

## PIONEER TS-Z65CH

# Pioneer Z-Series TS-Z65CH 6.5-inch 2-Way Component Speaker System User Manual

## 1. INTRODUCTION

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This manual provides essential information for the proper installation, operation, and maintenance of your Pioneer Z-Series TS-Z65CH 6.5-inch 2-Way Component Speaker System. Please read this manual thoroughly before using the product to ensure optimal performance and safety. The Pioneer Z-Series speakers are engineered for high-resolution audio, delivering clarity and precision in your vehicle's audio environment.

## 2. SAFETY INFORMATION

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- Always ensure the vehicle's ignition is off and the battery is disconnected before beginning any installation work.
- Consult a professional installer if you are unsure about any aspect of the installation process.
- Do not expose speakers to excessive moisture or extreme temperatures.
- Securely mount all components to prevent them from becoming projectiles in the event of a sudden stop or accident.
- Ensure proper wiring polarity to avoid damage to the speakers or amplifier.

## 3. PACKAGE CONTENTS

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Verify that all items are present in the package:

- (2) Woofers
- (2) Tweeters (with attached 17" speaker leads terminated with quick-connects)
- (2) Crossovers
- (2) Woofer grilles
- (2) Flush mount tweeter housings (with tweeters installed)

Below is an image illustrating the components included in your Pioneer Z-Series TS-Z65CH speaker system.

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# High resolution audio, unparalleled experience.



TS-Z65CH

Figure 1: Pioneer Z-Series TS-Z65CH Component System

## 4. PRODUCT OVERVIEW

The Pioneer TS-Z65CH speakers are designed to deliver high-resolution audio with crisp highs and deep lows. They feature a dual-layer cone construction using Twaron Aramid Fiber and Cellulose Fiber for the woofer, and a 29mm aluminum alloy dome tweeter. An integrated passive crossover network allows for adjustable tweeter levels (-3dB / 0dB / +3dB).

For a visual overview of the product's features, please watch the official product video below:

Your browser does not support the video tag.

Video 1: Official Pioneer TS-Z65CH Product Overview. This video highlights the key features and design elements of the speaker system, including cone materials, tweeter design, and crossover network.

The image below shows the complete Pioneer Z-Series TS-Z65CH 6.5-inch 2-Way Component Speaker System.



Figure 2: Pioneer Z-Series TS-Z65CH Speaker System

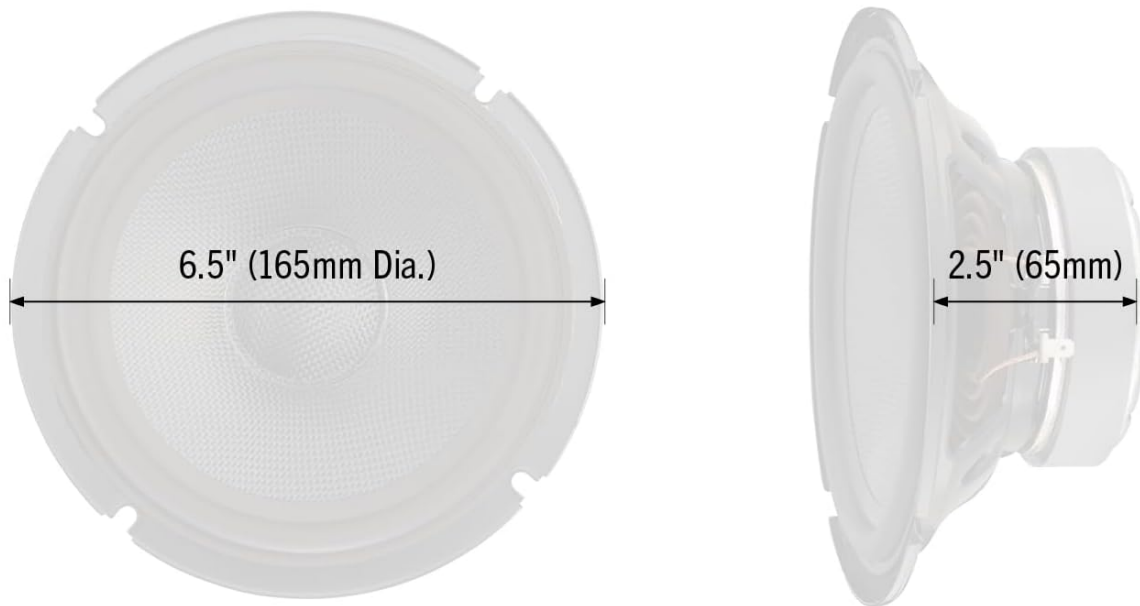
## 5. SETUP AND INSTALLATION

Proper installation is crucial for optimal sound performance. It is recommended to have the speakers installed by a qualified professional.

