# TS 400 Series

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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 2way systems for applications requiring subwoofers. 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 and its off-axis coverage.

The TS 400 is equipped with 4 x 6" DND 6130-16 Neodymium woofers and one Electro-Voice DH-3 compression driver coupled with a 90° by 40° constant directivity horn providing very high SPL and excellent coverage. Power handling is 600 W RMS / 2400 W peak. Separate protection circuits for the LF-, MF- and HF-elements are used to protect all transducers at the

- High power multi-functional 2.5 way cabinet
- 600 Watts / 4 Ω
- DH-3 Titanium diaphragm driver
- CAD optimized 90 x 40 CD horn
- 4 Neodymium DND 6130-16 woofers

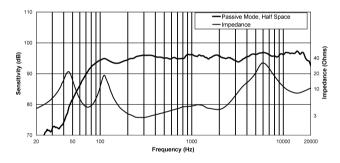
highest power levels. The TS 400 enclosure is aluminum for a very robust but lightweight design with a look that fits any environment. The TS 400 is available in either black or white (TS 400W). The optional wall mount kit WMK-25 (WMK-25W) allows for wall-mount applications with up to 30° of tilt. The optional TA-TS400 tilt adaptor can be used to precisely aim the system for optimum audience coverage. For flying the speaker the FB-TS400 Flying Kit is available. The optional carrying bag SH-TS400 is the ideal accessory for easy, protected transportation of the TS 400.

# **Technical specifications**

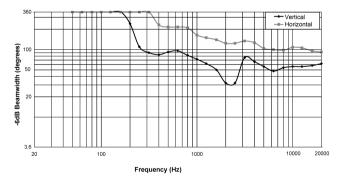
Color	
• TS 400	Black (RAL 9005, jet black)
• TS 400W	White (RAL 9010, pure white)
Cabinet	Full-range
Configuration	Passive 2.5-Way
Nominal impedance	4 Ω
Power handling: Full-range	
Rated power RMS	600 W

Peak power	2400 W
SPL 1 W/1 m	97 dB
Max. SPL at 1 m (calculated with peak power)	131 dB
Frequency range (-10 dB)	74–20000 Hz
Nominal coverage angle	90° x 40°
X-Over frequency	2600 Hz
Component HIGH	Electro-Voice DH-3
Component LOW	4 x DND 6130-16
Connector model	2 x NEUTRIK speakON NL4
Product dimensions (Width x Height x Depth)	199 x 935 x 281 mm
Net weight	18 kg
Enclosure material	Aluminum
Grille	Steel
Suspension	10 x M6

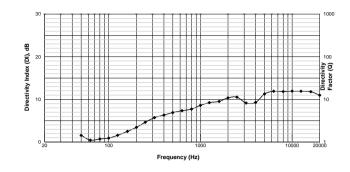
NEUTRIK and speakON are registered trademarks of Neutrik AG.



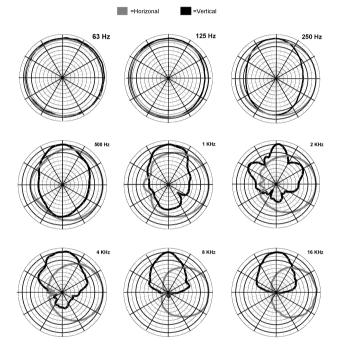
Frequency response and impedance



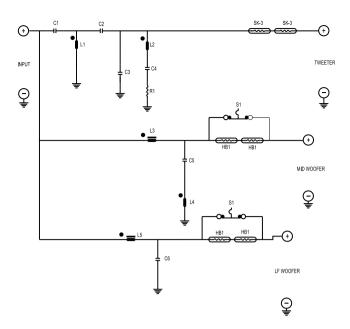
-6 dB Beamwidth, 1/1 Oct.



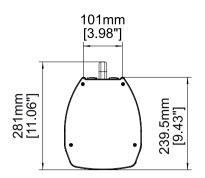
Directivity Index DI, Directivity Factor Q, 1/1 Oct.

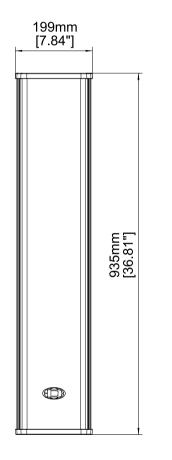


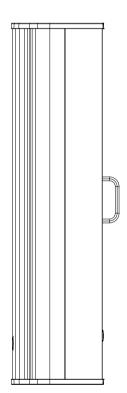
Horizontal and vertical directivity, 3 dB/Div (0 dB and -6 dB bold), 1/1 Oct.

