

DC206BT

INSTALLATION/OWNER'S MANUAL

AM/FM/CD Receiver with Detachable Face

















Preparation

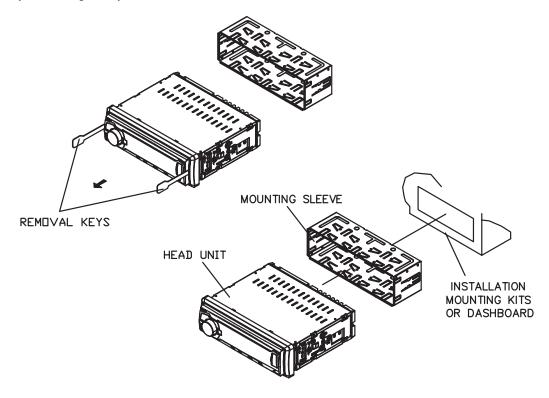
Please read entire manual before installation.

Before You Start

- Disconnect negative battery terminal. Consult a qualified technician for instructions.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

Getting Started

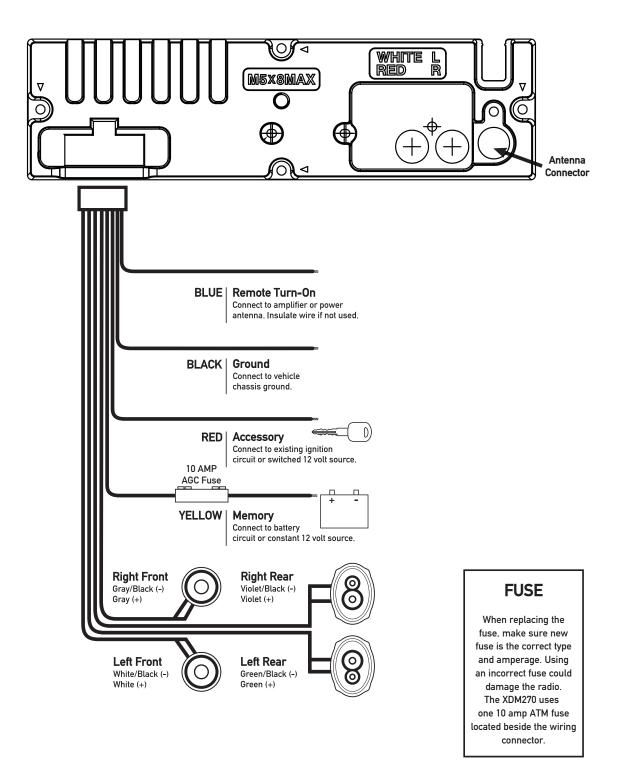
- Remove trim ring from unit.
- Remove 2 transit screws located on top of the unit.
- Insert the supplied keys into the slots as shown, and slide the unit out of the mounting sleeve.
- Install mounting sleeve into opening, bending tabs to secure.
- Connect wiring harness and antenna. Consult a qualified technician if you are unsure.
- Certain vehicles may require an installation kit and/or wiring harness adapter (sold separately).
- Test for correct operation and slide into mounting sleeve to secure.
- Snap trim ring into place.



TYPICAL FRONT-LOAD DIN MOUNTING METHOD

DC206BT INSTALLATION

Wiring Diagram





Control Locations

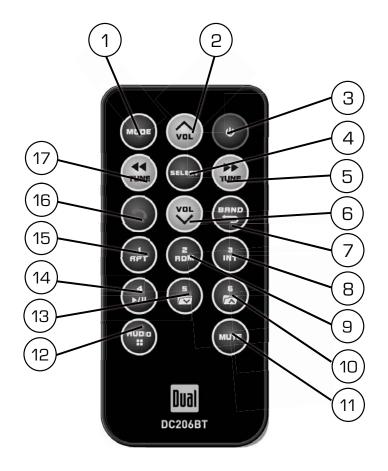


- (1) Power
- 2 Band / Go Back
- (3) Mute
- (4) Bluetooth Talk
- (5) Volume Knob
- 6 Audio / Menu
- 7 Eject
- (8) USB Port
- 9 Auxiliary Input
- (10) Preset 6 / Folder Up

