

# **DAB1001**

**Wireless Digital Radio Interface**

**Installation & User Guide**

## Contents

Contents.....	2
Introduction .....	3
Contents of Package.....	4
Installation.....	5
Product Overview .....	5
Installation Procedure.....	5
General Operation .....	8
Display .....	8
Remote Control Operation.....	8
Setting up the DAB1001 .....	10
Using the Remote Control .....	10
Menu Settings.....	13
Setting the DAB1001 Transmission Frequency .....	16
FAQ .....	19
Technical Specifications.....	20

## Introduction

The DAB1001 is a wireless interface that offers a flexible and cost effective way to listen to digital radio via your existing in-car audio system.

Your present AM/FM system can be easily upgraded to receive DAB/DAB+ digital radio services using an FM-RDS micro-transmitter and without the addition of complex cabling. The DAB1001 DAB receiver is operated using a remote control, while all messages related to the system's operations, such as service names, memory presets etc., are converted to RDS text and displayed on the LCD screen of your in-car audio system. The flexible configuration options of DAB1001 make it easy to install in a range of car makes and models.

In areas of high FM usage, the DAB1001 may need its broadcast frequency changed to avoid interference. DAB1001 uses its AFD (Automatic Frequency Detection) function, allowing you to continuously listen to your favourite DAB programs through your car system, without the need to change the FM frequency manually. Consult your car radio manual to find if your car radio has an AF (Alternate Frequency) function and how it can be enabled.

If this AF function is not built in to your car radio, the DAB1001 has an Autoscan function that can automatically scan for 3 useable FM frequencies. These can be synchronised with the in-car system to allow for consistent reception.

The DAB1001 also provides a 3.5mm jack auxiliary input to allow another music source to play on the in-car system. This function requires an additional cable.

**Note:**

DAB1001 must operate with an RDS car radio in order to properly display the relevant system message on the in-car radio display.

## Contents of Package



DAB1001



Power Cable  
With Accessory Socket



Powered  
DAB Antenna



Rotary Knob  
Remote Control



CR2032 Battery



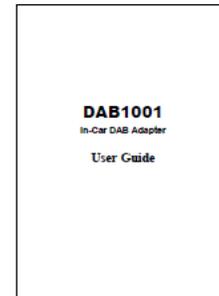
Dual Lock Tapes x2  
25mm x 55 mm



Dual Lock Tape x1  
25mm x 35mm



screw x2



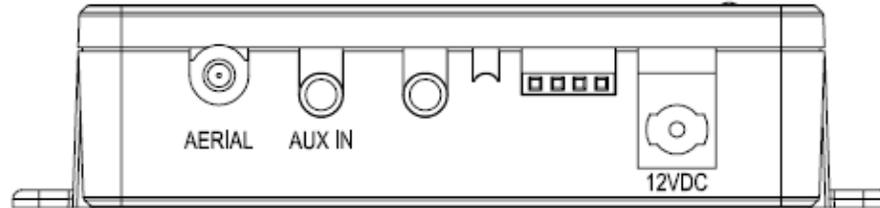
User Guide

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## Installation

### Product Overview

DAB1001 connections:

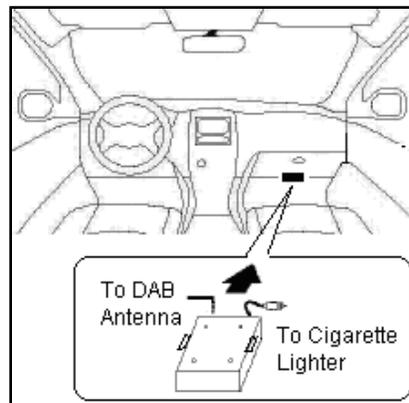


AERIAL – SMB connector for the DAB antenna  
AUX In – 3.5mm stereo audio jack for an auxiliary cable  
12VDC – Power socket for connecting to the Cigarette Lighter

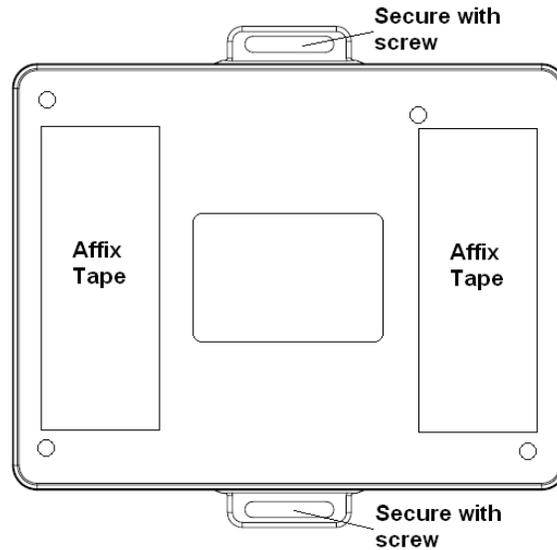
### Installation Procedure

Please read the installation procedure carefully prior to installation. Consult a professional installer if you have any issues or concerns with the installation.

1. For the best performance, locate the DAB1001 under the car's glove compartment. If using a different location, ensure it is away from metal objects and in an open area.
2. DAB1001 should be located with the bottom cover up and all cable and connectors to the rear.



