



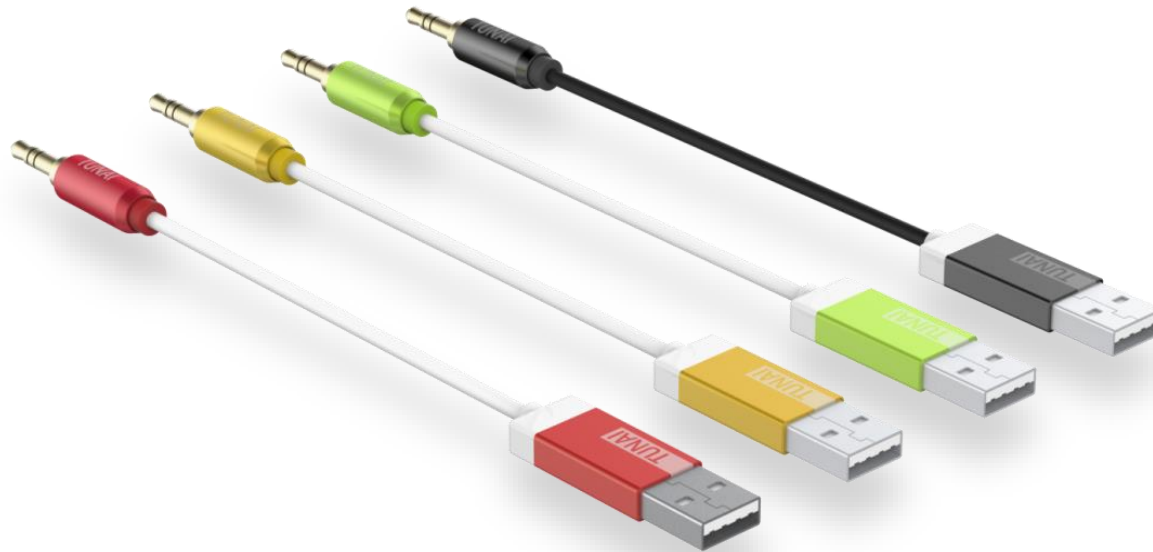
**TUNAI CREATIVE**

*Simple, but Significant*

# Firefly - Bluetooth Music Receiver



**Firefly turns any car or home speakers into a Bluetooth Speaker, allowing playback of all audios including music, video sound, navigation guidance and gaming sound to your car or home speakers wirelessly.**



# World Smallest Bluetooth Music

Enabling Audio System with Wireless Streaming Capability

**Size – Smallest in the world**

**1**

**2**

**Stylish – Anodized Aluminum + Color Palettes**

**Excellent Sound – Sounding Original**

**3**

**4**

**Easy to Share – Connecting to Two Devices**

**Optimized for Car – Filtering Car Power Noise**

**5**

**6**

**Fits all Audio System – Car & Home**

## Why's Firefly Different?

Small, Stylish, Excellent Sound, Easy to Share, Filter Car Noise, Fits all Audio System

