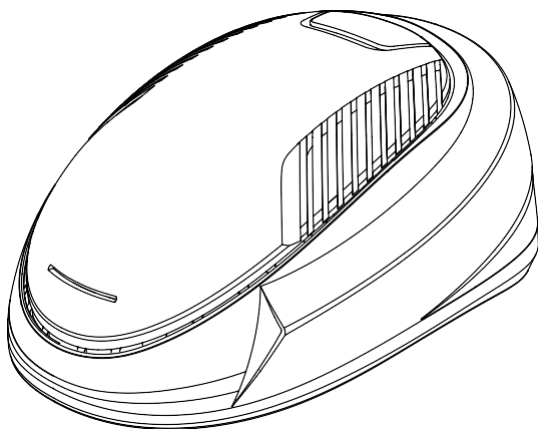




Laser Hair Growth System

(ML200/160/120/88)

USER MANUAL

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Adverse Event Reporting: To report adverse events, visit the FDA MedWatch website (<https://www.fda.gov/safety/medwatch>) or call the reporting number 1-888-463-6332

1. Product Introduction

• 1.1 Product Name

Laser Hair Growth System

• 1.2 Model & Specifications

Model	Working Time	Temperature Data	Start-up Method	Number of Laser Lights
ML200	30min	Yes	Connect and start via the mobile app	200
ML160	30min	Yes	Connect and start via the mobile app	160
ML120	30min	Yes	Connect and start via the mobile app	120
ML88	30min	Yes	Connect and start via the mobile app	88

• 1.3 Structure Composition

The laser hair growth System consists of a hair growth device, 650nm laser diodes, a USB power cable, and a mobile application software.

• 1.4 How the product works

The Laser Hair Growth System irradiates the scalp with red light of approximately 650nm wavelength, stimulating the mitochondria of hair follicle cells to enhance mitochondrial respiration.

• 1.5 Intended Use(Indications Of Use)

The Laser Hair Growth System is indicated to treat androgenetic alopecia for men and women. It is designed to promote hair growth in males who have Norwood-Hamilton Classifications II a to V and in females who have Ludwig-Savin scale Classifications I to II. All users should also have Fitzpatrick Skin Types I to IV.

Norwood-Hamilton Scale

Male	Appropriate							
	Not Appropriate							

Ludwig-Savin Scale

Female	Appropriate						
	Not Appropriate						

Fitzpatrick Scale

Compatibility	Appropriate				Not Appropriate	
Skin Type	Type I 	Type II 	Type III 	Type IV 	Type V 	Type VI 
Skin Color	Pale, white skin, freckled	Fair skinned, beige tint	White to light brown skin	Moderate brown or dark olive skin	Dark brown skin	Black skin
Reaction to Sun Exposure	Highly sensitive, always burns, never tans	Very sun sensitive, burns easily, tans minimally	Sun sensitive, sometimes burns, slowly tans to light brown	Minimally sun sensitive, burns minimally, always tans to moderate brown	Sun insensitive, rarely burns, tans well	Sun insensitive, never burns, deeply pigmented

• 1.6 Expected effect

Take once every other day for 30 minutes per session, do not exceed the time limit. Complete 16 weeks of treatment, with results varying by individual.

• 1.7 Contraindications

WARNING: Do not use on individuals with photosensitivity disorders

WARNING: Do not use on individuals with active skin infections or inflammation

WARNING: Do not use on individuals with a history of skin cancer

WARNING: Do not use on individuals with implanted electronic devices (pacemakers, defibrillators, etc.)

• 1.8 Precautions



Note:

Thank you for choosing and purchasing this product!

To ensure safe and effective use, please read this user manual carefully and operate the device strictly in accordance with the instructions. The images shown in this manual are for reference only; actual product appearance and color may vary.

This manual is compiled by our company, and we reserve the final right of interpretation.

Laser Safety Precautions:



Never point the laser directly into the eyes, as this may cause eye injury.