3. Secure the DAB1001 using the supplied dual lock tapes and screws. The following diagram shows the correct positioning of the mounting tape and screws.



4. Install the supplied DAB antenna referring to the separate antenna installation guide for instruction.

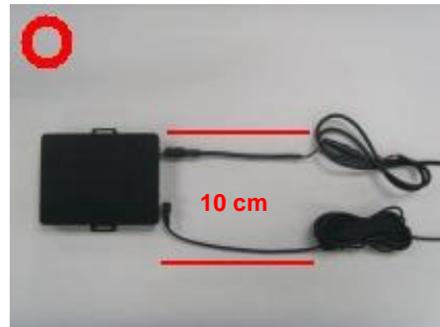
**The antenna supplied with DAB1001 is a universal DAB Antenna. Power will be supplied to the antenna by the DAB1001 interface. Therefore do NOT connect the antenna power separately.**

**When the antenna is installed please ensure the switch on the antenna is in the ANT position and the antenna power wires are insulated and secured.**

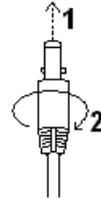
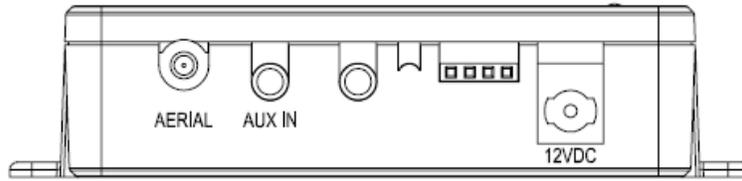
**ATTENTION**

- Replacing the supplied antenna with a third party product may result in reduced performance.
- When connecting/disconnecting the antenna from DAB1001, please disconnect the DAB1001 from the power first.
- Damage resulting from incorrect installation of the antenna is not covered by the warranty.
- Consult a professional installer if you have any issues or concerns with the installation.

5. Minimise coiling loops of excessive power and antenna cable, and do not secure them to the DAB1001. Any excess cable that does require looping should be done at least 10cm from the DAB1001 unit.



6. Connect one end of the power cable into DAB1001 and the accessory plug into car's accessory socket. There is a lock mechanism on the plug of Power Cable to DAB1001. Connect the DAB1001 before plugging in the accessory socket (see page 10).



Rotate 90° to ensure the plug locks into position

7. The DAB1001 is now ready for use.

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## General Operation

### Display

The DAB1001 unit is operated by using a remote controller; the system messages from the remote control operation are converted to RDS text and displayed as an 8 character display on the LCD screen of your in-car audio system.

Below is a list of DAB1001 system messages displayed on the in-car audio system:

Messages	Description
DABRADIO	<ul style="list-style-type: none"><li>• Display after DAB1001 is powered on.</li></ul>
<i>station name</i>	<ul style="list-style-type: none"><li>• Display the 8-character short service name of the DAB station.</li></ul>
<i>text info</i>	<ul style="list-style-type: none"><li>• Display DLS/DL+ (station text information) if enabled.</li></ul>
TUNING	<ul style="list-style-type: none"><li>• Indicate tuning a DAB station is in progress.</li></ul>
RESETTING	<ul style="list-style-type: none"><li>• Indicate performing a DAB reset or factory reset is in progress.</li></ul>
DONE	<ul style="list-style-type: none"><li>• Confirm completion for certain system operation, i.e., set a DAB preset mode.</li></ul>
RETUNING	<ul style="list-style-type: none"><li>• Indicate FM transmitting frequency is being returned to a new frequency.</li></ul>
<i>TO frequency</i>	<ul style="list-style-type: none"><li>• Indicate DAB1001 is changing FM transmitting frequency to a new frequency from a manual setting.</li></ul>
<i>AF frequency</i>	<ul style="list-style-type: none"><li>• Indicate DAB1001 is changing FM transmitting frequency to a new frequency from the AFD function.</li></ul>
POWEROFF	<ul style="list-style-type: none"><li>• Display after DAB1001 is turned off (into the standby mode).</li></ul>

### Remote Control Operation



Below is a list of remote control operations and their affect on the DAB1001:

Control key	General operation
Rotary Knob	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Turn on DAB1001 while it is off.</li> <li>• Confirm a selection.</li> <li>• Display DLS/DL+ (station information) while listening to a DAB station.</li> <li>• Press followed by <b>MODE</b>, <b>SCAN</b> or <b>MENU</b> to enter selection.</li> <li>• Press and hold to turn off DAB1001.</li> </ul> <p><b>Rotate [◀] [▶]</b></p> <ul style="list-style-type: none"> <li>• Step tune to select a DAB station.</li> <li>• Navigate to items, sub items while in <b>MENU</b> settings.</li> <li>• Navigate to DAB preset modes, AUX mode while in <b>MODE</b> settings.</li> <li>• Adjust FM transmitting frequency by 100 KHz after <b>SYNC</b> is pressed.</li> </ul> <p><b>Accelerate Rotation [◀] [▶]</b></p> <ul style="list-style-type: none"> <li>• Quick tune to select a DAB station.</li> <li>• Adjust FM transmitting frequency by 2MHz after <b>SYNC</b> is pressed.</li> </ul>
P1 MODE	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Recall station preset <b>P1</b>.</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Programs preset <b>P1</b> when a radio station is selected.</li> </ul>
P2 SCAN	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Recall station preset <b>P2</b>.</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Programs preset <b>P2</b> when a radio station is selected.</li> </ul>
P3	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Recall station preset <b>P3</b>.</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Programs preset <b>P3</b> when a radio station is selected.</li> </ul>
P4 MENU	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Recall station preset <b>P4</b>.</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Programs preset <b>P4</b> when a radio station is selected.</li> </ul>
SYNC	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Display adaptor's current FM transmitting frequency.</li> <li>• Select and set the FM transmitting frequency from a manual setting or from one of the four memory presets.</li> <li>• In AutoScan mode, select and set the FM transmitting frequency from one of the three AutoScan frequencies.</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Perform an immediate frequency change.</li> </ul>
PREVIOUS	<p><b>Press</b></p> <ul style="list-style-type: none"> <li>• Recall the last listened DAB station.</li> <li>• Revert the screen back to station name display from SCAN, SYNC and MENU settings</li> </ul> <p><b>Press and Hold</b></p> <ul style="list-style-type: none"> <li>• Press and hold to return the FM transmitting frequency to 87.6 MHz.</li> </ul>

