

ProPlex EZ-LAN Unity 20 User Manual

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1. INTRODUCTION

PRODUCT OVERVIEW

EZ-LAN makes today's complex show networking easier and accessible for everyone. These simple to operate yet powerful Gigabit Ethernet switches distribute up to four discrete networks quickly, effortlessly, and simultaneously. Users untrained in the complexities of managed networking can easily isolate networks and access and change VLAN assignments with a single button press.

Save money by using two EZ-LAN switches to do the work of up to eight standard Gigabit switches! With one quad fibre cable, or two copper Ethernet cables connecting two EZ-LANs, speed is doubled (through the magic of "link aggregation") and the security of full redundancy is provided.

With 16 ports, assignable in four groups of four ports, EZ-LAN is a revolutionary new addition to the ProPlex Data Distribution range. This line of multiple format data management systems, are all designed and built to withstand "Life on the Road."

UNPACKING INSTRUCTIONS

Upon receipt of the unit, carefully unpack the carton and check the contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear to be damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a unit must be returned to the factory, it is important that it be returned in the original factory box and packing.

POWER REQUIREMENTS

Before powering the unit, make sure the line voltage is within the range of accepted voltages. This unit accommodates 100-240VAC, 50/60Hz. All units must be powered directly from a switched circuit and cannot be operated with a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0-100% switch.

SAFETY INSTRUCTIONS

Please read these instructions carefully. This user guide contains important information about the installation, usage and maintenance of this product.

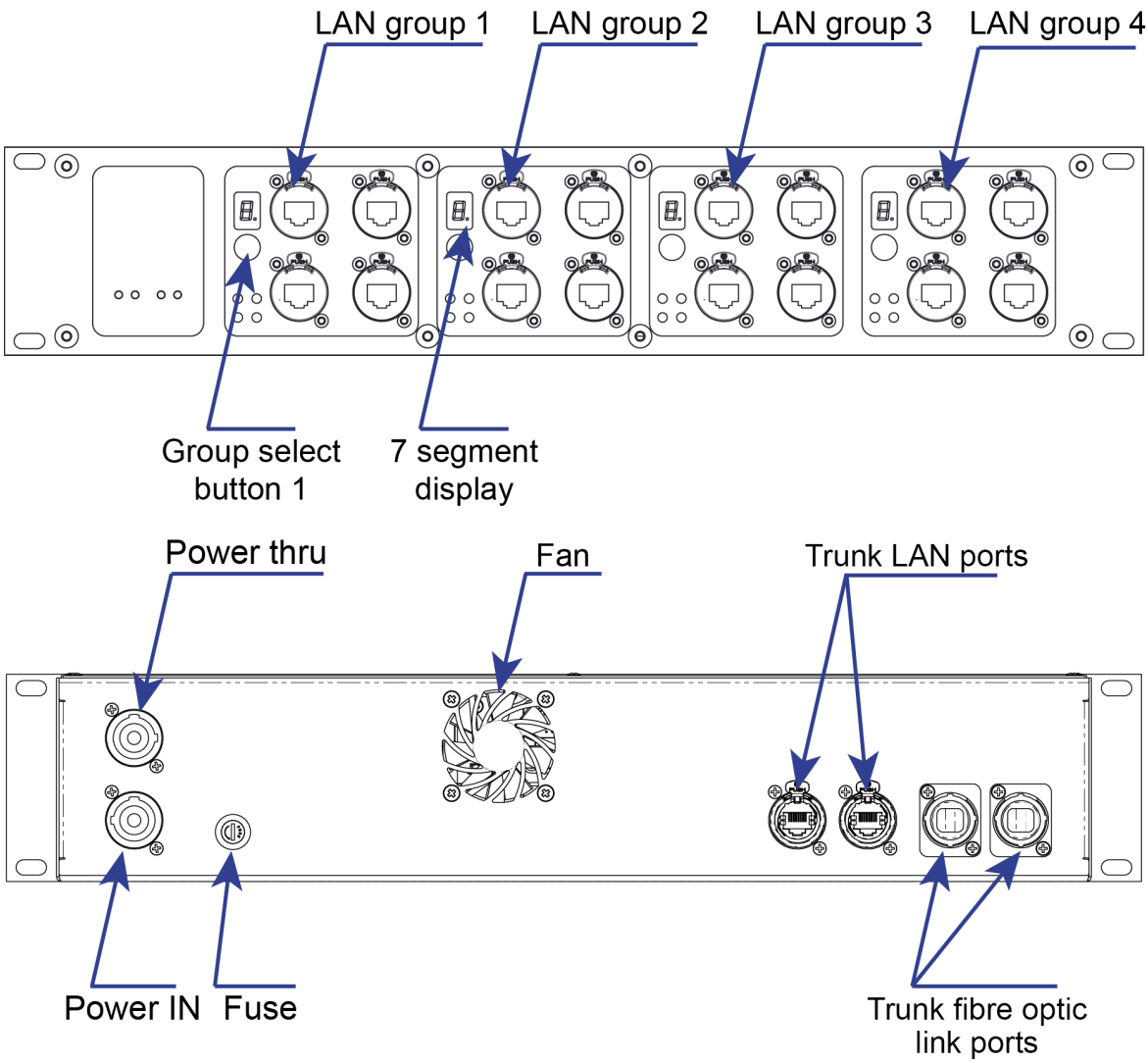
- Keep this User Guide for future reference. If unit is sold to another user, make sure they also receive this instruction booklet.
- Ensure the unit is connected to proper voltage, and that line voltage is not higher than that stated on the device.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from the power source before servicing or fuse replacement. Always use the fuse specified in this manual..
- Maximum ambient temperature (Ta) is 40°C (104°F). Do not operate unit at temperatures above this rating.
- In the event of a serious operating problem, stop using the unit immediately. Repairs must be carried out by trained, authroized personnel. Conact the nearest authorized technical assistance center. Only OEM spare parts should be used.
- Do not connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.

