

# ProPlex<sup>®</sup>

DATA DISTRIBUTION



## 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..
- Always use a safety cable when hanging unit overhead.
- 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, authorized personnel. Contact 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.

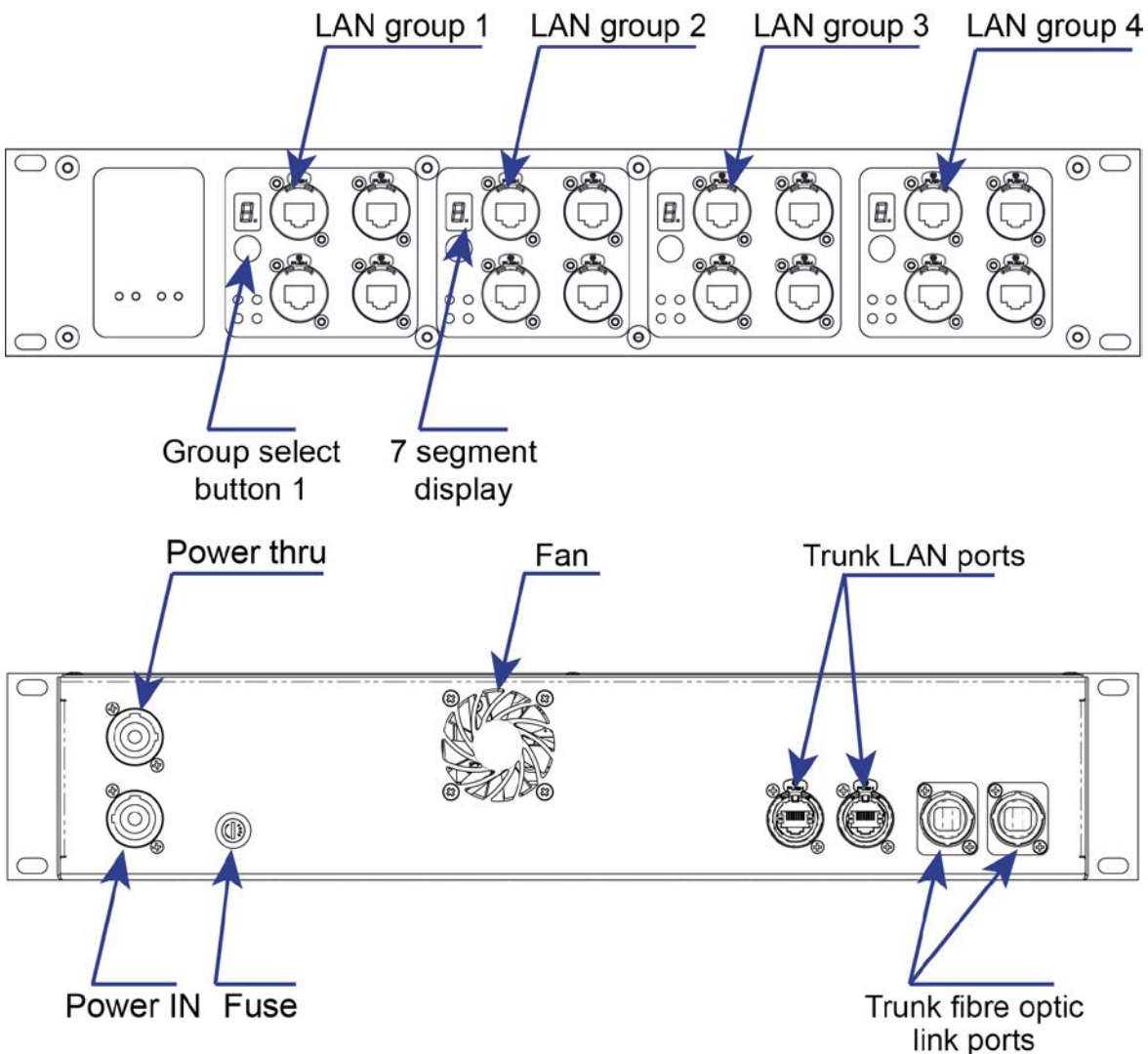
## FUSE REPLACEMENT

The SceneSwitch uses a 1.0A, 250V barrel fuse, 5x20mm (0.2x0.8 in.).

