

## XD6150

#### **INSTALLATION/OWNER'S MANUAL**

AM/FM/CD Receiver with 3.5mm Auxiliary Input, USB Charging Port and Detachable Face











### **Preparation**

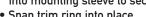
Please read entire manual before installation.

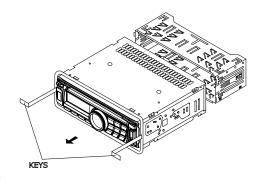
#### **Before You Start**

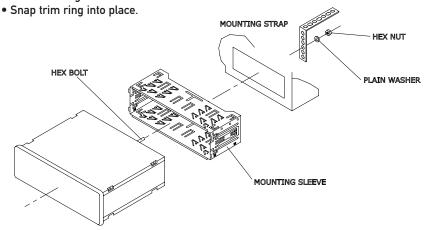
- Disconnect negative battery terminal. Consult a qualified technician for instructions.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

#### **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.



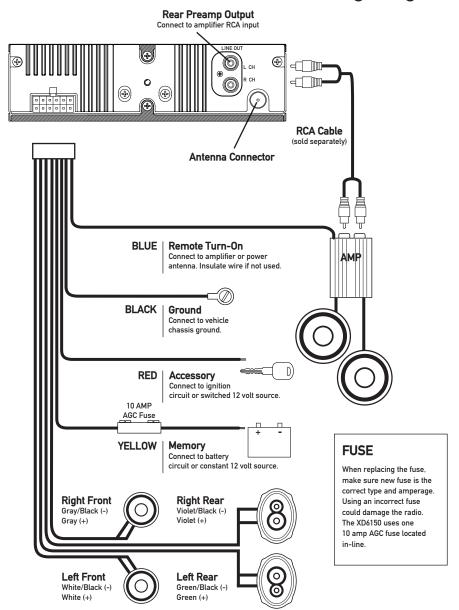




TYPICAL FRONT-LOAD DIN MOUNTING METHOD



#### Wiring Diagram





#### **Control Locations - Receiver**



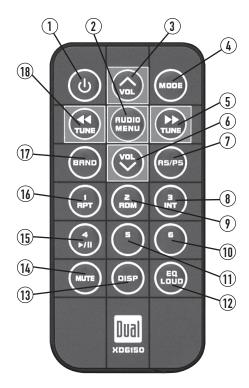
- (1) Release
- (2) Mode
- (3) Audio/Menu
- 4) Preset 1/Repeat
- 5 Preset 4/Play/Pause
- (6) Preset 2/Random
- (7) Preset 5
- (8) Preset 3/Intro
- (9) Preset 6
- (10) Eject

- (11) USB Charging Port
- (12) Auxiliary Input
- 13 Tune/Track Up
- 14) Tune/Track Down
- (15) Display
- 16) Band
- (17) EQ/Loudness
- (18) Auto Store/Preset Scan
- (19) Mute
- (20) Power (**(**)

The XD6150 has an easy-to-use interface that provides a rewarding experience, as well as support for your favorite tunes. Audio CD-R and CD-RW disc playback ensures compatibility with your music collection, and the RCA preamp output provides the right connections to expand your system. From its front panel auxiliary input for connecting your MP3 player, to the detachable face for security assurance, this head unit has you covered.

# XD6150 OPERATION

#### **Control Locations - Remote**



- 1 Power (**b**)
- (2) Audio/Menu
- 3 Volume Up
- (4) Mode
- 5 Tune/Track Up
- (6) Volume Down
- (7) Auto Store/Preset Scan
- (8) Preset 3/Intro
- (9) Preset 2/Random

- (10) Preset 6
- (11) Preset 5
- (12) EQ
- (13) Display
- (14) Mute
- (15) Preset 4/Play/Pause
- (16) Preset 1/Repeat
- (17) Band
- (18) 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

Semi-Permanent Faceplate Installation

Remove trim ring and install supplied #1 x 7/32" Phillips head screw through left side of mounting frame into faceplate.

Power On/Off

Press  $\circlearrowleft$  or any other button (except eject) to turn the unit on. Inserting a disc will turn the unit on automatically. Press  $\circlearrowleft$  to turn the unit off.

Mode

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

Note: CD mode will not appear unless a CD is inserted.

**Auxiliary Input** 

Insert a 3.5mm connector in the front panel AUX port.
Connect the other end of the 3.5mm connector to the headphone output of an audio device, MP3 player, etc. Press MODE to select AUX mode.

**USB Charging Port** 

Insert the USB connector of a battery-powered USB device into the USB charging port on the front panel, which provides 5 volts DC and 1.0 amps. The USB device will immediately begin charging.

**Note:** The USB charging port may not be compatible with every device due to differences in power requirements.

Note: This USB port provides power only and will not play back music from a USB device.

Volume

Adjust volume using volume knob (00-46).

Mute

Press MUTE to silence the audio. "MUTE" will flash in the display. Press MUTE again to cancel.

Reset

Press to **RESET** the unit upon initial installation or if abnormal operation occurs. The reset button is located behind the faceplate.

Display

Press **DISP** to select between clock and different types of information, such as radio frequency or CD track information.

#### **General Operation**

Set the Clock

With the unit on, press and hold **DISP** until the clock begins to flash, then release. Press **TUNE** ◀ to adjust the hours and **TUNE** ▶ to adjust the minutes. Press **DISP** momentarily to save the selected time.

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/MENU for more than 3 seconds to access the setup menu, then press AUDIO/MENU to cycle through menu options. When desired option appears in the display, rotate the volume knob left/right to adjust or activate the desired function.

