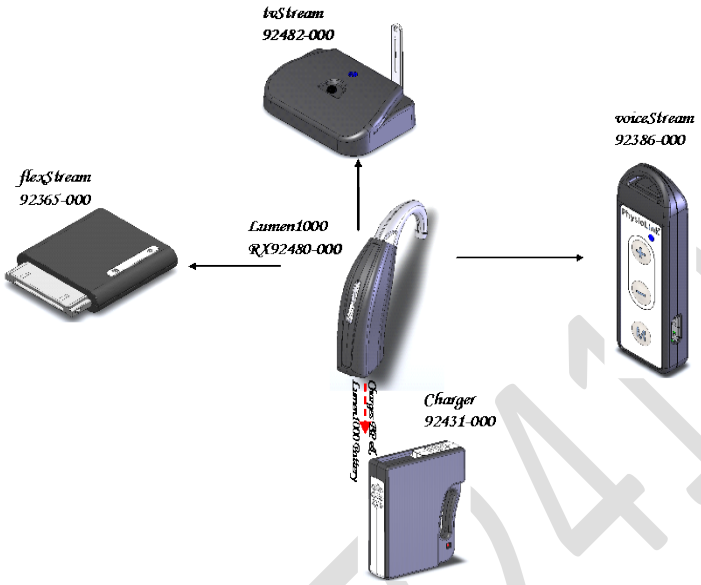
LUMEN 1000 & ACCESSORIES

USER GUIDE

Device Summary



Lumen 1000 is a BTE hearing aid that receives audio signal and converts into acoustic output. A rocker switch control provides the user interface input. In addition to providing volume control, the Up and Down keys of the rocker switch can be used to toggle between different pre-loaded audio programs, audio streaming being one of them. Lumen 1000 receives audio signals transmitted wirelessly from paired accessories (linkstream, voicestream and flexstream). The Li-Po battery in the unit is charged using a customized Lumen 1000 Charger device. Each device has a unique serial number.

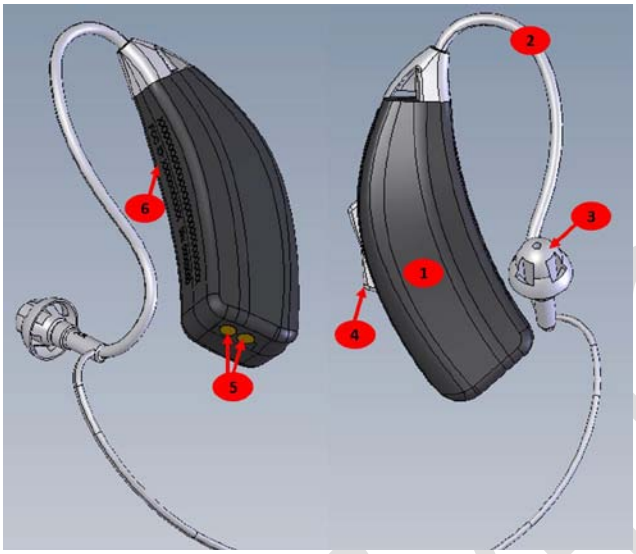
Linkstream is designed to pick up audio signal from a television and relaying it wirelessly to the hearing aid device. . The device is be powered by a 120-240V wall power adapter via a mini USB socket and picks up the TV audio through an audio cord connection to the TV audio output. It uses a high efficiency external antenna to allow link distances of 5 meters. An LED indicates It may need to have a function button and LED. It is also be used to program Lumen 1000 device when connected to a PC.

Voicestream is designed to pick up nearby sounds through two internal microphones, amplifies those sounds, and converts them into a digital wireless transmission to the Lumen 1000 hearing aid. A membrane switch serves as a user interface for mode and volume control. The use of more than one microphone allows it to function in OMNI and DIRECTIONAL modes. MicroUSB cable is used to recharge the Li-Po battery.
Typical use environments include restaurants, cars, meetings etc.

Flexstream draws power from the host iPhone, iPod Touch, or iPad and sends audio and/or command information wirelessly to Lumen 1000. It will connect to the host via the 30 pin dock connector. The use of more than one microphone allows it to function in OMNI and DIRECTIONAL modes.
Typical use scenarios include listening to iTunes player, cell phone calls, reloading Lumen 1000 firmware from a host app.

