ProPlex®

DATA DISTRIBUTION

FloppyDrive 4x2 PortableMount 24V and 12V

USER MANUAL

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1. Introduction

Product Overview

ProPlex FloppyDrive 12V and ProPlex FloppyDrive 24V are DMX controllers for RGB LED neon, tape, and other low-voltage systems. Features include:

- Rugged, tour-ready ProPlex "Blue Box" PortableMount chassis. Packaged for extreme conditions. Shock-mounted circuitry. Advanced thermal management
- Many onboard preprogrammed "looks" with RGB presets
- Perfect for FloppyFlex LED neon, FloppyTape LED tape, and other 24 VDC LED neon or tape systems (max. length of runs per output varies with neon or tape product).
- Color LCD Display with easy-function control buttons for easy setup and configuration
- Heavy-duty yoke for truss mounting. Optional RackMount Kit available.
- Two 12VDC or 24VDC outputs (depending on model), 350 Watts total output.
- RDM functionality for complete system monitoring and addressing via RDM
- Self-healing overcurrent / short circuit protection
- Neutrik connectors throughout

Unpacking Instructions

Upon receipt of the unit, carefully unpack the carton and check the contents to ensure that all parts are 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 unit 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 90-240 VAC, 50/60 Hz. 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 manual contains important information about the installation, usage and maintenance of this product.

- Keep this user manual 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, 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.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your distributor.

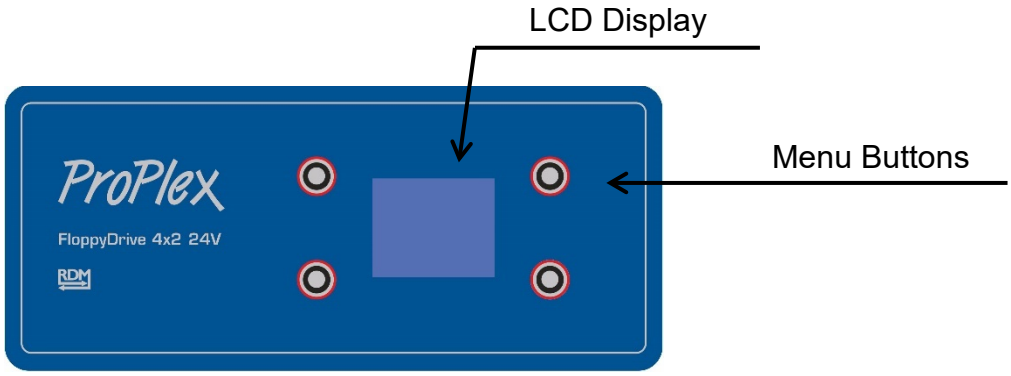
Disconnect the power cord before replacing a fuse and always replace with the appropriate fuse.

Fuse Replacement

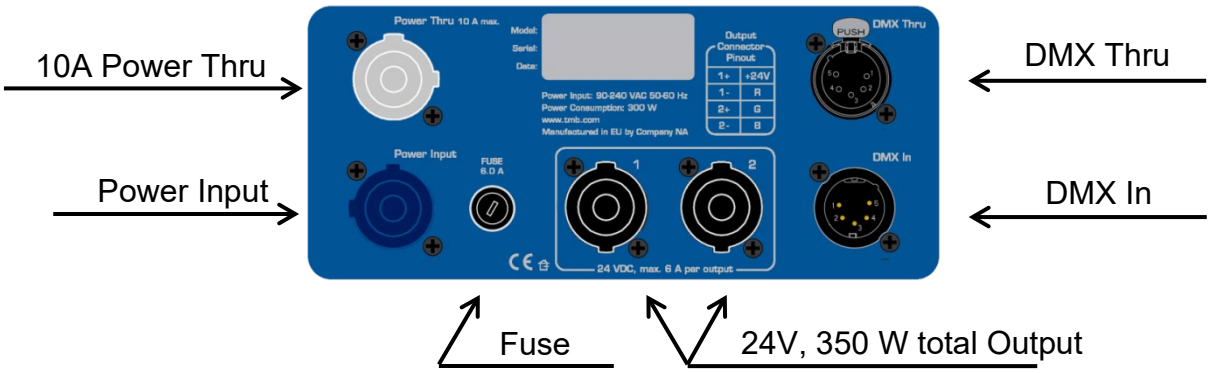
The FloppyDrive uses a 6.0A, 250V barrel fuse, 5x20mm (0.2x0.8 in.).
To replace fuse:

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

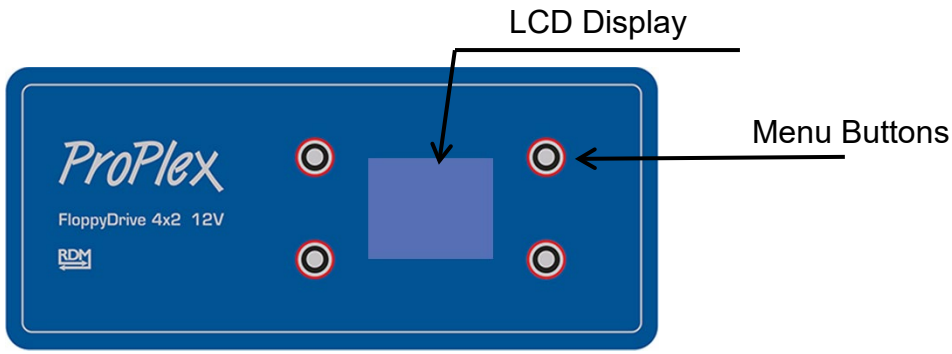
Panel Front: FloppyDrive 24V



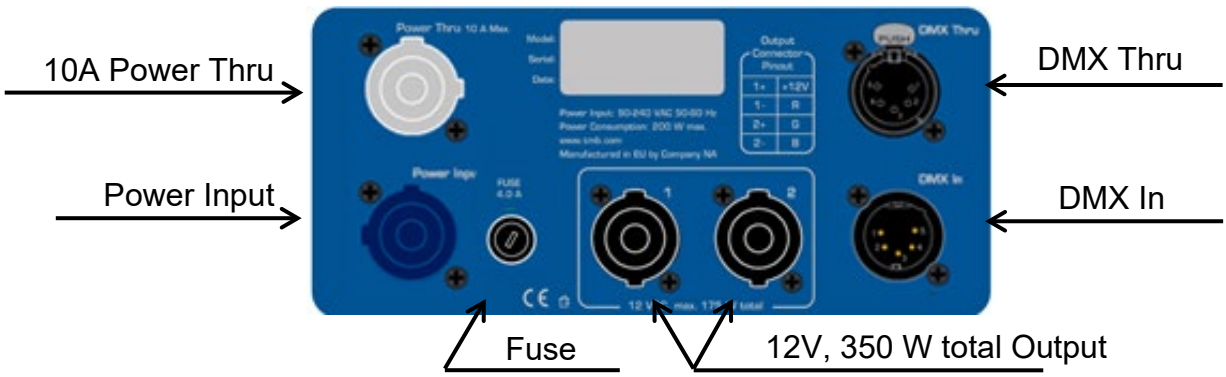
Panel Rear: FloppyDrive 24V



Panel Front: FloppyDrive 12V

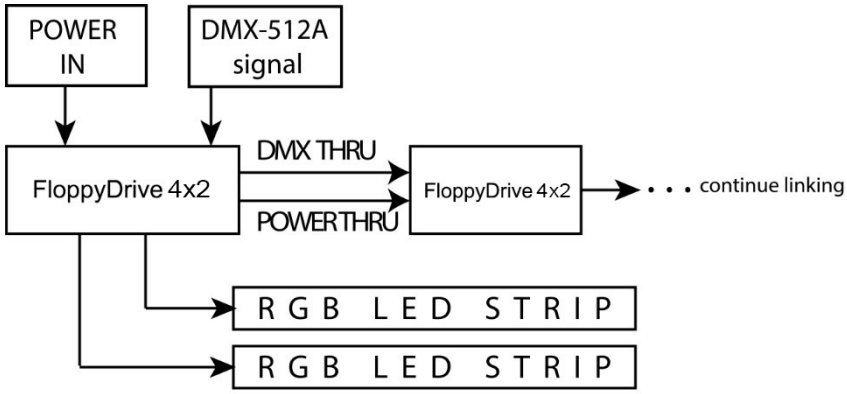


Panel Rear: FloppyDrive 12V



Linking

1) Connect the male 5-pin XLR connector of the DMX cable to the output (female) 5-pin XLR connector of the DMX console.
2) From the DMX console, connect the female 5-pin XLR connector of the DMX cable to the input connector (male) of the ProPlex FloppyDrive.
3) Connect from the fixture output as stated above to the input of the following FloppyDrive and so on.
4) Continue the link until last FloppyDrive is connected in your DMX signal data chain.
5. Attach LED strips to each ProPlex FloppyDrive as planned.



LED Strip Pin Out

RGB LED strip connection pin out.