#### Setup Menu

Menu Function	Options	Action	
Tuner Frequency Spacing	FREQ USA	Programs unit to USA tuner spacing. (200kHz for FM and 10kHz for AM)	
	FREQ EUR	Programs unit to European tuner spacing. (50kHz for FM and 9kHz for AM)	
Clock Display	CLK OFF	Programs unit to not display the clock when the power is off.	
	CLK ON	Programs unit to display the clock when the power is off.	
Auxiliary Input	AUX ON	Enables the front panel 3.5mm auxiliary input.	
	AUX OFF	Disables the auxiliary input.	
Beep Confirmation	BEEP OFF	Disables the confirmation beep.	
	BEEP ON	Enables the confirmation beep.	
Local/Distance Tuning	LOCAL OFF	Activates distance tuning.	
	LOCAL ON	Activates local tuning for strong station reception only.	
Power on Message	MSG OFF	Disables power on message.	
	MSG ON	Enables power on message to be displayed.	
Demonstration Mode	DEMO OFF	Disables the demonstration mode.	
	DEMO ON	Enables the scrolling demonstration message.	



#### **General Operation**

**Audio** 

Press **AUDIO/MENU** momentarily to select between Volume (default). Bass. Treble. Balance and Fader.

 $\rightarrow$  VOLUME  $\rightarrow$  BASS  $\rightarrow$  TREBLE  $\rightarrow$  BALANCE  $\rightarrow$  FADER -

Bass

Press AUDIO/MENU until BAS appears. Rotate the volume knob left/right to adjust (-6 minimum / +6 maximum).

Treble

Press AUDIO/MENU until TRE appears. Rotate the volume knob left/right to adjust (-6 minimum / +6 maximum).

**Note:** Any adjustment to the Bass or Treble settings automatically cancels the current EQ curve (if one is selected).

Note: Bass and Treble settings are retained for each mode individually.

Balance

Press AUDIO/MENU until BAL appears. Rotate the volume knob left or right to direct the sound output to the left or right (BAL L12 - BAL R12). BAL 00 represents equal balance.

Fader

Press AUDIO/MENU until FAD appears. Rotate the volume knob left or right to direct the sound output to the front or rear (FAD F12 - FAD R12). FAD 00 represents equal fader.

**Preset EQ Curves** 

Press **EQ**•**LOUD** to select between POP, JAZZ, CLASSIC, BEAT, ROCK and FLAT (default) equalization curves. Any adjustment to the Bass or Treble settings automatically cancels the current EQ curve (if one is selected).

Loudness

Press and hold **EQ•LOUD** for 3 seconds to activate the loudness function. Activating this feature will enhance the bass and treble frequencies when listening to music at low volumes.

#### **AM/FM Tuner Operation**

**Seek Tuning** 

Press **TUNE** ◀◀ or **TUNE** ▶▶ for more than one second to seek the next strong station.

Manual Tuning

Press **TUNE** ◀◀ or **TUNE** ▶▶ momentarily to move radio frequency up or down one step at a time. Press and hold to advance quickly.

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 two seconds. When stored, the preset number will appear in the display. The station can be recalled anytime by pressing the corresponding preset button.

**Preset Scan** 

Press AS•PS momentarily to scan presets 1-6 on the current band, pausing for five seconds at each. Press AS•PS again to cancel.

**Automatic Station Store** 

Press AS•PS or more than two seconds to automatically store the six strongest stations to the 1-6 preset buttons in the current band. Press AS•PS again to cancel.



#### **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 (AM/FM or AUX). 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 and Reverse

Press and hold TRACK ►► or TRACK ◀ to fast forward or reverse a track.

Pause

Press /II to temporarily stop CD playback.
Press /II again to resume playback.

Repeat

Press RPT to continuously repeat the selected track. Press RPT again to cancel.

Random

Press **RDM** to play all tracks in random order. Press **RDM** again to cancel.

Intro

Press INT to play the first 10 seconds of each track. Press INT again to cancel.

CD-R/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 encrypted or copy-protected CDs that do not conform to the audio CD-DA red book recording standard.

**Note:** CD-R/RW recording sessions must be closed (finalized) for playback.



## Troubleshooting - General

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
Unit has power (but no sound)	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuses	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuse with correct rating
Excessive skipping	Unit is not mounted correctly or	Check mounting sleeve and
	backstrap is not secure	backstrap support
	Physical defect in media (CD, CD-R or CD-RW)	Check media for scratches
ERROR-01 appears on display	Disc read error	Press EJECT or RESET
ERROR-02 appears on display	Focus error or disc is in upside down	Press EJECT or RESET
Unit will not accept a disc	CD mechanism position out of alignment	Press and hold <b>EJECT</b> for 3 seconds to reset CD mechanism position
	CD transit screws still in place	Remove 2 transit screws located on top of the unit

## **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 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: 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.

#### 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.
- 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.
- 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: 10Hz-20kHz

Channel separation @ 1kHz: >65dB

D/A converter: 1 Bit

FM Tuner | Tuning range: 87.5MHz-107.9MHz

Usable sensitivity: **8.5dBf** 50dB quieting sensitivity: **10dBf** Stereo separation @ 1kHz: **40dB** Frequency response: **30Hz-13kHz** 

AM Tuner | Tuning range: 530kHz-1710kHz

Usable sensitivity: 22uV

Frequency response: 30Hz-2.2kHz

General Operating voltage: 11-16 VDC, negative ground

Speaker output impedance: 4~8 ohms Line output voltage: 2 Volts RMS

Dimensions: 7" x 2" x 7" (178 x 51 x 178 mm)

Design and specifications subject to change without notice.



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

Power Output: 17 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.





Dual Electronics Corp. Toll Free: 1-866-382-5476

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