

# MDF2PSUX20

## Safety Manual

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## DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual

Date	Document Version	Software Version	DMX Channels	Notes
03/29/22	1.0	N/A	Not Applicable	Initial Release.
05/09/25	1.1	N/A	Not Applicable	Updated FCC Statement

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# GENERAL

## INTRODUCTION

This fixture has been designed to perform reliably for years when the information in this manual are followed. Please read and understand all the instructions and guidelines carefully and thoroughly before operating this unit. This manual contains important information regarding safety, installation, use, and maintenance.

## UNPACKING

Each fixture has been thoroughly tested and shipped in perfect operating condition. Carefully check the outer shipping carton for signs of any damage that may have occurred during shipping. If the outer carton appears to be damaged, carefully inspect the fixture for damage and be sure all included accessories have arrived intact. In the event damage has been found and/or parts are missing, please contact our customer support team for further instructions. Please do NOT return this fixture to your dealer without first contacting customer support at the number listed below. Please do NOT discard the outer shipping carton in the trash. Please recycle whenever possible.

## INCLUDED ITEMS

Power Cable (x1)

**CUSTOMER SUPPORT:** Contact ADJ Service for any product related service and support needs. Also visit [forums.adj.com](https://forums.adj.com) with questions, comments or suggestions.

**ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST**

**Voice:** 800-322-6337 | [support@adj.com](mailto:support@adj.com)

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**REPLACEMENT PARTS** please visit [parts.adj.com](https://parts.adj.com)

## WARRANTY RETURNS

All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without an R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.

# LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty periods below). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service you must obtain a Return Authorization number (RA#) before sending back the product—please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic checkup. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## LIMITED WARRANTY PERIODS

- **Non-LED Lighting Products = 1-Year (365 Days)** (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- **Laser Products = 1-Year (365 Days)** (excluding laser diodes which have a 6-Month Limited Warranty).
- **LED Products = 2-Year (730 Days)** (excluding batteries which have a 180 Day Limited Warranty)  
**PLEASE NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the USA.**
- **StarTec Series = 1-Year (365 Days)** (excluding batteries which have a 180 Day Limited Warranty)
- **ADJ DMX Controllers = 2 Year (730 Days)**
- **American Audio Products = 1 Year (365 Days)**

# SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

**IP RATING: This device is IP20 rated. This means that the unit is protected against intrusion from solids approximately the size of an adult finger (12mm in diameter), and that the unit is NOT protected against water intrusion of any kind!**



**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



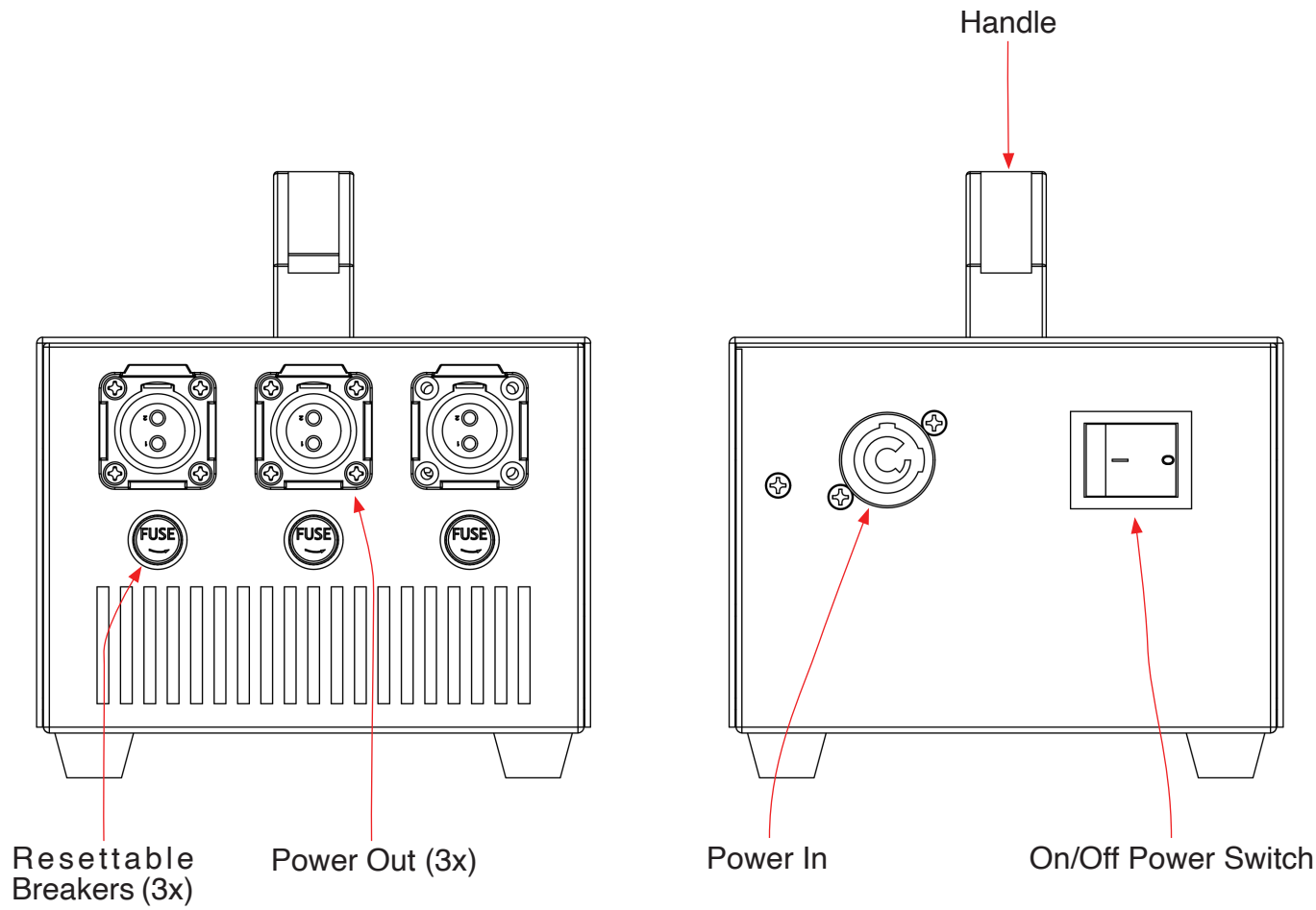
**DO NOT PLUG FIXTURE INTO A DIMMER PACK!  
NEVER OPEN THIS FIXTURE WHILE IN USE!  
DISCONNECT FIXTURE FROM POWER BEFORE SERVICING!  
NEVER TOUCH THE FIXTURE DURING OPERATION, AS IT MAY BE HOT!  
KEEP FLAMMABLE MATERIALS AWAY FROM THE FIXTURE!**



