

# DIGITALRADIO DP6400DAB Digital Radio Tuner DAB/DAB+ **User Manual**

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## Safety

#### **WARNING**

Stop the car before operating the unit. Important to know...

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- Caution: Adjust the volume so that you can hear sounds outside the car. Driving with the volume too high may cause an accident.
- The illustrations in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the illustrations may differ from what appears on the actual equipment.
- If you experience problems during installation, consult your dealer.
- When you purchase external components, check with your dealer to make sure that they work with your model and in your area.

#### **Maintenance**

Cleaning the unit: Wipe off the dirt on the panel with a dry silicon or soft cloth. Failure to observe this precaution may result in damage to the monitor or unit.

Cleaning the connector: Wipe off dirt on the connector of the unit and faceplate. Use a cotton swab or cloth.

The unit has a IP54 weather resistant design, but can not be immersed into water or other liquids...

Improper use may damage the unit and may void the guarantee.

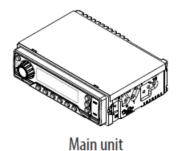
Caution: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS

AND DO NOT REPAIR BY YOURSELF PLEASE REFER SERVICING TO A QUALIFIED TECHNICIAN.

**NOTE:** the unit does not come with a DAB antenna. Please make sure a suitable antenna is installed to enable reception of the DAB frequencies.

## What's in the box

Check and identify the contents of your package:







## Installation/Connection

## **Basic Procedure**

- 1. Remove the key from the ignition switch, then disconnect the terminal of the car battery.
- 2. Make proper input and output wire connections.
- 3. Install the unit to your car.
- 4. Reconnect the terminal of the car battery.

## Warning

- The unit can only be installed in a car with a 12 V DC power supply, negative ground.
- If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.
- Disconnect the battery's negative terminal and make all electrical connections before installing the unit.
- Insulate unconnected wires with vinyl tape or other similar material. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Be sure to ground this unit to the car's chassis again after installation.
- If the power is not turned ON, the speaker wire may have a short-circuit or touched the chassis of the vehicle and the protection function may have been activated. Therefore, the speaker wire should be checked.

#### Caution

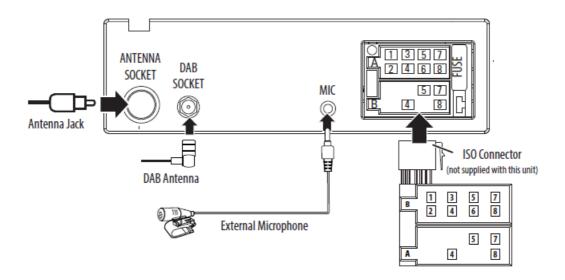
- If your car's ignition does not have an ACC position, connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, as with battery wires, the battery may die.
- Install this unit in the console of your vehicle. Make sure the faceplate will not hit the lid of the console (if any)

when closing and opening.

- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- If the fuse blows, first make sure the wires are not touching to cause a short circuit, then replace the old fuse with one that has the same rating.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or
  fail to work if you share the
  wires or ground them to any metal part in the car.
- When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear).
- Mounting and wiring this product requires skills and experience. For safety's sake, leave this work to professionals.

If you experience problems during installation, consult your dealer.

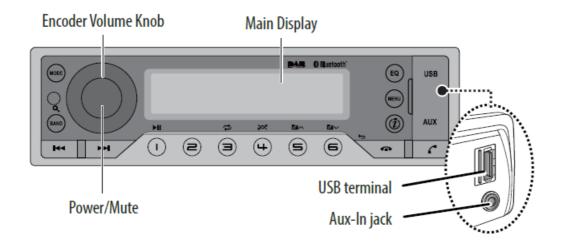
# **Wiring Connection**



## **ISO Connector Wiring Chart**

Pin	Color and function		Pin	Color and function	
A4	Yellow	Battery(+)	B1/B 2	Violet + /Violet/Black	Right rear speaker
A5	Blue	Connect to system control terminal of the power AMP or auto antenna relaycontrol terminal (Max 150MA 12V DC)	B3/B 4	Grey + /Grey/Black	Right front speaker
A7	Red	Ignition(ACC)	B5/B 6	White + /White/Black	Left front speaker
A8	Black	Ground	B7/B 8	Green + /Green/Black	Left rear speaker