## Setting up the DAB1001

1. Turn on your in-car audio system.
2. Enable the AF function on your car radio if it is equipped (Consult your car radio manual or the car dealer if your car radio has AF feature). This feature is typically enabled as standard.
3. Tune the car radio's FM frequency to FM 87.6 MHz, which is the same as DAB1001 default FM TX frequency.
4. Start DAB1001 by plugging the cigarette-lighter power plug into the cigarette lighter, the audio system display will show 《 DABRADIO 》 .
5. DAB1001 will perform a Scan of DAB stations automatically.
6. If FM 87.6 MHz is already used by an existing FM station, change the initial FM TX frequency as below:

### DAB1001 Operation

Press and hold **SYNC**, the DAB1001 will now set a new and clear frequency to transmit the FM signal.

### Car Radio Operation

Use auto scan function of your car radio to search for the FM broadcast having program service name 《 DABRADIO 》 . Tune on this channel. The DAB1001 and car radio are now synchronized.

7. Listen to DAB stations using the remote control keys.
8. To avoid unnecessary draining of the car battery, the DAB1001 will automatically turn off after 4 hours if it is not being used.

## Using the Remote Control

**The remote control uses advanced RF communication to operate the DAB1001 and further can be used from any position within the vehicle (front or rear). Please also note that due to the time required to update the vehicle's existing AM/FM RDS radio display there is typically a "short delay" between pressing a remote control button and the vehicle display showing the function. This is normal behaviour of the DAB1001 user interface.**

## To Turn On or Off DAB1001

The DAB1001 can be turned on or off by the following:

- Press the **Rotary Knob**, while DAB1001 is off, to return it to operating mode.
- Press and hold the **Rotary Knob**, while DAB1001 is in the operating mode, to turn it off.

## To Listen to the DAB Stations

There are two options available for you to select and listen to a DAB station: **Quick Tune** and **Step Tune**. Quick Tune allows you to move more quickly through the list of stations to a specific letter of the alphabet corresponding to the initial letter of a station. Once you have reached the desired initial character; you can then use Step Tune to move to the exact station.

### Quick Tune

Fast rotation of the **Rotary Knob** [◀] [▶] tunes to the first station in the next/previous alphabet. Repeat the action one character at a time, until the screen shows the DAB station with desired initial character.

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### Step Tune

Rotate the **Rotary Knob** [◀] [▶] to step through the stations, one by one, until the screen shows the desired station: « *station name* » .

Note:

- When the DAB station you have selected is not available, the screen will show « UNAVAIL » . There will be no audio output from the DAB1001.
- When the signal strength of the DAB station you have selected is too weak, the screen will show « POOR SIG » .
- Each time you start DAB1001, if the station list is empty, it will perform a Full Scan of DAB stations automatically.

### To Display Radio Text

DAB1001 is capable of receiving real time Dynamic Label Segment (DLS) station information such as song titles, music type and news or traffic updates, or Dynamic Label Plus (DL+) extended information for song track and song artist.

1. While listening to a DAB station, press the **Rotary Knob**, the station name display will be replaced by the station text.
2. If the feature is not enabled, the screen will show « TEXT OFF » . After a system time out, the screen will revert back to station name.

### To Set a DAB Mode

The DAB1001 provides memory positions for up to three sets of DAB Presets. The DAB mode positions are: DAB1, DAB2, and DAB3. Each DAB Preset position has its own 4 Memory Presets. This allows the user to setup three sets of four separate DAB Presets. These can be used for different drivers, passengers or music choices.

1. Press the **Rotary Knob** then **MODE** to enter mode function.
2. Rotate the **Rotary Knob** [◀] or [▶] to select a particular DAB Preset Mode.
3. Press the **Rotary Knob**, the system will set the selected Preset mode. The screen will then show « DONE » .

Note:

- When you switch to a different DAB Preset Mode, the Memory Preset list of the selected DAB Preset will be loaded into the internal operating system of the DAB1001 automatically. The DAB1001 will then perform all functions based on the settings of this DAB Preset Mode.
- The system default is **DAB1**.

### To Save a DAB Memory Preset

You can save your favorite stations in the DAB Memory Preset List. There are 4 memory presets.