- (11) Preset 5 / Folder Down
- (12) Preset 4 / Play / Pause
- (13) Preset 3 / Intro
- (14) Preset 2 / Random
- (15) Preset 1 / Repeat
- (16) Display
- (17) Mode
- (18) Reset
- (19) Tune / Track Up
- (20) Tune / Track Down

DC206BT OPERATION

Remote Control



- 1) Mode
- 2 Volume Up
- 3 Power
- 4 Select
- 5 Tune / Track Up
- **6** Volume Down
- 7 Band / Go Back
- 8 Preset 3 / Intro
- 9 Preset 2 / Random

- 10 Preset 6 / Folder Up
- 11) Mute
- (12) Audio / Menu
- 13) Preset 5 / Folder Down
- (14) Preset 4 / Play / Pause
- (15) Preset 1 / Repeat
- (16) Bluetooth Talk
- 17) Tune / Track Down



General Operation

Faceplate Removal

Press **RELEASE** and pull away from the left side to remove. To re-install, insert right side of faceplate first then push left side to secure.

Power On/Off

Press \circ or any other button (except **EJECT**) to turn the unit on. Press \circ to turn the unit off.

Mode

Press **MODE** to select between AM/FM, CD player, Bluetooth, auxiliary and USB. Modes of operation are shown in the display.

NOTE: CD and USB modes will not appear unless a CD is inserted or USB device is connected.

Auxiliary Input

The DC206BT offers a 3.5 mm auxiliary input port on the front panel of the unit for connecting an audio device, MP3 player, etc. Press MODE to select auxiliary input mode.

Volume

Adjust volume using volume knob (00-46).

Display

Press **DISP** to show the clock. During playback of MP3/files, ID3 tag information, elapsed time, track number and file/folder names will automatically rotate on the display.

Reset

Press **RESET** upon initial installation or if abnormal operation occurs. Reset button is located behind the front panel.

Set the Clock

With the unit on, press and hold **DISP** until the clock begins to flash, then release. Turn the **volume knob** to the right to adjust the hours or to the left to adjust the minutes.

12/24-hour Clock

The clock will display 12-hour AM/PM time in USA frequency spacing mode (PM 10:00). In European frequency spacing mode, the clock will display 24-hour time (22:00).

Setup Menu

Press and hold **AUDIO** for more than 3 seconds to access the setup menu. Press **AUDIO** momentarily to select between the menu functions and rotate the **volume knob** left/right to adjust or activate the desired function.

DC206BT OPERATION

General Operation - Setup Menu

Menu Function	Options	Action	
Auto Station Store	AUTO STORE	Press the volume knob to seek and save 6 strong stations in the current band. (Tuner mode only)	
Local/Distance Tuning	LOCAL OFF	Activates distance tuning (Tuner mode only).	
	LOCAL ON	Activates local tuning for strong station reception only (Tuner mode only).	
Tuner Frequency Spacing	FREQ USA	Programs the unit to USA tuner spacing. (200kHz for FM and 10kHz for AM). (Tuner mode only)	
	FREQ EURO	Programs the unit to European tuner spacing. (50kHz for FM and 9kHz for AM). (Tuner mode only)	
Auxiliary Input	AUX ON	Enables the front panel 3.5mm auxiliary input.	
	AUX OFF	Disables the front panel 3.5mm auxiliary input.	
Beep	BEEP OFF	Disables the confirmation beep.	
Confirmation	BEEP ON	Enables the confirmation beep.	
Programmable Turn On Volume	PRO-VOL #	Programs unit to always turn on at a specific volume (default is OFF). Any volume level 1-30 can be selected.	
Power On Message	MSG OFF	Disables power on message. (Example: GOOD MORNING)	
	MSG ON	Enables power on message to be displayed.	
	SCROLL 15 SP	Programs unit to scroll information every 15 seconds (default).	
Scrolling Option	SCROLL ONCE	Programs unit to scroll once then show the first 10 characters on display	
	SCROLL ON	Programs unit to scroll continuously.	
	SCROLL OFF	Programs the unit to show the first 10 characters on display.	
Demonstration Mode	DEMO OFF	Disables the demonstration mode.	
	DEMO ON	Enables the demonstration mode.	
Bluetooth	BT ON	Enables Bluetooth functionality.	
	BT OFF	Disables Bluetooth functionality.	



