

## Stoll CFR 2610 Convertible



SWISS MADE

### Technical Description

The Stoll CFR 2610 Convertible loudspeaker system unifies 12 drivers in its ported enclosure. One Stoll CFR 2610 Convertible is driven three way active with power totalling up to 3kW.

Lower and middle frequency dispersion is controlled with APT Acoustic Pixel Technology. This APT is represented by ten drivers in their respective configuration. Because of the longer wavelengths, the closely mounted drivers together form one coherent source with the desired dispersion. The smaller wavelengths of the highs are radiated by two specialized mid-to-high frequency systems.

In the Line Mode, the mid/high frequencies are reproduced by a magnetostatic driver on a constant directivity waveguide which radiates through over 95% of the enclosure's height.

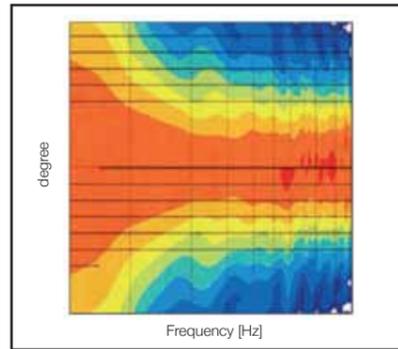
The Stoll CFR 2610 can be switched to either dispersion mode, line or point, by interchanging the cable connecting box called the TM Transfer Module mounted on the back of the loudspeaker.

Each Stoll CFR 2610 comes fitted with two modules: one TMP for point source operation and one TML for the line. Changing the Transfer Modules and choosing the appropriate DSP-setup prepares the speakers to output, thus changing their dispersion characteristic fundamentally.

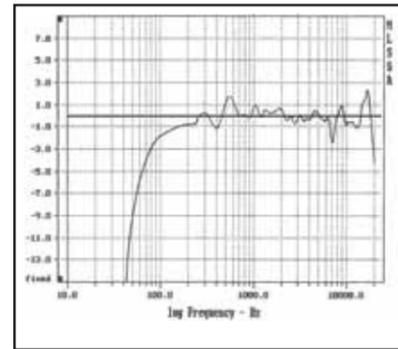
In the SLA line mode, Stoll recommends using at least five CFR 2610 for excellent results. However, there are set-ups for a lesser number of elements which can also bring very good results in certain circumstances.



Front view



Horizontal Dispersion Schematic



Frequency magnitude response, 2m on axis  
Line Mode, Full Top Setup, 4π full space

### TECHNICAL SPECIFICATIONS

Frequency Response: 100Hz to 20kHz +/-2dB, 60Hz -6dB or 40Hz -6dB low f limit

Nominal Dispersion: A) Coaxial Point Source Mode CPS: 90° x 90° -6dB spheroidal (conical)  
(Simulationdata on request) B) Straight Line Array Mode SLA: 100° -6dB horizontally, very narrow vertically, depending on number of line-array elements

Sensitivity: 97,5dB SPL / 1W at 1m 4π

Power Rating: 1500W nominal, Amp up to 3kW

Acoustic Output: A) Single Unit Coaxial Point Source CPS at 1m: 126dB SPL longterm, over 134dB SPL peak  
B) Five Units Straight Line Array SLA at 30 m: 105dB SPL longterm, over 112dB SPL peak

Dimensions: H/W/D: 580/490/442 mm, Weight: 38,4 kg, trapezoidal cabinet with 45° wedge slopes

Electronic Drive: 3-way active, CDS-ready DSP-Control mandatory

Alterations of specifications without prior notice.

#### ARCHITECT SPECIFICATIONS

**Frequency Response:** 100Hz to 20kHz +/-2dB, 60Hz -6dB or 40Hz -6dB low f limit. **Nominal Dispersion:** A) CPS (hvx) 90° x 90° -6dB, B) SLA (h) 100° -6dB. **Sensitivity:** 97,5dB SPL / 1W at 1m 4π. **Power Rating:** 1500W nominal, Amp up to 3kW. **Acoustic Output:** A) CPS/1m: 126dB longterm, over 134dB peak. B) SLA, 5xCFR/30m:105dB longterm, over 112dB peak. **Dimensions:** H/W/D: 580/490/442 mm, Weight: 38,4 kg. **Electric Drive:** 3-way active, CDS-ready DSP-Control mandatory.