1. Rotate the **Rotary Knob** [◀] or [▶] to select a desired station.
2. Press and hold **P1**, **P2**, **P3** or **P4**.
3. The screen will display a short message of « **PX SAVED** » .

Note:

- This new setting will overwrite a previous setting in Memory Preset **X**.

### To Recall a DAB Memory Preset

This function allows you to recall the favorite preset DAB station from the Memory Preset list for the current DAB preset mode.

1. Press a **PX** button (where **X** is from 1 to 4) to select the memory preset.
2. If there is no DAB station saved in Memory Preset **PX**, the screen will show « PX EMPTY » .

### To Set the Auxiliary Input Mode

The DAB1001 provides the capability to play audio device such as MP3 or iPod<sup>®</sup> etc. through your car radio.

1. Press the **Rotary Knob** then **MODE** to enter mode function.
2. Rotate the **Rotary Knob** [◀] [▶] until the screen shows « AUX » .
3. Press **Rotary Knob** and the system will switch to auxiliary input mode and start listening to the audio device. The screen will then show « DONE » .

Note:

- You must connect your audio cable between the Aux-In jack of DAB1001 and the audio device (cable not supplied).

### To Recall the Last Listened DAB Station

The DAB1001 automatically remembers the station that is last listened to.

1. Press **PREVIOUS** to recall the station that was last listened to.

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## Menu Settings

Press the **Rotary Knob** then **MENU** button to enter the menu function. Rotate the **Rotary Knob** [◀] [▶] to select a menu setting then press the **Rotary Knob** to confirm.

### To Reset FM Transmitting Frequency Setting

This function allows you to reset the FM transmitting frequency to the default setting FM 87.6MHz.

- Press and hold **PREVIOUS** to return the FM transmitting frequency to 87.6 MHz.
- Tune the car radio to FM frequency 87.6MHz manually.

### To Display Station's Signal Strength

This function allows you to display the signal quality of the station you are currently listening to.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « SHOW SIG » .
2. Press the **Rotary Knob** to display station's signal quality value, the screen will show « SIG xx% » where xx is the signal quality value

### To Enable DLS/DL+ Display

When you enable DLS/DL+ Display, the radio will show DLS information such as song titles, music types and news or traffic updates from the station if DLS is being received, or DL+ information, song track, song artist if DL+ is being received.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « RADIOTXT » .
2. Press the **Rotary Knob** to enter radio text selection operation.
3. Then you can rotate the **Rotary Knob** [◀] [▶] until the screen shows « ON » to enable the DLS/DL+ display on radio.
4. Or you can rotate the **Rotary Knob** [◀] [▶] until the screen shows « OFF » to disable the DLS/DL+ display on radio..
5. Finally, press the **Rotary Knob** to set the DLS/DL+ display. The screen will then show « DONE » .

Note:

- The default DLS/DL+ setting is ON.

### To Scan for the DAB Stations

This function searches for all DAB stations found, adding them to the station list in alphabetical order.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « FULLSCAN » then press the **Rotary Knob** to begin scanning for DAB stations in the channel range.
2. Alternatively, you can press the **Rotary Knob** then the **SCAN** button to do a FULLSCAN.

**Note:**

- Each time you start DAB1001, if the station list is empty, it will perform a Full Scan of DAB stations automatically. You may also need to perform a Scan function if you drive your car to a new area where the broadcasting DAB stations are not on the current station list.
- During a scan the screen will show 《 *FFF N* 》, in which *FFF* shows the current channel being scanned, and *N* indicates how many stations have been detected.
- While the Scan operation is in process, you can press the **Rotary Knob** at any time to stop the scan.
- If the DAB Station List is not empty before scanning then after completion of a scan, the DAB1001 will revert to playing the last DAB station automatically.
- If the DAB Station List is empty before scanning, the DAB1001 will tune in the first station of the new DAB Station list.
- If the DAB Station List is empty before scanning, and there is no station detected by DAB Scan, the screen will show 《 EMPTY 》.

**To Enable AFD (Automatic Frequency Detection)**

There are two AFD modes, AFD\_H (High Sensitive) & AFD\_L (Low Sensitive). While in AFD mode, DAB1001 will detect and determine if a frequency change is necessary constantly. Set AFD\_L mode, if you experience the FM frequency is being changed too often. Set AFD\_H mode, if you frequently hear static noise and the FM frequency is not changed. By default DAB1001 is already set to use AFD\_H mode.

**Setting AFD**

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows 《 SYNCMODE 》.
2. Press the **Rotary Knob**, and then rotate the **Rotary Knob** [◀] [▶] until the screen shows 《 AFD\_H 》 or 《 AFD\_L 》.
3. Press the **Rotary Knob**, the AFD function is now enabled and the DAB1001 is operating in the AFD mode. The screen will then show 《 DONE 》.