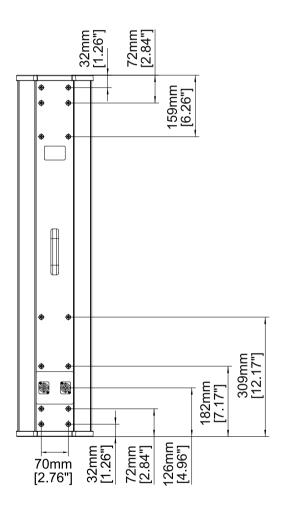


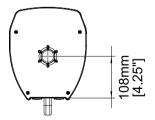
Circuit diagram













# Installation/configuration notes

## Warning!



We expressly point out that the relevant safety regulations must be observed for "flying" loudspeaker systems. It is imperative that qualified expert advice is sought.

#### Warning!

Use of speaker stands

Be sure to observe speaker stands' maximum load-bearing capacity. Note that for reasons of design and construction, most speaker stands are approved to bear centric loads only; that is, the speakers' mass has to be precisely centered and balanced. Ensure speaker stands are set up stably and securely. Take appropriate added measures to secure speaker stands, for example when the floor or ground surface does not provide a stable, secure base or they are extended to heights that impede stability or high wind pressure may be expected or there is the risk that they may be knocked over by people or vehicles. Special measures may become necessary as precautions against unsafe audience behavior. Do not set up speaker stands in evacuation routes and emergency exits. Ensure corridors are wide enough and put proper barriers and markings in place when setting speaker stands up in passageways. Mounting and dismounting are especially hazardous tasks. Use aids suitable for this purpose. Always observe the given na-

#### Notice!



Consult a certified structural engineer before any attempt to suspend this loudspeaker! Loudspeaker can fall from improper suspension, resulting in severe injury and damage of property. Do not suspend or mount any other product or device from this loudspeaker enclosure! Use grade 5 hardware or better only!

tional or local regulations when doing so.



This loudspeaker system can permanently damage hearing! Use extreme care when setting sound pressure levels!

### **Optional accessories**



Carrying bag (SH-TS400)



Tilt adaptor (TA-TS400)





TV spigot (FB-TV)

Flying kit (FB-TS400)



Wall mount kit (WMK-25, black version shown)



Truss clamp to TV spigot adaptor (TC-TV)



Truss clamp (TC-02)

# System example



VA 418 system (2 x TS 400, 2 x PSD 218, 2 x PSE 218)

# **Ordering information**

## TS 400

4x6 in +1 in vertical full range / mid-hi cabinet, aluminum housing; 4  $\Omega$ ; 131 db max SPL; 2400/600 W; Peak/RMS

# Order number F.01U.215.165

## Accessories

FB-TS400

Flying Kit for TS-Series Speakers Order number **F.01U.267.862** 

#### **FB-TV**

TV Spigot for Flying-Brackets for: PM-TV or TC-TV Order number F.01U.100.845

SH-TS400 Order number F.01U.215.168

#### **TA-TS400**

Tilt adaptor for TS-Series Speakers Order number **F.01U.267.861** 

#### TC-02

Truss clamp 43-50 mm Order number **F.01U.100.657** 

## TC-TV

Truss Clamp > TV Spigot 2" Truss Adapter Order number F.01U.100.727

WMK-25

Rotatable Wall-Mount-Kit, black, max. 25 kg Order number **F.01U.260.845** 

## TS 400W

4x6" / 1" full-range cabinet; aluminum housing; 2,400W/600W (peak/RMS);  $4\Omega$ ; white Order number **F.01U.283.240** 

## Accessories

FB-TS400 Flying Kit for TS-Series Speakers Order number F.01U.267.862

#### **FB-TV**

TV Spigot for Flying-Brackets for: PM-TV or TC-TV Order number **F.01U.100.845** 

SH-TS400 Order number F.01U.215.168

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# **TA-TS400** Tilt adaptor for TS-Series Speakers

Order number **F.01U.267.861** 

# TC-02

Truss clamp 43-50 mm Order number **F.01U.100.657** 

## TC-TV

Truss Clamp > TV Spigot 2" Truss Adapter Order number **F.01U.100.727** 

## WMK-25W

Rotatable Wall-Mount-Kit, white, max. 25 kg Order number **F.01U.288.668**