General Operation

Audio Press AUDIO momentarily to select between Bass, Treble,

Balance and Fader.

 \rightarrow BASS \rightarrow MIDDLE \rightarrow TREBLE \rightarrow BALANCE \rightarrow FADER \rightarrow EQ \rightarrow LOUD \rightarrow SOURCE LEVEL -

Bass Press AUDIO until BAS appears then rotate volume knob left/right to adjust (-7 minimum / +7 maximum).

Treble Press AUDIO until TRE appears then rotate volume knob left/right to adjust (-7 minimum / +7 maximum).

Balance Press AUDIO until BAL appears then rotate volume knob left/right to adjust (BAL 10L - BAL 10R).

BAL EVEN represents equal balance

Fader Press AUDIO until FAD appears then rotate volume knob left/right to adjust (FAD 10R - FAD 10F).
FAD EVEN represents equal fader

AM/FM Tuner Operation

Seek Tuning

Press **TUNE** ◀◀ or **TUNE** ▶▶ momentarily to seek to the next strong station.

Manual Tuning

Press and hold **TUNE** ◀◀ or **TUNE** ▶▶ until "MANUAL" appears, then press **TUNE** ◀◀ or **TUNE** ▶▶ momentarily to change radio frequency up or down one step at a time. Press and hold to advance quickly.

Note: Seek and manual tuning functions are reversed if Seek Priority is set to SEEK 2 in the setup menu (refer to page 7 for details on setting Seek Priority).

Band

Press **BAND** to select between FM1, FM2, FM3, AM1 and AM2 bands.

Storing and Recalling Station Presets Up to 18 FM stations and 12 AM stations can be stored. To store a station, select the desired band and station. Press and hold the desired preset button (1-6) for more than 2 seconds. When stored, the preset number will appear in the display. The station can be recalled anytime by pressing the corresponding preset button.

Automatically Store Stations

Press and hold **AUDIO/MENU** for more than 3 seconds to find auto store in the display. Then press volume knob to automatically store strong 6 stations in the current band.

CD Player Operation

Insert CD

With the label facing up, insert a standard size CD into the CD slot. The CD will automatically begin playback.

Eject CD

Press **EJECT** to eject the CD. The unit will change to previous mode of operation. If the disc is not removed within 10 seconds, the unit will reload the disc. The unit does not have to be turned on to eject CD.

Track Select

Press TRACK ►► to skip to the beginning of the next track. Press TRACK ◀◀ to return to the beginning of the current track. Pressing TRACK ◀◀ again skips to the beginning of the previous track.

Fast Forward/Reverse

Press and hold **TRACK** ►► or **TRACK** ◀ on the remote control to fast forward or reverse a track.

Pause

Press / II to temporarily stop CD playback.

Press ►/ ■ again to resume playback.

Intro

Press **INT** to enter the Intro menu, then turn the volume knob to select one of the following options:

- OFF Cancels the INT function.
- ALL Plays the first 10 seconds of each track.

Repeat

Press **RPT** to enter the Repeat menu, then turn the volume knob to select one of the following options:

- ALL Plays all tracks on CD.
- TRACK Continuously repeats selected track.

Random

Press **RDM** to enter the Random menu, then turn the volume knob to select one of the following options:

- OFF Cancels the RDM function.
- ALL- Plays all tracks in random order.

CD-R/CD-RW Compatibility

Some CD-Rs and CD-RWs may be incompatible with this unit, depending on media type and recording method. In addition, the following CDs may be incompatible with this unit:

CDs exposed to extreme temperatures or direct sunlight for extended periods of time, CDs recorded in which a recording session failed or a re-recording was attempted and, or encrypted or copy-protected CDs which do not conform to the audio CD-DA red book recording standard.