Output connector pinout

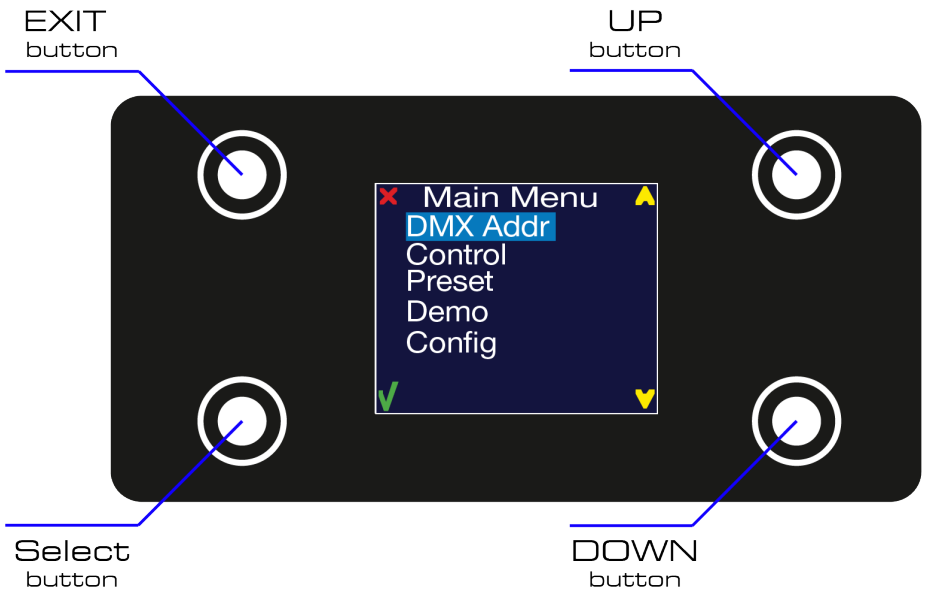
1+	+24V
1-	R
2+	G
2-	B

2. Operation

Navigating the Control Panel

Access control panel functions using the four control panel buttons surrounding the LCD display.

Press and hold the **<MENU>** button to scroll through the top level menu items. This is the top of the menu map. Use the **<UP>** and **<DOWN>** buttons, located right from LCD screen, to navigate the menu map and menu options.



Press the **<SELECT>** button to access the menu function currently displayed or to enable a menu option. To return to the top of the menu map or menu without changing the value, press the **<EXIT>** button.

Main Menu Functions

DMX Addr – DMX address selection
Control – Control mode selection menu
Manual – Stand-alone mode with intensity of each color
Demo – Pre-programmed test modes
Config – Change fixture parameters

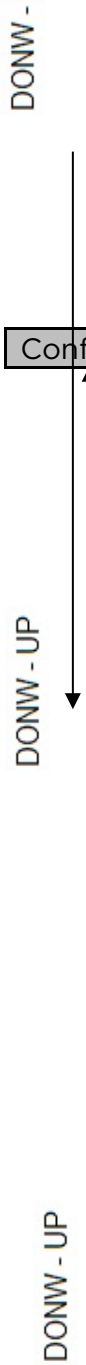
During normal operation of the ProPlex FloppyDrive, the LCD of the control panel displays the current DMX address. If the unit is not receiving a DMX signal, the address blinks in RED color.

Menu tree

Back- Enter

DONW - UP

Level 1	Level 2	Level 3	Notes
DMX Address			Set the DMX start address
Control			In this menu function, fixture control options can be selected
	RGB 1p 3ch		Basic control options
	RGB 2p 6ch		Advanced control options (with strobe function)
Manual			This mode is made for stand-alone DMX
	RED	000 ↔ 255	Set the DMX value from 0-100% for RED color
	GREEN	000 ↔ 255	Set the DMX value from 0-100% for GREEN color
	BLUE	000 ↔ 255	Set the DMX value from 0-100% for BLUE color
Demo			Pre-programmed fixture tests.
	Demo 1		Red color test
	Demo 2		Green color test
	Demo 3		Blue color test
	Demo 4		White color test
	Demo 5		Yellow color test
	Demo 6		Cyan color test
	Demo 7		Pink color test
	Demo 8		White color test
	Demo 9		Color Amplitude Modulation soft transition test
	Demo 10		Color Amplitude Modulation sharp transition test
	Demo 11		Color + Intensity Amplitude Modulation test
	Demo 12		Color + Intensity Amplitude Modulation test
	Demo 13		White Intensity Amplitude Modulation test
	Demo 14		Red color strobe test
	Demo 15		Green color strobe test
	Demo 16		Blue color strobe test



Demo 17		White color strobe test
Demo 18		Red flash delay test
Demo 19		Green flash delay test
Demo 20		Blue flash delay test
Auto 20		Automatic selection of all tests 1- 20
Config		Pre-programmed self-test.
DMX Loss		This setting defines what will happen at DMX signal loss.
	ON	When DMX signal is lost, it will keep the output as the last static DMX record received.
	OFF	When DMX signal is lost, device won't hold the last input DMX record received and will turn black.
Fan		This setting sets the cooling fan behavior.
	OFF	Fan is ON only under load.
	ON	Fan is always ON.
Fade Time		Time
	OFF	No fade time.
	SmartFade	It will attempt to add smoothness to crossfading DMX values coming from the lighting controller, but will also allow for very quick changing of values where smoothness is not applicable.
	Fixed fade	The fade time for any change in DMX values can be set manually. (0.01s to 2.5s)
Gamma		Set color dimming curve values here.
	Gamma (1.0-5.0)	In this setup you can set each color dimming curve value from "1.0" till "5.0", by default this value is "2.2"
Async Strobo		Flash once on every intensity change when strobe duration, rate and FX parameters are off.
	OFF	Flash once when intensity changes from 0 to any other value.
	OFF	Flash once on every intensity change.
Thermometer		Shows current temperature of the device.
	Celsius	Shows temperature in degrees Celsius
	Fahrenheit	Shows temperature in degrees Fahrenheit
Reset		This setting will reset device to default (factory) settings.
	NO	Press NO to not restore default settings.
	YES	Press YES to restore default settings.