#### **Unit Overview**



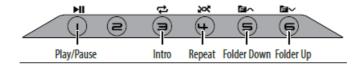
Main Un	General operation
MODE	Select the available source, if the power is turned on.
	<ul> <li>Short press to mute or restore volume.</li> <li>Turn the unit on. Press and hold again to turn the unit off.</li> <li>Confirm selection.</li> <li>Rotate it to increase or decrease the volume.</li> <li>Rotate it to select items.</li> </ul>
<b>!</b> ←	<ul> <li>Tuner Mode: Press to enter into the Auto Seek mode, press and hold to enter into the Manual S eek mode.</li> <li>Media Playback Mode: Press to track Up/Down, press and hold for fast forward/backward.</li> <li>BT Audio Mode: Press to track Up/Down.</li> <li>DAB Mode: Press to tune to a detected station.</li> </ul>

Q BAND	<ul> <li>Tuner Mode: Select the FM bands (FM1/FM2/FM3) or AM1/AM2. Press and hold to access into Auto Store mode, the six strongest stations of the selected band will be saved in preset channel aut omatically: FM1, FM2, FM3(1-6), AM1, AM2.</li> <li>Media Playback Mode: Press to access search Folder/File music mode.</li> <li>DAB Mode: Press repeatedly to select a band: DAB1,DAB2 or DAB3. Press and hold to start sea rching for on-air DAB radio stations.</li> </ul>
EQ	Press repeatedly to select a preset sound equalizer :  FLAT->POP->USER->TECHNO->ROCK->CLASSIC->JAZZ->VOCAL
MENU	<ul> <li>Press to access into the Audio Menu mode.</li> <li>Press and hold to access the System Menu.</li> </ul>
Ō	<ul> <li>Press to switch between Clock and Source Name.</li> <li>Tuner Mode: Press to view RDS received information.</li> <li>Media Playback: Press to view ID3 informations.</li> <li>DAB Mode: Press repeatedly to display available information that is transmitted by a DAB radio s tation.</li> </ul>
<b>∌</b> €	<ul> <li>Returns to the previous item.</li> <li>BT Handfree Mode: To reject/end a call.</li> </ul>
C	During a telephone conversation, press and hold to transfer the call back to the Hand phone for priv acy.

• **Tuner Mode:** Press the Numeric buttons to recall the preset stations. Press and hold the Numberic buttons to store the listening station.

• Media Playback: Press the Numeric buttons to perform the below operation:

Preset N umeric Buttons • **DAB Mode:** Press the numeric buttons to recall the preset stations. Press and hold the Numeric buttons to store the listening station.



# **Listen to Digital Audio Broadcasts (DAB)**

Digital Audio Broadcasting (DAB) is a way of broadcasting radio digitally through a network of transmitters. It provides you with more choice, better sound quality and more information. For the first time when DAB mode is switched on.

- Press on the main unit repeatedly to select DAB/DAB+.
  - The system performs auto scan.
  - · All the available DAB stations are stored.
  - The radio tunes to the first available station.

#### Scan for on-air stations

- Press and hold MENU to access the Setup Menu.
- · Press is displayed. repeatedly until [SCAN
- Press, the product starts scanning for on-air DAB radio stations, the detected stations are saved in the flash memory.

## Antenna Power Supply 12V On/Off

- Press
   and hold access into the Setup Menu.
- Press repeatedly until [12V ON] or [12V OFF] is displayed.
- Rotate to select an option, and then press to confirm.
  - [12V ON]: Enable Antenna power supply (12V).
  - [12V OFF]: Disable Antenna power supply (12V).

#### Erase the DAB station list

- Press and hold to access the Setup Menu.
- Press repeatedly until [PRUNE ] is displayed.
  - To remove invalid stations from the listof scanned stations, press .
  - To exit the system menu, press

## **Use Bluetooth Device**

## Pairing the Bluetooth device

On your Bluetooth-enabled device, follow the steps below.

- 1. Search for Bluetooth devices.
- 2. In the device list, select 7137546
- Enter the default password "0000", and then confirm the password entry.
   If the pairing is successful, the device name will be displayed on the LCD screen of this system.

#### Making a call

You can dial number through the mobile phone.

- 1. Use the Mobile Phone to dial and make an outgoing call
- 2. Once completed the dialing, the phone number and [CALLING] is displayed.