**Note:**

- If your car radio does not have AF feature, the AFD function must not be enabled (refer to section on page 15).
- When your DAB1001 identifies a need to switch FM transmission frequency this will usually force the car radio to change FM frequency automatically and the car radio display will show 《 *AF Frequency* 》 where *Frequency* is the new frequency DAB1001 is transmitting.
- If you hear static noise or a FM program and before AFD tunes to a clear frequency you can force an immediate frequency change manually by the following methods:
  1. Perform an immediate frequency change (refer to section on page 18).
  2. Recall and change FM Transmitting Frequency Saved in Memory (refer to section on page 17).
  3. Change the FM Transmitting Frequency Manually (refer to section on page 16).
  4. Reset the FM transmitting frequency to 87.6MHz (refer to section on page 13).
- While in AFD mode, if the FM transmitting frequency for DAB1001 and the car radio listening frequency is out of sync and you wish to reset them, do the following:
  1. Tune the car radio to 87.6MHz
  2. Press and hold **PREVIOUS** to return the FM transmitting frequency to 87.6 MHz.

### To Enable AutoScan

If it is not possible to use the AFD feature you can use AutoScan to automatically search for unused FM frequencies. When this function is activated, the DAB1001 will keep searching for 3 available FM frequencies automatically. You may select one of them as the new transmitting frequency and tune your car radio in this new FM frequency to receive DAB services continuously.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « SYNCMODE » .
2. Press the **Rotary Knob**, and then rotate the **Rotary Knob** [◀] [▶] until the screen shows « AUTOSCAN » .
3. Press the **Rotary Knob**, the function of AutoScan is now enabled and the DAB1001 is operating in the AutoScan mode. The screen will then show « DONE » .

#### Note:

- Switching to the AutoScan mode does not change the current FM transmitting frequency as it remains the same as before the switch.
- While in the AutoScan mode, DAB1001 will automatically search for three unused FM frequencies and save them into the memory in sequence (from frequency 1 to frequency 3) through the SYNC function. (refer to section on page 18).

### To Set Antenna Power

For DAB1001 to work with the supplied active antenna, the antenna power must be set to ON. If you replace the supplied antenna with any third party antenna, you must set the antenna power to OFF.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « ANTENNA » .
2. Press the **Rotary Knob** to enter the antenna power selection operation.
3. Then you can rotate the **Rotary Knob** [◀] [▶] until the screen shows « ANT ON » to set the antenna power on.
4. Or you can rotate the **Rotary Knob** [◀] [▶] until the screen shows « ANT OFF » to set the antenna power off.
5. Finally, press the **Rotary Knob** to set the antenna power. The screen will then show
6. « DONE » .

#### Note:

- The default Antenna Power setting is ON

### To Reset DAB Presets

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « DABRESET » .
  2. Press the **Rotary Knob** to perform a reset operation for DAB Presets.
  3. If you do want to reset, rotate the **Rotary Knob** [◀] [▶] to find « YES » and then press the **Rotary Knob** for confirmation.
  4. The screen will show « RESETTING » to indicate that DAB reset is in progress.
  5. The system will perform a scan of DAB stations automatically after the DAB has reset.
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Note:

- DAB reset will erase all previous DAB settings, including all memory presets, for all DAB Presets of the system, and all FM transmitting frequency presets. It will also clear the station list and perform a full scan for DAB stations.

### To Restore to Factory Settings

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « FACTORY » .
2. Press the **Rotary Knob** to perform a factory reset operation.
3. Rotate the **Rotary Knob** [◀] [▶] to find « YES » and then press the **Rotary Knob** for confirmation. Otherwise, you can press **Rotary Knob** to revert back to station name.
4. The screen will show « RESETTING » to indicate that factory reset is in progress.
5. The system will perform a scan of DAB stations automatically after the factory reset is completed. You must switch the car radio to FM 87.6MHz to continue DAB listening.

Note:

- Factory reset will erase all previous system's settings and set them to default.

### To Display Software Version

This function allows you to display the current software version of your DAB1001.

1. In the menu function, rotate the **Rotary Knob** [◀] [▶] until the screen shows « VERSION » .
2. Press **Rotary Knob** to display the software version, the screen will show the current software version number « x.x.x.x » .

## Setting the DAB1001 Transmission Frequency

If required, the FM transmission frequency can be set manually.

### To Display the current FM Transmitting Frequency

1. Press the **SYNC**, and the screen will show « *Frequency* » where *Frequency* is the current FM Transmitting Frequency.

### To Set the FM Transmitting Frequency

1. Press the **SYNC** and the screen will show the current FM Transmitting Frequency.
2. Rotate the **Rotary Knob** [◀] or [▶] until the screen shows « MANUAL » .
3. Press the **Rotary Knob** to confirm the selection, the screen will show the current FM Transmitting Frequency « *Frequency* » .
4. Quick rotation of the **Rotary Knob** [◀] [▶] steps up or down FM frequency by 2MHz. Slow rotation of the **Rotary Knob** [◀] [▶] steps up or down FM frequency by 100KHz. Choose a frequency until the desired FM frequency is displayed (e.g. 106.7MHz). Make a note of that frequency number.
5. Press the **Rotary Knob**, the DAB1001 will set and transmit the FM signal at this new frequency and the screen will show « TO *Frequency* » .
6. Tune the FM preset of your car radio corresponding to the same frequency.
7. Now you can listen to DAB stations via this new FM Frequency.

Note:

- It is recommended to set the selected FM frequency as one of the memory presets of your car radio, selecting this particular preset FM frequency and together with setting the

DAB1001's FM transmitting frequency will quickly enable you to start listening to DAB stations.

- While setting a new transmit frequency operation is in process and « TO Frequency » is displayed, other than the power key, any key pressed is ignored by the system.