FUSE REPLACEMENT

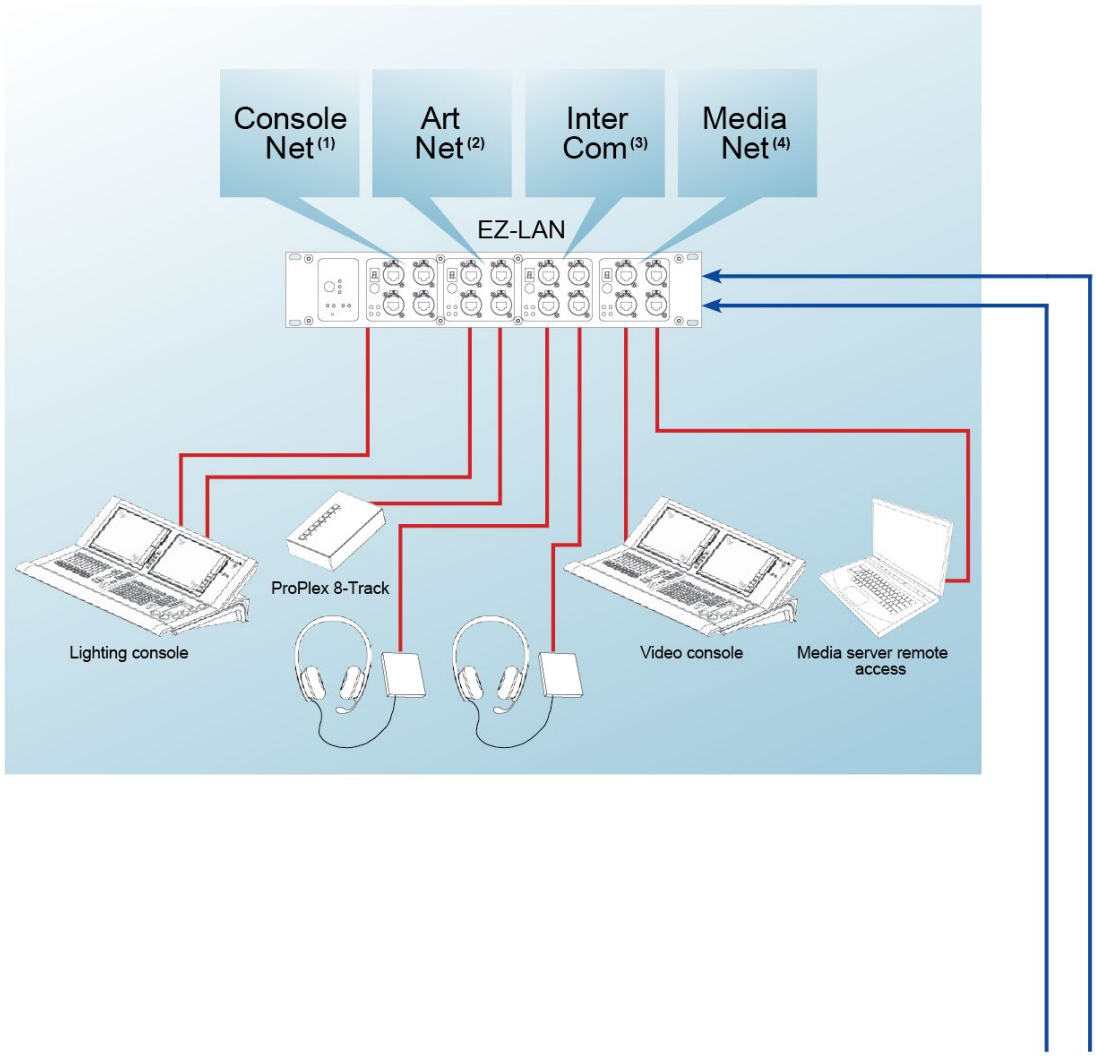
The EZ-LAN uses a 1.0A, 250V barrel fuse, 5x20mm (0.2x0.8 in.).
To replace fuse:

1. With a screwdriver turn the fuse cap counter-clockwise to remove fuse cap with fuse.
2. Replace fuse attached to fuse cap.
3. Reinsert fuse cap with new fuse and tighten clockwise

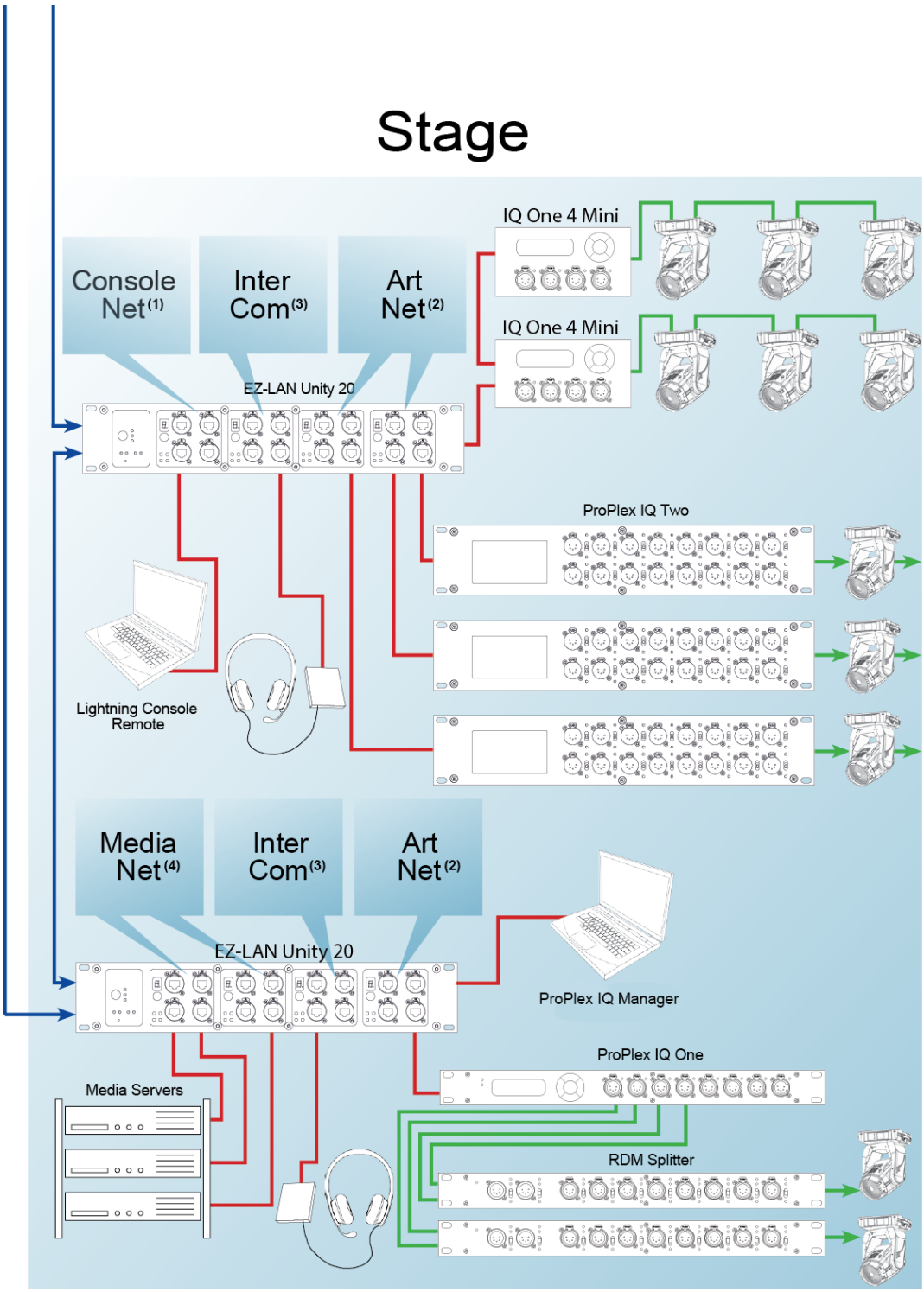
UNIT PANELS – FRONT / BACK



FOH



(diagram continued next page)


Stage
IQ One 4 Mini
IQ One 4 Mini
Console Net (1)
Inter Com (3)
Art Net (2)
EZ-LAN Unity 20
ProPlex IQ Two
Lightning Console Remote
Media Net (4)
Inter Com (3)
Art Net (2)
EZ-LAN Unity 20
ProPlex IQ Manager
ProPlex IQ One
Media Servers
RDM Splitter

2. OPERATION

CONFIGURATION

Types of Groups:

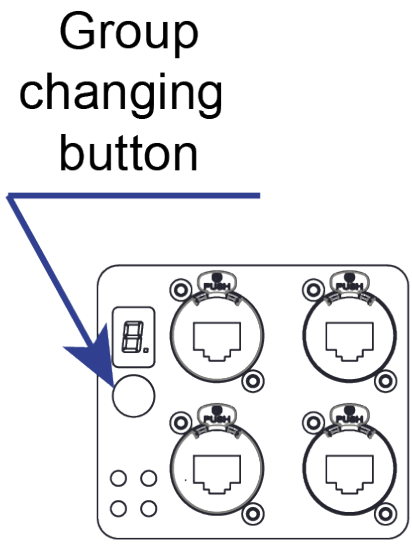
Trunk Ports: The Fibre and Ethernet ports on the rear of the EZ-LAN are always connected to "Trunk" groups. Trunk ports are used to connect multiple EZ-LANs together to move the VLANs from EZ-LAN to EZ-LAN. Multiple connections between a pair of EZ-LANs provide redundancy and link aggregation and utilizes IEEE 802.1Q to transport VLANs between multiple EZ-LANs. Any number of EZ-LANs can be connected together using trunk port to trunk port connections. If more trunk ports are needed, set the VLAN group to "." to turn a group of 4 front ports into another trunk group. This can help faciliate "ring" and "star" type network layouts with multiple EZ-LANs.

VLAN Groups: Each EZ-LAN can have up to 4 different VLAN groups. A VLAN can be defined as a separate network that is isolated from other networks on the same EZ-LAN. VLANS can be chosen by pressing the VLAN group button on a group of connectors and choosing group 1 through 9. These can be used to network multiple devices together while keeping them separate from other groups of devices. When EZ-LANs are connected together via the trunk ports, these VLAN Groups are transported from EZ-LAN to EZ-LAN. By setting your VLAN group to the same number on all connected EZ-LANs, this VLAN is accesible on each device.

Note: Group numbers do not match VLAN IDs directly. Group 1 corresponds to VLAN ID 11; Group 2 corresponds to VLAN ID 12, etc. Generally, VLAN ID matches group no. +10.

GROUP CHANGING

To assign VLAN groups, press the button located next to each group's four RJ45 ports (group changing button, see image).



To change the VLAN group assignment, hold the Group Select button for few seconds to unlock the group. The display will begin flashing. Then press the button to cycle trough all available groups. After the desired group is selected, wait for a few seconds for this new group to be saved and for the switch to internally reconfigure the port group. The display will stop flashing.

All of the ports within the same group are linked together and they can exchange data, while other ports in other groups are not connected.