Using mirrors or optical devices to observe the laser beam increases the risk of eye damage.

General Safety Precautions:



This device does not generate strong electromagnetic waves during operation. However, to avoid potential interference, it is recommended to avoid using it simultaneously with other high-sensitivity electronic equipment.



Do not use on broken or irritated skin.



This device is not intended as a safety helmet or head protection device.



Avoid dropping or subjecting it to severe impact.



Keep away from direct sunlight and corrosive gases.



Store out of reach of children and pets.



Do not use the device when your hair is wet.



Do not drop objects into or insert anything into the ventilation openings or slots. Prevent insects or small animals from entering the device.



The laser module is sensitive to electrostatic discharge (ESD). Do not expose the bottom of the device to static electricity or other high-voltage sources.



When storing the device for extended periods, keep it in the specified storage environment. Charge the battery at least once per month to maintain optimal battery performance.



Overuse or underuse of the device may reduce hair growth effectiveness.



During use, scalp temperature may rise slightly. Under normal conditions, this will not cause burns. If you experience discomfort due to excessive heat, discontinue use immediately.



For greater comfort, we recommend using the device in an air-conditioned environment.



Use only original manufacturer components. Internal repairs should be performed exclusively by qualified technicians.



Intended for individual use only — do not share among multiple users.



Before first use, fully charge the device.



Avoid charging in environments exceeding 45°C.



The internal rechargeable lithium battery must never be disassembled, impacted, punctured, or exposed to fire, as this may cause explosion. Avoid short-circuiting the battery terminals to prevent damage. Use only chargers compliant with IEC 60601-1 standard (Output: DC 5V= 2A).



If the internal lithium battery shows signs of deformation, leakage, or other abnormalities, stop using the device immediately to prevent accidents.



Used batteries may harm the environment — please dispose of them through proper recycling channels.

• 1.9 Safety Warnings



Warning:



Do not use this device while bathing or showering!



Do not use this product near bathtubs, showers, sinks, or other water-containing vessels!



The Laser Hair Growth Device emits intense visible light. During use, strictly follow the operating instructions for treatment!



Always protect your eyes during treatment! Never look directly into the laser beam output port! Do not stare at or view the beam directly through optical instruments (e.g., mirrors, magnifiers, cameras) — this may cause permanent eye damage or vision impairment!



During treatment, do not observe the laser tube's operation by looking through the edges of the device. Patients must wear the device correctly — do not position the center of the device on the forehead.



Do not replace any components without prior written authorization from the manufacturer!



This device is NOT intended for use on skin types Fitzpatrick V – VI!

• 1.10 Explanation of Product Symbols

	Warning: Do not look directly at Class 3R laser products
	laser window
	Radiation output and standard specifications
	BF Application Section
IP22	Level of protection against liquid ingress
	Class II equipment
	General warning symbols
	Follow the operating instructions
	Manufacturer
SN	Serial number
	Date of manufacture
UDI	Unique device identifier
	Keep dry

• 1.11 UDI information

See the label on the product or its packaging.

• 1.12 product life

Shelf life: 5 years (from the date of manufacture)

Service life: 3 years

2.Product Property

• 2.1 Usage environment

• 2.1.1 Transportation and storage environment

Ambient temperature: -20℃~55℃

Relative humidity range: ≤93%RH, non-condensing

Atmospheric pressure range: 70.0~106.0kPa

• 2.1.2 Operating Environment

Ambient temperature: 5℃~40℃

Relative humidity range: 45%~75%RH

Atmospheric pressure range: 86.0~106.0kPa

Heat engine time: If transported or stored outside the operating temperature range, let the equipment be at room temperature for 2 hours before use

• 2.2 Product Classification

Classification by type of protection against electric shock: Internal power supply equipment

Classified by the degree of electric shock protection: BF type

Classification by liquid ingress protection rating: IP22

Safety classification for use with air-mixed flammable anesthetic gases or with air-mixed flammable anesthetic gases mixed with oxygen or nitrous oxide: equipment not to be used with air-mixed flammable anesthetic gases or with air-mixed flammable anesthetic gases mixed with oxygen or nitrous oxide

