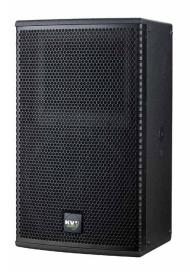


# **CS Series**

# **User Guide**

• CS6 • CS8 • CS12





# The Future of Sound. Made Perfectly Clear.

At KV2 Audio our vision is to constantly develop technologies that eliminate distortion and loss of information providing a true dynamic representation of the source.

Our aim is to create audio products that absorb you, place you within the performance and deliver a listening experience beyond expectations.



### Content

Connection       5         Wiring       6         Drawings       7         Frequency characteristics       8         Specifications       9         CS8       10 - 15         Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	CS6	4 - 9
Wiring       6         Drawings       7         Frequency characteristics       8         Specifications       9         CS8       10 - 15         Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Overview	4
Drawings       7         Frequency characteristics       8         Specifications       9         CS8       10 - 15         Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Connection	5
Frequency characteristics         8           Specifications         9           CS8         10 - 15           Overview         10           Connection         11           Wiring         12           Drawings         13           Frequency characteristics         14           Specifications         15           CS12         16 - 21           Overview         16           Connection         17           Wiring         18           Drawings         19           Frequency characteristics         20           Specifications         21           Accessories         22 - 23           Warranty · Service         24	Wiring	6
Specifications       9         CS8       10 - 15         Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Drawings	7
CSS8       10 - 15         Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Frequency characteristics	8
Overview       10         Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Specifications	9
Connection       11         Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	CS8	10 - 15
Wiring       12         Drawings       13         Frequency characteristics       14         Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Overview	10
Drawings Frequency characteristics Specifications  CS12  Overview Connection 17 Wiring Drawings Frequency characteristics Specifications  19 Frequency characteristics Specifications 20  Accessories 22 - 23  Warranty · Service	Connection	11
Frequency characteristics  Specifications  CS12  Overview  Connection  Wiring  Drawings  Frequency characteristics  Specifications  Accessories  14  15  16 - 21  16 - 21  17  18  19  19  19  19  19  19  19  19  19	Wiring	12
Specifications       15         CS12       16 - 21         Overview       16         Connection       17         Wiring       18         Drawings       19         Frequency characteristics       20         Specifications       21         Accessories       22 - 23         Warranty · Service       24	Drawings	13
CS12  Overview  Connection  Wiring  Drawings  Frequency characteristics  Specifications  Accessories  16 - 21  17  18  18  20  20  21  Accessories  22 - 23  Warranty · Service	Frequency characteristics	14
Overview  Connection  17 Wiring  Drawings  Frequency characteristics  Specifications  20  Accessories  22 - 23  Warranty · Service	Specifications	15
Connection  Wiring  Drawings  Frequency characteristics  Specifications  Accessories  Warranty · Service  17  18  20  20  21  22  24	CS12	16 - 21
Wiring Drawings Frequency characteristics Specifications  Accessories  Warranty · Service  18 20 20 20 21 22 23 24 24 24 24 24 25 26 27 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Overview	16
Drawings 19 Frequency characteristics 20 Specifications 21  Accessories 22 - 23  Warranty · Service 24	Connection	17
Frequency characteristics 20 Specifications 21  Accessories 22 - 23  Warranty · Service 24	Wiring	18
Accessories 22 - 23 Warranty · Service 24	Drawings	19
Accessories 22 - 23 Warranty · Service 24	Frequency characteristics	20
Warranty · Service 24	Specifications	21
	Accessories	22 - 23
Notes 25 - 26	Warranty · Service	24
	Notes	25 - 26

# **Important Safety Instructions**

Before using your CS6, CS8, CS12 be sure to carefully read the applicable items of these operating instructions and the safety suggestions.

- 1. Read all product instructions.
- 2. Keep printed instructions, do not throw away.
- 3. Respect and review all warnings.
- 4. Follow all instructions.
- 5. Clean only with dry cloth.
- 6. Install in accordance with KV2 Audio's recommended installation instructions.
- 7. Only use accessories specified by KV2 Audio.
- 8. Install the product only with rigging specified by KV2 Audio, or sold with the loudspeaker.
- 9. An experienced user shall always supervise this professional audio equipment.





CS6 - part number KVV 987 434



### **Application**

Purpose designed as a discreet portable passive loudspeaker for speech for Rental and Production companies

- · Corporate presentations and functions
- Full range performance with addition of subwoofers
- Infills
- Close monitoring
- Fixed installations

### Introduction

The CS6 is a very high quality 2 way passive speaker, presented conservatively in a low profile unique angled painted baltic birch enclosure.

Designed to present exceptional speech clarity, the CS6 can be applied quickly and flexibly on podiums, stands and suspended as well as in fixed installations using the comprehensive range of ancillary attachments and brackets.

