

link22



SHIELD

Technical Performance

Shield sound dampening

Shield is designed to suppress speech from entering the box via sound dampening features. These features also prevent the sound generated inside Shield from exiting the box.

Shield uses sound-dampening features to block external speech from entering the box and to keep the sound produced inside Shield from escaping. Sound can travel through both air and objects. Shield effectively minimizes sound travel by:

- Sealing potential air leaks using features like seals, anti-vibration grommets, an aluminum lid, magnet closing components, and insulated walls.
- Damping vibrations through strategic design elements such as an internal box mounted on silicon pads (vibration

isolator), rubber feet, noise-reducing materials, and rubber seals.

Test Results | Shield is the quietest noise cancelling box on the market, only emitting less than 20dB(A) of sound at 1 meter from the box.



Shield sound masking

To guarantee that no sound reaches the mobile devices within the box, Shield plays carefully calibrated masking sounds. These sounds effectively obscure human speech and are designed to resist any attempts by attackers to remove the masking from a recording.

Shield features a **sound masking box** built into its interior cabin, comprising two small speakers and a bass reflex channel. Through rigorous testing, the bass reflex channel has been calibrated to effectively mask human speech.

To safeguard against reverse engineering and removal of sound masking from recordings, Shield utilizes a real time three-layered **randomized sound algorithm**. This algorithm incorporates random noise and multiple synthetic voices.

Adapting to diverse environments, Shield offers the flexibility of **two adjustable volume** settings. This feature empowers the security team to tailor sound masking precisely to their unique environment.

Test Results | Shield has undergone testing in an independent acoustic laboratory. The results confirm that Shield effectively prevents devices from eavesdropping. Contact [link22](#) for the full test report



DEVELOPED
BY SECURITY
EXPERTS

Shield security

Ensuring robust security is crucial, as it safeguards Shield from unauthorized access and preserving the confidentiality of sensitive discussions. Built and tested by security experts at link22, Shield is designed to be tamper-resistant.

Security features

- Security Features
- Anti-vandal Switch
- Power loss buzzer
- Self-monitoring system
- Tamper evident labels
- Key Switch
- Kensington security slot

Security is not just about adding features; it's also about reducing the attack surface. Therefore, Shield has no USB ports for charging or microphones for signal recognition.

The Result | Shield provides a sense of security and is trusted by world leading military organisations.



Shield is designed to keep mobile devices from eavesdropping on meetings without disturbing the environment. This is achieved through a combination of sound dampening, sound masking, and security features.

Independent testing demonstrates that Shield effectively prevents eavesdropping and is resistant to advanced signal analysis methods.



Product specification

Product name	Shield 2.0	
Dimensions	Inside	Outside
Hight	300mm	340mm
Width	190mm	278mm
Depth	70mm	136mm
Weight	13kg	
Color	Black	
Power supply	90V-264V, 47/63Hz	
Delivered with	• Power supply cable • 2 Keys • User guide	
Quantity of phones	16 standard phones	
Operating temperature	0-40 °C	
Warranty	1 year	
Sound masking		
Volume options	Middle level	High level
Volume 1 m away from Shield	20-23dB(A)	26-29dB(A)
Noise to signal ratio	-44dB	-70dB
Sound	Synthetic voice and pink noise randomly generated algorithm	
Security		
Power loss buzzer	Yes	
Self-monitoring system	Yes	
Kensington lock port	Yes	
Key switch	Yes	
Tamper evident labels	Yes	
Wireless technology	No	
USB-ports	No	
In built microphone	No	