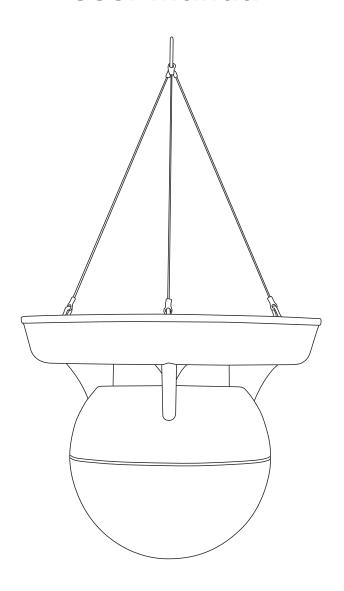


# PDS 660 100V Pendant Ball Loudspeaker

**User Manual** 



Order code: CRSP51



### WARNING

# FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all the parts are present.
- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- · Retain the carton and all packaging materials.
- In the event that a fixture must be returned to the supplier, it is important that the fixture is returned in the original carton and packaging.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.



### **CAUTION!**

KEEP THIS EQUIPMENT AWAY FROM MOISTURE, RAIN AND LIQUIDS, AND OUT OF DAMP/HUMID ENVIRONMENTS



DANGER TO LIFE!
BEFORE OPERATING THE

BEFORE OPERATING THE SPEAKER FOR THE FIRST TIME, THE INSTALLATION HAS TO BE APPROVED BY AN EXPERT

#### **IMPORTANT:**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- · Never leave any cables lying around.
- Do not use the unit near stoves, heaters, radiators, or other heat producing devices.
- · Do not insert any objects into the air vents.
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- · Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- · Do not use the incorrect cables or defective cables.
- Do not drive the inputs with a signal level higher than required to drive the equipment to its full output

- Prevent distortion! Make sure that all components connected to the speaker have sufficient power ratings.
   Distortion will be generated if the components are operated at their limits.
- The user is responsible for correct positioning and operation of this fixture. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this equipment.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- WARRANTY: One year from date of purchase.

#### **OPERATING DETERMINATIONS**

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g. short-circuit, burns and electric shocks etc.

Incase of malfunction this device should be returned for service or inspection.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.



## **Product overview & technical specifications**

## PDS 660 100V Pendant Ball Loudspeakers

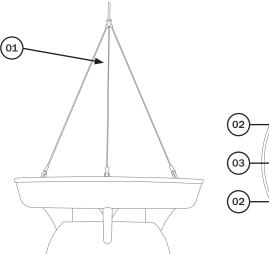
High efficiency pendant ball loudspeaker, featuring 360° dispersion with high output suitable for installation into industrial and commercial premises with high ceilings including supe play centres. Offering full range audio deli dual cone driver the PDS 660 is ideally su speech reinforcement.

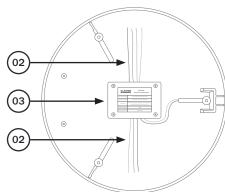
- Internal 100V/70V transformer
- 360° wide sound dispersion
- Dual cone driver for wide frequency response
- Multiple power taps
- ABS enclosure
- · Supplied with suspension wires

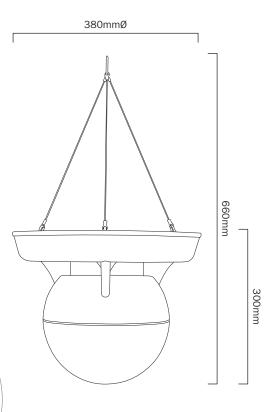
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ermarkets, warehouses and livered utilising a horn loaded, uited for general music and	
the box: 1 x loudspeaker th suspension wires & x user manual	

Specifications	PDS 660
Input	100V, 70V
Power taps @ 100V	7.5W, 10W, 15W, 20W, 30W, 60W
Power taps @ 70V	3.75W, 5W, 7.5W, 10W, 15W, 30W
Impedance	Black: COM, White: 1.3K $\Omega$ , Red: 1K $\Omega$ , Yellow: 670 $\Omega$ , Brown: 500 $\Omega$ , Blue: 330 $\Omega$ , Green: 165 $\Omega$
Sensitivity (1W/1m)	102dB
Maximum SPL (Rated W/1m)	120dB
Frequency response	100Hz-10kHz
Drivers	6" dual cone, full range
Connections	Flying leads
Dimensions	300 x 380mmØ
Weight	3.4kg
Order code	CRSP51







- 01 Suspension wires (See next page for installation instructions)
- 02 Flying leads
- 03 Multiple power tap transformer



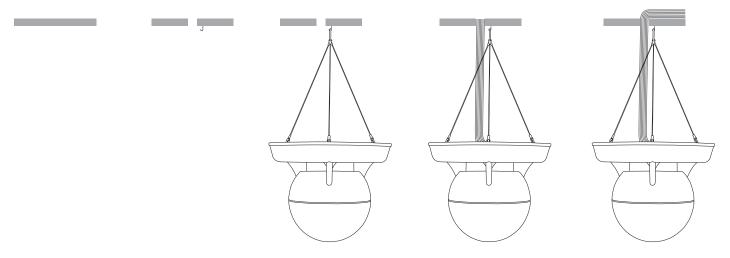
### **Installation instructions**

This pendant loudspeaker is designed to be suspended in buildings with high ceilings.

Before attaching the loudspeaker, make sure that the supporting structure can hold a minimum safety factor of 10 times the installations weight. (eg 3.4kg - 34kg point load).