### **Features**

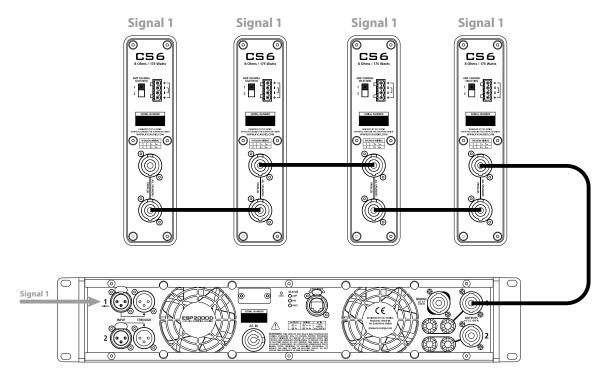
- Professional Baltic birch construction with unique angles for flexible use
- Extremely hard-wearing textured plastic paint
- · Compact enclosure allows discreet placement and application
- Wide dispersion 90 H x 90 V Horn
- KV2 Audio SLA technology passive crossover inc. thermal breaker protection
- 1"/ 1.3" Titanium diaphragm compression driver
- 6" Neodymium low mid woofer
- Fixing points for comprehensive attachments



### **Standard Connection**

Parallel connection of the CS6 (8 $\Omega$ ) - Total impedance 2 $\Omega$ .

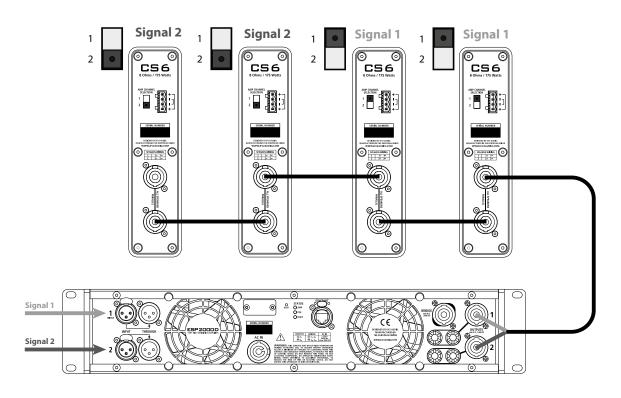
2 wire or 4 wire cable may be used, the AMP CHANNEL SELECTION switch does not apply.



## 2 Channel Connection

Channel connection using single 4 wire cable (2 Channel Adapter Cable may be used - KVV 987 450). Total impedance 4  $\Omega$  per channel. Channel switch for selecting Signal 1 or Signal 2.

Note: It should **NOT** be switched during passing of signal as this could potentially cause damage to the switch or amplifier).

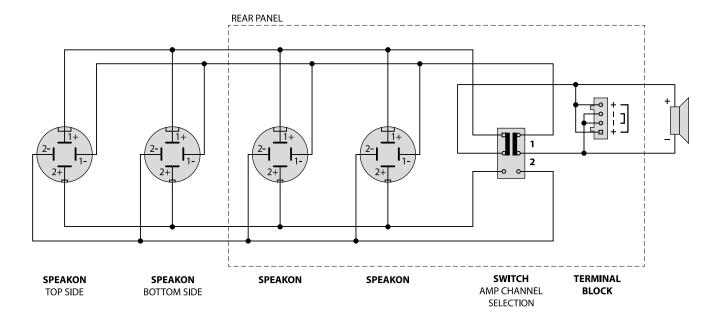




# Wiring

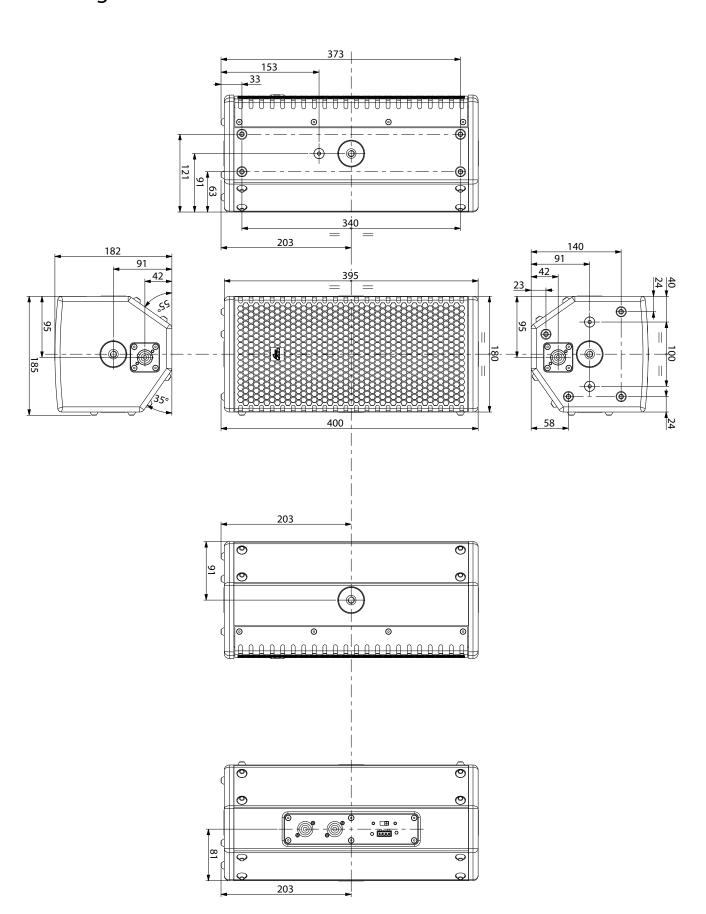
All CS6 SPEAKON connectors are wired in parallel and the desired amplifier channel is selected using AMP CHANNEL SELECTION switch.