#### COMPLEMENTS

Although the CFR 2610 Convertible can be used full range, Stoll recommends the Stoll CXL 2600 Extender and the SL 3000 Sublows for extension and augmentation of low frequencies.

Stoll  
Basel  
Switzerland  
www.stoll-speakers.com



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Basel, Switzerland

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Stoll  
CFR 2610 Convertible  
One system,  
many solutions.



SWISS MADE



TOP PERFORMANCE SPEAKER SYSTEMS

POINTSOURCE OR LINE ARRAY?

SELECT BY SWITCHING!

**General Description**

**Hybrid** - Being a Coaxial Point Source or an element of a Straight Line Array.

Stoll CFR 2610 Convertible stands for a totally new generation of professional loudspeaker systems.

The major feature of this DSP- controlled system is its ability to act as a point-source radiator or as a module in a line-array. In both operating modes the system makes no compromise in performance, which equals or surpasses that of conventional specialized speakers in many respects.

**Sound Quality and High Output Capacity** - For all venues; ranging from the opera to a Goa-party, from a corporate event to rock'n roll.

Superb technology and transducer-elements of the finest quality ensure pristine sound reproduction. In reference to the original, Stoll Convertible emphasizes the acoustic restoration of the electrical input. High output is attained by a tight density of the drivers and powerful DSP-controlled amplifying. Covering audience and stage with a sound quality that even allows for a custom studio monitoring.

**Rental Stock and Pooling Efficiency** - One speaker for many applications.

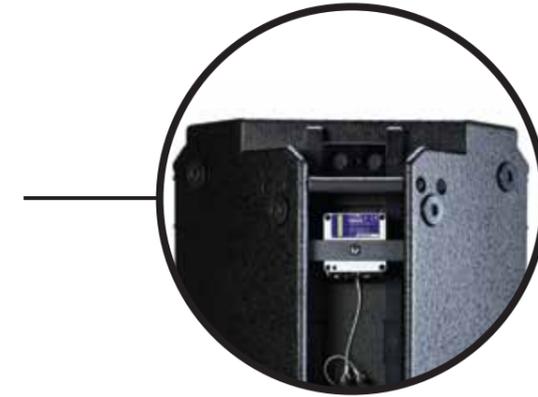
Increasingly demanding requirements in a continuously changing environment challenge today's event services, including sound.

Stoll CFR 2610 Convertible's primary economic advantage is its hybrid multi-purpose flexibility which provides a better and easier management of stocking, logistics and pooling. Complex logistics become easier to deal with using Stoll Convertible's proverbial flexibility.

**Mobile PA and Sound Reinforcement** - In its finest quality, utmost efficiency and flexibility in any surrounding.

Stoll CFR 2610 Convertible is conceived, developed and produced for mobile application in the field of sound reinforcement and public address. Having a compact and rugged design, it offers an integrated flying system which can also be used for ground support. Stoll Convertible is a practical, high-performance tool made to withstand the rigours of the road.

One system,  
many solutions.



**MAC Multiple Application Capability**

The loudspeaker can be used in a variety of applications without compromising on sound quality.

**IBS Integral Baffle System**

The integration of sound ducts such as e.g. horns or ports into the baffle allows a more solid and compact construction.

**CTF Clean Treble Front**

The highs can pass the front protection unhindered by a grill.

**HOT Horn Overlap Technology**

The waveguides overlap with the sound ports of the direct-radiating loudspeaker.

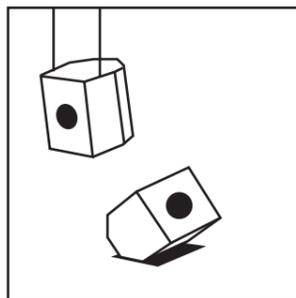
**TCR Time Coherent Response**

Through its mechanical construction the loudspeaker system produces a time coherent radiation of sound.

**QCS Quasi Coincidental Source**

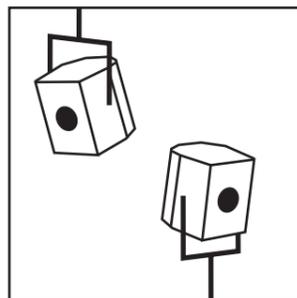
The spacing between the acoustic centres of the drivers are much smaller than the wavelengths of the crossover frequencies.

