



LARGER CLUBS AND DISCOTHEQUES REQUIRE SOUND SYSTEMS MULTIPLE ZONES. THE TS 200 DOES AN IMPRESSIVE JOB IN SUCH APPLICATIONS. THE ROTATABLE HF SECTION ALLOWS FOR HORIZONTAL INSTALLS, TOO.

The TS 200 is available in either black or white (TS 200W). For fixed installation, the WMK-10 (WMK-10W) mounting kit is available.

The optional FB-TS400 flying kit facilitates suspension of the device safely from a truss.

Another highly practical accessory is the SH-TS200 transport bag.

Linear phase FIR (finite impulse response) factory presets are available as well as presets for conventional digital controllers.





# TS 400

FULL RANGE  
VERTICAL ARRAY CABINET



■ **The TS 400 is a compact, powerful and versatile loudspeaker system for mobile and installation applications.**

It can be used full range, or in active 2-way systems for applications requiring subwoofers. It will typically perform in active 2-way systems but can also be used as a fullrange cabinet. DYNACORD PSD 215 or PSD 218 powered subwoofers ideally allow for such active 2-way system combinations.

Vertical pattern control is a requirement for highest sound quality and speech intelligibility, especially in difficult acoustic spaces.

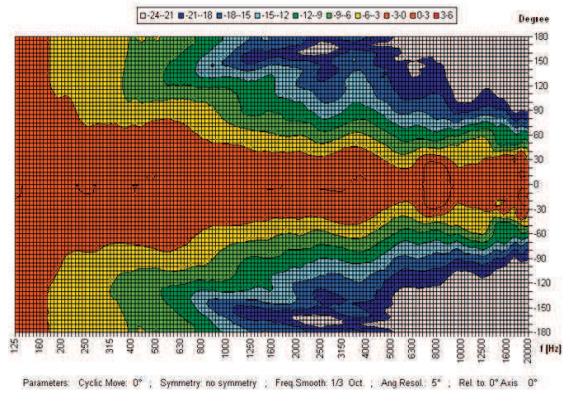
The TS 400 was designed to provide a very even and smooth coverage

over a very wide bandwidth by using spaced and filtered woofers as array elements.

The 2.5 way design places elements at the ends of the column for maximum distance to lower the effective controlled frequency. The MF-elements and the HF-element are placed in the middle of the cabinet for a smooth transition of the mids to the HF and to extend the coverage control. Each group of elements has its own bandpass filter to optimize the array's performance to provide good attenuation at 90° off-axis and evenly cover the audience area front to rear with half the rate of attenuation of a non "steered" cluster.

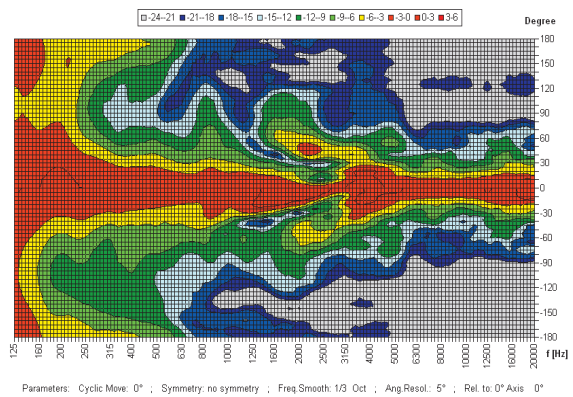


Horizontal isobar curves



Horizontal isobar curves of the TS400 with a nominal dispersion angle of 90°

Vertical isobar curves



Vertical isobar curves of the TS400 with a nominal dispersion angle of 40°. The cleverly conceived 21/2-way system allows the very narrow dispersion angle to be maintained over a very wide frequency range down to 300 Hz

The TS 400 is equipped with DND 6130-16 Neodymium woofers and one Electro-Voice DH3 compression driver coupled with a 90° by 40° constant directivity horn providing very high SPL and excellent coverage. Power handling is 600W RMS / 2.400W peak. Separate protection circuits for the LF-, MF- and HF- elements are used to protect all transducers at the highest power levels. The TS 400 enclosure is aluminum for a very robust but lightweight design with a look that fits any environment.



TA-TS400 tilt adaptor can be used to precisely aim the system for optimum audience coverage. This adaptor also fits for TS 100 / TS 200. The optional mounting bracket WMK-25 allows for wall-mount applications with up to 30° of tilt.

The optional FB-TS400 Flying Kit allows flying the TS400. It can be adjusted to any aiming angle.



# Vertical Array System

## COMBINATIONS

Particularly recommended for mobile use are system combinations with active subwoofers (e.g. PowerSub 312 or PSD 215).

**SYSTEM VA 312-100**



**SYSTEM VA 312-200**



<b>Cabinet Types</b>	2 x TS 100, 1 x Powersub 312
<b>Accessories</b>	1 x BS 35, 1 x VPM 1500, cable
<b>Possible extensions</b>	1 x Sub 112, 2 x TS 100

<b>Cabinet Types</b>	2 x TS 200, 1 x Powersub 312
<b>Accessories</b>	1 x BS 35, 1 x VPM 1500, TA-TS400, cable
<b>Possible extensions</b>	1 x Sub 112, 2 x TS 200

**SYSTEM VA 215-200**



**SYSTEM VA 215**



<b>Cabinet Types</b>	2 x TS 200, 2 x PSD 215
<b>Accessories</b>	2 x VPM 1500, TA-TS400, cable
<b>Possible extensions</b>	2 x PSE 215, 2 x TS 200