Terminal block (4 pins, 5.0mm pitch) is wired directly to the speaker, the AMP CHANNEL SELECTION switch does not apply.



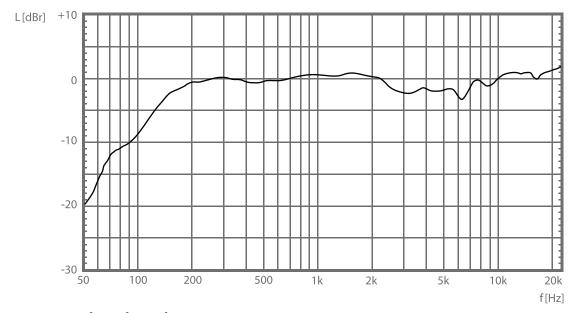


# Drawing

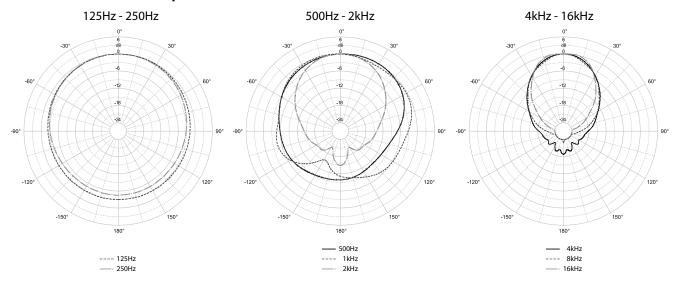




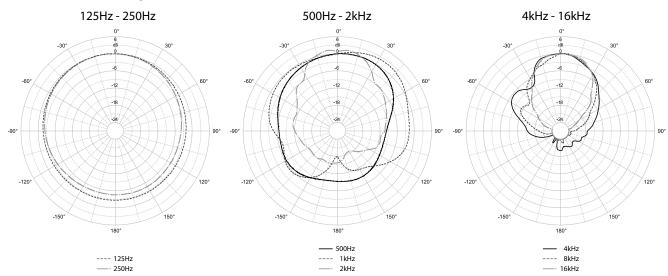
# Frequency response



# **Horizontal Polarplots**



# **Vertical Polarplots**



# $\mathsf{CS6} \cdot \mathsf{Specifications}$



# Specifications

#### **System Acoustic Perfomance**

Max SPL Long-term	118dB
Max SPL Peak	121dB
-3dB Response	145Hz to 20kHz
-10dB Response	90Hz to 28kHz
Recommended Power	175W
Sensitivity	93dB
Impedance	8 Ω
Crossover Point	4,2kHz

#### **High Frequency Section**

Acoustic Design	Horn loaded
High Horn Coverage Horizontal / Vertical	90° x 90°
Rotatable Horn	symetric
Throat Exit Diameter / Diaphragm Size	1"/1,3"
Diaphragm Material	Titanium
Magnet Type	Ferrite
Protection	Thermal breaker - auto reset

#### **Low Frequency Section**

Acoustic Design	Closed box
Number of Drivers	1
Woofer Size / Voice Coil Diameter	6" / 1.75"
Magnet Type	Neodymium
Diaphragm Material	Epoxy reinforced cellulose
Protection	Thermal breaker - autoreset

#### **Speaker Input**

Speaker Input	4x Neutrik Speakon, Terminal block
Speaker Hibut	4X NEULIK SDEAKOH, TEHHIHAI DIOCK

#### **Cabinet**

Cabinet Material	Baltic birch
Color	Plastic paint

#### **Physical Dimensions**

Height	400mm (15.75")
Width	185mm (7.28")
Depth	182mm (7.17")
Weight	8,3 kg (18.26lbs)





CS8 - part number KVV 987 425



## **Application**

Purpose designed as a discreet portable passive loudspeaker for speech and music content for Rental and Production companies

- Corporate presentations and functions
- Full range performance with addition of subwoofers
- Infills
- Close monitoring
- Fixed installations

### Introduction

The CS8 is a very high quality 2 way passive speaker, presented conservatively in a low profile unique angled painted Baltic birch enclosure.