**MAXIMUM EXTERNAL SURFACE TEMPERATURE: 185° F (85° C)  
MAXIMUM AMBIENT TEMPERATURE: 104° F (40° C)**

- **DO NOT TOUCH** the fixture housing during operation.
- Turn **OFF** the power and allow approximately 15 minutes for the fixture to cool down before serving.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- **DO NOT** block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is at least M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end, and never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- In the event that the fixture needs to be returned for servicing, use only the original packaging and materials to transport the fixture.

# OVERVIEW



# INSTALLATION



## **FLAMMABLE MATERIAL WARNING**

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



## **ELECTRICAL CONNECTIONS**

A qualified electrician should be used for all electrical connections and/or installations.



**MINIMUM DISTANCE TO OBJECTS/SURFACES IS 6.6 FEET (2 METERS).**

**MINIMUM DISTANCE OF INFLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER)**



**DO NOT EXPOSE TO RAIN OR MOISTURE!  
INDOOR USE ONLY!**

## **DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!**

- Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Ambient temperature operating range is **-4°F to 158°F (-20°C to 70°C)**. Do not use operate the unit when ambient temperature falls outside of this range!
- Device(s) should be installed in areas outside walking paths, seating areas, or areas were unauthorized personnel might reach the fixture by hand.
- Allow approximately 60 minutes for the fixture to cool down before servicing.

## **IP RATING**

**This device is IP20 rated. This means that the unit is protected against intrusion from solids approximately the size of an adult finger (12mm in diameter), and that the unit is NOT protected against water intrusion of any kind!**