## Receiving a Call

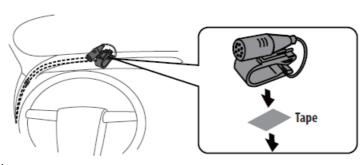
- If there is an incoming call, the phone number will be displayed. If the incoming call has no phone number, [PHONE IN] will be displayed.
- 2. Press to answer/accept the call.
- 3. When conversation ends, press to terminate the call.
- 4. Call Transfer

You can transfer voice from car speakers to mobile phones during a telephone conversation. During a telephone conversation, press and hold to transfers voice from car speakers to mobile phone.

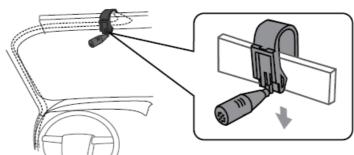
## **Adjust Microphone Position**

For better sound quality in making/receiving phone call through Bluetooth, place the microphone near the mouth.

- 1. Make sure the supplied microphone is connected to the car audio system.
- 2. Place the microphone at a proper location, for example:
  - · Stick it onto the dashboard



• clip it on the sun-shield



# **Adjust Setup Menu Settings**

- 1. Press and hold to access the Setup Menu, and then press repeatedly to select the item to be adjusted.
- 2. Rotate to select a value/option.
- 3. Press the button to exit.

# When you press or hold the following button(s)...

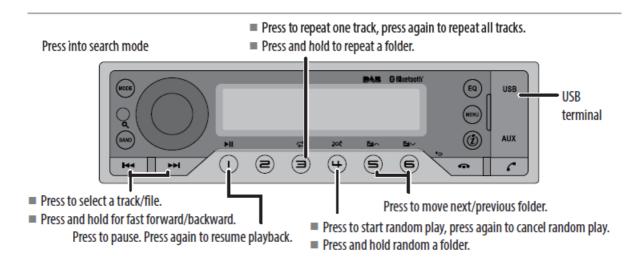
System Mode	Selectable setting
Clock Set	Adjust Hours and Minutes
Clock Format	Select the time format 12H or 24H
Beep Tone	Turn On or Off this beep sound
Dimmer	Adjust the LCD display backlight level between High or Low

Reset	Restore to factory default settings.		
Tuner Mode	Selectable setting		
RDS On/Off	Turn On or Off the RDS function.		
PTY (Program Ty pe)	Once inside the PTY mode, press to get into program type item, and ROTATE encoder volume knob to select category.  • Available Program Type:  POP M; ROCK M; EASY M; LIGHT M; CLASSICS; OTHER M; JAZZ M; COUNTRY; NATI ON M; OLDIES M; FOLK M; A-TEST; ALARM; NEWS; AFFAIRS; INFO; SPORT; EDUCA TE; DRAMA; CULTURE; SCIENCE; VARIED; WEATHER; FINANCE; CHILDREN; SOCIA L; RELIGION; PHONE IN; TRAVEL; LEISURE; DOCUMENT		
AF (Alternative frequencies)	<ul> <li>◆ ON: The unit will search for another station with stronger signal, but with the same prog ram identification as the current station automatically.</li> <li>◆ OFF: Turn off AF function.</li> </ul>		
TA (Traffic Announce ment)	<ul> <li>◆ ON: When there is traffic announcement, unit will automatically switch to the tuner mod e (regardless of the current mode) and begins to broadcast the announcement on traffic co nditions. When the traffic announcement is over, unit will automatically return to the previous mode.</li> <li>◆ OFF: Traffic announcement does not cut in.</li> </ul>		
CT (Clock Time)	<ul> <li>◆ ON: Turn on the RDS clock. Time shown on the unit will synchronizes with the clock time of the RDS station.</li> <li>◆ OFF: Turn off the RDS clock.</li> </ul>		

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Local	<ul> <li>◆ ON: only stations with strong signal can be broadcast. The Local indicator will light up.</li> <li>◆ OFF: Stations of both strong and weak signals can be broadcast.</li> </ul>
Area	Select suitable country area for this unit: EUROPE; ASIA; MID-EAST; AUSTRALIA; USA; LATIN;
BT Mode	Selectable setting
RE-CON / DIS-C ON	This feature allows to Re-connect or Dis-connect the paired mobile phone or Bluetooth device manually.