Designed to present exceptional speech and music clarity, the CS8 can be applied quickly and flexibly on podiums, stands and suspended as well as in fixed installations using the comprehensive range of ancillary attachments and brackets.

### **Features**

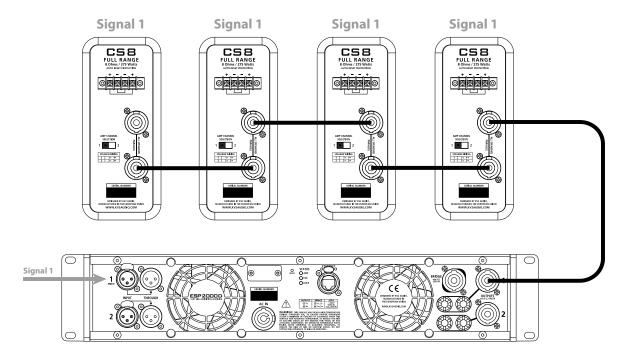
- · Professional Baltic birch construction with unique angles for flexible use
- Extremely hard-wearing textured plastic paint
- Compact enclosure allows discreet placement and application
- Wide dispersion 100 H x 100 V Horn
- KV2 Audio SLA technology passive crossover inc. thermal breaker protection
- 1"/ 1.75" Titanium diaphragm compression driver
- 8" Neodymium low mid woofer
- Fixing points for comprehensive attachments



### **Standard Connection**

Parallel connection of the CS8 (8 $\Omega$ ) - Total impedance 2 $\Omega$ .

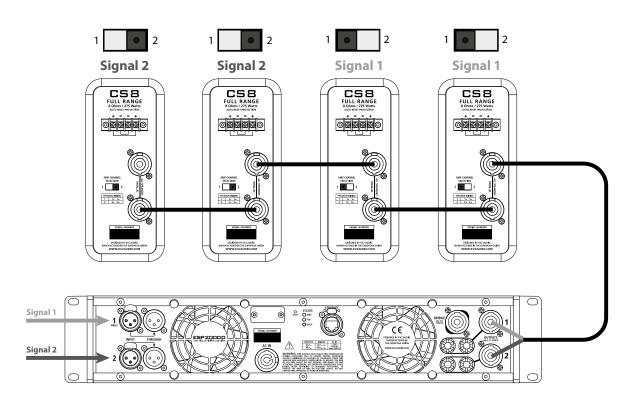
2 wire or 4 wire cable may be used, the AMP CHANNEL SELECTION switch does not apply.



### 2 Channel Connection

Channel connection using single 4 wire cable (2 Channel Adapter Cable may be used- KVV 987 450). Total impedance 4  $\Omega$  per channel. Channel switch for selecting Signal 1 or Signal 2.

Note: It should **NOT** be switched during passing of signal as this could potentially cause damage to the switch or amplifier).

