



# Spectra<sup>®</sup> Classic<sup>™</sup>

THE MOST ADVANCED SELF-CONTAINED  
SOUND MASKING AND PAGING SYSTEM  
IN THE INDUSTRY

# A Sound Solution

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The leading choice of innovators and companies throughout the world, **Lencore's Spectra® Classic™** is the most advanced self-contained sound masking and paging system in the industry. The **Spectra Classic** system uniquely addresses speech privacy, masking, paging and audio requirements of today's facilities.

Each system successfully masks intrusive speech, creates privacy and delivers intelligible paging and audio solutions to ensure intended audiences are well informed and comfortable in their environment.

**Spectra Classic's** superior sound quality, unmatched speaker design and built-in sound frequency controls is unrivaled by market competitors. The system's design flexibility allows users to adjust the volume of paging and

audio separately from the masking volume. These features enable **Spectra Classic** to provide three systems (masking, paging and audio) for the price of one.

What makes **Spectra Classic** the superior sound solution is its ease of installation, simplified tuning controls, flexible paging and audio options and the renowned sound that is unmatched in the masking industry for comfort.

## Increasing Office Productivity

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Whether for collaborative or individual spaces, **Lencore's Spectra Classic** technology was developed to make the environment comfortable and productive. By creating a positive, uniform field of ambient background sound in applications such as office spaces, conference rooms, healthcare, government facilities, private work areas and more, **Spectra Classic** minimizes the level of audible distraction to allow employees to interact as well as think.

A designed space where distraction is the norm is unproductive. Sound masking is proven, and can be quantified, to provide speech privacy. A comfortable work environment, however, produces productivity. From the comfort of the sound to the ability to customize in small areas, **Lencore's Spectra Classic** is the only system that delivers the unique features necessary to achieve a productive workplace and quickly generate a return on investment.

## Our Advantage is Our Sound

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**Lencore** offers the highest quality speakers in the sound masking industry with the widest dispersion that perfectly reproduces the finest masking sound. Our broadband frequency outperforms competitive systems to deliver more privacy and greater comfort. By far the simplest masking system to install and deploy, **Spectra Classic**

offers in-plenum and direct fired speakers to suit all ceiling applications and types.

**Lencore** also offers specialty products to accommodate a variety of site conditions and requirements.



**Spectra Classic** sound masking units are typically installed above the ceiling tile in the plenum. The units are placed in a grid pattern in order to maximize sound masking coverage for better sound quality, distribution and uniformity.



## Achieving Speech Privacy & Comfort

A quality sound masking system must simultaneously provide both privacy and comfort throughout any facility. For privacy, there are a variety of industry tests, parameters and measurements for securing speech unintelligibility. Most notably, ASTM E-1130\* is the primary test to determine speech privacy. Lencore's Spectra Classic system meets ASTM E-1130 standards while also providing acoustical comfort within any facility.

Measurements for comfort, previously considered subjective, are now defined and measured by the following five qualities: audio distribution range, uniformity of sound throughout a space, wraparound of generated sound, target decibel (dB) level and the achieved privacy measurements. All Lencore systems rate the highest for each metric for comfort. No other manufacturer comes close.

\*Standard Test Method for Objective Measurement of Speech Privacy in Open Plan Spaces Using Articulation Index

## Spectra Classic Features

- Superior sound quality and uniformity that provides speech privacy and comfort
- Award-Winning Broadband Sound
- Meets ASTM Standards for Speech Privacy
- Complete System Customization
- Energy Efficient and Low Voltage
- UL Listing for Plenum Use
- Over 50% Recycled Content
- Central Volume Controls and Central Timers available

## Spectra Classic Advantages

- E-Sound® and IndePage® Technologies
- SPEC™ Diagnostic Software Tool
- Simple to Install, Tune and Use
- Quantifiable ROI
- 10-Year Full Warranty
- Manufactured in the USA

## Specifications

Each **Lencore Spectra Classic Main (LM6)** Sound Masking unit consists of:

- An individual, non-coherent, pseudo-random masking sound generator (CMOS programmed micro controller circuit)
- Audio amplifiers capable of outputting to two additional secondary sound masking units
- Loudspeaker
- Masking volume and contour controls
- A separate paging volume control

Each main unit also consists of an AC to DC power supply, powered by a 16-18 VAC transformer. Additional central volume controls and central programmable timer options including acclimation features are also available.



## Paging and Audio Systems

**Lencore's Spectra Classic** sound masking system has the ability to incorporate a high quality paging and audio system. With simple wiring and equipment additions, Spectra Classic can handle your paging, music and audio needs. Paging capabilities include: all call paging, zone paging, security paging and emergency paging. Using IndePage Technology, Spectra Classic delivers a superior sound quality and crystal clear paging options that are completely non-directional, uniform and surpass conventional paging systems.