CD Player Operation - MP3/WMA Files

Playing an MP3 CD

When an MP3/WMA encoded disc is first inserted, "DISC READ" will appear in the display. Depending on the number of files and folders, this may take several seconds.

Displaying Information

Press **DISP** to select between song title, artist, file name, folder name, track number, and clock/elapsed time.

"NO ARTIST" or "NO TITLE" will be displayed if the MP3/WMA file contains no ID3 tag information.

"ROOT" will be displayed if the directory name of a root folder is not labeled.

Title Icon

This icon will illuminate when the song title is displayed.

Artist Icon

This icon will illuminate when the artist name is displayed.

Folder Icon

This icon will illuminate when the folder name is displayed.

File Icon

This icon will illuminate when the file name is displayed.

Character Support

Maximum character display information

- Track name 32 character maximum
- Directory name 32 character maximum
- *Song title 32 character maximum
- *Artist name 32 character maximum

*Song title and Artist Name will only be displayed if included with the MP3/WMA file.

When referring to MP3/WMA playback, the following terms are synonymous:

- File name and track name
- Folder name and directory name

CD Player Operation - MP3/WMA Files

Media Compatibility

The following types of discs/files are compatible:

- CD-ROM (ISO), CD-R, CD-RW
- CD-DA
- MP3 data
- WMA data

The following types of discs/files are not compatible:

- WMA files that are protected by DRM (Digital Rights Management).
- WMA lossless format
- Discs recorded with Track At Once or packet writing
- MP3 PR0 format
- MP3 playlists
- WAV format

Playback Order

MP3/WMA playback sequence is based on recorded order of files and begins in the root folder of the disc. Any empty folders or folders that do not include MP3/WMA files are skipped. This unit may not play files in the order they were recorded in. Refer to your recording software's user's manual for more information.

Compatible Recording Formats

- IS09660 level 1
- IS09660 level 2
- Yellow Book MODE 1
- Yellow Book MODE 2 FORM 1
- Multi session
- Maximum files 999
- Maximum folders 255
- Maximum folder levels 8
- MPEG-1/2/2.5 Audio Layer-3

ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z
 (all caps), numbers 0-9, and "_" (underscore). Some
 characters may not be displayed correctly, depending on
 the character type.
- This device can play back discs in Joliet, Romeo, and other standards that conform to ISO9660. MP3/WMA written in the formats other than the above may not play and/or their file names or folder names may not be displayed properly.

CD Player Operation - MP3/WMA Files

Additional MP3/WMA Information

An internal buffer provides ESP (Electronic Skip Protection) to virtually eliminate skipping.

When playing a disc recorded with regular audio files (CD-DA or .WAV) and MP3/WMA files, the unit will play the MP3/WMA files only.

Only MP3 files with filename extension (.mp3) can be played. Only WMA files with filename extension (.wma) can be played.

Do not attempt to play discs which contain non-MP3/WMA files with the MP3/WMA extension.

Sampling Frequency

Rates

MP3 8kHz ~ 48kHz

WMA | 32kHz ~ 48kHz

Transfer Bit rates

MP3

32kbps ~ 320kbps constant

Variable bit rates

WMA

32kbps ~ 192kbps constant

Variable bit rates

Note: Some files may not play or be displayed correctly,

depending on sampling rates and bit rates.

MP3 Tag Display

ID3 tags Version 1.0 to 2.4.

This model will not display ID3 Version 2.4 or greater tags.

Recommended Settings

For best results, use the following settings when burning an

MP3 disc:

128kbps or higher constant bit rate 44.1kHz or higher sampling frequency

For best results, use the following settings when burning a

WMA disc: 64kbps or higher constant bit rate

32kHz or higher sampling frequency

Connecting a USB Device (sold separately)

To play MP3/WMA files from most USB mass storage devices, line up the USB connector and insert the USB device into the unit's USB port.