# INSTALLATION

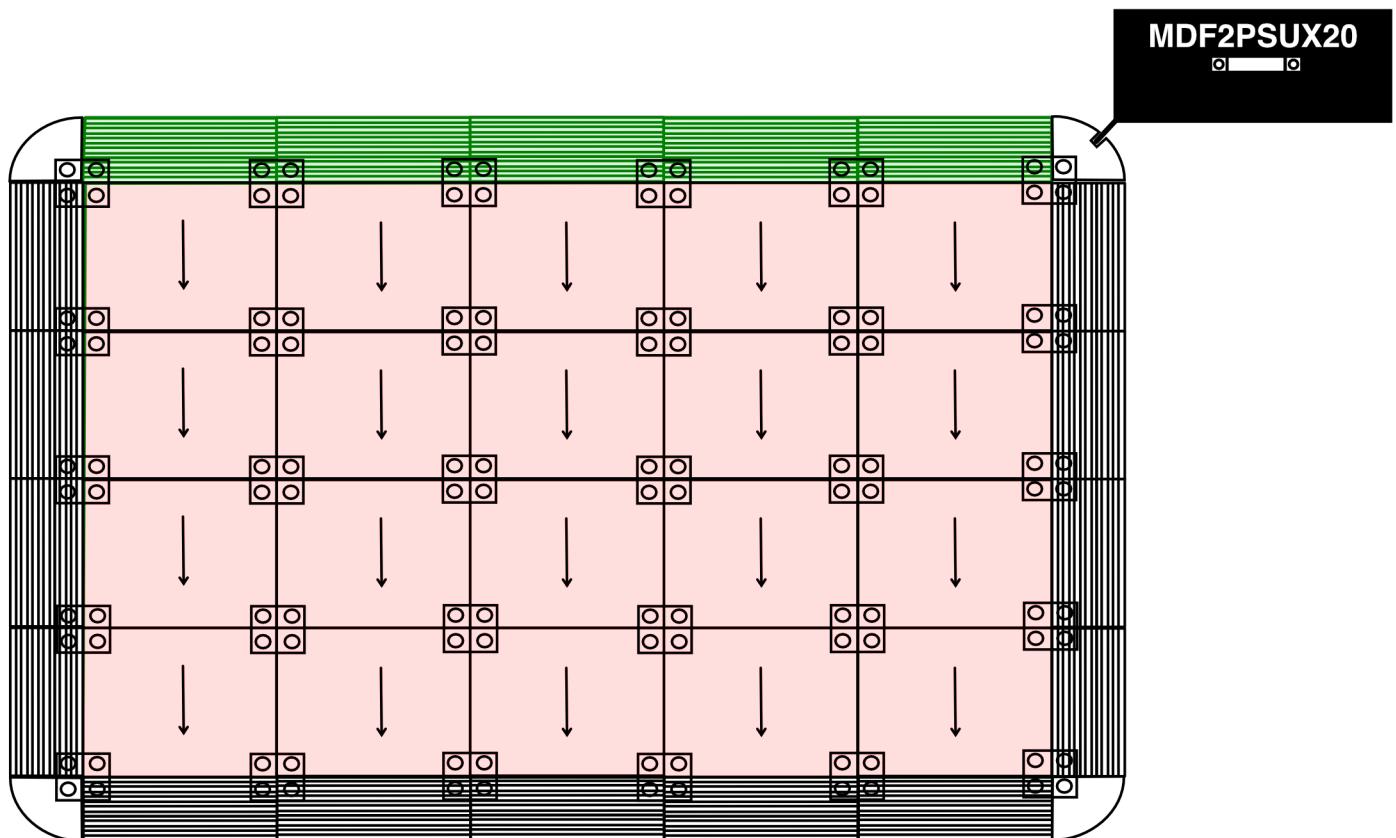
## CONNECTIONS

Each of the three (3x) Power Out connections should be linked via a power cable to a single Power Ramp from the MDF2 system. When used in conjunction with the MDF2PSUX20 power supply, each Power Ramp is able to support a single row of up to twelve (12) dance floor tiles, for a total of 20 dance floor tiles.

When installing the dance floor panels in place, pay close attention to the directional orientation arrows located on the side faces of each panel. When placed correctly, these arrows should indicate the direction of power flow from the Power Ramp to the first panel, then to each subsequent panel down the line. These panels must be positioned in a straight line to receive and transit power. **If the panel is rotated 90 degrees, or if the panel is placed with the directional arrow pointing back towards the power source, the panel will not receive power, or be able to transmit power to any subsequent panels down the line.**

Please see the illustration below, or refer to the user manual for the ADJ MDF2-9SYS for detailed information.

**Note:** The top row of ramps in the illustration (shown in green) are Power Ramps. All other ramps shown are non-powered Dummy Ramps.



**NOTE:** Directional orientation arrows are depicted on the top surface of the panels for the sake of clarity. Actual panels will have directional orientation arrows located on the sides of the panels.

# TROUBLESHOOTING

Below are some common issues that you may encounter during use, along with possible solutions. If the steps below do not solve your problems, please contact the ADJ support line at the phone number or e-mail address listed in the **Introduction** section of this manual.

## **No voltage output from power supply:**

- Check that there is voltage output from the power socket.
- Check whether the fuse has been tripped. If so, replace the fuse. It is also strongly advised to check the layout of the dance floor panels to make sure that have been oriented correctly, in order to avoid tripping the fuse again.
- Check that the cable connecting the power supply to the dance floor assembly is securely connected.