To replace fuse:

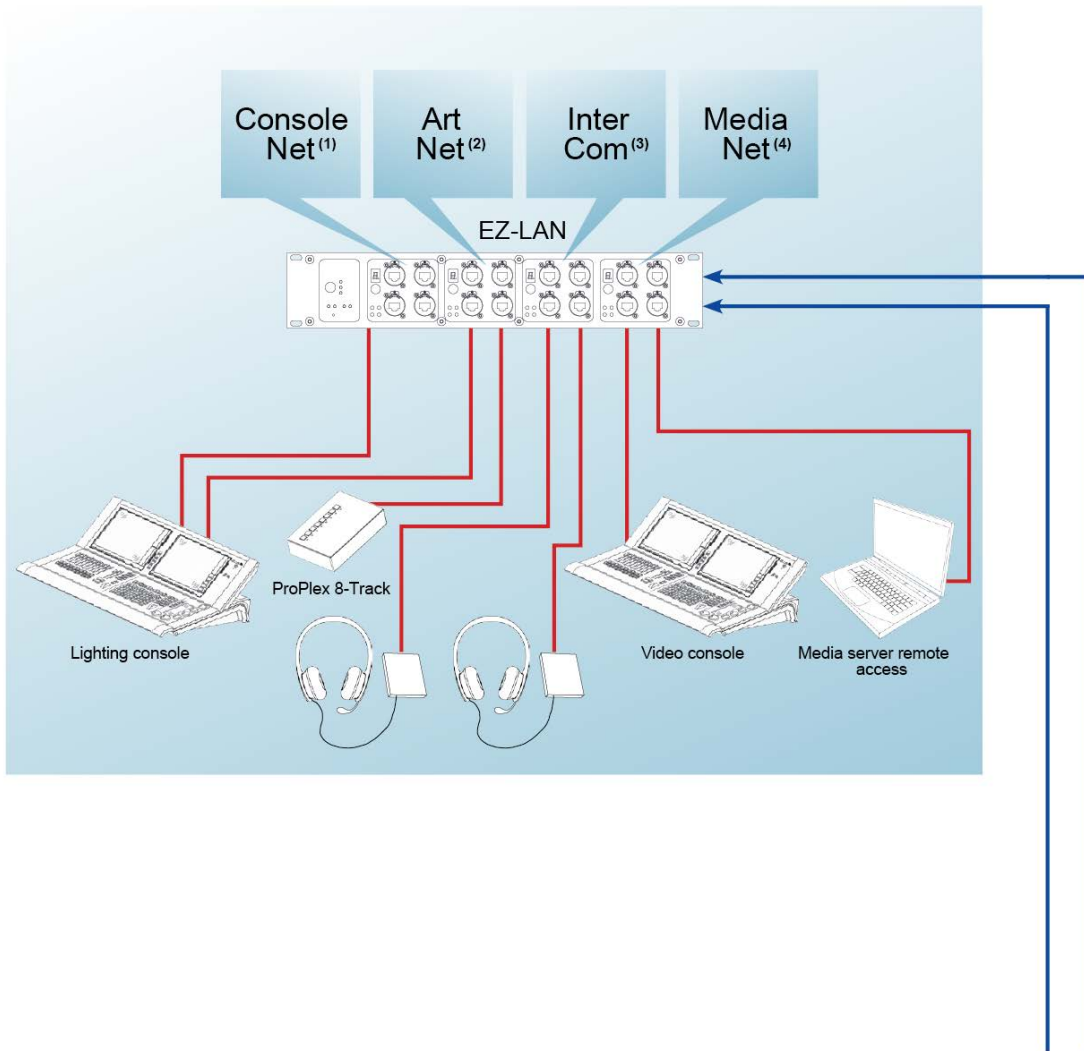
1. With a screwdriver turn the fuse cap counter-clockwise to remove fuse cap with fuse.
2. Replace fuse attached to fuse cap.
3. Reinsert fuse cap with new fuse and tighten clockwise