**COAXIAL POINT SOURCE (CPS) Different Application Examples**



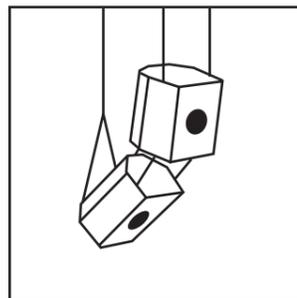
**SINGLE USE**

Flown with ropes / As wedge



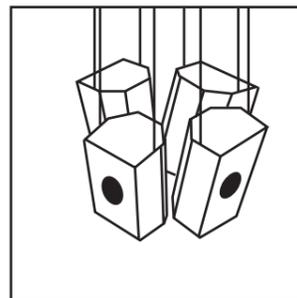
**SINGLE USE**

Flown / On stand with U-Bracket



**DOUBLE USE**

Flown with ropes



**MULTIPLE USE**

Flown with ropes

**Driving the system**

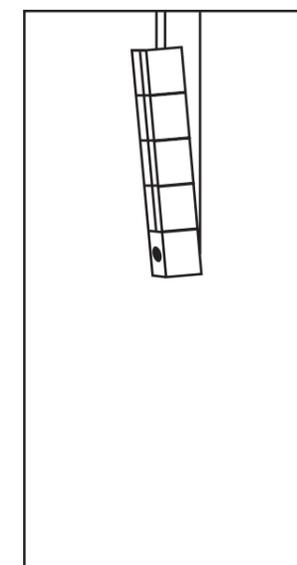
**DSP and Amplifiers**

The Stoll CFR 2610 Convertible must be driven using three or four active ways processed through any CDS-ready digital speaker controller. CDS stands for Convertible Data System and implies the readiness of a speaker controller to correctly drive the CFR 2610. There are a number of CDS-ready DSPs available on the market, which fulfil the specifications. Ask Stoll to inform you about the current list.

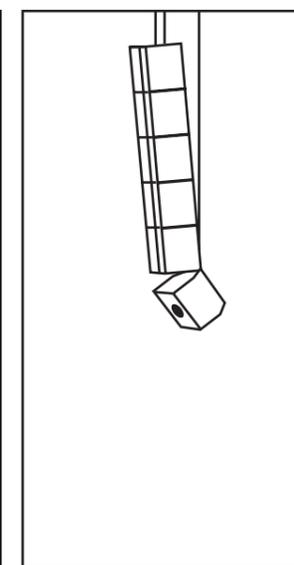
Modus	LMF	MF	HF
SLA	780W	520W	300W
CPS	520W	780W	110W
XTD	1300W		n/a

Powerful amplification of high quality is necessary in order to drive the CFR 2610 to its maximum performance. Total amplifier power can be rated up to 3kW for one CFR 2610. Speak to Stoll and find out which amplifiers are suitable.

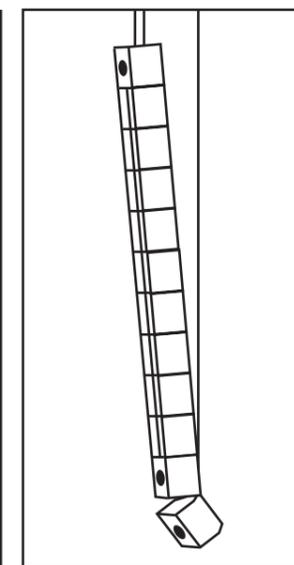
**STRAIGHT LINE ARRAY (SLA) Different Application Examples**



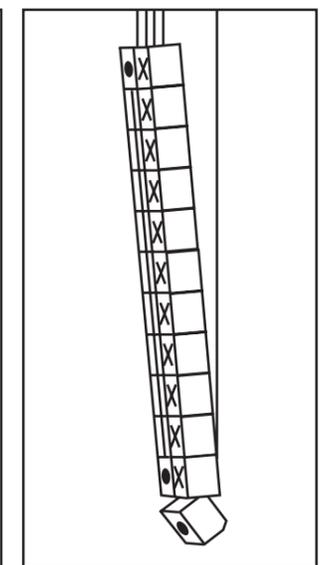
**MINIMUM LINE**  
4 line plus 1 point



**ONE ROW LINE**  
5 line plus 1 point



**ONE ROW LINE**  
1 point, 9 line, 1 point,  
1 near- / downfill



**DOUBLE ROW LINE**  
1 point, 9 line, 1 point,  
1 near- / downfill,  
11 CXL 2600 Extender