### 5.1 Mounting the Woofers

The system includes original equipment (OE) 6-1/2" custom-fit installation brackets to optimize fitment in applicable speaker locations. Ensure the mounting location provides sufficient depth and clearance for the woofer. Refer to the dimensions below for planning your installation.

## Woofer



## Tweeter



Figure 3: Woofer and Tweeter Dimensions

### 5.2 Mounting the Tweeters

The swivel tweeter mounting kit is designed for mounting in original equipment (OE) tweeter locations, allowing for directional adjustment to optimize sound staging. Ensure the tweeter is securely mounted and aimed towards the listening position for best results.

### 5.3 Wiring and Crossover Network

The integrated/in-line crossover network simplifies installation by eliminating the need for an outboard module. Connect the amplifier output to the 'AMPLIFIER' terminals on the crossover. Connect the woofer to the 'WOOFER' terminals and the tweeter to the 'TWEETER' terminals. Pay close attention to positive (+) and negative (-) terminals for correct polarity. The crossover network also features a tweeter level adjustment (-3dB / 0dB / +3dB) to fine-tune the high-frequency output to your preference and vehicle acoustics.

## 6. OPERATING INSTRUCTIONS

Once installed, connect your audio source (e.g., car stereo, amplifier) to the speaker system. Adjust the volume and audio settings on your head unit or amplifier to achieve your desired sound. The TS-Z65CH

speakers are designed for high-fidelity sound reproduction across a broad frequency range. These speakers have a maximum power handling of 330 watts and a continuous power handling of 110 watts. An 85 dB sensitivity rating ensures clear and loud sound even with lower power inputs, minimizing distortion at higher volumes.

The graphic features a dark blue background with a teal gradient at the bottom. In the top left, there are concentric purple circles. The main headline 'Crisp highs & deep lows.' is in large teal font. Below it, a white paragraph describes the sound quality. On the right, two large circular speakers and two smaller tweeters are shown. On the left, a red icon of horizontal lines is above the text 'POWER HANDLING' in red, and '330 W MAXIMUM' and '110 W CONTINUOUS' in white below it. The Pioneer logo is in the bottom left, and 'TS-Z65CH' is in the bottom right.

# Crisp highs & deep lows.

Dynamic sound delivers a wide range of audio frequencies with clarity and accuracy.

**POWER HANDLING**  
330 W MAXIMUM  
110 W CONTINUOUS

**Pioneer** **TS-Z65CH**

Figure 4: Power Handling Specifications

# High volume, clear sound

High sensitivity produces clear and loud sound at lower power without distortion.

## SENSITIVITY

88 dB



## FREQUENCY RESPONSE

31 Hz – 16 kHz



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TS-Z65CH

Figure 5: Sensitivity and Frequency Response

## 7. MAINTENANCE

To maintain the performance and longevity of your speakers:

- Regularly inspect speaker grilles for any debris or damage.
- Clean the speaker surfaces with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- Ensure all connections remain secure. Loose connections can lead to signal loss or damage.
- Avoid overdriving the speakers with excessive power, which can cause distortion and potential damage.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No sound from speakers	Loose or incorrect wiring connections; Amplifier off or malfunctioning; Head unit issue	Check all wiring connections for security and correct polarity. Verify amplifier and head unit are powered on and functioning correctly.
Distorted sound	Overdriving speakers with too much power; Incorrect amplifier gain settings; Damaged speaker cone	Reduce volume or amplifier gain. Check amplifier settings. Inspect speaker cones for visible damage.
Weak or no bass	Incorrect wiring polarity; Low-pass filter setting too high; Insufficient power	Verify correct wiring polarity. Adjust low-pass filter settings on your head unit or amplifier. Ensure adequate power supply.
Harsh or absent treble	Tweeter level setting too low or high; Damaged tweeter; High-pass filter setting too low	Adjust tweeter level on the crossover. Inspect tweeter for damage. Adjust high-pass filter settings.

## 9. SPECIFICATIONS

Feature	Specification
Brand	PIONEER
Model Number	TS-Z65CH
Speaker Type	2-Way Component
Speaker Size	6.5 Inches
Woofer Diameter	6.5 Inches
Tweeter Diameter	29 Millimeters
Speaker Maximum Output Power	330 Watts
Continuous Power Handling (RMS)	110 Watts
Impedance	4 Ohms
Frequency Response	30 Hz to 96 kHz
Sensitivity	85 dB
Woofer Material	Twaron Aramid Fiber and Cellulose Fiber
Tweeter Material	Aluminum Alloy Dome
Connectivity Technology	Wired (AUX)
Mounting Type	Flush Mount
Item Weight	2.5 Pounds
Item Dimensions (D x W x H)	2.5"D x 6.5"W x 6.5"H

Feature	Specification
UPC	884938374613

## 10. WARRANTY AND SUPPORT

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This Pioneer product is covered by a **1-year limited warranty** from the date of purchase. For warranty claims or technical support, please contact Pioneer customer service or visit the official Pioneer website. Keep your proof of purchase for warranty validation.