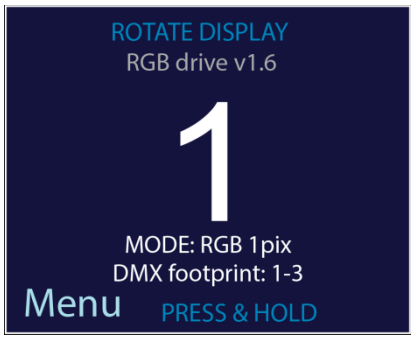
DMX ADDRESS – To set the required DMX address:

1) Press and hold **<MENU>** button to open the **Main Menu**.
2) Use **<UP>**and **<DOWN>** buttons to find the **DMX Address** submenu.

3) Press **<Select>** button to access the DMX address value change submenu.
4) Use **<UP>** and **<DOWN>** buttons to set necessary DMX address value (for example: "**DMX Addr: 1**").

5) Use **<Select>** button to confirm the new DMX address.
6) When the new DMX address is confirmed, Main Menu appears. Press **<EXIT>** button to return the working state.
7) Working state control panel display shows current DMX address, in this case it is **1**.

The active control mode is shown under the DMX address. The DMX footprint is shown below the mode. This shows the DMX addresses used by this unit.



CONTROL – The ProPlex FloppyDrive has two available control modes. Each control mode occupies a different DMX footprint.

To change **control modes**:

1) Press and hold **<MENU>** button to open the **Main Menu**.
2) Use **<UP>** and **<DOWN>** buttons to find the **Control** submenu and press **<Select>** button.

3) Now the **Control** menu is opened.

3) Use **<UP>** and **<DOWN>** buttons choose the desired control mode.
4) Press **<Select>** button to choose a control mode and return to the main menu. Press **<EXIT>** button to retain the previous control mode and return to the main menu.

DMX Protocol:

3ch RGB 1pix

Channel	Value	Function	Pixel numb.
1	000 ↔ 255	RED intensity 0% - 100%	1
2	000 ↔ 255	GREEN intensity 0% - 100%	1
3	000 ↔ 255	BLUE intensity 0% - 100%	1

6ch RGB 2pix

Channel	Value	Function	Pixel numb.
1	000 ↔ 255	RED intensity 0% - 100%	1
2	000 ↔ 255	GREEN intensity 0% - 100%	1
3	000 ↔ 255	BLUE intensity 0% - 100%	1
4	000 ↔ 255	RED intensity 0% - 100%	2
5	000 ↔ 255	GREEN intensity 0% - 100%	2
6	000 ↔ 255	BLUE intensity 0% - 100%	2

Manual Mode – This is a manual stand-alone mode where LED strips can be set as a static RGB wash. Even if the FloppyDrive is powered off and on, the preset mode values will be saved. A reset will clear these values.

To activate **Manual mode**:

1) Press and hold **<MENU>** button to open the **Main Menu**.
2) Use **<UP>** and **<DOWN>** buttons to find the **Manual** submenu and press **<Select>** button.

3) Manual mode submenu will open:
RED color intensity (000 ↔ 255);
GREEN color intensity (000 ↔ 255);

BLUE color intensity (000 ↔ 255);

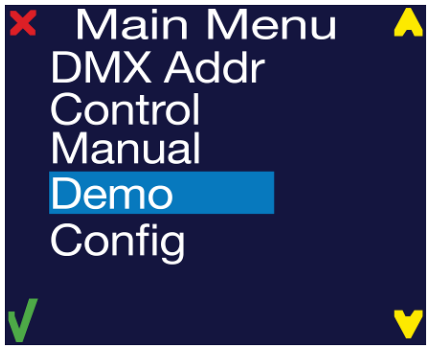
4) To change the intensity values, use the **<+>** and **< - >** buttons. After selecting the desired value of the first color (RED), press the **<Select>** button to edit the next value in the list (BLUE). When all values have been set as desired, select "**Save.**" It will flash **"Saved"**

5) Now the device should have LED output.
6) Press **<EXIT>** button. All settings will be saved.

Demo – In this menu, select the following demo scenes:

Demo 1 - Red color test
Demo 2 - Green color test
Demo 3 - Blue color test
Demo 4 - White color test
Demo 5 - Yellow color test
Demo 6 - Cyan color test
Demo 7 - Magenta color test
Demo 8 - White (RGB) color test
Demo 9 - Color Amplitude Modulation, blur edge transition test
Demo 10 - Color Amplitude Modulation, hard edge transition test
Demo 11 - Color + Intensity Amplitude Modulation test
Demo 12 - Color Intensity Amplitude Modulation test with hard edges
Demo 13 - White Intensity Amplitude Modulation test
Demo 14 - Red color strobe test
Demo 15 - Green color strobe test
Demo 16 - Blue color strobe test
Demo 17 - White flash delay test
Demo 18 - Red flash delay test
Demo 19 - Green flash delay test
Demo 20 - Blue flash delay test
Auto 20 - Automatic selection of all demonstrations (Demo 1 - Demo 2)

1) Press and hold **<MENU>** button to open the **Main Menu**.
2) Use **<UP>** and **<DOWN>** buttons to find the **Demo** submenu and press select button.