# Firefly | World Smallest Bluetooth Receiver



# Size Does Matter – Smallest in the World

Driving Safety, Saving Spaces

# Firefly | World Smallest Bluetooth Receiver



**GOLD**



**BLACK**



**RED**

**Stylish – Metal Casing + Colorful Palettes**

**Driving Safety, Saving Spaces**

# How is this tested?

## Theory

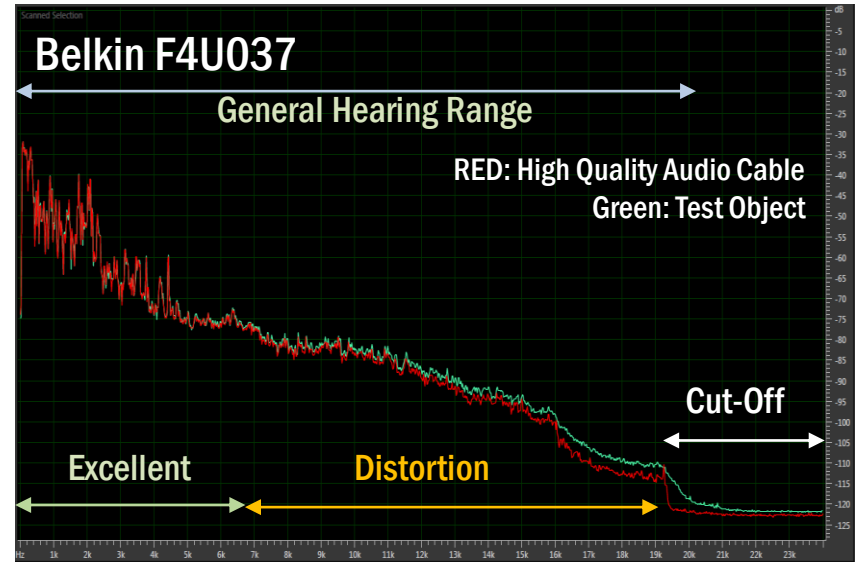
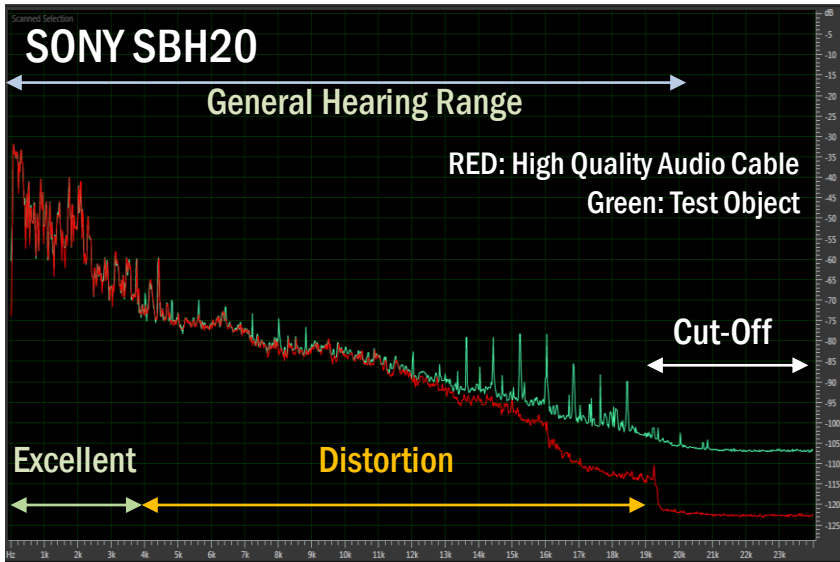
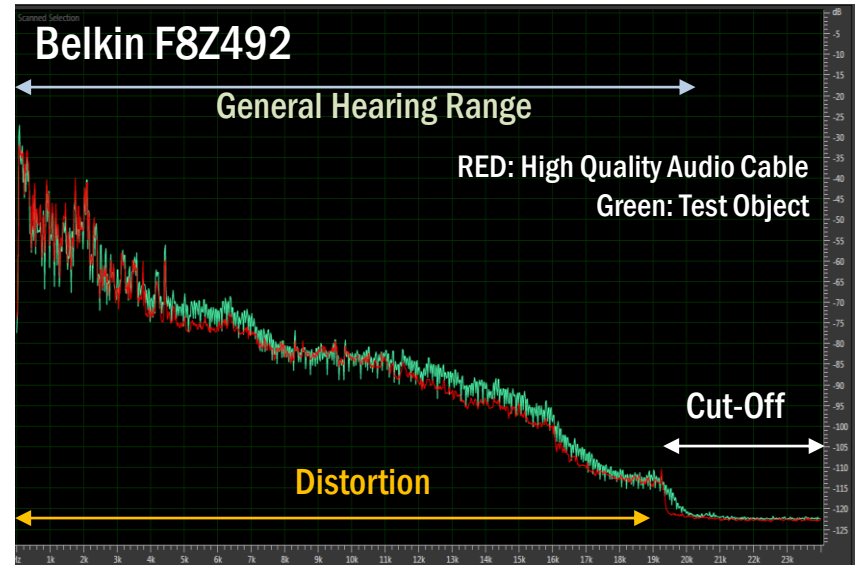
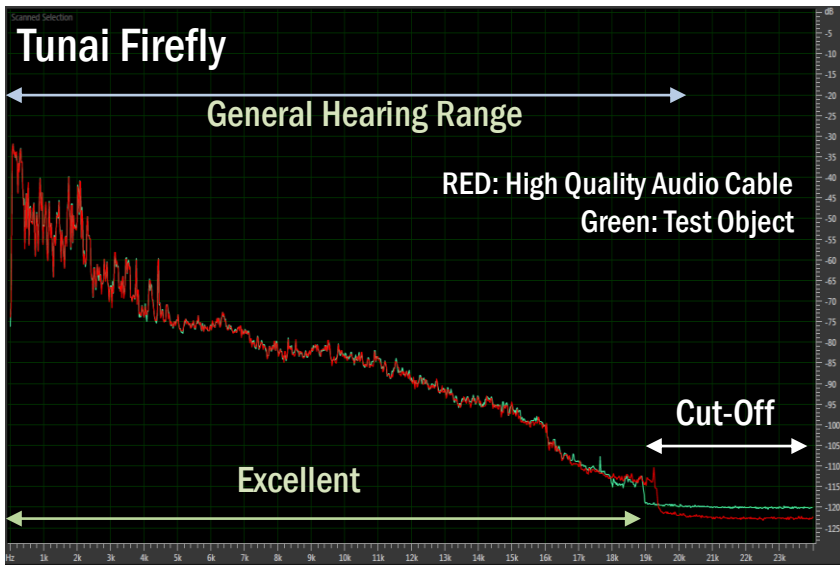
- Assuming direct connection between mobile device (playback) and audio system through a “high quality audio cable” provide the best lossless sound quality, and use it as golden sample.
- Record the playback sound from golden sample and various test objects (wireless audio receiver) into the PC under the same test condition (same song, sample rate, etc).
- Process frequency analysis for the recorded audio.
- Compare the frequency analysis result between golden sample and test objects. The more consistent between golden sample and test object, the better the sound quality of test object provides.