By operation mode: Continuous operation

Whether or not the device has signal output or input parts: Not applicable

Permanent installation equipment or non-permanent installation equipment: Non-permanent installation equipment

Applicable to applications requiring protection against defibrillation discharge effects: Not applicable

• 2.3 Technical Specifications

Laser Parameters:

Light source type: Class 3R laser, visible light

Peak wavelength: 650nm±10nm

Pulse width: 60ms±2ms

Pulse frequency: 6.94Hz±0.50Hz

Laser output power: 5mW/each, error ±20%

Output power instability: <10%

Light output power uniformity: ±20%

Performance Parameters:

Working noise: ≤65dB (A)

Surface temperature of the light radiation output window: ≤50℃ (ambient temperature 40℃)

Software Specifications:

Software version: V1

Operating system compatibility: iOS 13.0+, Android 10.0+

Bluetooth version: Bluetooth 5.0

Data storage capacity: 50MB

• 2.4 Power Supply Conditions

Battery Specifications:

Power Supply: Lithium battery (3.7V, 3500mAh)

Battery type: Li-ion, rechargeable

Battery capacity: 3500mAh

Charging voltage: 5V DC

External Power Supply:

Type-C Input: 5V= 2A

This product does not include an AC adapter.

Please select a Type C adapter.

We recommend using an adapter that meets the following specifications:

Input: 100~240V 50/60HZ

Output: 5V= 2A

Implementation standard: IEC 60601-1:2020

3.Product Structure

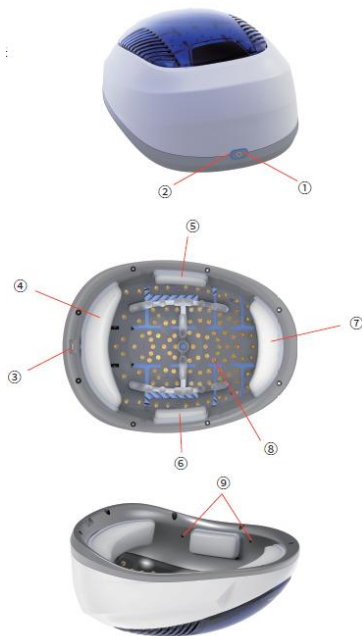
1. Power Button
2. Power/Bluetooth indicator
3. USB charging port
4. Post-silicone sheath
5. Right pad
6. Left pad
7. Pre-silicone sheath
8. Laser head
9. Safety protection switches

Key Safety Features:

Multiple safety interlock switches

Laser emission only when properly worn

Low battery protection



4.Operation Instructions

1. The user activates the device for laser therapy, with a daily dose administered every other day.
2. Press and hold the power switch to trigger the buzzer with a long 'beep' sound.
3. Connect the laser hair growth device via Bluetooth through the mobile app.
4. After successful connection, place the laser hair growth device on your head. Select the appropriate mode in the app, then send the activation command. The device will activate automatically upon receiving the command, and you can start using it.
5. The laser will begin irradiation with a 30-minute countdown.
6. After treatment, the device emits three short beeps before automatically shutting down.
7. To manually shut down the device without charging, hold any mode button for more than 1 second.

8. The device will automatically shut down after 3 minutes of inactivity (either without Bluetooth connection or if no operation is performed after connecting).
9. If the cap is removed during treatment, the light will pause. If the cap is not reinserted within 10 minutes, the device will automatically shut down
10. Cleanse your scalp and pat dry your hair before use.
11. This product features a safety switch. The machine will only operate normally when properly worn on the head.

