

ZEN Blue 3 User Manual_Ver1.0 ()



ZEN Blue

User Manuals

Thank you for purchasing the Blue 3 from the ZEN series. The Blue 3 is a Hi-Res Bluetooth DAC.

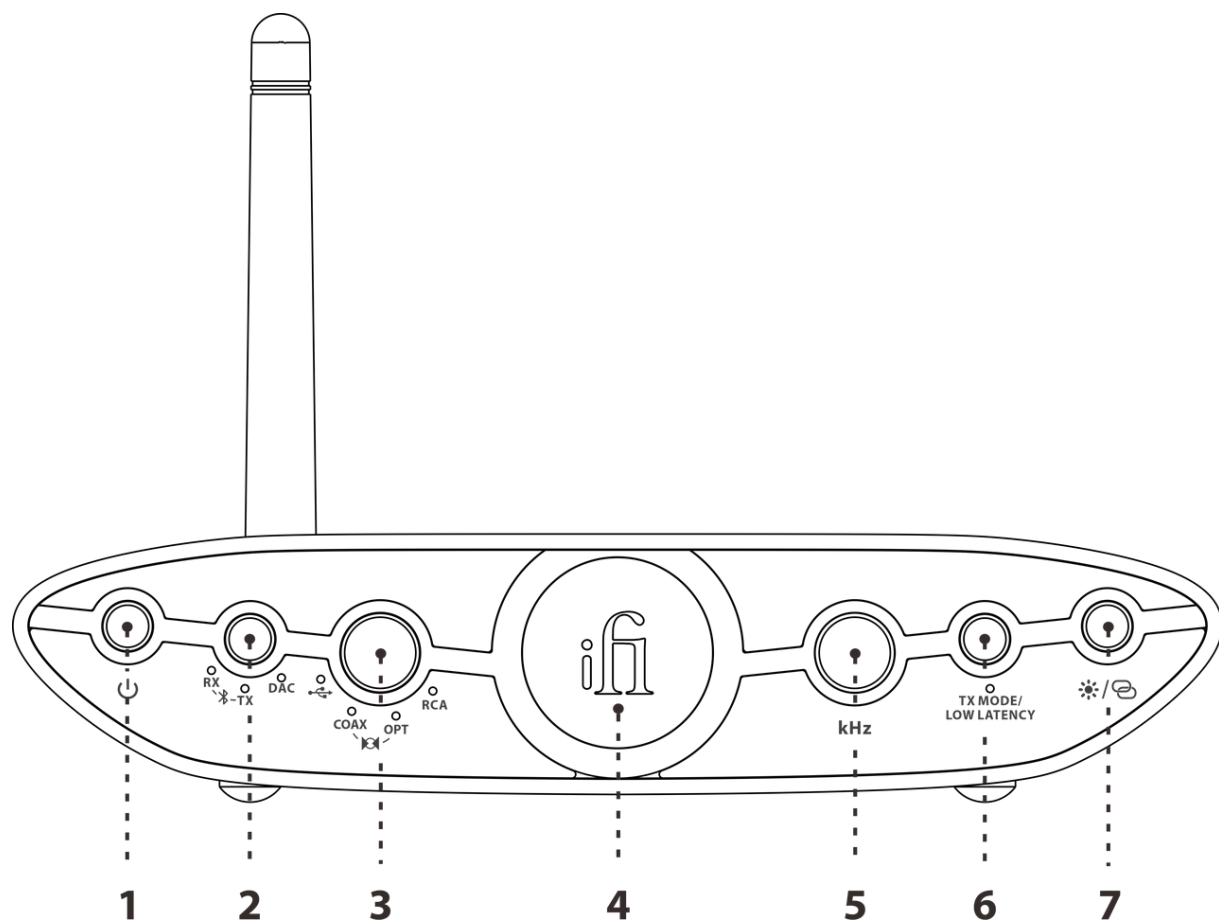
Unlock aptX Lossless and LDAC high-resolution audio transmission for your Bluetooth headphones and Hi-Fi system with our new Lossless Bluetooth transmitter and receiver, the ZEN Blue 3. Featuring three exciting operation modes and unbeatable Bluetooth codecs, you'll never have to settle for lossy codecs again. The ZEN Blue 3 boasts three operation modes: RX mode for receiving Bluetooth signals from your smartphone and outputting to your Hi-Fi system; TX mode for transmitting audio from your TV, set-top box, gaming console, or CD player to your