### To Save an FM Transmitting Frequency in the Memory

It is suggested to save a few known free transmitting frequencies (up to 4 frequencies) in DAB1001 so that you can switch to a new FM transmitting frequency instantly when you drive into an area where the original FM frequency for DAB is no longer available.

1. Press the **Rotary Knob** and then press **MENU** button to enter menu function.
2. Rotate the **Rotary Knob** [◀] or [▶] until the screen shows « FMPRESET » .
3. Press the **Rotary Knob** to confirm the selection, the screen will show « F1 » .
4. Press the **Rotary Knob** to confirm the selection, the screen will show « Frequency » where *Frequency* is the frequency saved in the preset F1.
5. Then you can accelerate rotating the **Rotary Knob** [◀] [▶] to step up or down FM frequency by 2MHz, or just rotate the **Rotary Knob** [◀] [▶] to step up or down FM frequency by 100KHz, to choose a frequency until the desired FM frequency is displayed (e.g. 106.7MHz), and then press the **Rotary Knob** to save. The screen will show « F1 SAVED » and then show « F2 »
6. Repeat step 4 and 5 to select and save memory presets F2 to F4.
7. Before executing step 4, you can rotate the **Rotary Knob** [◀] or [▶] to quickly advance the frequency preset selection to the desired « FX » where **X** is from 1 to 4.

#### Note:

- The default FM frequencies saved in presets **F1** to **F4** are 87.6MHz, 92.5MHz, 102.5MHz and 107.9MHz, respectively.
- It is suggested to set those FM frequencies saved in DAB1001 into FM preset of your car radio. Selecting the FM preset of your car radio and the matching FM preset of DAB1001 will switch the FM transmission frequency instantly for a clear reception of the DAB station.
- Saving the frequency in memory does not affect the current FM transmitting frequency; it remains the same as before saving the frequency.

### To Recall an FM Transmitting Frequency from the Memory

If you wish to change the setting and switch to a previously saved free FM transmitting frequency manually, do the following:

1. Press **SYNC** the screen will show the current FM Transmitting Frequency.
2. Rotate the **Rotary Knob** [◀] or [▶] to select a preset **FX** and the screen will show « FX Frequency » Where **X** is from 1 to 4, and the *Frequency* is the FM frequency saved in memory, make a note of that frequency number.
3. Press **Rotary Knob**, the DAB1001 will set and transmit FM signal at this new frequency and the screen will show « TO Frequency » where *Frequency* is the frequency saved in the preset **FX**.
4. Tune the car radio to the same FM frequency.
5. Now you can listen to DAB stations via this new FM Frequency.

#### Note:

While setting a new transmitting frequency operation is in process and « TO Frequency » is displayed, other than the power key, any key pressed is ignored by the system.

## To Perform an Immediate Frequency Change

### In AFD Mode:

While listening to a DAB station, If you hear static noise or a FM program and before AFD tunes to a clear frequency you can force an immediate frequency change by doing the following:

1. Press and hold **SYNC**, the screen will show « *AF Frequency* » where *Frequency* is the new frequency that DAB1001 will set and use to transmit FM signal and force radio to tune to the same frequency automatically.
2. Now you can listen to DAB stations via this new FM Frequency.

Note:

- While setting a new transmitting frequency operation is in process and « *AF Frequency* » is displayed, other than the power key, any key pressed is ignored by the system.

### In AutoScan Mode

1. Press and hold **SYNC**, the screen will show « *TO Frequency* » where *Frequency* is the new frequency that DAB1001 will set and use to transmit FM signal.
2. Manually change your car radio's FM frequency to match the new DAB1001's new transmit frequency.

## To Perform a Frequency Change in AutoScan Mode

While in the AutoScan mode, DAB1001 will automatically search for three unused FM frequencies and save them into the memory in sequence (named frequency 1 to 3). These frequencies can be displayed by the following method.

### Operation on the DAB1001

- Press the **SYNC** button to enter the SYNC function. The screen will show the current FM Transmitting Frequency.
- Pressing **SYNC** now will cycle through the frequencies (1 to 3), at each stage showing « *SX Frequency* », where **X** is the frequency name (1 to 3). Stay at the preferred frequency.
- Press the **Rotary Knob** and the DAB1001 will set and transmit FM signal at this new frequency.

### Operation on Car Radio

- Tune the car radio to FM frequency 87.6MHz.

## FAQ

Please read this user manual carefully before using the DAB1001 In-Car DAB Adapter. If you still have difficulties to use this unit, this section gives some of the most likely solutions to the problems you might have.

### **I cannot find any DAB stations.**

Ensure that DAB coverage exists in your area. Please visit [www.worlddab.org](http://www.worlddab.org) or [www.digitalradionow.com](http://www.digitalradionow.com) to check for DAB coverage.

### **I can find DAB stations, but I cannot get any sound.**

Make sure that the car radio is not on mute; check the volume settings of the car radio.

### **I forget the FM transmission frequency setting of DAB1001.**

Press **SYNC** key the screen will show the current FM Transmitting frequency.

### **I cannot hear DAB program when I start up my car and turn on the car radio.**

Ensure the DAB1001 is not in the Auxiliary mode.