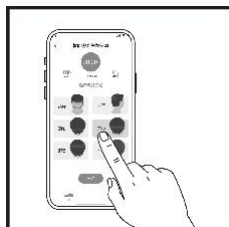
Operation Diagram



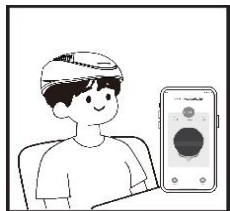
Connect Bluetooth



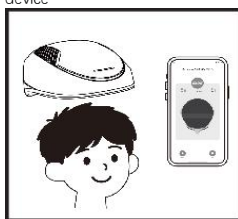
Wear hair growth device



Select area



Start using



Remove the device at the end



Clean hair growth device

• 4.1 Software Download

Search for "Laser Hair Growth" in the App Store on iOS and Google play on Android to download and install the APP.

Software Requirements:

1. Minimum iOS version: **iOS 13.0**
2. Minimum Android version: **Android 10.0**
3. Required permissions: Bluetooth, Location, **read the device serial number (SN)**
4. Data storage capacity: **50MB**

• 4.2 APP Operation

Step-by-Step Operation:

1. Open the APP, add a device on the "Device" page.
2. After adding the device, when the laser generator is on, open the Bluetooth connection to the generator on the mobile phone.
3. Click the generator icon in the APP interface to enter the device working page. At this time, the working status is "connected", and you can choose the appropriate working mode.
4. Wear the hair growth device, select the working mode, and the laser will start to irradiate. At this time, the working state is "working", and the countdown of 30 minutes will be displayed.
5. When entering the device working page, the working status is "Not connected", please turn on the mobile phone Bluetooth to connect.
6. If the hat is removed during the treatment, the light will be paused. The working state will be "paused", Please put the hat back on and continue the light within 10 minutes.
7. APP has voice prompt function.

Safety Confirmation Steps:

User must confirm understanding of contraindications

• 4.3 Charging & Indication

Charging Instructions:

1. Please charge fully before the first use.
2. The charging port is located at the back of the product. Plug in the charging cable, connect the charger and power supply, and start charging.
3. When charging, the green light around the switch will flash, and the green light will stay on when fully charged. All modes will not work in charging state.

Battery Status Indicators:

1. Green light flashing: Charging in progress
2. Green light steady: Fully charged
3. Green light flashing rapidly: Low battery (needs charging)
4. Green light flash rapidly for 5 times and then the product automatically shut down: Battery power is insufficient

5. Blue light flashing: Bluetooth connecting

6. Blue light steady: Bluetooth connected

• 4.4 Software Version

APP software version: V1

Embedded firmware version: V1

• 4.5 Network Functions

Bluetooth version: 5.0

Bluetooth signal strength: 0dBm

5. Maintenance inspection

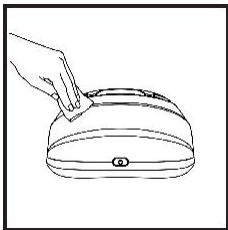
• 5.1 Cleaning and maintenance

- Clean the surface of the instrument with a clean soft cloth or cotton ball, dip it in an appropriate amount of neutral detergent, wring it to the appropriate humidity, and gently wipe it.
- Turn off the instrument before cleaning.
- Clean the cooling hole at the top of the hair growth device regularly to prevent clogging.
- Do not wash the top of the hair growth device directly with liquid.
- Clean the silicone parts inside the hair growth device with 70% medical alcohol before and after each use.
- Do not use abrasive cleaners

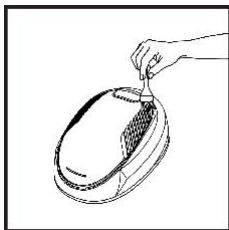
Note:

The silicone components in contact with the human body have passed ISO 10993 biocompatibility testing, meeting all relevant standards for skin irritation and cytotoxicity.