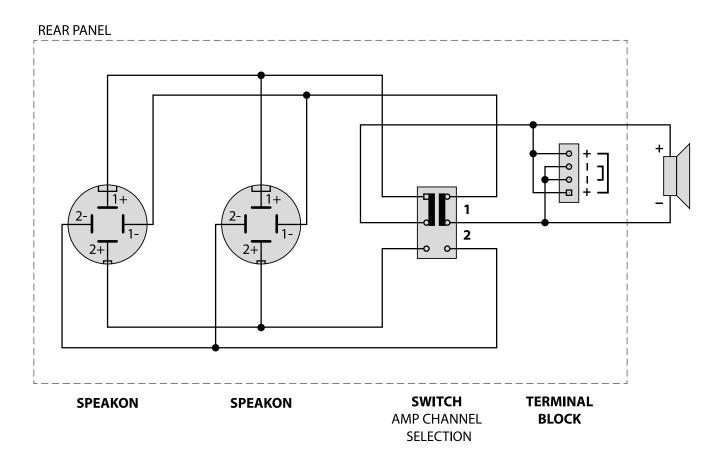




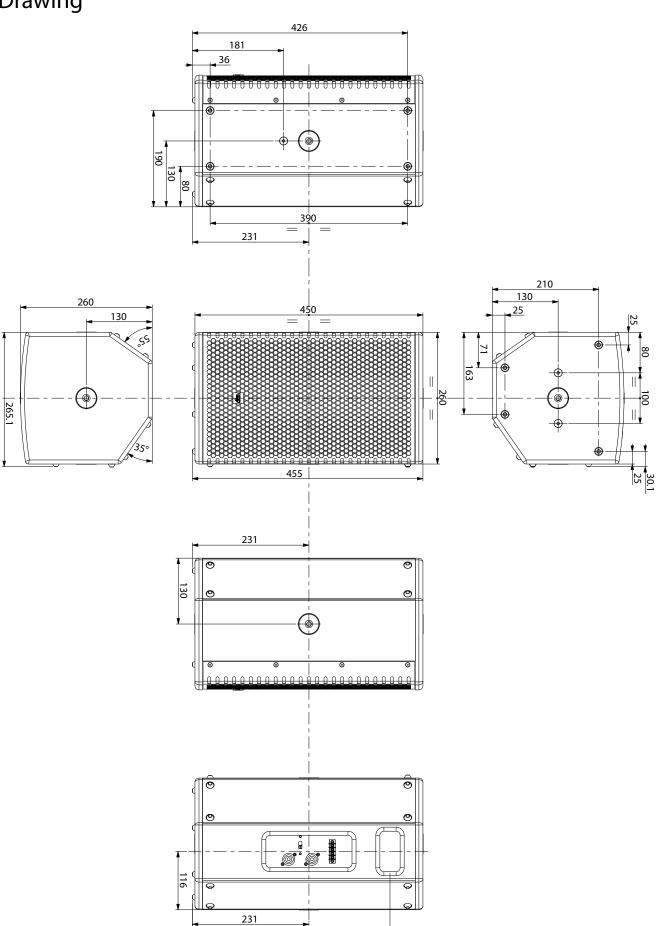
# Wiring

All CS8 SPEAKON connectors are wired in parallel and the desired amplifier channel is selected using AMP CHANNEL SELECTION switch.

Terminal block (4 pins, 5.0mm pitch) is wired directly to the speaker, the AMP CHANNEL SELECTION switch does not apply.



# Drawing

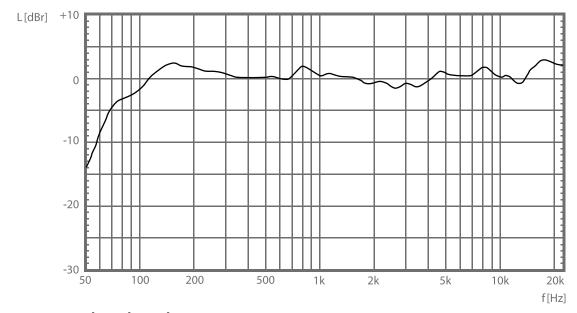


391

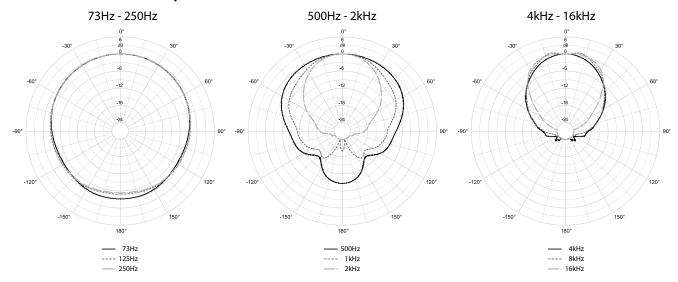
CS8 · Drawings



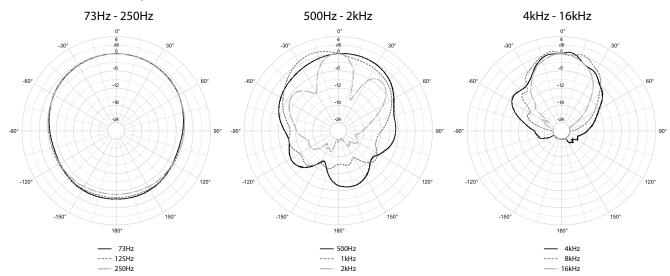
# Frequency response



# **Horizontal Polarplots**



# **Vertical Polarplots**



# CS8 · Specifications

# Specifications

#### **System Acoustic Perfomance**

Max SPL Long-term	121dB
Max SPL Peak	124dB
-3dB Response	80Hz to 20kHz
-10dB Response	62Hz to 28kHz
Recommended Power	275W
Sensitivity	94dB
Impedance	8 Ω
Crossover Point	2,2kHz

#### **High Frequency Section**

Acoustic Design	Horn loaded
High Horn Coverage Horizontal / Vertical	100° x 100°
Rotatable Horn	Symetric
Throat Exit Diameter / Diaphragm Size	1"/1,75"
Diaphragm Material	Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### **Low Frequency Section**

Acoustic Design	Front loaded bass reflex
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	8"/ 2"/ Trans coil
Magnet Type	Neodymium
Diaphragm Material	Epoxy reinforced cellulose
Protection	Thermal breaker - auto reset

#### **Speaker Input**

Connellante	2. Na. t.: l. C. a. a. l. a
Speaker Input	2x Neutrik Speakon®, Terminal Block