Playing Music

When a USB device is first connected, "USB READ" will appear in the display and playback will begin momentarily. Depending on the number of files and folders, it may take several seconds for the device to begin playing. If no valid MP3/WMA files are detected, "NO FILE" will be displayed and the last mode will be resumed.

Track Select

Press TRACK ►► to skip to the beginning of the next track. Press TRACK ◀◀ to return to the beginning of the current track. Pressing TRACK ◀◀ again skips to the beginning of the previous track.

Fast Forward and Reverse

Press and hold **TRACK** ►► or **TRACK** ◀◀ on the remote control to fast forward or reverse a track.

Pause

Press / II to temporarily stop USB playback.

Press / II again to resume playback.

File Search Step 1

Press **SELECT** to enter the file/folder search mode. A list of all the folders from the USB device will be displayed.

Note: Any files located in the root directory will be located in the folder named "ROOT". Press **SELECT** to view the files on the root folder.

Step 2

Turn the volume knob to cycle through all the folders on the device and press **SELECT** to choose the desired folder. The list of files in the selected folder will be displayed. Turn the volume knob to cycle through the list of files.

Note: Pressing **GO BACK** when viewing the contents of a folder will return to the list of folders on the USB device. Press **GO BACK** again to exit the search menu.

Step 3

Once the desired song is displayed, press **SELECT** to begin playback of the desired song.

Note: Due to differences in USB device transfer speeds, it is recommended to limit each folder to less than 30 songs.



Displaying Information

When a file is accessed, the clock and elapsed time will be displayed. Press **DISP** momentarily to select beween song title, artist, file name, folder name, track number and clock/elapsed time.

"NO TITLE" will be displayed if no song title information is available.

"NO ARTIST" will be displayed if no artist information is available.

Song Title Icon This icon will illuminate when the song title is displayed.

Artist Icon This icon will illuminate when the artist name is displayed.

Folder Icon This icon will illuminate when the folder name is displayed.

File Icon This icon will illuminate when the file name is displayed.

Folder Access

Press to select the previous folder.

Press to select the next folder.

Note: Folder access is only available on devices with more than one folder.

Repeat

Press **RPT** to enter the Repeat menu, then turn the volume knob to select one of the following options:

- ALL Plays all tracks on the device.
- TRACK Continuously repeats selected track.
- FOLDER Continuously repeats all files in selected folder.

Random

Press **RDM** to enter the Random menu, then turn the volume knob to select one of the following options:

- OFF Cancels the RDM function.
- ALL Plays all tracks in random order.
- FOLDER Plays all tracks in folder in random order.

Note: Random mode is retained in memory when selecting between other modes and when the unit is turned on/off.

Intro

Press **INT** to enter the Intro menu, then turn the volume knob to select one of the following options:

- OFF Cancels the INT function.
- ALL Plays first 10 seconds of each track.
- FOLDER Plays first 10 seconds of each track in folder.

Character Support

Maximum character display information

- Track name 32 character maximum
- Directory name 32 character maximum
- *Song title 32 character maximum
- *Artist name 32 character maximum

*Song title and artist name will only be displayed if included with the MP3/WMA file.

Media Compatibility

The following types of files are compatible:

- MP3 data
- WMA data

The following types of files are not compatible:

- WMA files that are protected by DRM (Digital Rights Management).
- WMA lossless format
- MP3 PR0 format
- MP3 playlists
- WAV format

Playback Order

MP3/WMA playback sequence is based on order the files are copied to the USB device and begins in the root folder. Any empty folders or folders that do not include MP3/WMA files are skipped. Depending on your software, the playback order may vary.

Playback Capacity

- Maximum number of files: 999
- Maximum number of folders: 255 plus the root directory
- Maximum number of files in each folder and root: 999

Note: If the number of files/folders exceeds the maximum outlined above, the additional files/folders will be ignored.

Note: Devices that exceed the maximum number of files or folders may not function properly.

USB Device Compatibility

Due to the differences of USB devices, some devices may not be compatible. USB devices must be 'mass storage class' and formatted to the FAT or FAT32 file system in order to ensure compatibility.