3) Choose the desired demo using **<UP>** and **<DOWN>** buttons.

4) After the demo has completed playback, press **<Select>** or **<EXIT>** button to return to the main menu.

CONFIG – Under this menu, change the device's configuration settings.

1) Press and hold **<MENU>** button to open the **Main Menu**.
2) Use **<UP>** and **<DOWN>** buttons to find the **Demo** submenu and press select button.

3) Another submenu will open:

4) Using **<UP>** and **<DOWN>** buttons choose the setting to be modified and press the **<Select>** key.

In **Configuration menu** the following functions may be selected:

DMX LOSS – Set the FloppyDrive's reaction to lost DMX signal.

HOLD – Holds the last received DMX values when DMX signal is lost
OFF – Doesn't hold the last received DMX values when DMX signal is lost; stops light output.

Use **<UP>** and **<DOWN>** keys to find the desired option and press **<✓>** button.
After selecting correct setting, press **<X>** key to exit this submenu.

FAN – Cooling fan options

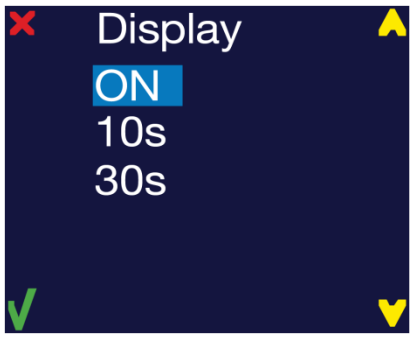
AUTO - Fan speed is automatically controlled by the fixture and will slow down as soon as it reduces its temperature to normal operating levels.

ON - Fan cooling always is turned on.

Use **<UP>** and **<DOWN>** keys to choose the desired option and press **<✓>** button. After selecting correct setting, press **<X>** key to exit this submenu.

BACKLIGHT – Display backlight settings

ON – Backlight is turned on
10s – Backlight off after 10 seconds of idle.
30s – Backlight 30 seconds of idle.



Use **<UP>** and **<DOWN>** buttons to find the option desired and press **<✓>** button. After selecting correct setting, press **<X>** key to exit this submenu.

FADE TIME – Fade time setup. In this setup, set the way the unit reacts to changing DMX values. This is designed to allow the light output of the LEDs to react as **smoothly** as possible when **crossfading DMX values**.

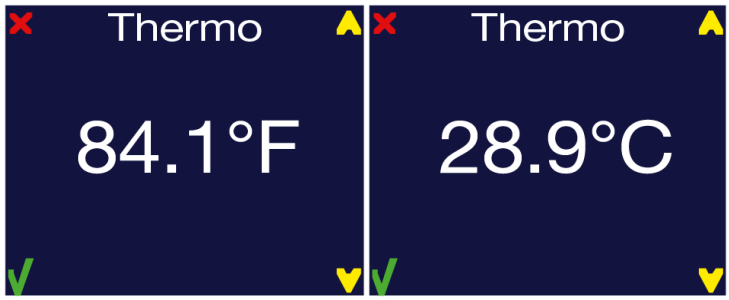
OFF – The LED strips will not change the smoothness of crossfading of values coming from the lighting controller.
Smart Fade – The LED strips will attempt to add smoothness to crossfading DMX values coming from the lighting controller, but will also allow for very quick changing of values where smoothness is not applicable.
Fixed Fade – The fade time for any change in DMX values can be set manually. The timing values can be set between 0.00 seconds and 2.50 seconds.
Use **<UP>** and **<DOWN>** keys to find the option necessary and press **<✓>** button. After selecting the desired setting, press **<X>** key to exit this submenu.

GAMMA – Gamma correction curve selection. This is a direct relation to the current going to the LED and the DMX value. The lower the value, the dimming curve and steps of intensity will be more noticeable at the bottom of the DMX range. The higher the value, the smoother the bottom end of the curve will be where the human eye detects more subtle changes.

Gamma – 8-bit rate Gamma correction setup. In this setup you can set the each color dimming curve value from "1.0" to "5.0", by **default** this value is "**2.2**".

Use the **<UP>**and **<DOWN>** buttons to change these values. To save selected values press **<SELECT>** button.