<b>Cabinet Types</b>	2 x TS 400, 2 x PSD 215
<b>Accessories</b>	2 x VPM 1500, TA-TS400, cable
<b>Possible extensions</b>	2 x PSE 215

**SYSTEM VA 415**



<b>Cabinet Types</b>	2 x TS 400, 2 x PSD 215, 2 x PSE 215
----------------------	--------------------------------------

<b>Accessories</b>	2 x VPM 1500, TA-TS400, cable
--------------------	-------------------------------

**SYSTEM VA 218**



<b>Cabinet Types</b>	2 x TS 400, 2 x PSD 218
----------------------	-------------------------

<b>Accessories</b>	2 x VPM 1500, TA-TS400, cable
--------------------	-------------------------------

<b>Possible extensions</b>	2 x PSE 218
----------------------------	-------------



**SYSTEM VA 418**

<b>Cabinet Types</b>	2 x TS 400, 2 x PSD 218, 2 x PSE 218
<b>Accessories</b>	2 x VPM 1500, TA-TS400, cable

**TECHNICAL SPECIFICATIONS**

Type / Name	TS 100 / TS 100W	TS 200 / TS 200W	TS 400 / TS 400W	PS 312
<b>Cabinet</b>	Full Range	Full Range	Full Range	Subwoofer
<b>Configuration</b>	Passive 2-Way	Passive 2-Way	Passive 2.5-Way	Powered 3-Channel
<b>Components</b>	1 x 6" / 1"	2 x 6" / 1"	4 x 6" / 1"	1 x 12"
<b>Impedance</b>	16 Ohms	8 Ohms	4 Ohms	-
<b>Rated Power RMS</b>	150 W	300 W	600 W	2 x 250 W MH 1 x 800 W LF
<b>Peak Power</b>	600 W	1200 W	2400 W	-
<b>Max. Amplifier Output Capability</b>	-	-	-	1300 W
<b>SPL 1 W / 1 m</b>	94 dB	97 dB	97 dB	-
<b>Max. SPL 1 m / calc.</b>	122 dB	128 dB	131 dB	123 dB
<b>Freq. Range (-10 dB)</b>	90 Hz - 20 kHz	90 Hz - 20 kHz	74 Hz - 20 kHz	44 Hz - 130 Hz
<b>Coverage (H x V)</b>	90° x 40°	90° x 40°	90° x 40°	
<b>Dimensions (W x H x D) mm</b>	199 x 350 x 239.5	199 x 513.5 x 239.5	199 x 935 x 281	445 x 380 x 445
<b>Net. Weight</b>	7.1 kg	9.8 kg	17 kg	22.5 kg
<b>Wheels</b>	-	-	-	-

**ACCESSORIES**


Type / Name	WMK-10 / WMK-10W	SH-TS100(W)	SH-TS200(W)	WMK-25 / WMK-25W
<b>Art-No.</b>	F.01U.119.022 / F.01U.119.032	F.01U.283.242	F.01U.283.243	F.01U.260.845 / F.01U.288.668
<b>Description</b>	Rotatable Wall-Mount-Kit, black / white, max. 10 kg for TS 100(W)	SH-TS100 Carrying Bag for TS 100(W)	SH-TS200 Carrying Bag for TS 200(W)	Rotatable Wall-Mount-Kit black / white for TS 400(W)

PSD 215	PSD 218	PS 112	PSE 215	PSE 218
Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer
Powered 2-Channel	Powered 2-Channel	Vented-Direct Radiator	Vented-Direct Radiator	Vented-Direct Radiator
1 x 15"	1 x 18"	1 x 12"	1 x 15"	1 x 18"
-	-	8 Ohms	8 Ohms	8 Ohms
1000 W TOP 1000 W SUB	1000 W TOP 1000 W SUB	400 W	500 W	500 W
-	-	1600 W	2000 W	2000 W
3200 W	3200 W	-	-	-
-	-	92 dB	98 dB	98 dB
128 dB	130 dB	124 dB	131 dB	131 dB
40 Hz - X-Over	34 Hz - X-Over	43 Hz - 350 Hz (internal Hi-Cut)	38 Hz - 3.5kHz	32 Hz - 3.5kHz
-	-	-	-	-
640 x 465 x 694	759 x 575 x 694	445 x 380 x 445	640 x 465 x 694	759 x 575 x 694
37.2 kg	45.2 kg	20 kg	31.6 kg	39.6 kg
2.4 kg	2.4 kg	-	2.4 kg	2.4 kg



Type / Name	FB-TS400	CB-TS400	TA-TS400
<b>Art-No.</b>	F.01U.267.862	F.01U.215.168	F.01U.267.861
<b>Description</b>	Flying Kit for TS 400(W)	Carrying Bag for TS 400(W)	Tilt adaptor

**HEADQUARTERS EUROPE,  
MIDDLE -EAST & AFRICA**

Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Ring 5  
85630 Grasbrunn, Germany

**CONTACT & VISITOR ADDRESS**

EVI Audio GmbH  
Sachsenring 60  
94315 Straubing, Germany  
Tel: +49 9421 706 0  
Fax: +49 9421 706 265

© Bosch Security Systems, Inc.  
Art.Nr. XXXXXX  
Printed in Germany (F&W) XXXX/09/13  
Subject to change without prior notice!

**VISIT DYNACORD ON:**



[www.facebook.com/dynacord](http://www.facebook.com/dynacord)  
[www.twitter.com/dynacord\\_com](http://www.twitter.com/dynacord_com)  
[www.youtube.com/user/DynacordTV](http://www.youtube.com/user/DynacordTV)