



dB Electronics

# CAP21 SOUND LIMITERS

Possibilities and configuration

# Features

## CAP21 Basic & Advanced

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The **CAP21 Advanced sound limiter** is specially designed device to act on the sound chain, allowing for the control of levels generated by a music system and preventing regulatory noise protection levels from being exceeded. It acts on the whole audio spectrum and without altering the equalisation and sound quality within the premises.

This device supports the connection of two external sensors to register music levels in two different spaces. What's more, it can remotely send the registered noise levels via telematics and can be connected to an external display to check noise levels on site and show users that they are in a room which isn't exceeding healthy limits.

The CAP21 Advanced sound limiter boasts optimum sound quality and achieves a powerful level of music with no variations caused by background noise. It's the highest-rated limiter by today's most popular DJs, thanks to its frequency response, which can limit sound by bands and maintain optimal audio quality.

The CAP21 Advanced sound limiter is an ideal accessory for soundproofing premises.

**Applications: music bars, clubs, pubs, concert halls, theatres, restaurants, etc.**

**The CAP21 Basic sound limiter** is specially designed device to act on the sound chain, allowing for the control of levels generated by a music system and preventing regulatory noise protection levels from being exceeded. It acts on the whole audio spectrum and without altering the equalisation and sound quality within the premises.

What's more, it has an external sensor that records the music level within the premises, creating a more pleasant environment with a stable music level and without variations caused by background noise.

The CAP21 Basic sound limiter is configured with the help of a PC and dBconfig software by dBElectronics.

**APPROVED BY ALL NATIONAL AND INTERNATIONAL STANDARDS..**



# Specifications

## CAP21 Advanced Sound Limiter - Recorder

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Spectral analysis of the signal in thirds of octave.

Configurable frequency range between 63 Hz and 20 kHz.

Configurable to permitted sound levels.

Configurable to soundproofing level of activity and level transmitted to neighbouring premises.

Compliance with UNE-EN ISO 140-4/1999 standards.

Compliance with UNE-EN 61672-1 standards.

Recording of parameters via external sensors.

## Programming and Functions

Double software-selectable spectral limitation algorithm (MP / MPX).

Stable limitation of level, without penalties.

Peak level compensation algorithm that improves music reproduction and live music performances.

PVL algorithm that improves live vocal performances.

Recording of entire sound status of premises in internal memory.

Double performance verification test (at beginning of and during music session).

Continuous monitoring 24 hours a day.

Telematic transmission of all data stored in internal memory (LAN / WiFi / GPRS).

Cut-off of sound emission when external sensor is disconnected.

Advanced scheduling.

# Telematic Data Transmission Protocol

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Universal Limiter Data Transmission Protocol (ULDTP).

Real-time data transmission.

Compatible with the Automatic Noise Control and Surveillance System (Synkro System).

## Advanced Scheduling

Four programmable time slots with different emission levels (daytime, night, transient and mute).

Different programming for each day of the week.

Programming for special periods.

Programming for special days.

## External Sensor Features

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Type II measurement according to UNE-EN 61672-1.

Type A frequency weighting.

Measurement range from 45 to 120 dBA.

Frequency measurement range from 20 Hz to 20 kHz.

Cable length: 8 metres.

Sealable fastening system.

Number of possible sensors: 2

## Configuration and Monitoring Software

PC connection via front USB Type B port.

Software protected by renewable licences.

Automatic generation of installation and configuration reports.

Automatic update via Internet.

Compatible with Windows and Mac OS X.

## Design and Construction

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High-quality A/D conversion and sampling rate.

Data processing in 32-bit floating point.

System propagation delay <1.20 ms.

## Audio Inputs and Outputs

Analogue with Iso-Float™ ground insulation.

Symmetrical (balanced) inputs and outputs.

XLR connection format.

Dynamic input and output range >112 dB.

Frequency response 20 Hz to 20 kHz.

Configurable input sensitivity at 12 or 26 dBu.

Maximum input level 20 dBu.

Input impedance 20 kOhm.

THD + noise <0.00030% at 1 kHz

## Front Panel

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Backlit display with operating information (time, sensor-recorded level, band correction level, reception level of GPRS External Modem (optional accessory) and malfunctions).

USB Type B configuration port.

## Rear Panel

Rear panel.

Stereo XLR input and output audio.

XLR connection external recording microphone 1 (main).

XLR connection external recording microphone 2.

Mini-DIN external GPRS modem connection (data & power).

RJ45 for Fast-Ethernet data transmission connection.

Housing of seal kit for connections (optional accessory).



## Power

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220 V – 50/60 Hz.

Max power consumption 18 W.

## Size and Weight of Unit

One 19" rack unit.

432 x 44 x 164 mm (width/height/depth).

Weight 2.84 kg.

# Synkro Online Platform

## Discover your ally against noise: Synkro Cloud

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Synkro Cloud has been designed by dBelectronics, alongside clients, experts and public administrations with the target of solve the noise issues and make easy to manage the registered data. It's designed to monitor and supervise noise data from any dBelectronics device, located anywhere, with the required technology to transmit information through the internet.

This app allows to access to any individual, installer company or supervision entity, public or private.

Synkro Cloud is an essential and effective tool on cities over the noise control.

At dBelectronics we exclusively design, manufacture and sell devices to control the noise. We offer solutions like Synkro Cloud for our branded devices.

## Explore All Possibilities

### ACCESS TO YOUR DEVICES

Access to your devices in order to monitor and supervise. Verify it's state in an easy way.

### CONTINUOUS CONNECTION 24/7

We offer you a receive and storage service with flexible plans.

### TECHNICAL SUPPORT

Access to custom technical support by phone or email.

### NOTIFICATIONS

Receive notifications with the issues or state changes produced by your devices.

## SECURITY

All your data and device data is exchanged on secure channels.

## INTERACTIVE ANALYSIS

Interactive analysis of your device data.

# Discover the Plans

## START FEE (Free)

- Free, if you buy a dBelectronics device. Apply to 1 device.
- Duration: 12 first months\* from the device buy date.
- Includes service activation.
- 24/7 Data reception and storage.
- Full access by the Supervising Authority.
- Full access by the installer company.
- Basic access to the most recent\*\* data by the device user company.
- Included technical support.

\*Only for new devices.

\*\*The access by the device user company is limited to a maximum of last 14 days of information.

## STANDARD FEE (Price per device)

- Apply to 1 device.
- Duration: 12 months.
- 24/7 Data reception and storage.
- Full access by the Supervising Authority.
- Full access by the installer company.
- Basic access to the most recent\*\* data by the device user company.
- Included technical support.

Service activation not included. Devices with expired fee or disabled ones require previous device activation (see conditions).

\*The access by the device user company is limited to a maximum of last 14 days of information.

### PREMIUM FEE (Price per device)

- Apply to 1 device.
- Duration: 12 months of premium fee.
- 24/7 Data reception and storage.
- Full access by the Supervising Authority.
- Full access by the installer company.
- Full access to the last year data by the device user company.
- Notifications service, visualization and warnings setup for the device user company.
- Included technical support.

Service activation not included. Devices with expired fee or disabled ones require previous device activation (see conditions).



