

Cyfi Speaker Operational Description

General Description :

Cyfi Speaker use the KLEER-KLR3012 radio operates in the globally unlicensed 2.4GHz ISM band from approximately 2.4GHz to 2.48GHz. It divides the spectrum into 16 channels spaced at 5MHz. Cyfi Speaker can operate on any of these channels and will automatically switch to another channel when the current channel is experiencing poor performance due to interference or fading.

The radio operates using time domain duplex communications, such that communications from Cyfi Adapter to Cyfi Speaker are on the same channel as communications from Cyfi Speaker to Cyfi Adapter.

All information is packetized and transmitted at the peak bit rate of the radio. Since the average data throughput is considerably less than the peak rate of the radio, the radio is idle much of the time and this is used to reduce power consumption.

Features :

- ◆ Point to point – Cyfi Adapter is the most basic configuration in which there is a single Cyfi adapter and a single Cyfi Speaker.
- ◆ Point to multipoint – Cyfi Adapter is currently limited to a maximum of 4 Cyfi speaker.
- ◆ Remote iPod – Play/Pause, Next/Fast-forward, Previous/Rewind, Turn off.
- ◆ Indoor listen.
- ◆ Outdoor listen music.

Specifications :

Chipset	KLEER KLR3012
Database	Stereo Speaker(SINK)
RF Output Frequency Range	2400 MHz ~ 2480 MHz
Channel frequency	$F = 2403 + 5(K-1)$ K=1,2,.....16
RF Channels	16 channels
RF Channel Spacing	5MHz
20dB bandwidth for	3MHz

modulated carrier	
Digital Audio Interface	16-bit,44.1Ks/sec stereo audio
Maximum Data Rate	2.37Mb/s
Sensitivity (18% packet error rate)	-87 dBm
Transmitter Power	+1.5dBm
Button Funtion	Power On&Off/Associate/Play&Pause Button Volume Up Button Volume Down Button Next/Fast-forward Button Previous/Rewind Button Reset Button
Led Funtion	Red Led,Blue Led,Green Led
Charger Voltage	DC +5V/2A
Battery Voltage	+3.7V/1200mAh
Operating Time	Over 5 Hours
Transmission Range	Over 10 Meters
Operating Temperature	-10°C to +50°C
Storage Temperature	-20°C to +60°C
Dimension	122.4(L) x 100(W) x 29(H)mm
Weight	106 g

(Specifications are subject to change without notice.)