## UNIT PANELS – FRONT / BACK



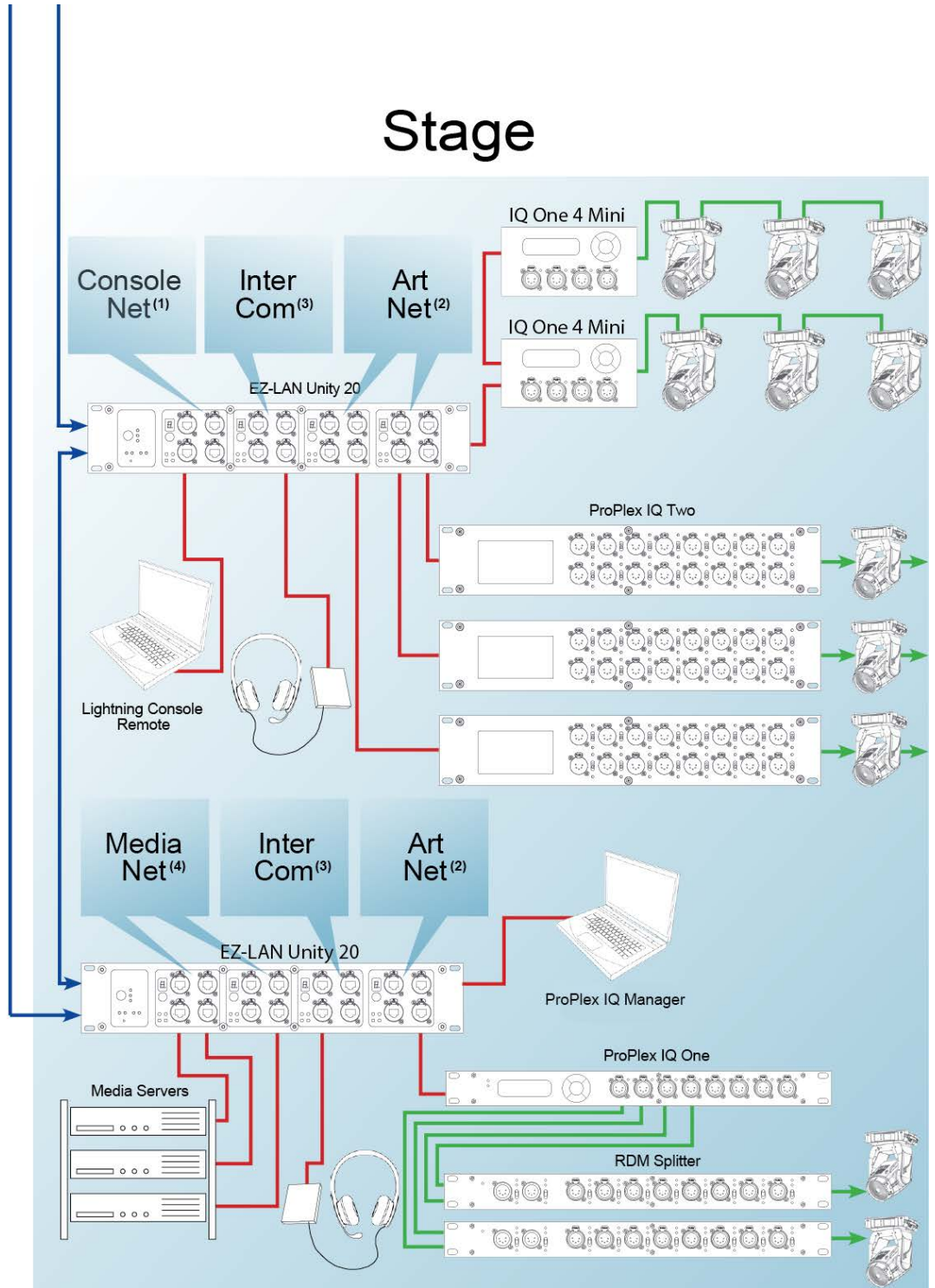
# NETWORK EXAMPLES

## FOH



(diagram continued next page)

# Stage



## 2. Operation

### CONFIGURATION

Types of Groups:

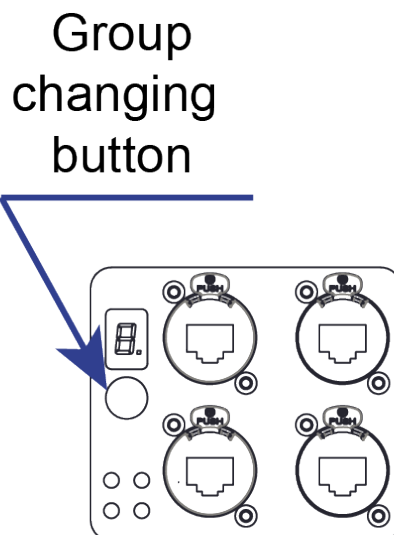
**Trunk Ports:** The Fibre and Ethernet ports on the rear of the EZ-LAN are always connected to "Trunk" groups. Trunk ports are used to connect multiple EZ-LANs together to move the VLANs from EZ-LAN to EZ-LAN. Multiple connections between a pair of EZ-LANs provide redundancy and link aggregation and 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 facilitate "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 accessible 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 through 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. 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](mailto:TechSupportRepairNA@tmb.com).

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## 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

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Toll Free: 0800.652.5418  
e-mail: techsupport@tmb.com

# EZ-LAN UNITY 20 – Technical Specifications

## WEIGHT & DIMENSIONS

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|                     |                  |
|---------------------|------------------|
| 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

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|                         |                   |
|-------------------------|-------------------|
| OPERATING VOLTAGE ..... | 100-240V, 50-60Hz |
| POWER CONSUMPTION.....  | 10W MAX.          |

## THERMAL

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|                            |              |
|----------------------------|--------------|
| OPERATING TEMPERATURE..... | -20 TO +40°C |
| COOLING .....              | Convection   |

## CONTROL

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|                                 |  |
|---------------------------------|--|
| 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

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|                |                         |
|----------------|-------------------------|
| WARRANTY ..... | 2-YEAR LIMITED WARRANTY |
|----------------|-------------------------|