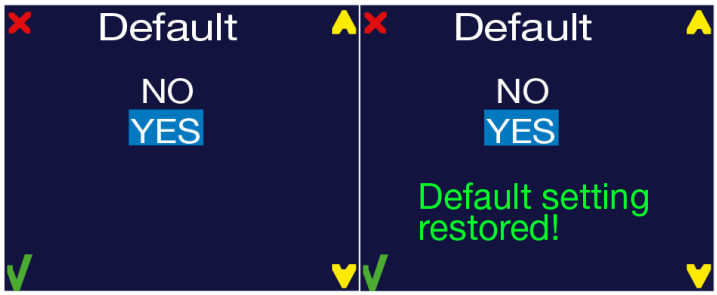
THERMOMETER – Internal thermometer. The built-in thermometer will provide full information about the current temperature of fixture.



Pressing the **<UP>** and **<DOWN>** buttons will change from degrees Celsius to degrees Fahrenheit

RESET – Set factory defaults. There are two options: **NO** and **YES**.

Use **<UP>** and **<DOWN>** keys to find the option necessary and press **<✓>** button. After selecting correct setting, press **<X>** key to exit this submenu.

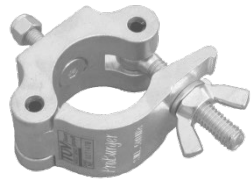


Caution! All saved data on device will be erased!

3. INSTALLATION

MOUNTING / RIGGING

Orientation – ProPlex Mini units may be mounted in any position, using the standard yoke. Always make sure there is adequate room for ventilation.



Rigging – *Always consult a certified rigging specialist before suspending any device overhead.*

Use ProBurger® couplers or equivalent C- or O-type clamps for attaching to truss. After establishing the desired position, tighten all appropriate bolts.

- *Always use safety cables!*
- When selecting installation location, consider routine maintenance.
- Never mount Mini enclosure where it will be exposed to moisture, high humidity, extreme temperatures, or restricted ventilation.

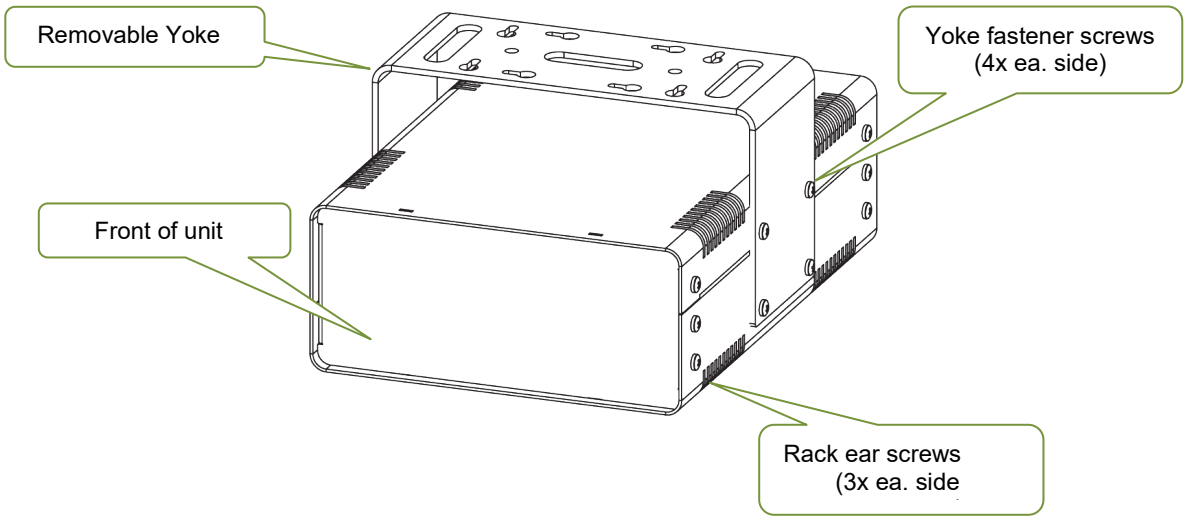
RackMount Kit

Optional RackMount Kits are available for mounting a ProPlex PortableMount enclosure in a 19" EIA rack.

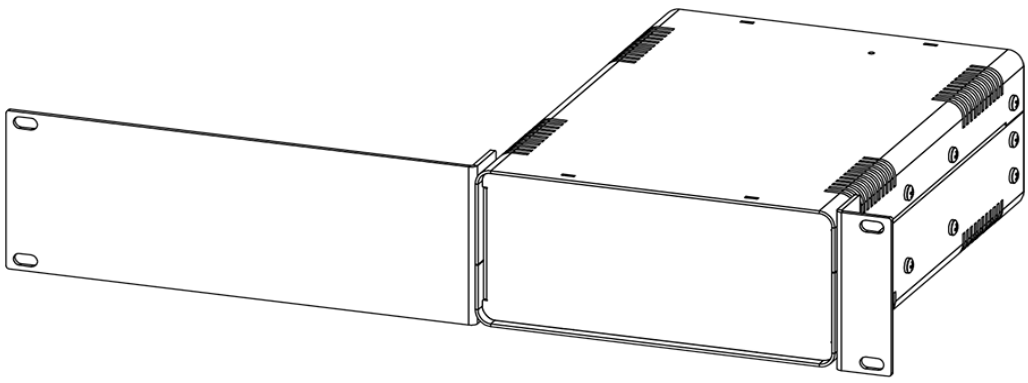
1) ProPlex PortableMount enclosures include a yoke for truss mounting. Before attaching any RackMount Kit, remove the yoke by unscrewing the four Phillips-head screws which fasten the yoke to the chassis.

