feonic
INVISIBLE SPEAKER

Feonic Wireless Kit

The Feonic Wireless Kit is an excellent way to explore Feonic's solid state speaker technology. It includes the F5PRO Audio Drive which has been developed specifically for embedding into new and existing larger products made from glass, aluminium, steel, GRC, GRP, Corian, MDF, plywood, and more materials, where sound is required from the product without grilles or perforations. **When driven by a Feonic F5PRO the entire surface of the panel produces sound at an equal level all around the product.**

The low profile F5PRO is unlike traditional speaker technology because it uses a very high powered smart material as a solid state exciter (instead of a moving coil or such other high movement speaker technologies) to deliver miniscule non damaging micro-vibrations.

A stereo Bluetooth amplifier (can power 2 F5PRO) and all cables are supplied with the kit so it's ready to use out of the box with either a wireless Bluetooth audio input or from any headphone output.

Key benefits

F5PRO's provide a more even distribution of sound than directional traditional speakers - the whole panel or structure being driven becomes a 3 dimensional speaker cone, creating an omni-directional, evenly distributed output. The frequency response of the output is not affected by the position of the listener relative to the sounder so all content is communicated all around the panel or structure unlike directional solutions.

The versatility of the compact, broad bandwidth F5PRO audio drive makes it the perfect invisible speaker mounted safely inside the structure to be sounded. This is particularly useful when sound is required from kiosks, bathrooms, ATM's etc that are prone to vandalism or water permeation as speaker grilles, slots or holes are not required as the sound transmits from the inner surface without quality loss.

Technical Specification

F5PRO Audio Drive

Impedance:	4 Ohms
Integrated Circuitry:	2 way crossover & circuit protection
Operating temperature range:	-20ºC to +80ºC (-68ºF to 176ºF)
Storage temperature range:	-20ºC to +100ºC (-68ºF to 212ºF)
Weight:	c340g
Dimensions:	76.5mm(W)x46mm(L) x26mm(H)
Mounting method:	3M VHB adhesive or optional mounting plate
Connection to amplifier:	5m cable (can be cut to length)
Optimal amplifier power rating[1]:	15-20Watt
Amplitude:	40μm (microns at <125Hz)
Sensitivity[2]: (glass[2])	62dBA @ 1m
Sensitivity[2]: (MDF[2])	66dBA @ 1m
Typical Bandwidth:	120Hz-20,000Hz
Sound Pressure Level Pink Noise [3]:	82dBA @ 1m on (glass[3])
Sound Pressure Level Pink Noise [3]:	80dBA @ 1m on (MDF[4])
Speech Transmission Index /	0.60 to 0.65 /
Common Intelligibility Scale[4]:	0.78 to 0.83
Environmental protection:	IP55 (Impervious to moisture damage*)

[1]Recommended amplifier power rating for optimum performance, [2]Sensitivity measured with 1kHz sine wave at 1Watt, [3]Max Sound Pressure Level (SPL) achieved with sounder mounted on same side as measurement with 1kHz sine signal just prior to input signal distorting, [4]STI/CIS values, measured to IEC Standard 60268-16, are typical values since it is dependent on acoustics of installation site. *Cannot be immersed – mount drive vertically in wet environments.

Typical applications

- Educational experiments
- Mirror and furniture speaker
- Bathroom
- Artwork
- Digital Signage – embedded into advertising units
- Retail advertising and POS
- Information Points, ATM's, vending machines, petrol pumps
- Community projects, including high street regeneration and public audio artwork

Bluetooth Amplifier

Power RMS (W) @ 4 Ohms:	2 X 15W
Frequency Response:	80Hz-20,000Hz
Operating temperature range:	-20ºC to +80ºC* (-68ºF to 176ºF)
Storage temperature range:	-20ºC to +100ºC* (-68ºF to 212ºF)
Weight:	c128g
Dimensions:	41mm(W)x118mm(L)x27mm(H)
Mounting method:	Screw mount or 3M VHB adhesive
Connection to audio drive:	Phoenix
Audio Input:	Auxiliary 3.5mm stereo jack or Bluetooth 4.0
Power Supply:	12V with international mains power adapters 100-240VAC 50-60Hz

Box Contents

1 x F5PRO Audio Drive
1 x Mounting plate (for rough surfaces)
1 x Stereo Bluetooth Amplifier
1 x 12V power supply with adapters
1 x 3.5mm stereo jack - 3.5mm stereo jack cable
2 x 3M VHB Adhesive tape
1x Instructions

Optional: Additional F5PRO for stereo

To download specifications visit www.feonic.com/downloads or scan the QR code using your mobile device