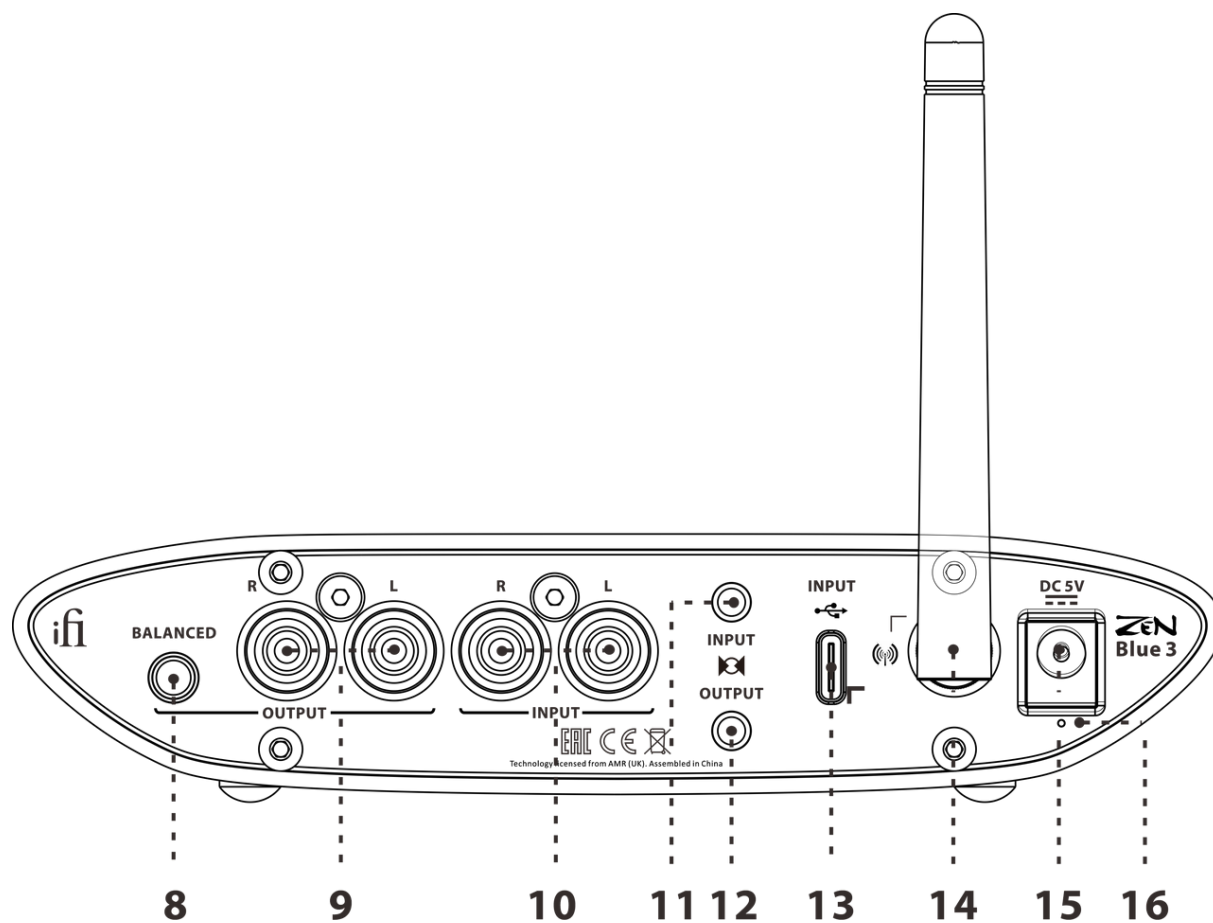
wireless headphones; and DAC mode for high-resolution music playback from USB and **S-PDIF** connections.