Additional MP3/WMA

Information

Only MP3 files with filename extension (.mp3) can be played. Only WMA files with filename extension (.wma) can be played. Do not attempt to play non-MP3/WMA files with

the MP3/WMA extension.

Sampling Frequency

Rates

MP3 8kHz ~ 48kHz

WMA 32kHz ~ 48kHz

Transfer Bit rates

MP3 32kbps ~ 320kbps constant

Variable bit rates

WMA 32kbps ~ 192kbps constant

Variable bit rates

Note: Some files may not play or be displayed correctly,

depending on sampling rates and bit rates.

MP3 Tag Display ID3 tags Version 1.0 to 2.4

Note: If an invalid ID3 tag version is detected, "NO

SUPPORT" will scroll on the display.



Pairing a Device

Preparation

Before you can use a Bluetooth device, it must be paired and connected. Make sure that Bluetooth is activated on your device before you begin the pairing process.

Pairing a New Device

The unit broadcasts the pairing signal constantly when no devices are currently connected. Complete the pairing sequence from your Bluetooth device. Refer to the owner's manual for your device for more details.

The device name is "DUAL BT" The Bluetooth passcode "1234"

Note: The unit can be in any mode of operation when pairing is performed.

Pairing Additional Devices

If a device is currently connected, press and hold to disconnect the current device before a new device can be paired. Then begin the pairing sequence from the new Bluetooth device.

(Re)Connecting a Paired Device

Most Bluetooth devices support the auto-connect feature, and will connect automatically if the device is in range when the unit is powered-on. If your device was previously paired but does not connect, use these instructions below. Some devices require authorization to allow the auto connect feature.

- If your most recently connected Bluetooth device becomes disconnected or does not reconnect, press from Bluetooth mode to reconnect your mobile device.
- To connect a previously paired device that was not recently connected:
 - 1) If applicable, press and hold \frown to disconnect any connected mobile devices.
 - 2) From Bluetooth mode, press **SELECT**. "Paired Devices" will appear on the LCD.
 - 3) Turn the volume knob to cycle through the list of devices.
 - 4) Press **SELECT** or **1** to connect to the desired device. It must be in range to connect.

Note: If the **Auto Connect** setup menu setting is set to **OFF**, you must press **1** to connect you device after pairing, and each time the unit is powered-on.

Disconnecting a Device

Press and hold for 3 seconds to disconnect a connected device. The device will remain paired and appear in the PAIRED DEVICES menu, but not be connected.

Making a Phone Call

Manual Dialing

- Press once. "Enter Phone Number" will be shown, then an "_" will appear on the display.
- Using the remote control, enter the phone number using the 0-9 buttons. Press on the remote control or the unit's front panel to begin dialing.

Note: Placing a phone call from your cell phone will also use the Bluetooth function of the unit.

Recent Calls List

- Press SELECT from Bluetooth mode to view the 10 most recent phone calls that were dialed, received or missed while connected to the unit.
- Turn the volume knob to cycle through the recent phone numbers. Press SELECT or to dial the phone number.

Redialing the last number

To redial the last phone number, press \(\bullet\) two times from Bluetooth mode. Press \(\bullet\) again to redial the phone number.

Receiving and Ending Phone Calls

Receiving a Phone Call

Incoming phone calls will automatically appear on the display and a ring tone will be heard.

Note: The volume of the ring tone depends on the volume level of the unit. The incoming ring tone may not be heard if the volume is set to a low level or mute is activated.

- Press
 to receive the incoming phone call.
- Press to refuse the incoming phone call.

Note: If **Auto Answer** is set to **ON** in the setup menu, all phone calls will be received automatically.

Ending a Phone Call

During an active phone call, press to end a phone call. If the phone call was received when listening to music in another mode, the unit will resume the previous mode.



During a Phone Call

Volume

Turn the **volume knob** to adjust the volume level during a phone call. Bluetooth mode has a separate volume level from the main volume of other modes. The unit will remember the volume level in Bluetooth mode and always return to the last volume level for each phone call.

Microphone Mute

Press **MUTE** during a phone call to turn the unit's external microphone off. Press **MUTE** again to resume microphone operation.