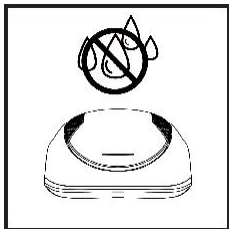
Operation Diagram



Turn off the instrument and gently wipe



Clean the heat dissipation hole



Direct liquid pouring on the top is prohibited

70% medical alcohol is used to clean silicone parts

5.2 Preventive inspection

Regular Inspection Schedule:

- Check the inner shell, outer shell and power cord for damage every two weeks
- Check safety interlock switches monthly
- Inspect battery performance quarterly

Professional Maintenance:

- Conduct laser power testing at least annually.
- Notify the manufacturer or franchiser to replace the laser if a significant power drop is detected.

6. Common Faults and Solutions

phenomenon	cause	Solution
No laser output	Battery has run out	Charge according to instructions in manual
	The hair growth device is not properly worn	Check the hair growth device and adjust wearing position
The laser stopped outputting or restarted during operation	Low battery	Charge according to Instructions in Manual

questions	Solution
Bluetooth connection lost during use	The helmet will continue to function normally and shut down after Bluetooth disconnects. Use the app to reconnect to Bluetooth.
No Voice	Check if Phone is on Silent Mode, and turn up the phone volume.
During use, the light from the hair growth device does not stop after the	The Wearing Detection Device is not working. Contact your local dealer or sales platform.

head is removed	
-----------------	--

Note: 1. Consumers are not allowed to disassemble the device and repair the internal components or parts.
2. If the product is not functioning properly, please contact your local distributor or sales platform.

7. After-Sales Service

The warranty period for this product may vary depending on the country of sale, and we will extend it as much as legally permitted under local laws.

From the date of purchase, the entire product is covered by a one-year warranty under normal use.

If the product develops a fault during the warranty period under normal use and requires free repair, please contact your local authorized dealer or the sales platform where you purchased the product.

The following situations are not covered by the free warranty:

Damage caused by improper use, maintenance, or storage by the consumer.

Damage resulting from disassembly or modification by unauthorized personnel.

Failure to provide a valid original invoice.

Damage caused by force majeure (e.g., natural disasters, accidents, etc.).

8. Manufacturer

Name: Providence Enterprise(Ganzhou)Co.,Ltd

Address: No.38, Guangming Road, Zhanggong High-Tech Zone, Zhanggong District, Ganzhou, Jiangxi Province, P.R. China

9. Instructions for Use Information

Version: V1.0

Issue Date: 2025-11-28

10. Packing List

Laser Hair Growth System x1

USB Power Cable x1

User Manual x1

Fabric Storage Bag x1

Note:

- The ML Series Laser Hair Growth System complies with the electromagnetic compatibility requirements of the IEC 60601-1-2 standard.
- Users shall install and operate the device in accordance with the electromagnetic compatibility information provided in the accompanying documents.
- Portable and mobile RF communication equipment may affect the performance of the ML Series Laser Hair Growth System. Avoid strong electromagnetic interference during use, and keep the device away from mobile phones, microwave ovens, and similar sources.
- During operation, maintain a distance of at least 1 meter from individuals wearing cardiac pacemakers. Avoid simultaneous use with highly sensitive electronic equipment to prevent mutual interference.
- For detailed guidelines and the manufacturer's declaration, please refer to the appendix.

Warning:

- a) The use of cables and other accessory accessories other than those sold as spare parts by the manufacturer of ML Series Laser Hair Growth System in conjunction with ML Series Laser Hair Growth System may result in an increase in the electromagnetic emission of ML Series Laser Hair Growth System or a decrease in immunity.
- b) ML Series Laser Hair Growth System should not be used in close proximity to or stacked with other devices, and if it must be used in close proximity or stacked, it should be observed to verify that it can operate normally under the configuration used.

Essential performance:

During and after EMS (Electromagnetic Susceptibility) tests, the change of parameter numerical values doesn't exceed the specified accuracy as below.

Peak wavelength: 650nm±10nm

Laser output power: 5mW/each, error ±20%

This product declarations to meet Table 1, Table 2, Table 3 and Table 4 of Contents.