### **While listening to a DAB station, I lost reception suddenly and hear static noise or a FM program**

1. Check if DAB1001 station information shows 《 POOR SIG 》 or 《 UNAVAIL 》 , if so, you may be leaving the signal coverage area. Also, the station may be unavailable temporarily as you drive into a tunnel.
2. If DAB1001 is in AFD mode, the FM transmitting frequency for DAB1001 and the car radio listening Frequency maybe out of sync. To reset them, do the following:
  - Tune the car radio to FM frequency 87.6MHz.
  - Press and hold **PREVIOUS** to return the FM transmitting frequency to 87.6 MHz.
  - If DAB1001 is in AutoScan mode, the FM channel you selected for DAB mode may be occupied by an existing radio station. You need to change the frequency settings of FM Transmitter (refer to page 17).

## Technical Specifications

- Digital Audio Services: DAB/DAB+.
- RF Frequency Range: DAB Band III (174 MHz ~ 240 MHz).
- RF Sensitivity for DAB Band III: -98dBm ~ -100dBm.
- FM Transmit Range: 87.6 MHz ~ 107.9 MHz.
- Mains Power: 11 V ~16V DC
- Input Connectors: DC power jack, 3.5mm stereo audio jack.
- Presets: 4 DAB station presets (for each DAB mode) and 4 FM transmit presets.
- Operating Temperature Range: -10°C ~ +70°C.
- Storage Temperature Range: -40°C ~ +85°C.
- DAB Antenna Connector:
  - Connector Type: SMB
  - Output Voltage: 12V

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## Information On Waste Disposal

This mark on a product and/or accompanying documents indicates that when it is to be disposed of, it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked waste products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used.

For proper treatment, recovery and recycling; please take all WEEE marked waste to your Local Authority Civic waste site, where it will be accepted free of charge.

If all consumers dispose of Waste Electrical & Electronic Equipment correctly, they will be helping to save valuable resources and preventing any potential negative effects upon human health and the environment, of any hazardous materials that the waste may contain.



### Note about Remote control battery :

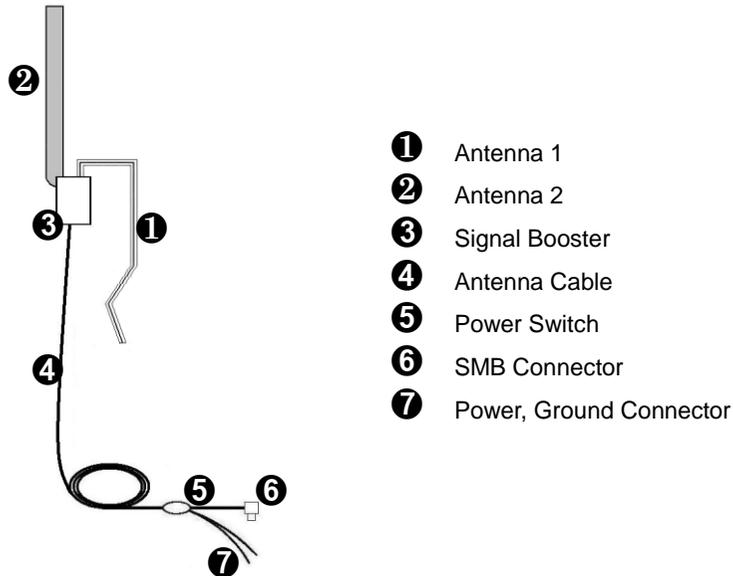
Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

## INTRODUCTION

This installation guide shows you how to install the ANT3008 glass-mount DAB Antenna into your car to work with an in-car DAB receiver.

**IMPORTANT PLEASE READ:** Once the antenna is adhered to the screen it cannot be removed and relocated. Please test the antenna in its location before permanently fixing. DABMotion will not accept RMA (returns) for antennas that have been adhered in location.

## OVERVIEW

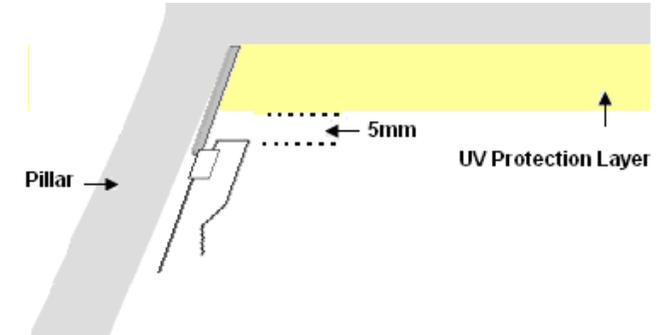


### Caution:

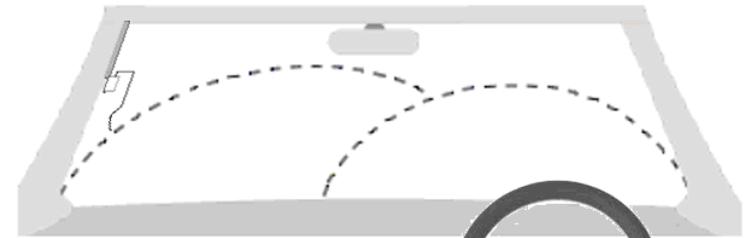
1. Please read the detail section of the installation procedure carefully prior to the actual installation.
2. This glass-mount DAB antenna is exclusively for use inside the vehicle.
3. It is not suitable for use on reflective-coated glass.
4. Do not bend or damage the antenna.
5. For safety reasons the antenna should be installed either on the passenger side of the front windshield or on the rear screen.
6. The car's DAB receiver must provide either a 12V phantom power feed to the SMB connector or the power and ground connectors must be connected to the car power supply system.
7. This guide is applicable to the AN3008 antenna.