Lumen 1000 Charger will draw power from one AAA alkaline battery and or microUSB cable connected to a wall outlet. The charger has a nest to hold the Lumen 1000 hearing aid and the entire unit is small enough to go into a shirt or coat pocket or purse compartment. The device has a LED to indicate charging status.

Lumen 1000 Hearing Aid

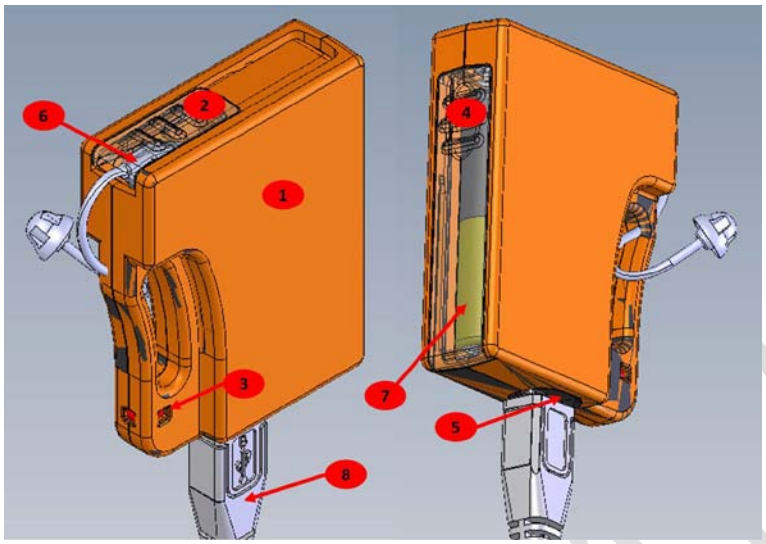


Lumen 1000 Device Illustration

	Device Description
1	Lumen 1000 Unit
2	Clear Tube System
3	Dome Shaped Earbud
4	Rocker Switch
	Program Switch
	Volume Control
5	Charging Contact Pins
6	Lasermarking Area

Charging procedure and installation in charger

Charger Description

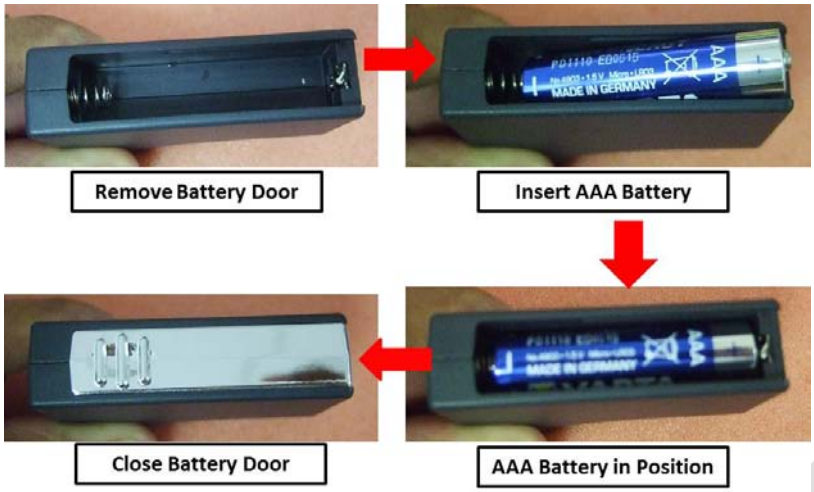


Lumen 1000 Charger Device Illustration

	Device Description
1	Lumen 1000 Charger Unit
2	Cover Slide
3	LED Charge Indicator
4	Batter Door
5	MicroUSB Port
6	Dummy Lumen 1000
7	AAA Battery
8	MicroUSB Cable