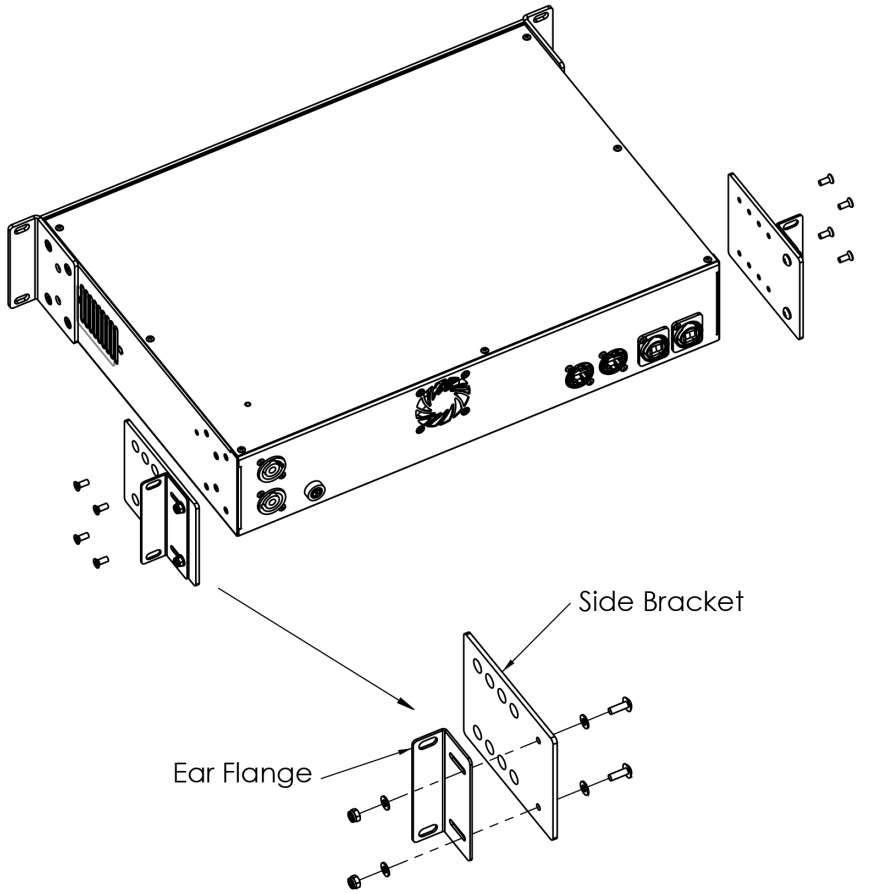
The same group can appear multiple times in network, even in the same unit – all ports can even be set to the same group.

HARDWARE INFORMATION

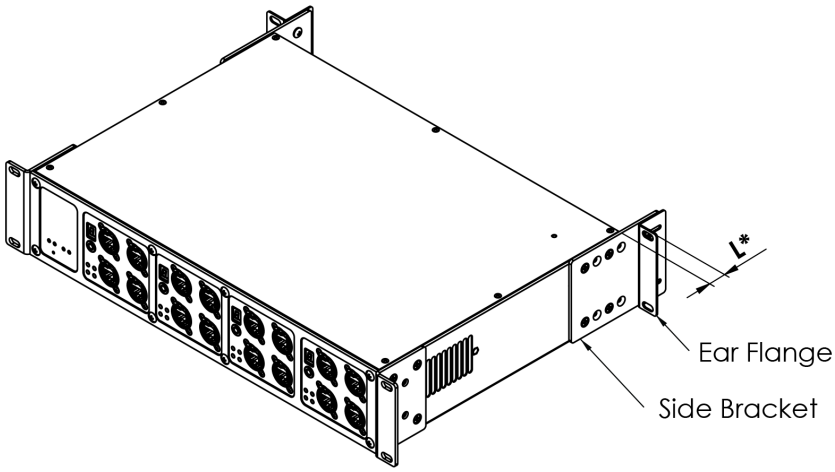
- Each Ethernet port has status LEDs that indicate data activity (IN or OUT).
- If the status LED is blinking, the Ethernet port is receiving signal.
- If the status LED is not blinking, the Ethernet port is not receiving signal.
- All ports have separate optical and galvanic isolation.
- Ethernet connectors are Neutrik EtherCon RJ45.
- Ethernet is 10/100/1000 Base-TX with auto-negotiation.

3. OPTIONAL REAR RACKMOUNT KIT

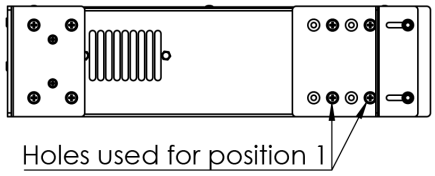
An optional Rear RackMount Kit is available for 8-point mounting within racks of various sizes, providing greater physical integrity to the EZ-LAN enclosure. This is particularly beneficial if the rack is transported.