Table1

Manufacturer's Declaration - Electromagnetic Emissions	
The ML Series Laser Hair Growth System intended for use in the electromagnetic environment specified below. The customers or users should ensure that it is used in such an environment.	
Emission measurement	Conformity
RF emission CISPR 11	Group 1
RF emission CISPR 11	Class B
Harmonic emission IEC 61000-3-2	Class A
voltage fluctuations / flicker emission IEC 61000-3-3	Applicable

Table 2

Manufacturer's Declaration - Electromagnetic Immunity		
The ML Series Laser Hair Growth System intended for use in the electromagnetic environment specified below. The customers or users should ensure that it is used in such an environment.		
Immunity test	IEC 60601 test level guidelines	Compliance level
electrostatic discharge IEC 61000-4-2	Contact: ± 8 kV. Air: ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV	Contact: ± 8 kV. Air: ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV.
Radiated RF EM fields IEC 61000-4-3	3 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz
Electrical fast transientburst IEC 61000-4-4	± 2 kV for power supply lines.	± 2 kV for power supply lines.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s).	± 1 kV line(s) to line(s).
Conducted RF IEC 61000-4-6	3 Vrms: 0,15 MHz – 80 MHz 6 Vrms: in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	3 Vrms: 0,15 MHz – 80 MHz 6 Vrms: in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz
Power frequency magnetic field (50Hz and 60Hz) IEC 61000-4-8	30A/m	30A/m
Power input line voltage dips, short interruptions and voltage variations IEC 61000-4-11	0% U_n , 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% U_n , 1 cycle and 70% U_n , 25/30 cycles Single phase: at 0° 0% U_n , 250/300 cycles	0% U_n , 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% U_n , 1 cycle and 70% U_n , 25/30 cycles Single phase: at 0° 0% U_n , 250/300 cycles

Table 3

Manufacturer's declaration-electromagnetic immunity							
Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment							
The ML Series Laser Hair Growth System is intended for use in the electromagnetic environment specified below. The customer or the user of the ML Series Laser Hair Growth System should ensure that it is used in such an environment.							
Test frequency (MHz)	Band ^{a)} (MHz)	Service ^{a)}	Modulation ^{b)}	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)	Compliance LEVEL (V/m)
385	380-390	TETRA 400	Pulse modulation ^{b)} 18 Hz	1,8	0,3	27	27
450	430-470	GMRS 460, FRS 460	FM ^{c)} ±5 kHz deviation 1 kHz sine	2	0,3	28	28
710	704-787	LTE Band 13, 17	Pulse modulation ^{b)} 217 Hz	0,2	0,3	9	9
745							
780							
810	800-960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation ^{b)} 18 Hz	2	0,3	28	28
870							
930							
1720	1700-1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation ^{b)} 217 Hz	2	0,3	28	28
1845							
1970							
2450	2400-2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation ^{b)} 217 Hz	2	0,3	28	28
5240	5100-5800	WLAN 802.11 a/n	Pulse modulation ^{b)} 217 Hz	0,2	0,3	9	9
5500							
5785							
NOTE: If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.							

- a) For some services, only the uplink frequencies are included.
- b) The carrier shall be modulated using a 50 % duty cycle square wave signal.
- c) As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

Table 4

Manufacturer's declaration-electromagnetic immunity		
Test specifications for ENCLOSURE PORT IMMUNITY to proximity magnetic fields The ML Series Laser Hair Growth System intended for use in the electromagnetic environment specified below. The customers or users should ensure that it is used in such an environment.		
Test frequency	Modulation	IMMUNITY TEST LEVEL (A/m)
30 kHz	CW	8
1 34,2 kHz	Pulse modulation ^{b)} 2,1 kHz	65 ^{c)}
1 3,56 MHz	Pulse modulation ^{b)} 50 kHz	7,5 ^{c)}
a) This test is applicable only to ME EQUIPMENT and ME SYSTEMS intended for use in the HOME HEALTHCARE ENVIRONMENT . b) The carrier shall be modulated using a 50 % duty cycle square wave signal. c) r.m.s., before modulation is applied.		

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.