## INSTALLATION PROCEDURE

1. Front windshield installation
  - 1.1 For the best performance the glass-mount antenna must be placed on the top left inside corner of the front windshield. If there is a UV protection layer across the top of the windshield then you must place the DAB antenna with Antenna 1 at least 5mm below the layer.



- 1.2 The glass-mount antenna must be placed outside of the swept area of the windshield wiper.



- 1.3 There is a black band on the edges of the windshield that includes a border of dots. Attach Antenna 2 over the black band and as close to the pillar (shown below) to get a better performance.



2. Rear windshield installation
  - 2.1 If the antenna cable can reach to the rear windshield, the antenna can be placed

on the top left corner of the rear screen, providing that is not reflective-coated. As with the installation onto the front windshield, attach the Antenna 2 over the black band at the side of the rear screen, and as close to the edge as possible.

- 2.2 For rear screens with the electric defroster, there are tiny electric lines across the glass. For the best reception, the Antenna 1 must not be aligned with the defroster's electric lines as illustrated below:

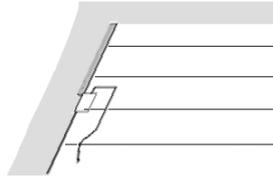


Fig 1

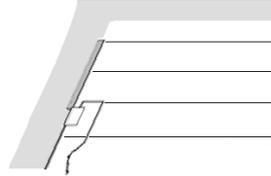
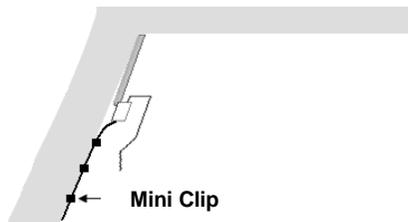


Fig 2

Fig 1: This is the recommended antenna installation for the best performance.

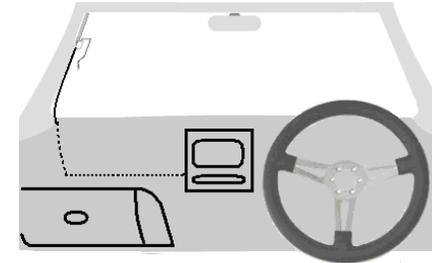
Fig 2: Top of the Antenna 1 is aligned with an electric line, this will hinder the reception quality and it is not recommended.

3. Clean the windshield.  
Ensure the antenna location on the windshield is clean and free of dirt, water, and other substances which will stop the antenna adhering to your car windshield properly. Clean the glass with an alcohol prep pad, and wait until the surface is completely dry before attaching the glass-mount DAB antenna.
4. Attach the glass-mount antenna to the windshield.
  - 4.1 As it is designed to be attached once only, if the antenna is removed it will not adhere again. Therefore it is recommended that you try fitting the antenna on the chosen location first before attaching the antenna permanently.
  - 4.2 Gently peel off the adhesive separator of Antenna 2 and paste it on the inside of the windshield on the chosen location, press and rub to bond it to the glass.
  - 4.3 Repeat step 4.2 for Signal Booster and then Antenna 1.
  - 4.4 Secure the antenna cable along the edge of the windshield.
    - a. Clip the supplied 3 mini-clips on the antenna cable just below the antenna.
    - b. Gently peel off the clips' adhesive separator.
    - c. Paste the clips along with the antenna cable on the edge of the windshield.



5. Route the antenna cable within the car interior and along the left side edge of the windshield to the DAB receiver.  
Make sure the antenna cable does not interfere with the safe operation of the steering

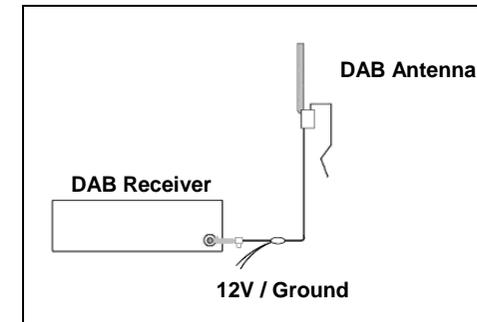
wheel, air bags, and seatbelts or other equipment.



6. Connect to the DAB receiver.
  - 6.1 Turn off the DAB receiver.
  - 6.2 If the car's DAB receiver provides 12V phantom power to the SMB connector then do the following:
    - Set the power switch to the ANT position.



- Plug the SMB connector at the end of the antenna cable into the DAB receiver's DAB antenna input connector as shown.



- 6.3 If the DAB car's receiver does **not** provide 12V phantom power to the SMB then do the following:
  - Set the power switch to the BAT position.



- Connect the power (red) and the ground (black) wires to +12V (switched & fused) and ground of the car power supply system, respectively.
- Plug the SMB connector at the end of the antenna cable into the DAB receiver's DAB antenna input connector as in 6.2 above.

**NOTE:** To achieve best performance, Antenna 1 must not be placed over a UV protection layer, while there is no such restriction to Antenna 2.