## Known Facts

- General speaking, human hears frequency from 20Hz – 20kHz. For frequency beyond 16kHz, human sense the sound through vibration of skull, bones instead of hearing from ears.
- The hearing range degrades through age.
- Bluetooth bandwidth is limited, and audio compression is required for transmission. Compression cut-off frequency is mostly at 19kHz.

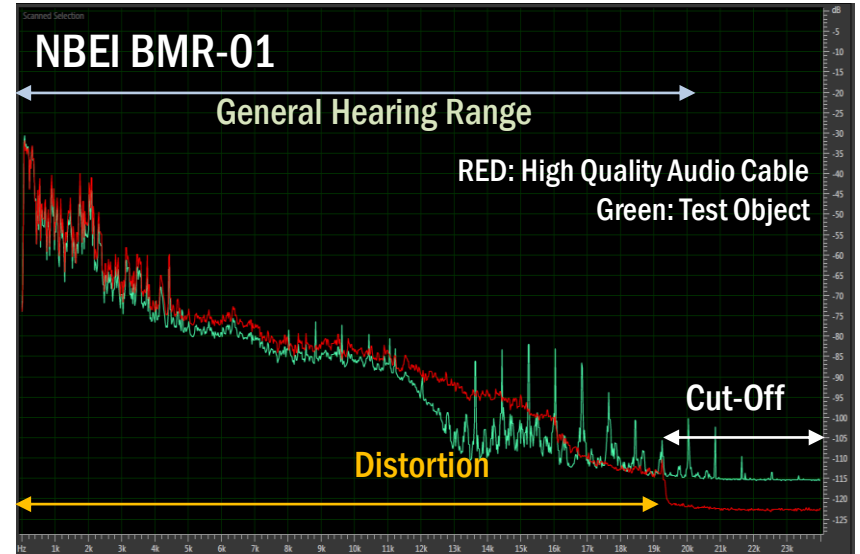
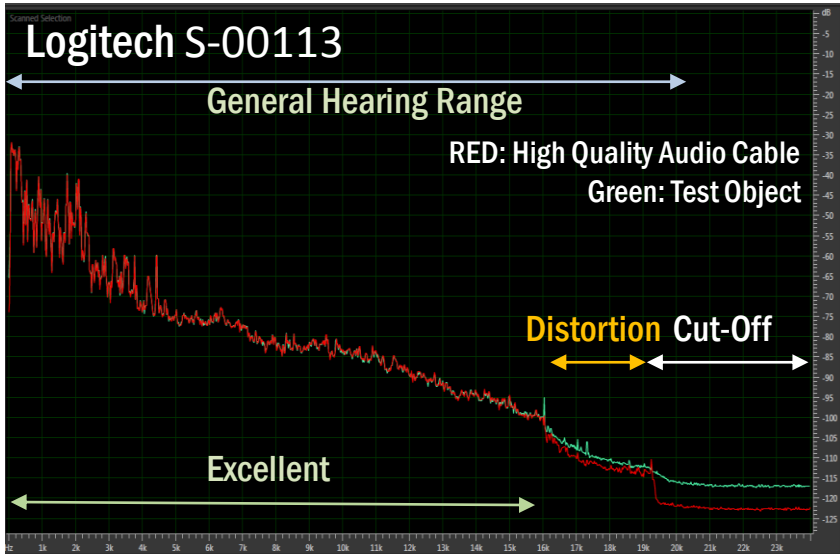
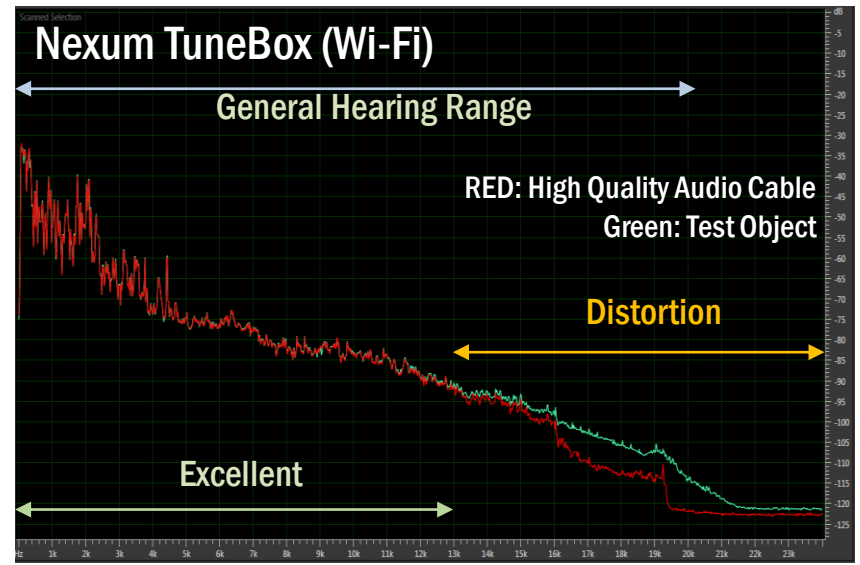
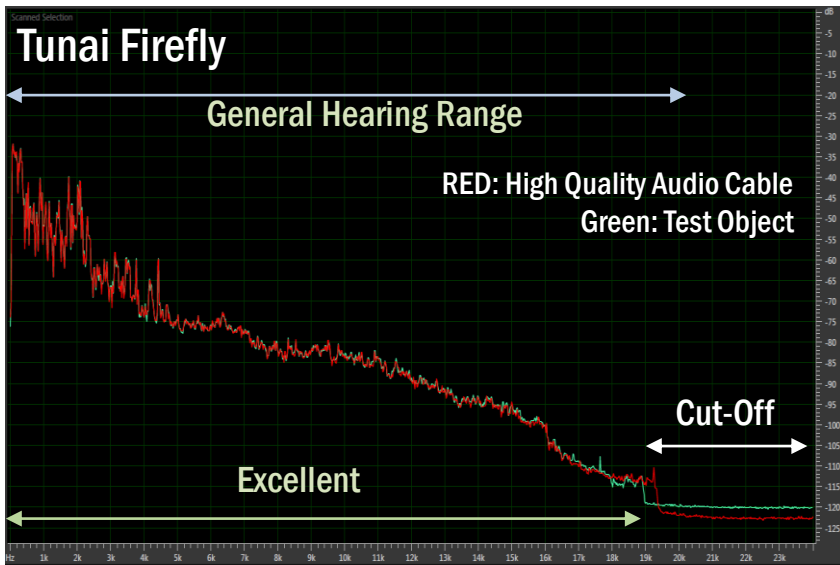
# Excellent Sound – Proof with Evidence

Showing Sound Excellence in Real Data



# Excellent Sound – Sounding Original

High Quality Audio Decoder AAC, MP3 Support, Optimized Circuit Design and Pure Copper Cable



# Excellent Sound – Sounding Original

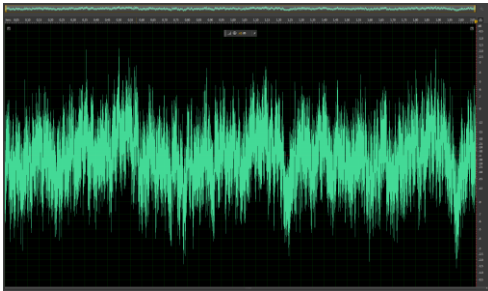
High Quality Audio Decoder AAC, MP3 Support, Optimized Circuit Design and Pure Copper Cable



Most car power source is dirty (unstable). When using car power as power source, unwanted power noise will couple into the audio easily if not taken care of.

Firefly is one of the very few Bluetooth music receiver which has carefully taken care of the power noise issue in the car, and tested over 100+ vehicles in the market remove the car noise issue.