The durability of the installation depends very much on the material used at the installation area (building material), such as wood, concrete and brick etc. This is why the fixing material must be chosen to suit the wall material.

Always ask a specialist for the correct plug/screw combination indicating the maximum load and building material.



### Step 1

Create a hole in the supporting structure large enough to fit the flying leads through.

### Step 2

Install an eyebolt or suitable fixing point.

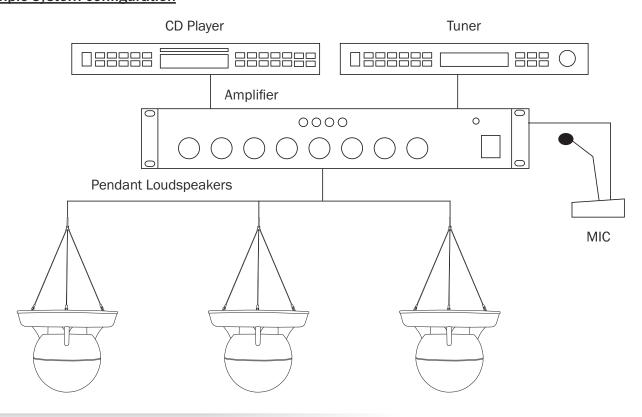
### Step 3

Attach the screwgate shackle onto the eyebolt

### Step 4

Feed the flying leads through the hole created and connect to amplifier equipment.

### **Example system configuration**





## **Installation instructions & setup**

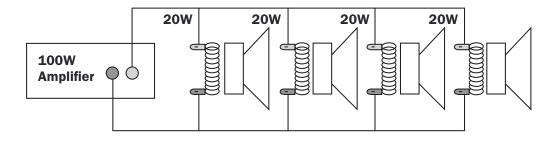
### Important installation advice

- All loudspeakers have to be connected to the constant voltage line and wired in parallel.
- The output power is adjustable using the switch provided on the rear of the speaker.
- As the voltage on the line can approach 100V, installation must follow the best practice with double insulated cable being used.
  - Cable runs should be kept away from any potential source of interference such as 3 phase mains, data cables, telecom cables etc.
- 100V line systems must always be wired in parallel and the total load presented to the amplifier must not exceed the rated output of the amplifier or damage can result.
- You must NEVER mix 100V line and low impedance speakers on the same system.
- DO NOT run microphone cables near mains, data, telephone or 100V line cables.
- DO NOT exceed 90% of the amplifiers output power when using 100V line (speech only).
- DO NOT exceed 70% of the amplifiers output power when using 100V line (high level background music only).
- ENSURE that all loudspeakers are in-phase.
- ENSURE that there are no short circuits on the loudspeaker line before connection of the amplifier.
- Where it is intended to use multiple low impedance speakers to cover an area, the speakers must be wired in a series/parallel arrangement in such a way as to present the correct load to the amplifier.
- Note: The total load impedance presented to the amplifier must never be below the rated amplifier impedance, otherwise damage can result.

### 100V examples:

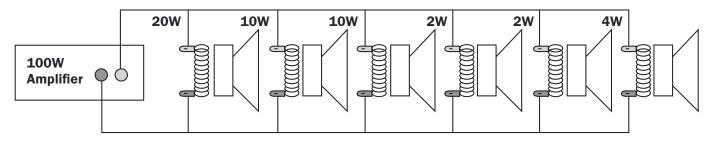
### Standard 100V line

4 x 20W - 80W load



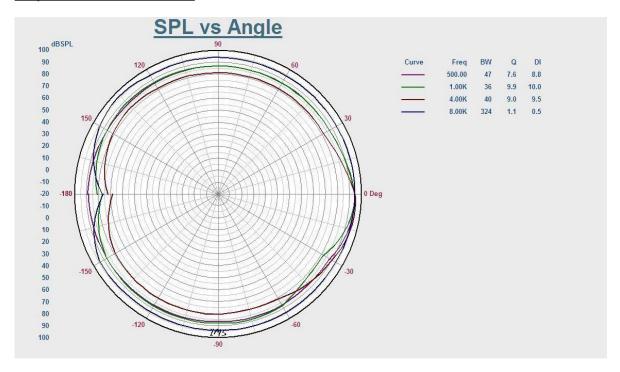
### Multi-tap 100V line

20 + 10 + 10 + 2 + 2 + 4 = 48W load





### **Dispersion characteristics:**



### **Frequency Response:**







# Correct Disposal of this Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.





### **Public Address solutions from Clever Acoustics**

Clever Acoustics wide range of 100V and low impedance products has been designed to offer the installer a comprehensive audio solution. With options for both indoor and outdoor installations the products provide cost effective solutions without compromise on quality or intelligibility.

Throughout the whole product portfolio the range has been designed to be installed with minimum fuss and simple touches including cut out templates for the **ceiling loudspeaker ranges** or Quick-Fixx® fast fit installation brackets featured on the **BGS-20T Series**.

When designing the range of mixer amplifiers our engineers have taken into account that not all amplifiers are tucked away in rack cabinets, with this in mind the **MA Series Mixer Amplifiers** and **SL Series Slave Amplifiers** all feature heavy gauge brushed aluminium, black anodised front panels, maximising quality and aesthetics.

The range includes:

### **Speakers**

- Ceiling
- Column
- Background
- Horn
- Projector
- Pendant
- Wall Mount

### **Amplifiers**

- Mixer
- Slave
- Compact

### **Accessories**

- Paging microphones
- Volume controls

To view the full range of Clever Acoustic products and to keep up-to-date on our latest additions visit **www.cleveracoustics.co.uk** 