The ZEN Blue 3 is the ultimate lossless Bluetooth transmitter and receiver, excelling in lossless/hi-res Bluetooth audio transmission for your wireless headphones and Hi-Fi system.

FEATURES:

- Equipped with Qualcomm's flagship Bluetooth QCC5181 chip featuring Bluetooth 5.4, supports the latest aptX Lossless codec, capable of streaming lossless CD-quality audio without sacrificing quality
- Supports lossless CD quality (44kHz/16bit) and Hi-Res (96kHz/24bit) Bluetooth playback (RX) and transmit (TX)
- Supports aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC (HWA), AAC and SBC codecs
- Three operation modes: Bluetooth RX; Bluetooth TX and USB/S-PDIF DAC mode
- Quick-access button for aptX Low-Latency connection, ideal for gaming and video
- Control your music via Bluetooth with your favourite music app on smart devices or computers and relax
- External antenna for enhanced connectivity and extended range
- Balanced 4.4mm line output





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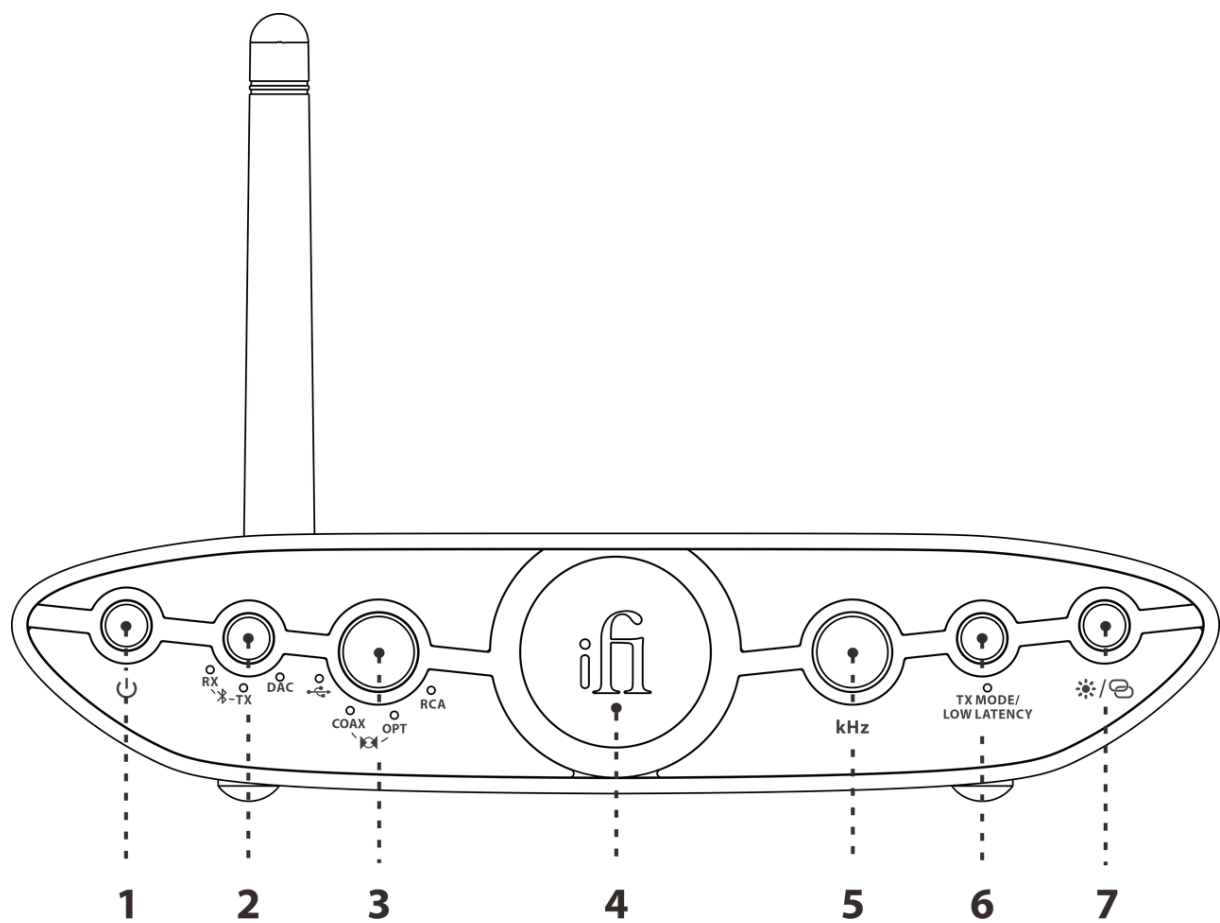
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1. Power switch