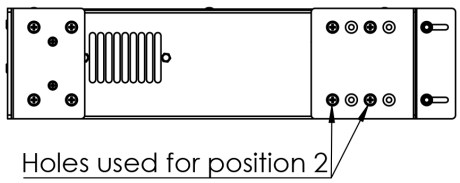
Depending on the rail-to-rail depth of the rack, the Rear RackMount Kit bracket/ear assemblies can be optimized as needed. The rear Side Bracket attaches to the enclosure, with the option of two positions, both using four screws (hardware included). Never use less than four screws per side when attaching the bracket to the EZ-LAN chassis. The rear Ear Flange attaches to both the Side Bracket and directly to the rear rack rail. The side of the Ear Flange which attaches to the Side Bracket has extra-elongated screw slots for to allow for fine adjustments as needed.



1. Rear Side Standard Bracket position 1
L = -13,5mm to 1,5mm [0.53 to 0.06 in]



2. Rear Side Standard Bracket position 2
L = 1,5mm to 16,5mm [0.06 to 0.65 in]



3. Rear Side Custom Bracket for specified length
L = Custom

***Rear Side Bracket mounting length (L) is measured from the back panel of the device to the rack's rear rail mounting surface.**

4. APPENDIX

LIMITED WARRANTY

ProPlex Data Distribution Devices are warranted by TMB against defective materials or workmanship for a period of two (2) years from the date of original sale by TMB.

TMB's warranty shall be restricted to the repair or replacement of any part that proves to be defective and for which a claim is submitted to TMB before the expiration of the applicable warranty periods.

This Limited Warranty is void if the defects of the Product are the result of:

- Opening the casing, repair, or adjustment by anyone other than TMB or persons specifically authorized by TMB
- Accident, physical abuse, mishandling, or misapplication of the product.
- Damage due to lightning, earthquake, flood, terrorism, war, or act of God.

TMB will not assume responsibility for any labor expended, or materials used, to replace and/or repair the Product without TMB's prior written authorization. Any repair of the Product in the field, and any associated labor charges, must be authorized in advance by TMB. Freight costs on warranty repairs are split 50/50: Customer pays to ship defective product to TMB; TMB pays to ship repaired product, ground freight, back to Customer. This warranty does not cover consequential damages or costs of any kind.

A Return Merchandise Authorization (RMA) Number must be obtained from TMB prior to return of any defective merchandise for warranty or non-warranty repair. For all repairs please contact TMB Tech Support Repair using the contact information below or email TechSupportRepairNA@tmb.com.

US
527 Park Ave.
San Fernando, CA 91340
Tel: +1 818.899.8818
Fax: +1 818.899.8813
tmb-info@tmb.com
www.tmb.com

UK
21 Armstrong Way
Southall, UB2 4SD England
Tel: +44 (0)20.8574.9700
Fax: +44 (0)20.8574.9701
tmb-info@tmb.com
www.tmb.com

RETURN PROCEDURE

Please send returned merchandise prepaid and in the original packing. Freight call tags will not be issued for shipping the product to TMB, but TMB will pay the freight for return to the customer. Clearly label package with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will delay service. Please contact TMB and request an RMA # prior to shipping the unit. Be prepared to provide the model number, serial number, and a brief description of the cause for the return. Be sure to properly pack the unit; any shipping damage resulting from inadequate packaging is the customer's responsibility. TMB reserves the right to use its own discretion to repair or replace product(s). Proper UPS packing or double-boxing will better ensure product integrity when shipped.

Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) A brief description of the symptoms

TMB 24/7 TECHNICAL SUPPORT

US/Canada: +1 818.794.1286
Toll Free: 1 877.862.3833 (877.TMB.DUDE)
UK: +44 (0)20.8574.9739
Toll Free: 0800.652.5418
e-mail: techsupport@tmb.com

EZ-LAN UNITY 20 – TECHNICAL SPECIFICATIONS

Weight & dimensions

Width	19 in / 483 mm
Depth	12 in / 305 mm
Height	3.5 in / 90 mm
Weight	10.8 lb / 4.9 kg
EIA rack units	19” 2U

Power

Operating voltage	100-240v, 50-60hz
Power consumption	10W max.

Thermal

Operating temperature	-20 to +40°C
Cooling	convection

Control

Base TX 10/100/1000 ports	18
Fibre optic link ports	2
Optical connectors	opticalCON QUAD (DUO option available)
Ethernet connectors	etherCON RJ45

Warranty information

Warranty	2-year limited warranty