Charging with mUSB cable

Charging with Battery



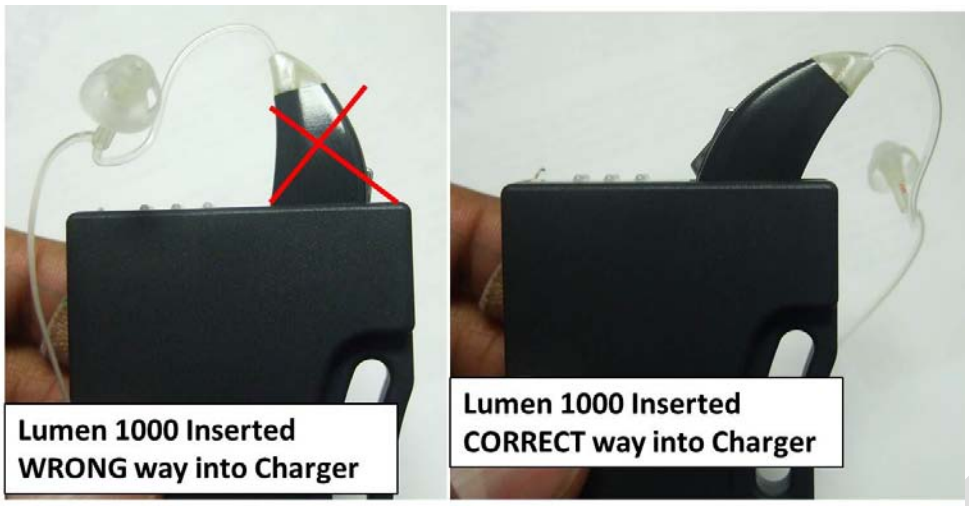
Lumen 1000 can be recharged about 5-8 times with one AAA battery.

Installing Lumen 1000 into charger

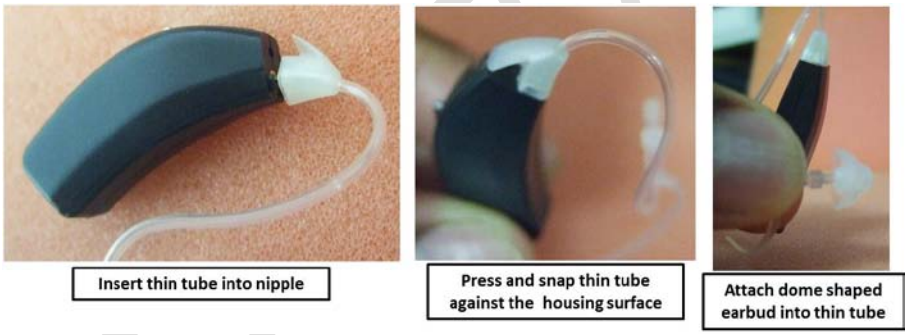
Charge Lumen 1000 fully before 1st use. Typical charge time is about 2.5hrs.

After charging is complete the red LED light on charger automatically goes OFF
Note: Charger cover door can be closed only when Lumen 1000 with thin tube is inserted. Lumen 1000 with Earhook cannot be closed in charger.

Lumen 1000 can be inserted only one way



Installing sound tube to Lumen 1000



Choose tip and length that fits best (most comfortable) or as recommended by audiologist

Exact tube availability to be determined by the customer

Verify Lumen 1000 is charged

Press rocker switch to hear beep ?? or pair with accessory ??

Using Lumen 1000

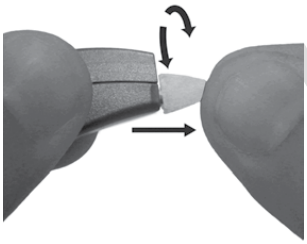
Wearing Lumen 1000

Place Lumen 1000 over the top of the ear until it rests securely behind the ear

Insert the ear tip into the ear canal, and curl/tuck the retention loop along the body of the ear

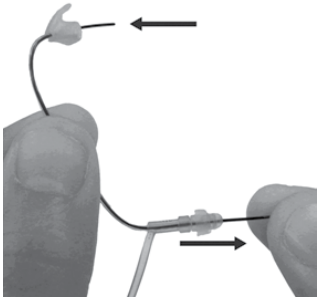
Ear Tube and Tip

Replacing ear tube & tip



Your ear tube & tip will come connected. For optimal performance, replace ear tube & tip every three months. Removing ear tube & tip from device: Grasp the “device end” of the ear tube; gently turn ~90 degrees and pull to remove the ear tube from the device. Attaching ear tube & tip to device: Gently push the “device end” of the ear tube onto the device until it snaps into position.