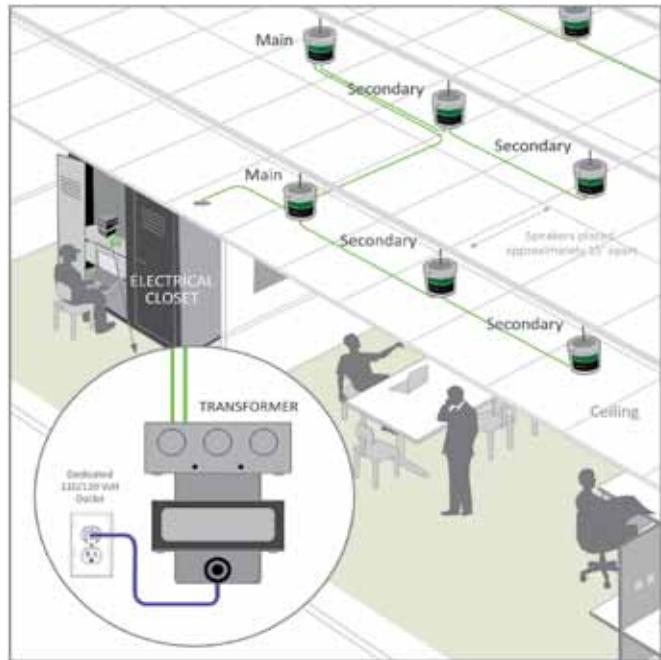
One of the most unique qualities of the **Spectra Classic** paging system is the ability to adjust the page and music volume separately from the masking volume at the speaker level.

## What is Quiet?

Is it the library? Is it the beach?

Traditional reasoning suggests that a library would be the most productive place to work. After all, libraries are recognized as study areas for students all around the globe. However, many find a library difficult to work in as each sound, whether a whisper or the tap of a pen, becomes intrusive and breaks a person's concentration. Research has shown that it takes the average individual twenty minutes to resume their level of performance on an activity prior to being distracted.

The beach, on the other hand, is filled with activity and noise. However, it is a place that is restful and feels quiet. The ocean waves produce a pleasant, random, broadband sound which raises the ambient background level. At the beach you recognize that there is activity around you but you are not distracted by the noise because of the sound generated from the ocean. Sound masking



Spectra Classic is unparalleled in its ability to create speech privacy and is the only system that comes pre-rated to meet the Acoustical Comfort Metric Unit (ACMU).

“takes you to the beach” by providing that same random, broadband sound within your space.

Quiet is privacy and comfort. To achieve quiet you need:

- Speech masked by the ambient background sound
- A full broadband sound
- Random sound with no noticeable wraparound
- Uniform coverage





## Why Sound Masking?

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Acoustics affect critical aspects of a workplace environment, from productivity in office settings to the performance quality in theaters and auditoriums. Intrusive noise is a common complaint and noise from overheard speech is a top concern for today's facilities.

Modern trends in workspace design are moving people out of private offices and into open areas with smaller workstations and lower partition heights. The higher concentration of people in the same work area combined with telephone

## How Sound Masking Works

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Similar to furniture or lighting, acoustics play a key role in the office environment. Sound masking, when properly designed, dynamically improves comfort and collaboration in the workspace.

Sound masking works by introducing a unique, broadband sound complimentary to the speech spectrum that effectively covers indirect speech levels. This scientifically engineered sound is amplified through individual speakers installed above or in the ceiling throughout the space to create a uniform field of sound that ensures temporal and spatial uniformity. The sound masking system "fills" the plenum

conversations and discussions between colleagues can create a disruptive environment.

Today's design trends are creating less efficient acoustical spaces that are affecting employee performance. Distractions create stress and lower productivity. By achieving smart acoustics in a space with both comfort and privacy, collaborative communication can easily coexist with independent work. Sound masking helps decrease intrusive noise, promote collaboration and encourage creativity while delivering acoustical comfort throughout any environment.

and filters down into the space below, without phasing, to gently raise the background sound level. This rise in sound level covers, or masks, unwanted office noise. As a result, noise from overheard speech becomes less intelligible.

**Spectra Classic** delivers innovative and flexible solutions to provide acoustical comfort, speech privacy and create an environment that supports both concentration and communication. **Spectra Classic** offers a variety of speaker options and design layouts to fit varying site conditions and applications.

# Improving the Acoustic Performance in Your Space

Reducing real estate related costs is a driving force to shift to open floor plans with fewer assigned workstations and individual spaces. This trend produces an environment with more direct and indirect speech.

**Lencore** sound masking is a proven element that when added to these environments create speech privacy and acoustical comfort. Masking is designed to introduce a gentle noise that covers indirect speech and some background noises - producing a more productive space. The diagram below visually demonstrates the concept in more detail.



  
**Background noise & indirect speech is no longer intelligible**

Decibel level (dB)



By achieving smart acoustics in a space with both comfort and privacy, collaborative communication can easily coexist with independent work.

- AT&T
- Bank of America Corp.
- Boeing
- Caterpillar
- Chevron
- Cisco Systems
- Coca-Cola
- General Electric
- General Motors
- Google
- Johnson & Johnson
- Kraft Foods
- Lockheed Martin
- Lowe's
- Microsoft
- Morgan Stanley
- Oracle
- PepsiCo
- Pfizer
- Procter & Gamble
- Sprint Nextel
- State Farm Insurance Cos.
- Sunoco
- UnitedHealth Group
- Walgreens
- Walt Disney

At Lencore we believe that PEOPLE MATTER. Our systems transform environments that change people's lives by providing more privacy, greater comfort and improved safety. Our advancements in sound quality, audio distribution, speaker design and software networking solutions have established Lencore as an industry leader.

Founded in 1990, Lencore has installed sound masking, paging, audio and mass notification systems for thousands of companies in over hundreds of millions of square feet across the United States and around the world.

As the premier manufacturer of global solutions for speech privacy and emergency communication systems, Lencore does not believe in one size fits all solutions. We offer clients the choice of networked, in-plenum, direct fired, centralized, decentralized and remote masking, paging and audio systems.

With the most advanced technology and by offering more choices with proven results, Lencore is in the position to meet the challenges and demands that affect your facility.

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