#### Cabinet

Cabinet Material	Baltic birch
Handles	2
Color	Plastic paint

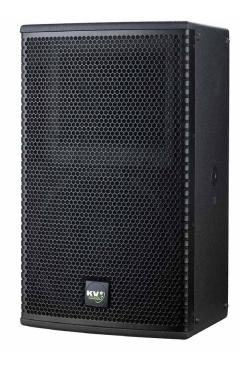
#### **Physical Dimensions**

Height	455mm (17.91")
Width	265mm (10.43")
Depth	260mm (10.24")
Weight	13 kg (28.6lbs)





CS12 - part number KVV 987 426



### **Application**

Purpose designed as a discreet portable passive loudspeaker for speech and full range music performance for Rental and Production companies

- Corporate presentations and functions
- Stand-alone full range performance or with addition of subwoofers
- Infills
- Monitoring
- Fixed installations

### Introduction

The CS12 is a very high quality 2 way full range passive speaker, presented conservatively in a low profile unique angled painted Baltic birch enclosure.

Designed to present exceptional speech and music clarity, the CS12 can be applied quickly and flexibly on podiums, stands and suspended as well as in fixed installations using the comprehensive range of ancillary attachments and brackets.

### **Features**

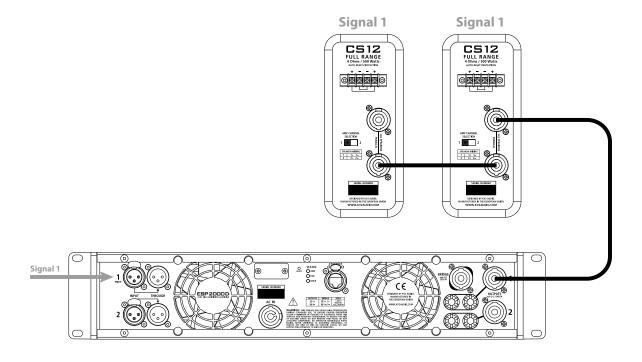
- Professional Baltic birch construction with unique angles for flexible use
- · Extremely hard-wearing textured plastic paint
- Compact enclosure allows discreet placement and application
- Wide dispersion 80 H x 40 V Horn
- KV2 Audio SLA technology passive crossover inc. thermal breaker protection
- 1.4"/3" Titanium diaphragm compression driver
- 12" Neodymium low mid woofer
- Fixing points for comprehensive attachments



### **Standard Connection**

Parallel connection of the CS12 ( $4\Omega$ ) - Total impedance  $2\Omega$ .

2 wire or 4 wire cable may be used, the AMP CHANNEL SELECTION switch does not apply.

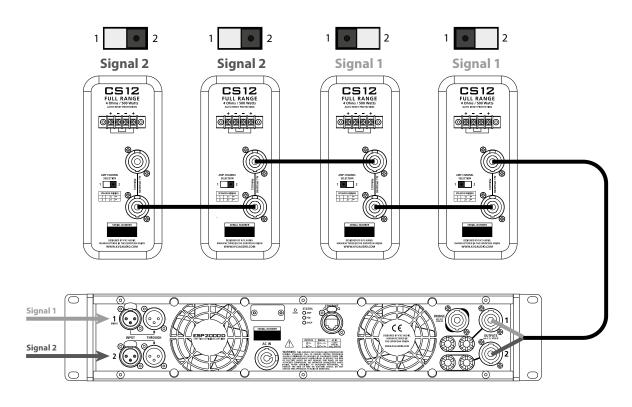


### 2 Channel Connection

Channel connection using single 4 wire cable (2 Channel Adapter Cable may be used - KVV 987 450).

Total impedance 2  $\boldsymbol{\Omega}$  per channel. Channel switch for selecting Signal 1 or Signal 2.

Note: It should **NOT** be switched during passing of signal as this could potentially cause damage to the switch or amplifier).