Cleaning ear tube & tip



Between replacements, you’ll need to clean the ear tube & tip with a cleaning wire, typically once a week. Remove the ear tube & tip from device. Thread the cleaning wire through the ear tube, starting at the “device end,” until it comes out at the “ear tip end,” then pull the cleaning wire all the way through. Be sure to wipe off the wire before the next cleaning. Note: Ensure the wire goes through the ear tube in only one direction, from “device end” to “ear tip end.” Do not reverse the wire back through the ear tube. Clean the ear tip with a dry cloth

Removing ear hook from device:
Grasp the "device end" of the ear hook; gently turn ~90 degrees and pull to remove the ear hook from the device.

Attaching ear hook to device:
Gently push the "device end" of the ear hook onto the device until it snaps into position.

Rocker switch functions

Rocker Switch Presses	Function
Short up	Volume up (default) or program up (configurable in MT)
Short down	Volume down (default) or program down (configurable in MT)
Medium Up (default 3s, but configurable in MT)	volume up or program up (default) (configurable in MT)
Medium Down (default 3s, but configurable in MT)	volume down or program down (default) (configurable in MT)
Long Down with power on (default 5s, but will be configurable in MT)	Shutdown
Long Down with power off (default 5s, but will be configurable in MT)	Wakeup
Extra Long Down with power off (default 10s, but will be configurable in MT)	Wakeup and enter pairing mode

<u>Using with telephones and cellular phones</u>

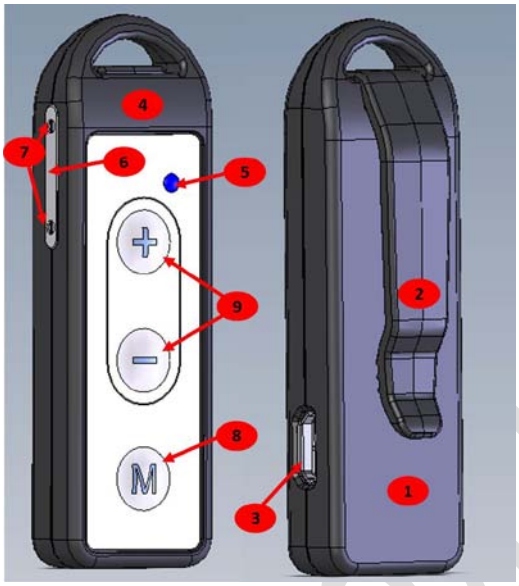
a. Telephones
    i. Hold the phone handset as you normally would. Move the handset up slightly to find the position that sounds best to you. If you encounter whistling (feedback), tilt the phone handset at an angle until the whistling stops.

b. Cellular phones
    i. Lumen 1000 is designed to comply with the most stringent Standards of International Electromagnetic Compatibility. However, not all cell phones are device compatible. Please check with your cellular phone carrier.

c. Telecoils - NA

Using Lumen 1000 with audio Accessory

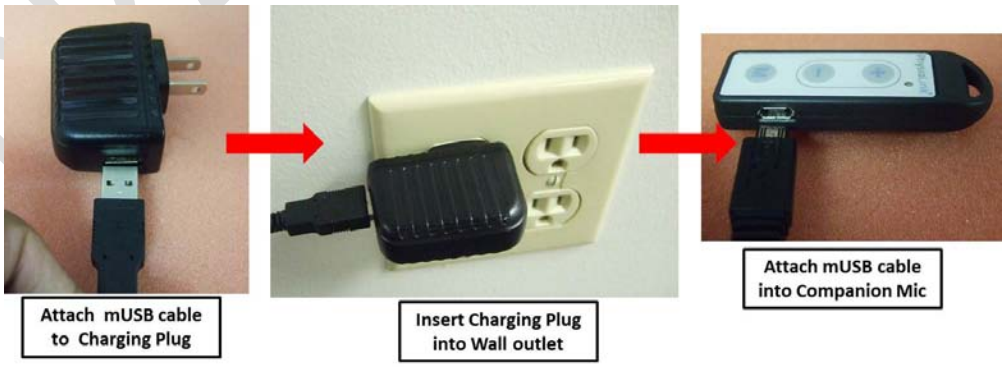
2. Using Companion Mic
    a. Typical use scenarios (sketch with stickfigures)
        i. Cars, restuarants etc.
    b. Describe CM with PICTURE showing labels identifying components



voicestream Device Illustration

	Device Description
1	voicestream Unit
2	Clip
3	MicroUSB Port
4	Lasermarking Area
5	LED Indicator
6	Mic Cover
7	Mic Ports
8	Mode Button
9	Volume Control