## **Fuse or circuit breaker trips repeatedly:**

- Check whether the power demand exceeds the maximum load output of the power supply. If so, reduce the number of dance floor panels connected to this power supply.
- Check whether the fuse itself is faulty. Replace the fuse with a new fuse of the correct type.
- Check the condition of the dance floor panels themselves to ensure that they are not working in an abnormal manner.

# SPECIFICATIONS

## ELECTRICAL

Input Voltage: AC 100-240V, 50/60 Hz Output Voltage: DC 24V

Maximum Load Power: 2250 W Load Current: 90 A

Current Overload Protector Trip Time:

- Within 10A of max load: no trip
- 10-15A over max load: trip within 1 hour
- 15-20A over max load: trips in 5.2 to 30 seconds
- 20-30A over max load: trips in 1.5 to 5.5 seconds

## DIMENSIONS

Length x Width x Height: 12.8" x 5.6" x 6.1" (326.0mm x 142.0mm x 155.5mm) Weight: 30.0 lbs (13.6 kg)

## AMBIENT OPERATING CONDITIONS

Ambient Operating Temperature: -4°F to 158°F (-20°C to 70°C)

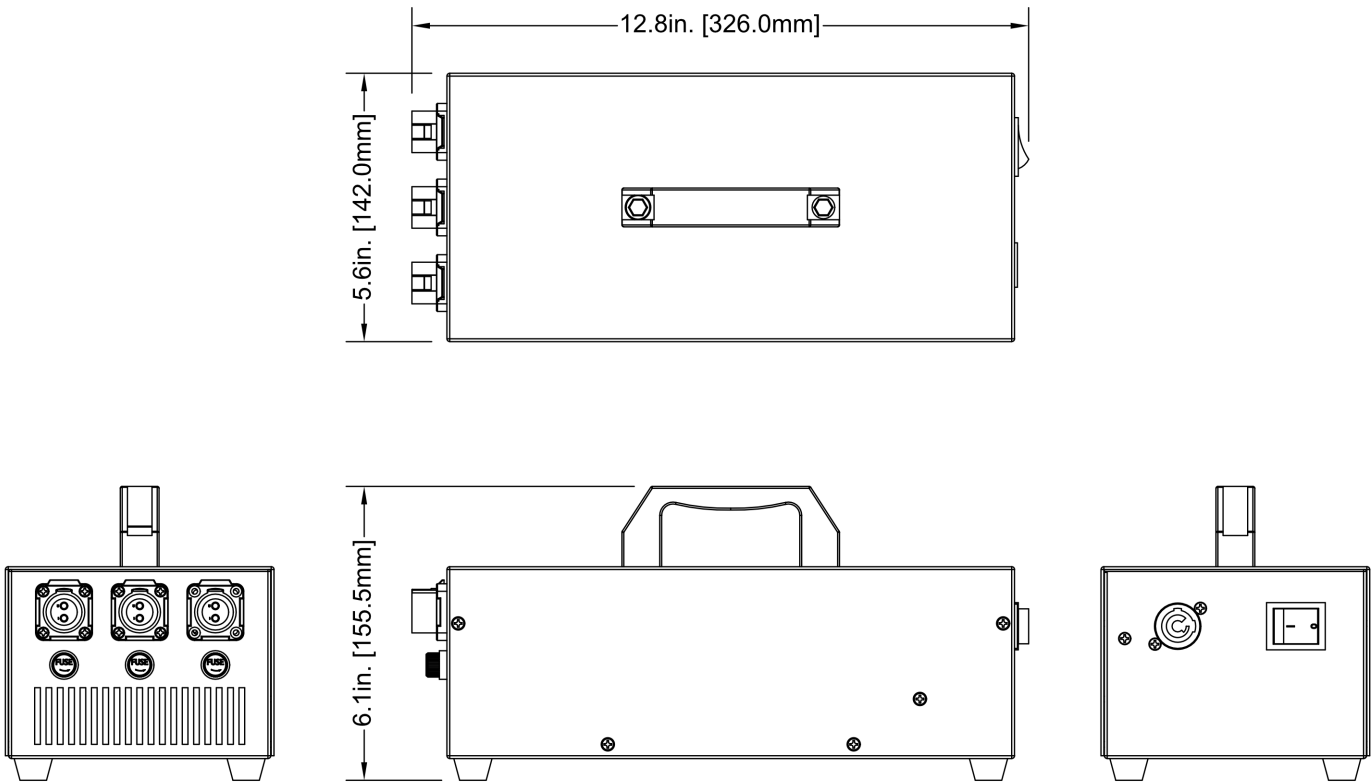
IP Rating: IP20

## INCLUDED ITEMS

Power Cable (x1)

# DIMENSION DRAWINGS

Dimensions not to scale



## FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Please note that changes or modifications to this product that are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.



