



hsg labs® | checker

Brightness and Audio Checking for  
Cinema Owners, Managers and Staff.



**More than two years in development, the all-new HSG Labs Checker builds upon the success of Harkness' previous device, the Digital Screen Checker, bringing to the cinema industry a state-of-the-art brightness and audio checking tool at an affordable price.**

The all new HSG Labs Checker is a low-cost tool designed to help cinema owners, managers and staff monitor brightness levels and spot check audio systems in order to ensure presentation quality is maintained. It is also an ideal tool for home cinema installations.

Simple and easy to use, the Checker is a point and click device with an intuitive user interface designed for users with varying levels of technical expertise. The ergonomically designed hand-held device (which can also be tripod-mounted) allows users to quickly take measurements inside of a cinema to spot check various presentation parameters from industry reference measurement positions.

### **Brightness Measurement**

Calibrated for use with all types of cinema projection including RGB laser illumination, the Checker's 3° field of view, provides accurate brightness readings between 0 and 40fL with a tolerance of +/-1fL. The simplicity of the Checker lends itself perfectly to regular spot checking of brightness levels to monitor light degradation or during lamp installations using a white test pattern.



### **Audio Checking**

The HSG Labs Checker features two audio spot checking functions designed to help exhibitors to identify if audio levels have altered from known calibrated levels. **Sound Pressure** is displayed in dBC ensuring audio levels are suitable for cinema. The Checker also features a **10-band spectrum analyser** enabling exhibitors to identify if an audio channel is defective.

### **Key Features**

- Brightness measurement (displayed in fL and Cd/m<sup>2</sup>)
- Sound pressure and 10-band spectrum analyser
- Ergonomic chassis
- Intuitive user interface
- LCD touch screen
- Rechargeable battery with standard USB-C charging
- Hard case for portability

## Product Specifications

**Packed Size:**  
200.3mm x 142.4mm x 48mm

**Packed Weight:**  
463g

**Device Size:**  
147mm x 56mm x 33.5mm

**Device Weight:**  
170g

**Display:**  
2.8 inch TFT LCD resistive touch screen

**Resolution:**  
320 x 240(RGB) - 65k colour LED  
Backlight

**Battery:**  
Li-ion 1800 mAh/3.7V (non-removable)

**Battery Life:**  
Up to 5 hours

**Input Power:**  
DC 5 V, 1A, USB Type C socket

**Laser Pointer:**  
Class 3R, 5mW, 650nm (red)

## Light Sensor

**Measuring Aperture:**  
2.5° (FOV)

**Spectral Response:**  
400nm to 725nm

**Luminance Range:**  
0.0 - 40fL (0 - 137 cd/m<sup>2</sup>)

**Luminance Accuracy:**  
1 fL (Illuminant A)

## Audio Sensor

**Spectral Response:**  
40 Hz to 20 kHz

**dBc Accuracy:**  
1.5dB (at 1 kHz)

**Spectrum Visualization:**  
10 bands (average time > 6 seconds)

## Product Code

**Item Name/Number:**  
HSG-CHK-AV1

**UPC Code:**  
checker

**Display Name/Code:**  
HSG Labs Checker

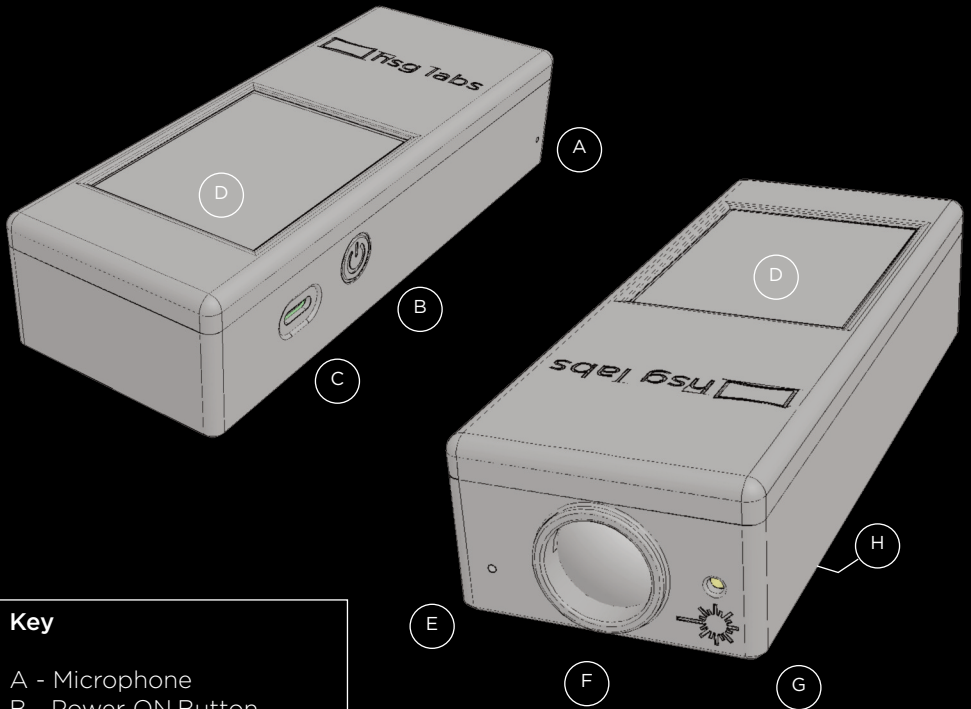
**HS Code:**  
90275000

## Working Conditions

Always transport the Checker in the carry case supplied to avoid damage. The unit is intended for indoor usage only. Operating temperature non-condensing 5°C to 35°C (41°F to 95°F). Use in dark conditions with a static 'white' test pattern or light from the projector (no movie content).



## Product Diagrams



### Key

- A - Microphone
- B - Power ON Button
- C - USB Type C
- D - 2.8" TFT Touch Monitor
- E - Microphone Hole
- F - Lens
- G - Laser Pointer Aperture
- H - 1/4 UNC Tripod Insert

## Further Information

For more information regarding the HSG Labs Checker including pricing, availability and calibration, please contact your local representative or visit the Harkness Screens web site.



[www.harkness-screens.com/checker](http://www.harkness-screens.com/checker)