Charging CM



LED status table describing charge level

Press -/+	Blinks once
Press M	OMNI mode
	Directional mode,
	Off mode
LED ON	Indicates Charging
LED OFF	Fully Charged or Off mode
Low Battery Indicator	0.1 seconds ON & 0.1 second Off every 5 seconds

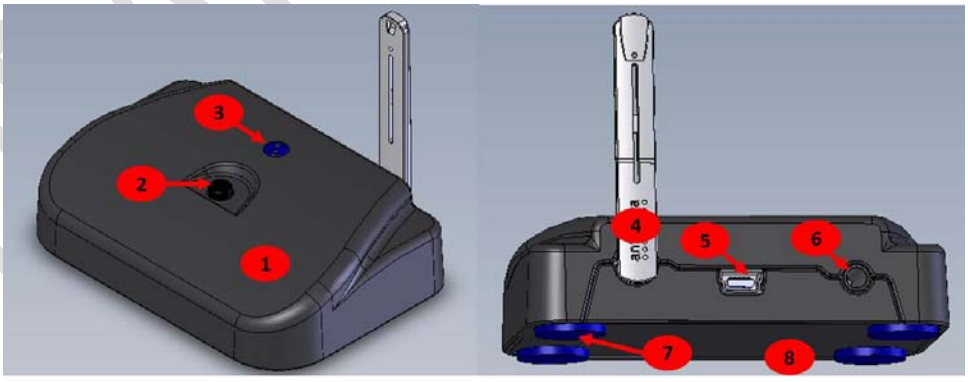
Description of button presses (including pairing)

Press -	Volume down one step
Press +	Volume up one step
Press M	Press and release to toggle between Omni, Directional and Off
Press M	Pairing with Lumen 1000 - Press and hold for 10 seconds, could be in any mode including Off

Charge device with microUSB cable when not in use.

Using TVA

c. Typical use scenarios (sketch with stickfigures)
    i. Home
d. Describe TVA with PICTURE showing labels identifying components