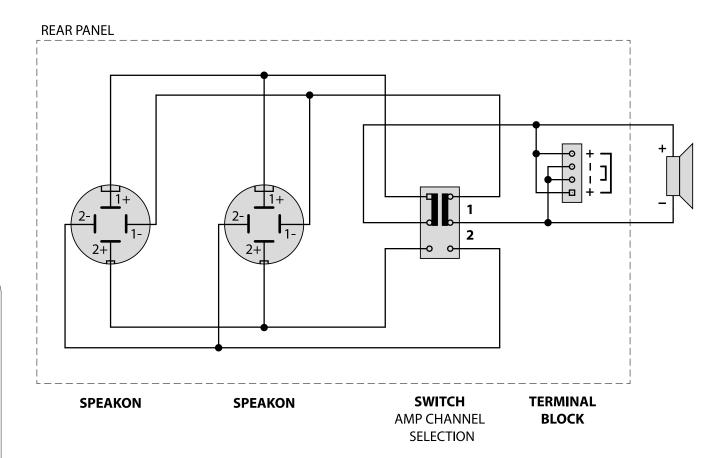




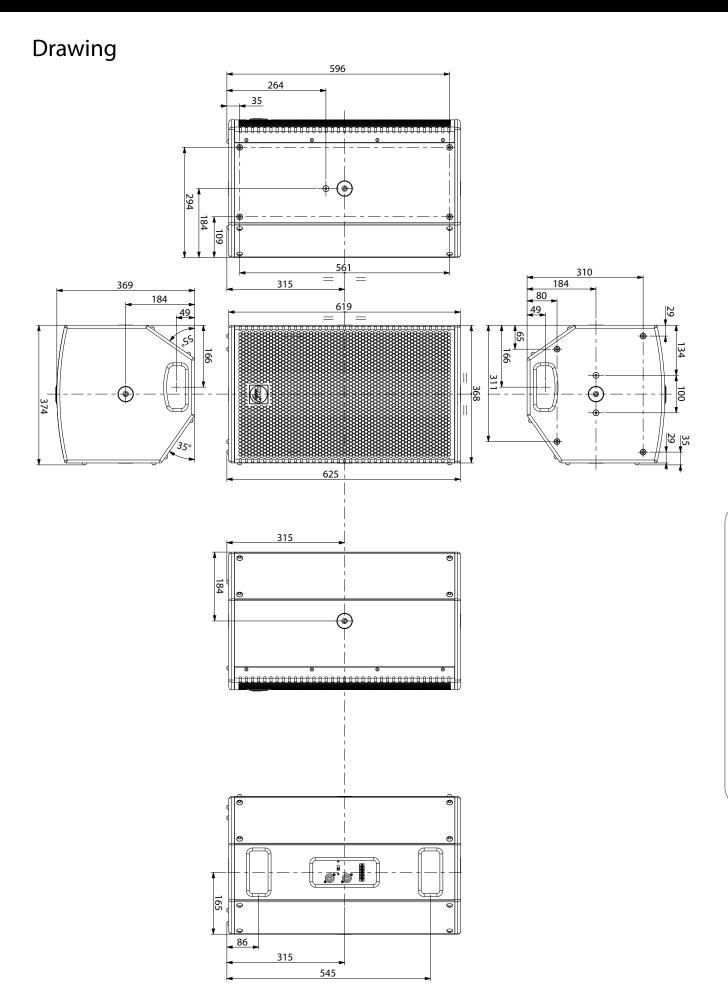
# Wiring

All CS12 SPEAKON connectors are wired in parallel and the desired amplifier channel is selected using AMP CHANNEL SELECTION switch.

Terminal block (4 pins, 5.0mm pitch) is wired directly to the speaker, the AMP CHANNEL SELECTION switch does not apply.

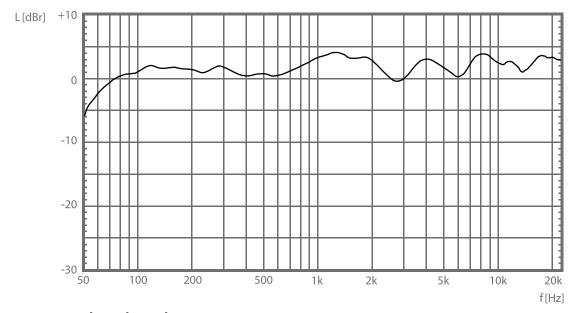




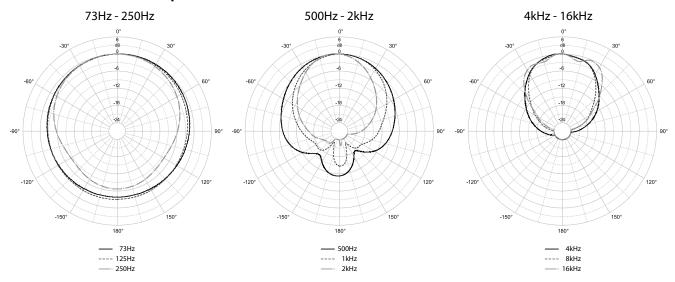




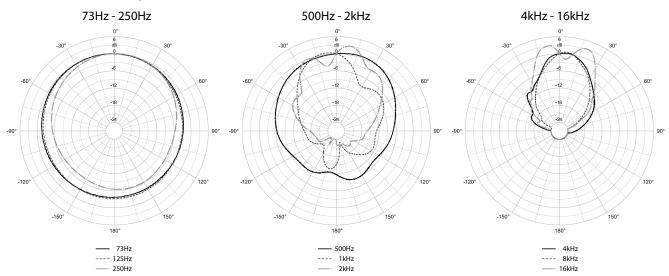
# Frequency response



# **Horizontal Polarplots**



# **Vertical Polarplots**



# CS12 · Specifications



# Specifications

#### **System Acoustic Perfomance**

Max SPL Long-term	127dB
Max SPL Peak	130dB
-3dB Response	55Hz to 22kHz
-10dB Response	50Hz to 30kHz
Recommended Power	500W
Sensitivity	98dB
Impedance	4 Ω
Crossover Point	1,2kHz