## Listening to external device



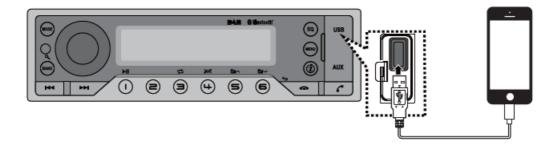
## Playing a USB device

- 1. Slide the USB socket cover to right.
- 2. Insert the USB device into the USB socket.
- 3. Press to select USB mode, the unit starts playing from the USB device.

# **Listening to external Aux input**

- 1. Press to select AUX mode.
- 2. Turn on the external component and start playing.

# **USB Smart Phone 1A charging**



- 1. Slide the USB socket cover to right.
- 2. Insert the iPhone/Smart Phone cable into the USB socket.
- Once the iPhone/Smart Phone is connected and recognized, the iPhone/Smart Phone begins to charge.
   NOTE This USB only can charge Phones, but cannot play or decode music files stored inside the Smart Phones.

# **Product Specification**

General		
IP Grade	IP54	
Power Supply	24 15A max	
Current fuse	15A	
Suitable speaker impedance	4-80	
Maximum power output	4x40W	
Continous power output	23W x 4RMS (4010%T.H.D)	
Aux-In level	800mV	
Operating Temperature	-20-+75°C	
Dimension (WxHxD)	178 x 50 x 111.9mm	

Weight		0.7 kg	
Radio Tuner			
Frequency R	FM		87.5MHzto 108.0MHz
ange	AM		522kHz to 1620kHz
FM Tuner	Usable Sensitivity (S/N=30dB)		5dBu
AM Tuner	Sensitivity/Selectivity (S/N=20dB)	) 40dBu	
DAB Tuner			
Frequency Range		174-240MHz	
Sensitivity		-96dBm(Band 111)	
Scan sensitivity		-97dBm	
Supports Audio Format			
MP3	Sampling frequencies		8/11.025/12/16/22.05/24/32 /44.1/48KHz
	Bitrates		32kbps-384kbps
WMA	Sampling frequencies		8/11.025/16/22.05/32/44.1/ 48KHz
	Bitrates		Okbps-320kbps

USB Device			
USB	USB1.1 Full speed		
USB Port	Type A		
USB Voltage	5.0V		
USB Output	1A		
Maximum USB Memory Size	32G		
USB Flash Drive and Hard	FAT16/FAT32		
Bluetooth			
Output Power	Class 2		
Frequency Band	2.4000 Ghz – 2.4835GHz ISM Band		
Range	3 meters (free space)		
Standard	Bluetooth 2.1 specification		
Compatible Bluetooth Profiles	Hands-Free Profiles (HFP) A2DP (Advanced Audio Distribution Profile)  AVRCP1.3 (Audio/Video Remote Control Profile)		

## Warranty

This product is under warranty for 24 months from the date of the purchasing. In order to demand warranty service please save documents for presentation. If items shipped without any proof of purchase, the service costs will be charged to customer. Please make sure sent items are packed properly in order to avoid any damage in transit-those will not be covered by warranty. If there are any problems during the warranty period caused by defects of material or manutacturing, Calearo Antenne SPA will provide remedy of defects free of charge. Calearo Antenne SPA or/and the Service Centre reserve the right to repair the defective product or exchange by new product at one's own discretion. Product replacement will not extent or renew the warranty period. It still will end after 24 months. Any damages caused by incorrect treatment, operation, installation, storage or acts of God as well as outside influences are not covered by warranty. Furthermore the warranty does not cover expendable items or any defects which only affect marginal usability. Any claim for damages is excluded unless negligence or deliberate intention of manufacturer may be demonstrated.

## **FCC** warning

Any Changes or modifications 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. 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.

## Care of the environment

Environmental information All unnecessary packaging has been omitted. We have tried to make the packaging easy to separate into three materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet.) Your system consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, and old equipment.

#### Disposal of your old product

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. This symbol on a product means that the product is covered by European Directive 2012/19/EU. Iyourself about the local separate collection system for electrical and electronic products. Follow local rules and never dispose of the product with normal household waste. Correct disposal of old products helps prevent Inform negative consequences for the environment and human health.

## **Documents / Resources**



<u>DIGITALRADIO DP6400DAB Digital Radio Tuner DAB/DAB+</u> [pdf] User Manual DP6400DAB Digital Radio Tuner DAB DAB, DP6400DAB, Digital Radio Tuner DAB, Digital Radio Tuner, Radio Tuner, Digital Tuner, Tuner

Manuals+,