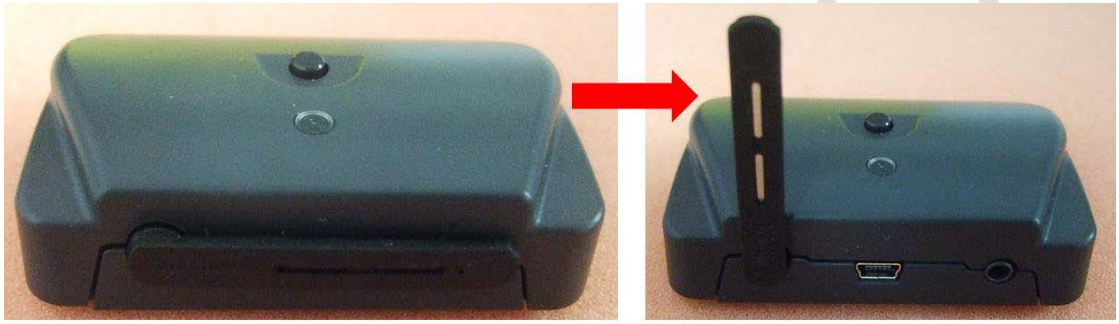


Linkstream Device Illustration

	Device Description
1	linkstream Unit
2	Switch Button

3	LED
4	Antenna
5	MiniUSB Port
6	3.5mm Audio Port
7	Anti-Slip Pads
8	Product labeling

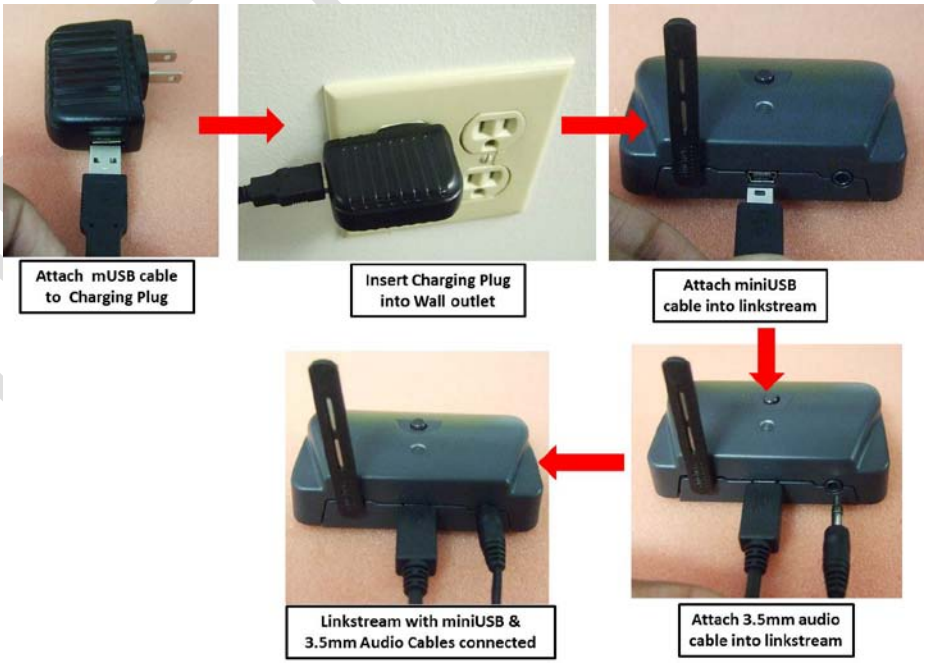
Positioning antenna



Antenna should be in upright position when in use

Connecting TVA to

Wall outlet, 3.5mm audio cable



e. Description of button presses (including pairing)

i. LED status
    1. ON/Off. Press and release button to Turn On/Off the LinkStream. LED will light when on
    2. Pairing mode. With the LinkStream On, Press and hold the button for 3 (??) seconds. LED will blink during pairing mode.

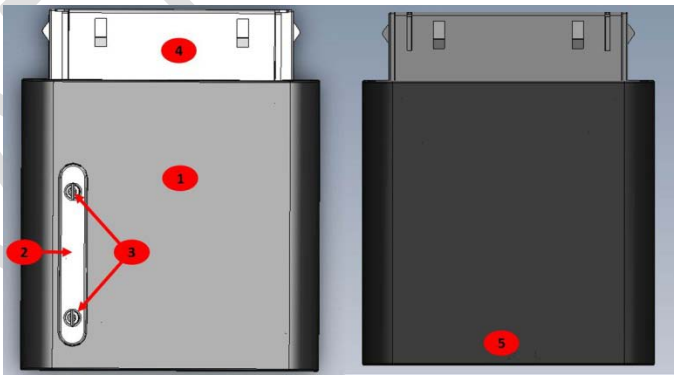
ii. Table capturing pairing scenarios – To pair LinkSteam accessory with a Lumen 1000 ear piece,
    1. If Lumen 1000 is in standby mode goto step 2. Press and hold down button for 5 seconds, the HA will enter Standby mode

    2. Continue pressing the down button for 10 seconds. Afer 5 seconds, the Lumen 1000 will wake up from Standby mode. Continue holding for the remainder of the 10 seconds to enter pairing mode. (In pairing mode the Lumen 1000 will generate a series of beeps that lasts for approximately 10 seconds.)

    3. When Lumen 1000 enters pairing mode, press and hold button on LinkStream for 5 seconds placing it into paitinr mode.

    4. When pairing is complete the beeping in the Lumen 1000 will stop and it will start receiving audio from the LinkStream device.

3. Using IPODA
    a. Typical use scenarios (sketch with stickfigures)
    b. Describe IPODA with PICTURE showing labels identifying components



flexstream Device Illustration

	Device Description
1	flexstream Unit
2	Mic Cover
3	Mic Ports
4	Docking Connector

5	Lasermarking Area

c. How to use APP (including pairing)
    i. Default mode -TBD
    ii. Table capturing pairing scenarios – In process

Troubleshooting section pointing to sections within manual

FCC LABEL REQUIREMENTS

- 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. (REF only - PER 15.19(a)(3))
- Changes or modifications not expressly approved by IntriCon for compliance could void the user's authority to operate the equipment. (REF only – per 15.21)

- ***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:***
    a. 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. (REF only – per 15.105)