Power switch, Long press $\geq 2S$ to switch on/off.

2. Operating mode selector

This button cycles through 3 operating mode:

RX Mode > TX Mode > DAC Mode

RX Mode

In receive Bluetooth signal mode, the ZEN Blue 3 acts as a Bluetooth signal receiver/decoder only, allowing Bluetooth pairing with mobile phones or other devices to transmit audio signals in lossless CD sound quality.

Connection to back-end devices is possible via (8) Balanced 4.4mm, (9) RCA and (12) S/PDIF (Optical/Coaxial) (See item 8/9/12).

Note: ZEN Blue 3 supports aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC/HWA, AAC and SBC to receive Bluetooth signals(See item 4).....

TX Mode

In DAC mode, the ZEN Blue 3 acts as a decoder only and can be output via (8) balanced 4.4mm and (9) RCA and (12) S/PDIF (optical/coaxial) (see item 8/9/12) when the input channels are (13) USB, (11) S/PDIF (optical/coaxial).

When the input channel is (10) RCA, outputs are available via (8) balanced 4.4mm and (12) S/PDIF (optical/coaxial) (see item 8/12).

Note: The Note: ZEN Blue 3 supports aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC and SBC emitting Bluetooth signals (See item 4).

Please adjust your Bluetooth receiving device to Bluetooth pairing mode and bring your device as close as possible to ZEN Blue 3 (avoid connecting to other Bluetooth products), ZEN Blue 3 will automatically pair and connect your Bluetooth product, if the connection fails, re-adjust ZEN Blue 3 and your Bluetooth product to Bluetooth pairing mode, you can connect it dynamically. (Remarks: The time of successful auto-pairing will be a little different each time).

If the connection keeps failing, please check if ZEN Blue 3 has been paired with other devices or select the reset setting in GAIA APP.

DAC Mode

In DAC mode, the ZEN Blue 3 acts as a D/A converter (when the input channels are (13) USB, (11) S/PDIF (Optical/Coaxial) and (10) RCA inputs) to connect via (8) Balanced 4.4mm and (9) RCA and (12) S/PDIF (Optical/Coaxial) (See item 8/9/12) Output.

Note: standard supports up to PCM Bluetooth 96kHz, S/PDIF (Optical/Coaxial) 192kHz, USB 96kHz.

3. Input channel selection

Use the button to choose between the following 4 input options:

Input 1: USB (See item 13)

Input 2: Coaxia (See item 11)

Input 3: Optical (See item 11)

Input 4: RAC (See item 10)

4. Bluetooth codec and PCM display

The colour of the 'iFi' logo in the centre of the front display represents the file format received:

RX Mode

LED	Format
Off	SBC
Yellow	AAC
Blue	aptX
Magenta	aptX HD
Green	aptX Adaptive
White	aptX Lossless
Cyan	LDAC
Red	LHDC/HWA

TX Mode

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LED	Format
Off	SBC
Blue	aptX
Magenta	aptX HD
Green	aptX Adaptive
White	aptX Lossless
Cyan	LDAC

DAC Mode

LED	Format
White	PCM

5. Audio Format LED (kHz)

The LED colour scheme indicates the audio format and sampling frequency received by the ZEN Blue 3 from the music source.