Important: Regardless of the configuration of the specific RackMount Kit being installed, all original yoke screws must be installed back into the ProPlex PortableMount device.

2) The 2U RackMount Kit Single is comprised of two rack ears, one long and one short. To fasten the ears to the ProPlex PortableMount chassis, remove the three chassis screws on each side that align with the rack ear mounting holes at the front of the chassis. Then use the same screws to securely fasten the ears to the chassis, per below illustrations. The short and long ears included in the RackMount Kit can be mounted to either side of the chassis.

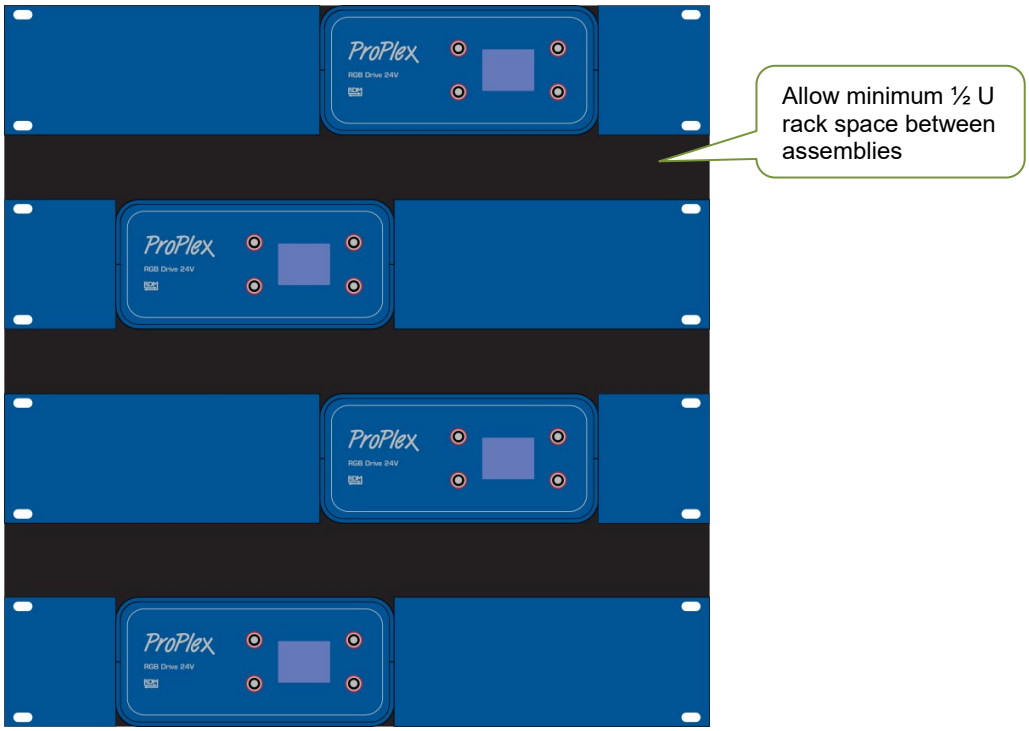


3) The drawing below depicts the 2U Large Single RackMount Kit attached to a FloppyDrive PortableMount.



4) **Caution: Rack-Mounting ProPlex FloppyDrives.** ProPlex LED Drives must have adequate airflow. When installing multiple units, they must be mounted on alternating sides of the rack, so one is NOT located directly above another, with at least one-half 1U space between each assembly, per below illustration.

Warning: Placing two FloppyDrives directly next to each other – vertically or horizontally – in a rack or enclosed space will prevent adequate air circulation and may result in overheating of the device. Misapplication will void the warranty of the ProPlex device.



4. Appendix

RDM Functionality

ProPlex FloppyDrive PortableMount devices have RDM Functionality. Below are the RDM functions available in these devices. TMB has many options for RDM control of your devices: ProPlex RDMigo and ProPlex Software; ProPlex Striker; and ProPlex MasterFade. Additionally, ProPlex RDM Opto-Splitters and the ProPlex IQ product range offer many means of RDM over DMX data distribution.

Main	Display	Temperature
Mode	Display invert	Lowest value
DMX address	Display level	
RDM version		
Software version		

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.