Sample Car Power Noise



Click for audio sample

How it sound when playing music (w/o taking care of power noise)



Click for audio sample

How it sound when playing music (when power noise is taken care of)



Click for audio sample

**Car Optimization – Noise Filtering & Privacy Secured**

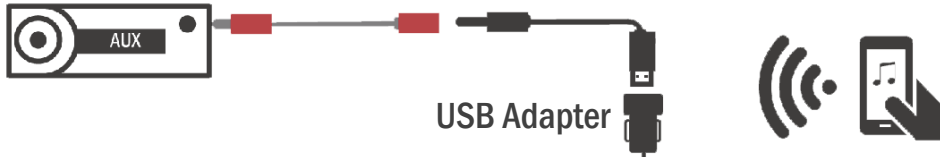
“Buzz” Sound is Removed

# Firefly | World Smallest Bluetooth Receiver

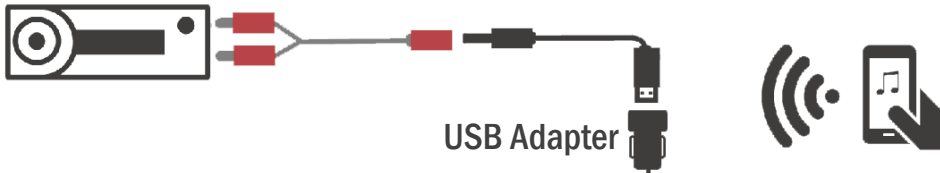
Car Audio (USB & AUX Available)



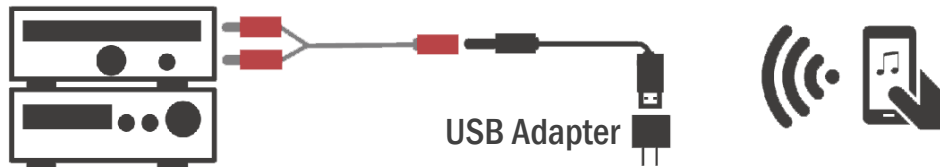
Car Audio (AUX Only, USB Not Available)



Car Audio (AUX & USB Not Available)



Home Audio



## Fit All Audio System – Car & Home

YES, Any System Will Work

# Firefly | World Smallest Bluetooth Receiver



Brand	Tunai Creative	Logitech	Yamaha	Belkin	Belkin
<b>Model</b>	Firefly	S-00113	YBA-11	F8Z492	F4U037
<b>Dimension (L x W x H, excluding cables)</b>	46mm x 14mm x 5.5mm	80mm x 80mm x 30mm	66mm x 66mm x 21mm	46mm x 46mm x 21mm	41mm x 41mm x 16mm
<b>Dimension (mm<sup>3</sup>)</b>	3,542	192,000	91,476	44,436	26,896
<b>Retail Price *1 PCHOME Price</b>					
<b>*2 Newegg Price</b>	NTD 1,490 <sup>*1</sup>	USD 54.98 <sup>*2</sup>	USD 49.95 <sup>*2</sup>	USD 48.76 <sup>*2</sup>	USD 67.99 <sup>*2</sup>
<b>Bluetooth Version</b>	4.0			2.1	
<b>Paired Device Memnory</b>	8				
<b>Decoding Support</b>	SBC, AAC, MP3	SBC	SBC, aptX	SBC	SBC
<b>Output</b>	AUX	AUX RCA	COAXIAL	AUX	AUX
<b>Embedded Battery</b>	No	No	No	No	No
<b>In The Box</b>	AUX-AUX extension cable (Pure Copper) AUX-RCA extension cable (Pure Copper)	Adapter AUX-RCA cable (General)	USB Charge Cable COAXIAL (General)	Adapter AUX-RCA Cable (General) AUX-AUX Cable (General)	N/A
<b>Application</b>	Car/Home	Home	Home	Home	Car
<b>Pairing Button</b>	Not Required	Yes	Yes	Not Required	Yes
<b>Phone Call Cability</b>	No	No	No	No	Yes
<b>Device Connection @ Same Time</b>	2	1	1	1	1
<b>Power Noise Filtering @ Car Enviroment</b>	Excellent	No	No	No	No
<b>Connection Distance</b>	10	10	10	10	10
<b>Case Material</b>	Aluminum / Plastic	Plastic	Plastic	Plastic	Plastic
<b>Distoration Level</b>	1	2.5	Not Tested	4	2.5
<b>Score 0 - 5, 0 is no distoration, 5 is worst</b>					

## Product Comparison

Better Quality, More Features @ Similar Price Point