LED	Mode
Yellow	PCM 44.1/48kHz
White	PCM 88.2/96/176.4/192kHz

6. TX MODE/LOW LATENCY

RX MODE/DAC MODE:

tapping is invalid

TX MODE:

- 1) In this mode, tap this button to switch the Bluetooth format.
- 2) long press $\geq 2s$ to enter the low latency state of aptX Adaptive/Low Latency.

7. Bluetooth pairing/LED display ON/OFF

- Bluetooth pairing (long press $\geq 3s$)
- LED display ON/OFF (Single tap)

Bluetooth Pairing

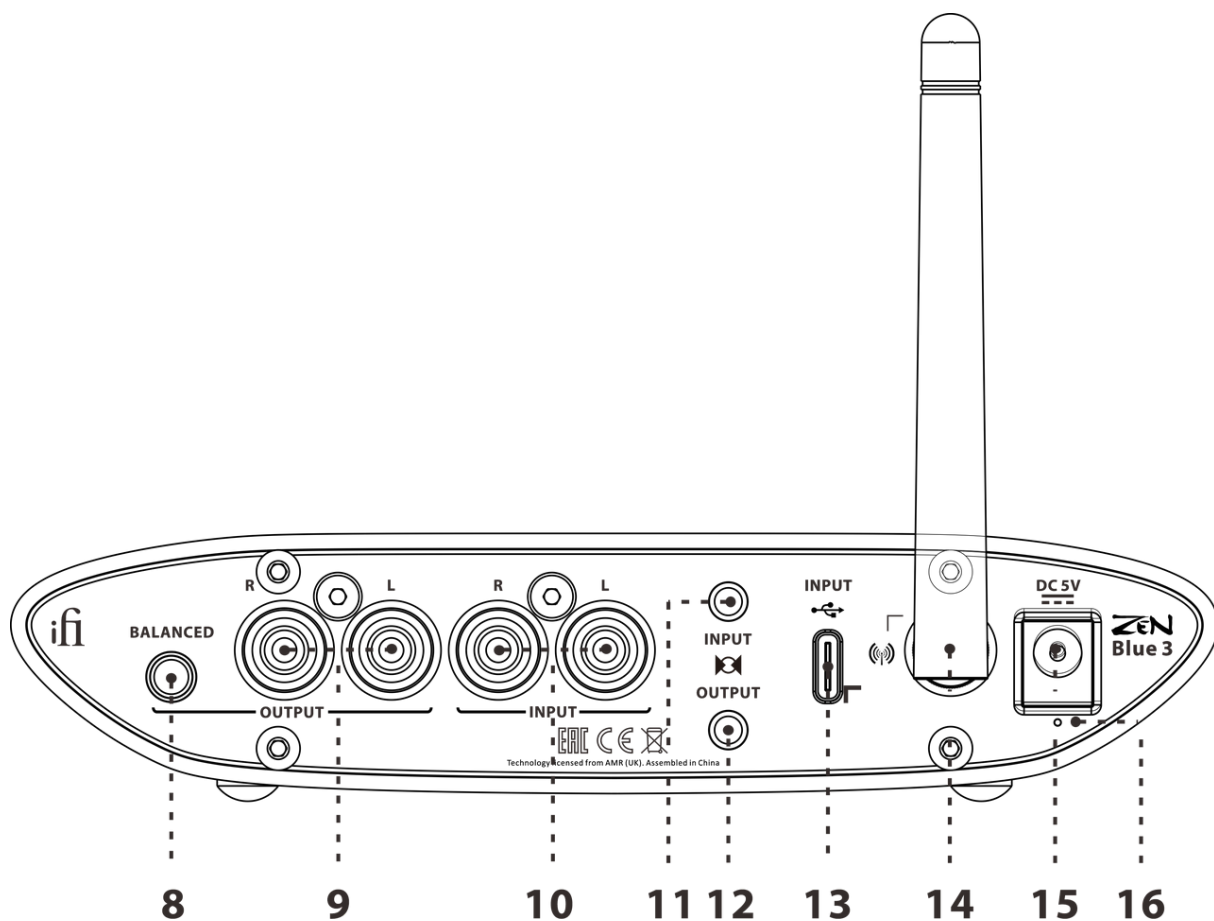
From switch on, the ZEN Blue 3 will blink blue as it searches for a previously paired device. If a stored device is not found, it will automatically enter pairing mode and blink blue/red.