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527 Park Ave.
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Tel: +1 818.899.8818
Fax: +1 818.899.8813
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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

Technical Specifications – FloppyDrive 4x2 24V

WEIGHT & DIMENSIONS (w/yoke)

Width	7.95 in / 202 mm
Depth	10.72 in / 272 mm
Height w/yoke	5.33 in / 135 mm
Weight	8.75 lb / 3.98 kg

POWER

AC Power	90-240VAC, 50-60Hz
DC Power	24VCD, 350 W
Power Consumption	Up to 400W

CONTROL

AC Power	90-240VAC, 50-60Hz
DC Power	24VCD, 350 W

THERMAL

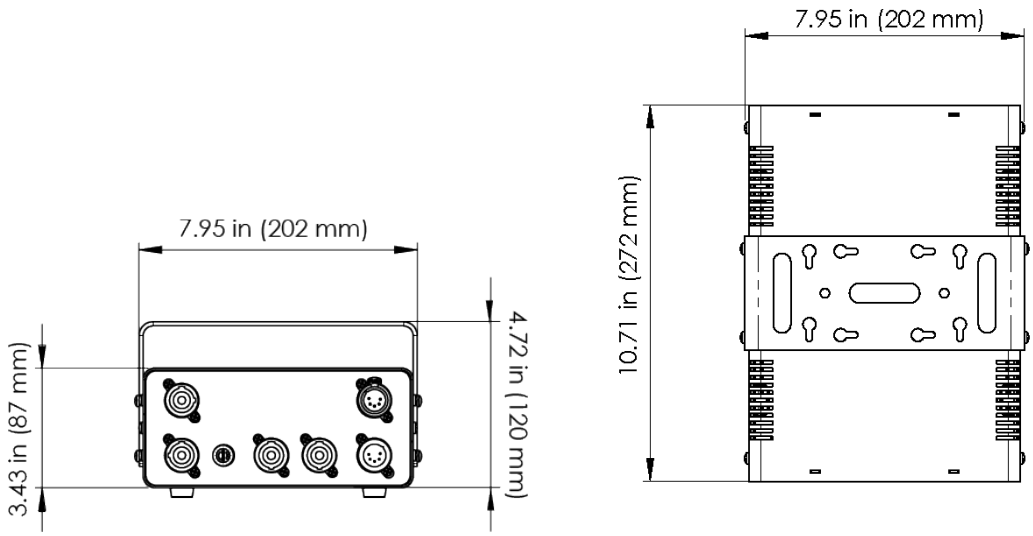
Operating temperature	-20 to +40 °C
Cooling	Passive / Active

CONTROL / PROGRAMMING

DMX In / Out	XLR 5-pin
DMX channels	3-12
Control channels	3 (4-wiire)

WARRANTY INFORMATION

Warranty	2-year limited warranty



Technical Specifications – FloppyDrive 4x2 12V

WEIGHT & DIMENSIONS (w/yoke)

Width	7.95 in / 202 mm
Depth	10.72 in / 272 mm
Height w/yoke	5.33 in / 135 mm
Weight	8.75 lb / 3.98 kg

POWER

AC Power	90-240VAC, 50-60Hz
DC Power	12VCD, 350 W
Power Consumption	Up to 200W

CONTROL

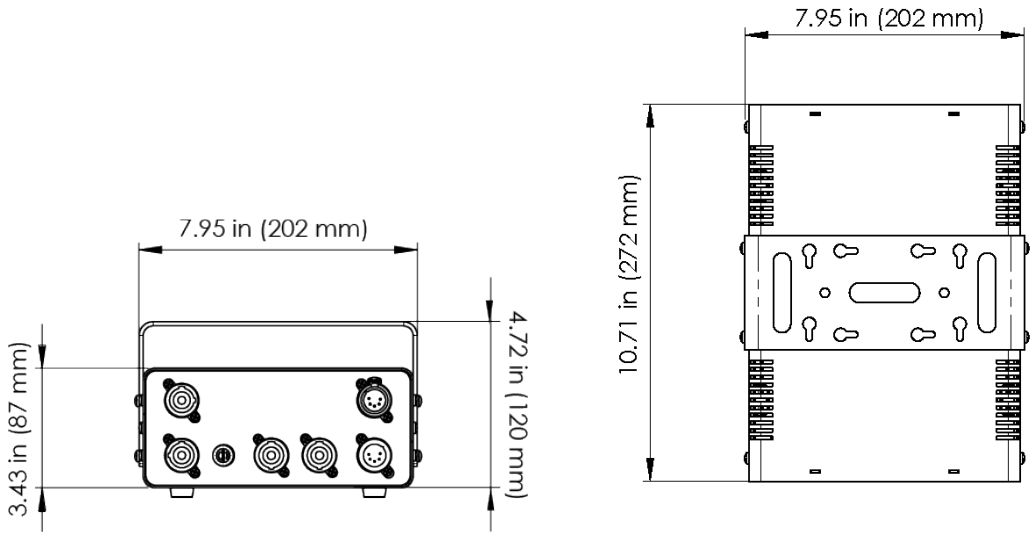
AC Power	90-240VAC, 50-60Hz
DC Power	12VCD, 350 W

THERMAL

Operating temperature	-20 to +40 °C
Cooling	Passive / Active

CONTROL / PROGRAMMING

DMX In / Out	XLR 5-pin
DMX channels	3-12
Control channels	3 (4-wiire)

WARRANTY INFORMATION

Warranty	2-year limited warranty