

whispering window™

Audio in the retail industry
Internal/external audio through windows

When coupled to a glass or rigid surface FeONIC™ technology turns the surface into a loudspeaker. The quality of the audio output is determined by the size and mass of the panel, it's mounting and the size of the FeONIC sounder. Recent applications of whispering window include football stadiums, restaurants, art galleries and retail locations as well as train carriages where audio and PA is delivered through the carriage windows. The device shown to the right is a standard design, devices can be completely discrete and integrated into the structure of the window they are sounding. Current FeONIC sounders are capable of driving windows of up to 200kgs in weight.

“Department sales increase of over 40%”

“The retail sector has been looking for a way that allows people to hear as well as see products, so Whispering Window is precisely what we've all been waiting for. After installing Whispering Window into our storefront, the number of people who stopped to view our window displays increased by nearly **50 percent*** during an afternoon of testing. Of course the acid test of any retail innovation is increased sales. As a result, we were very pleased that sales of our audio and television merchandise that were featured in the window increased significantly.”

Kevin Scully
Visual Merchandising Manager
Peter Jones

Outdoor Advertising Association Statement

“The use of audio in outdoor advertising has been limited by the inability of conventional loudspeaker technology to meet the stringent environmental demands of both the quality and control of sound. ‘Whispering’ Window uses FeONIC technology to deliver subtle, effective and controlled sound when used in outdoor advertising or as part of a retail campaign. FeONIC technology's ability to convert all sorts of smooth, hard surfaces as well as windows into loudspeakers represents a paradigm shift for the outdoor and in-store media industry”.

Alan James CEO Outdoor Advertising Association

Contact details:

sales@feonic.com

www.feonic.com

www.whisperingwindow.com



* Figures based on independent research carried out by Retail Marketing Services Ltd.



Whispering Window

Valcom TD230 dual 30W amplifier & Valcom TD230A dual 30W amplifier with AGC:

Nominal Specifications (per channel):

Input Impedance:	10kOhms
Input Level:	-10dBm nominal, 200mVp-p
Output Impedance:	8 Ohms
Output Power:	30 Watts Music (per channel)
Frequency response:	100Hz- 17kHz
Operating temperature:	0°C to 50°C (32°F to 122°F)
Weight:	1.18kg
Dimensions: (H x W x D)	299mm x 180mm x 44mm

Power Supply:

Input:	100-240Vac 47-63Hz
Output:	24Vdc 2Amps max

F1.3 Audio drive

Impedance:	4 Ohms
Integrated Circuitry:	3 way cross over & circuit protection
Operating temperature range:	-20oC to +80oC* (-50oF to 176oF)
Storage temperature range:	-20oC to +100oC* (-50oF to 212oF)
Weight:	c1500g
Dimensions:	57mm (W) x 118mm (L) x 55.5mm (H)
Mounting method:	3M VHB adhesive tape or optional mounting plate with screw holes
Connection to amplifier:	+ve/-ve terminal post
Maximum power rating:	100Watt / 50Watt 100V line with additional transformer
Sensitivity ¹ :	(glass ²) 69dBA @ 1m
Sensitivity ¹ :	(MDF ³) 69dBA @ 1m
Typical Bandwidth:	63Hz-20,000Hz
Sound Pressure Level ⁴ :	(glass ²) Peak 98dBA (SPL 95dBA) @ 1kHz 1m
Sound Pressure Level ⁴ :	(MDF ³) Peak 102dBA (SPL 99dBA) @ 1kHz 1m
Speech Transmission Index /	0.60 to 0.75 /

Common Intelligibility Scale ⁵	0.78 to 0.88
Environmental protection	IP55 (Impervious to moisture damage**)

¹Sensitivity measured with 1kHz sine wave at 1Watt, ²Reference glass panel size 10mm x 1m x 1m, ³Reference MDF panel size 18mm x 1m x 1m, ⁴Max Sound Pressure Level (SPL) achieved with actuator mounted on same side as measurement with 1kHz sine signal before circuit protection is triggered, ⁵STI/CIS values, measured to IEC Standard 60268-16, are typical values since it is dependent on acoustics of installation site. * high temperature variants available on special order. ** Cannot be immersed