To enter pairing mode, press and hold the front leftmost button until the 'Bluetooth mode LED' is blinking blue/red. To pair, on your handset, look for 'iFi Lossless Audio' in the list of available Bluetooth devices.

The ZEN Blue 3 is able to store up to 8 paired Bluetooth devices. When the 9th device is paired, the initially paired Bluetooth device will be removed from the pairing list and you may still need to manually reconnect it when using it.

LED display ON/OFF

Single tap to switch off (4) Bluetooth codec and PCM display and (5) Sampling frequency LED (kHz) LED.



8. Balanced 4.4mm analogue line output

This is an analogue output via 4.4mm > XLR or other balanced interconnects. You can use this to connect to active speakers or amplifiers that have a volume control.

Tip: As ZEN Blue 3 is balanced, this is the recommended output.

9. RCA analogue line output

This is an analogue output via RCA > RCA or other single-ended interconnects. You can use this to connect to active speakers or amplifiers that have a volume control.

10. RCA analogue line input

This is an analogue input. Connect an analogue RCA interconnects to an RCA Line output.

11. S/PDIF (Optical/Coaxial) input

Connect an S/PDIF source such as Apple TV, Google Chromecast, PS5, Xbox, a high-end CD transport, etc.

12. S/PDIF (Optical/Coaxial) output

Connect to the DAC or amplifier' s S/PDIF input.

13. USB-C audio and power input

This is a USB-C input. It connects ZEN Blue 3 to the computer audio source and provides the power supply.

14. Antenna

Please attach the enclosed antenna for maximum reception quality.

15. DC 5V Power Supply Connection

ZEN Blue 3 is powered by 5 volts, either via the enclosed USB-A to USB-C cable (for connection to laptop or PC) or DC power supply (not included).

Tip: For best performance upgrade the power supply to a super-low noise power adapter such as iPower2 5V or iPower X 5V.

16. DC 5V Power LED

The LED lights up when powered from a DC 5V supply.

SPECIFICATIONS:

DAC Chipset:			
Qualcomm QCC518x Series	DSP (CT5302)	DAC (ES9023)	AMP (MAX97220)
Input	RX MODE	TX MODE	DAC MODE
Digital	Bluetooth 5.4 (aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC(HWA), AAC and SBC)	USB, Optical, Coaxial,	USB, Optical, Coaxial,
Analogue		RCA L/R	RCA L/R

Output	RX MODE	TX MODE	DAC MODE
Digital	Optical, Coaxial	Bluetooth 5.4 (aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC(HWA), AAC and SBC)	Optical, Coaxial
Analogue	RCA L/R, Balanced 4.4		RCA L/R, Balanced 4.4
Maximum supported sampling rate	96kHz/24Bit	96kHz/24Bit	Optical/Coaxial 192kHz/24Bit, USB 96kHz/24Bit
Line Output:			
Output Voltage			
Balanced 4.4mm		4.1Vrms (0dBFS@1kHz)	
Single-Ended RCA		2.05Vrms (0dBFS@1kHz)	
Output Impedance:			
Balanced 4.4mm		$\leq 102\Omega$	
Single-Ended RCA			

	$\leq 51\Omega$
SNR:	109dB
DNR:	109dB (0dBFS @ 1kHz) +A
THD + N:	< 0.005% (10K Load)@(20-20kHz)
Frequency Response:	
Power supply requirement:	USB-C or DC 5V/ $\geq 0.5A$ (centre +ve)
Power consumption:	< 1W
Dimensions:	158 x 115 x 35 mm (6.2" x 4.5" x 1.4")
Net Weight:	447 g (0.99 lbs)
Limited Warranty:	12 months*
<i>*12 months typical or as permitted/required by local reseller laws.</i>	
<i>**Specifications are subject to change without notice.</i>	
<i>^See FAQ at ifi-audio.com for more information.</i>	

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. Changes or modifications 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 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 important announcement

Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.