Audio Transfer

Press **DISP** during a phone call to transfer the call from the unit to the cell phone. Press **DISP** again to toggle the audio back to the unit.

Call Hold

During a phone call, when there are no additional incoming calls, press \frown to place the call on hold. Press \frown again to resume the phone call.

Note: Audio transfer, call waiting and call hold must be supported by the mobile phone and service provider to function properly.

Bluetooth Setup Menu Options

Function	Options	Action
Bluetooth	BT (ON/OFF)	Enables/disables Bluetooth functionality.
Auto Answer	AANS (OFF/ON)	When set to ON, every incoming phone call will automatically be answered after 2-3 rings. When set to OFF, the houtton must be pressed to answer incoming phone calls.

Streaming Audio Operation

The unit supports A2DP (advanced audio distribution profile) wireless streaming audio from your Bluetooth mobile device directly to your head unit. You can also control your music from the front panel of the head unit using AVRCP (audio video remote control profile).

Notes:

- To stream music to your head unit, your mobile device must support the A2DP and AVRCP Bluetooth profiles. Check the owner's manual of your mobile device for details.
- Streaming audio must be enabled from your mobile device. This option will vary depending on the device. Some devices allow streaming audio to be disabled.

After pairing, connecting and enabling streaming audio from a compatible mobile device, begin playing music using the music player on your mobile device. Once the music is playing, the following functions can be used to control the music:

- The ►► button will skip to the next available audio track.
- The **◄** button will skip to the previous audio track.
- The ►/II button will toggle between play and pause during playback.
- The button will stop the audio playback.

Note: Some Bluetooth devices may not fully support these commands.

Troubleshooting

Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage Red wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
(Black wire not connected	Check connection to ground
	Fuse blown	Replace fuse
	Speaker wires not connected	Check connections at speakers
Unit has power (but no sound)	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
	Yellow or red wire touching chassis ground	Check for pinched wire
Unit blows fuses	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuse with correct rating
Evenence ekinning	Unit is not mounted correctly or backstrap is not secure	Check mounting sleeve and backstrap support
Excessive skipping	Physical defect in media (CD, CD-R or CD-RW)	Check media for scratches
ERR FILE appears	Disc read error	Press eject or RESET
on display	Focus error or disc is in upside down	Press eject or RESET
NO FILE appears on display	No playable MP3files found on the device	Check the device for valid MP3 files
Unit will not accept	CD mechanism position out of alignment	Press EJECT to reset CD mechanism position
a disc	CD transit screws still in place	Remove 2 transit screws located on top of the unit
NO SUPPORT appears on display	An invalid ID3 tag version is present	Version 1.0 to 2.0 ID3 tags are supported.

DC206BT OPERATION



Limited One Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased from an authorized Dual dealer and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via www.dualav.com.

What to do?

- Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
- 2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
- 3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
- 4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:
 - Call us toll-free at 1-866-382-5476
 - E-mail us at cs@dualav.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.



Specifications

CD Player | Frequency response: 20Hz-20kHz

Channel separation @ 1kHz: >60dB

D/A converter: 1 Bit

FM Tuner | Tuning range: 87.5MHz-107.9MHz

Usable sensitivity: 8.5dBf

50dB quieting sensitivity: 10dBf Stereo separation @ 1kHz: >30dB Frequency response: 30Hz-13kHz

AM Tuner | Tuning range: 530kHz-1710kHz

Usable sensitivity: <42dBu

Frequency response: 30Hz-2.2kHz

General | Speaker output impedance: 4~8 ohms

Line output voltage: 2 Volts RMS

Dimensions: 7" x 7" x 2" (178 x 178 x 50 mm)

Design and specifications subject to change without notice.



CEA-2006 Power Standard Specifications (reference: 14.4VDC +/- 0.2V, 20Hz~20kHz)

Power Output: 5 Watts RMS x 4 channels at 4 ohms and \leq 1% THD+N Signal to Noise Ratio: 80dBA (reference: 1 watt into 4 ohms)

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.