#### **High Frequency Section**

Acoustic Design	Horn loaded
High Horn Coverage Horizontal / Vertical	80° x 40°
Rotatable Horn	Yes
Throat Exit Diameter / Diaphragm Size	1,4" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

#### **Low Frequency Section**

Acoustic Design	Front Loaded, Bass Reflex
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	12" / 2.5" / Trans Coil
Magnet Type	Neodymium
Diaphragm Material	Epoxy reinforced cellulose
Protection	Thermal breaker - auto reset

#### Speaker Input

Speaker Input	2x Neutrik Speakon®. Terminal Block
Speaker inpat	2x Neutrik Speakor , Terrimar block

#### **Cabinet**

Cabinet Material	Baltic birch	
Handles	2	
Color	Plastic paint	

#### **Physical Dimensions**

Height	625mm (24.61")
Width	374mm (14.72")
Depth	369mm (14.53")
Weight	24 kg (52.8lbs)



#### Horizontal Bracket for CS6

#### part name:

#### **CS6 Horizontal Bracket**

part number:

#### KVV 987 435

#### description:

- black
- including two connection





### Vertical Bracket for CS6

#### part name:

#### **CS6 Vertical Bracket**

#### part number:

#### KVV 987 436

#### description:

- black
- including two connection bolts and bracket



#### Horizontal Bracket for CS8

#### part name:

#### **CS8 Horizontal Bracket**

part number:

#### KVV 987 427

#### description:

- black
- including two connection bolts and bracket



#### Vertical Bracket for CS8

#### part name:

#### **CS8 Vertical Bracket**

part number:

#### KVV 987 428

#### description:

- black
- including two connection bolts and bracket



#### Horizontal Bracket for CS12

#### part name:

#### **CS12 Horizontal Bracket**

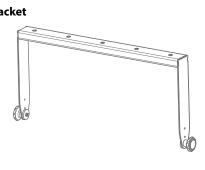
part number:

#### KVV 987 429

#### description:

- black

- including two connection bolts and bracket



### Vertical Bracket for CS12

#### part name:

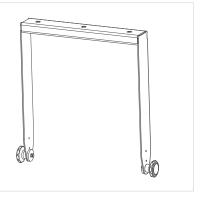
#### **CS12 Vertical Bracket**

part number:

#### KVV 987 430

#### description:

- black
- including two connection bolts and bracket



### Angle-set attachment for CS

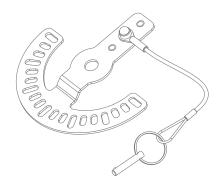
part name:

#### **Angle-set attachment**

part number: KVV 987 451

### description:

- angle-set attachment
- quick pin





### Speakon speaker cable 4.15

#### part name:

**CABLE SPEAKON 4.15** 

part number: **KVV 987 326** 

### description:

- 4 wire speaker cable
- Speakon NL4 connectors
- 1,5m (5ft)



### Speakon speaker cable 4.40

#### part name:

**CABLE SPEAKON 4.40** 

part number:

# KVV 987 327 description:

- 4 wire speaker cable
- Speakon NL4 connectors
- 4m (13ft)



### 2 Channel Adapter Cable

part name:

2 Channel Adapter Cable

part number:

KVV 987 450 description:

- 2 channel adapter cable



### Speaker cables

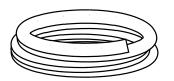


1m - round flexible speaker cable,

cross section 2 x 1.5mm

part number:

WX 002



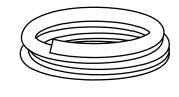
part name:

1m - round flexible speaker cable,

cross section 4 x 2.5mm

part number:

WX 003



#### part name: SPEAKON NL4 part number: KA 027



# Recommended maximum speaker cable length

MINIMUM CROSS SECTION [mm²]	LENGTH [m], impedance $4\Omega$	LENGTH [m], impedance $8\Omega$	LENGTH [m], impedance 16 $\Omega$
1.5	8	15	30
2.5	15	30	60
2 x 2.5	20	40	90
4	25	50	100

# CS Series · Warranty · Service



## Warranty

Your CS is covered against defects in material and workmanship.

Refer to your supplier for more details.

## Service

In the unlikely event that your CS develops a problem, it must be returned to an authorised distributor, service centre or shipped directly to our factory. Because of the complexity of the design and the risk of electrical shock, all repairs must be attempted only by qualified technical personnel.

If the unit needs to be shipped back to the factory, it must be sent in its original carton. If improperly packed, the unit may be damaged.

To obtain service, contact your nearest KV2 Audio Service Centre, Distributor or Dealer.







# The Future of Sound. Made Perfectly Clear.

#### **KV2 Audio International**

Nádražní 936, 399 01 Milevsko Czech Republic

Tel.: +420 383 809 320 Email: info@kv2audio.com

www.kv2audio.com

KVV120147-00-01-0