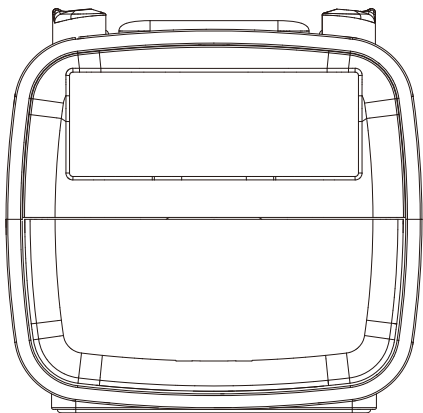




Desktop DAB+/DAB/FM Radio Receiver

DK-821B

User Manual



Please read this user manual carefully before using the receiver

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Introduction to the DK-821B Desktop DAB+/DAB/ FM Radio Receiver

The DK-821B Radio is a compact, multi-purpose and attractive clock radio with 5V/1.2A power supply for long hours of audio entertainment and a gateway into the world of digital DAB and FM audio.

There are four different operating modes:

1) DAB - Digital Audio Broadcast Radio

- CD quality audio received by the attached pigtail antenna



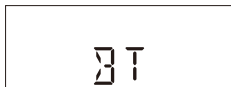
2) FM – Frequency Modulated Radio

- Listen to local FM Radio stations received by the attached pigtail antenna



3) BT – Bluetooth Powered Speaker

- Play audio transmitted from a Bluetooth source e.g. smart phone, laptop



4) SD – Micro SD/TF

- Play CD quality audio entertainment from MP3 files stored on Micro SD/TF memory card

Introduction to the DK-821B Desktop DAB+/DAB/ FM Radio Receiver



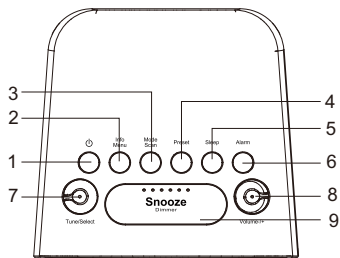
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Precautions

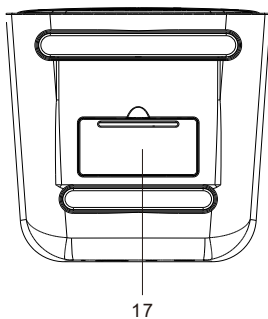
- Connect the power adaptor to the wall and the radio rear DC jack for power supply – do not apply any other power source or permanent damage to the radio may occur and be hazardous.
- To clean use only a damp cloth and dry with a clean towel - keep away from all liquids.
- To avoid loss of warranty do not attempt to repair or remove the cover for any reason.

Location of Controls

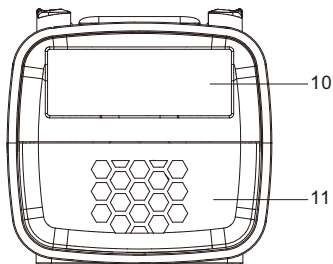
Top



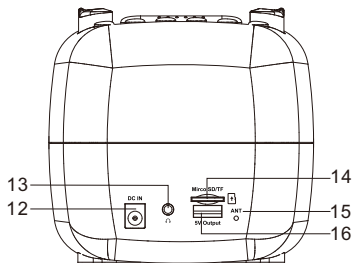
Bottom



Front



Back

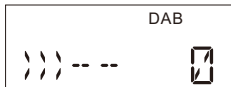


Location of Controls

- 1. On/Standby (⏻)** – Press to power on the radio and press again for standby
- 2. Info/Menu** – Press to display radio station information or Press and Hold for main menu
- 3. Mode/Scan** – Press to switch between radio operating modes i.e. DAB, FM, BT, and Micro SD/TF, or Hold for full scan in DAB and FM modes.
- 4. Preset** – Press and hold to add to preset list or press and release to display the list
- 5. Sleep** – Press to enter sleep setup mode
- 6. Alarm** – Press to enter the alarm setup mode.
- 7. Tune/Select** – Rotate the tune knob to highlight different options, press to confirm selection.
- 8. Volume +/-** – Rotate the volume knob to increase or decrease volume level
- 9. Snooze/Dimmer** – Press to dim the LCD backlight or when alarm is sounding , press to active the snooze.
- 10. Large Display** – 3x8cm monochrome LCD
- 11. Loud Speaker** – high fidelity, 2 Watt output power
- 12. DC IN Connector** – use the power adaptor provided
- 13. Headphone Connector** – Stereo 3.5mm
- 14. Micro SD/TF** – Card slot for audio file playback
- 15. Antenna** – attached pigtail antenna for DAB and FM modes
- 16. USB port** – Provides USB power source (i.e. 5 Volts) to charge battery of other USB devices e.g. smart phone.
- 17. Battery Compartment** – AAx2 battery backup for clock power when DC IN not connected

Overview of Radio modes and functions

When the radio is turned on for the first time it will go to DAB mode and scan for all available stations to create a list.



To go to a different mode, press the **Mode** button repeatedly to navigate through the modes to find and select any of these functions:

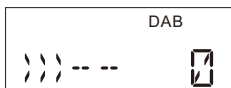
- 1) DAB – After a full scan to create a list of available stations; highlight and select a preferred station to start playing.
- 2) FM – After a full scan to create a list of available local stations; highlight and select a preferred station to start playing.
- 3) BT (Bluetooth) – Switch your Bluetooth device to a pairing mode and look up the device named “DK-821B ” from the list, select it to start pairing. When “Paired” (connected) to another Bluetooth device, use the Radio as a powered speaker. Maximum range of the Bluetooth wireless signal is 10 meters but this may be reduced by the presence of walls or other obstructions.
- 4) SD (Micro SD/TF) – Play audio files stored in MP3 format on Micro SD/TF memory card.

DAB Radio mode

With the attached pig tail antenna fully extended, turn on the radio and position antenna for strongest signal reception.

If this is the initial/first time the radio is turned on, it will go directly to DAB mode, automatically start a full station scan, create a list of all the DAB stations found and when finished, it is start playing the first station on the list.

If message “No DAB” is displayed, please press and hold the **Mode/Scan** button to start a full scan.



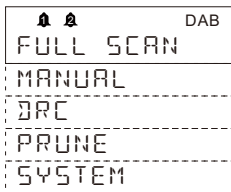
To play a different station, rotate the **Tune/Select** knob to display the station list; navigate the list to highlight the next station to play, press the knob to select the station and start playing.

Main Menu – Options and Settings

To display the Main Menu, press and hold the **Info/Menu** button until an option list is displayed. The Main menu is not available if no radio station available on DAB mode.

To exit sub-menu, press **Info/Menu** button again to go back to the previous menu.

Navigate the list to highlight an option; select by pressing the **Tune/Select** button.



If there is no activity within 30 seconds the radio will return to its previous function.

- Full Scan – Carry out a full scan to create or update list of all DAB stations available
- Manual (Manual tune) – Manually select a station by its transmission frequency and signal strength from the list provided.
- DRC (Dynamic Range Control) – This function improves the audio clarity when the DAB signal is poor or noisy by selecting one of three options:
 - 1) OFF (DRC Off) – No signal compression

Main Menu – Options and Settings

- 2) HIGH (DRC High) – Maximum signal compression to boost the low volume sounds while keeping the loud sounds at the received level.
 - 3) LOW (DRC Low) – Medium Compression
- Prune – Edit station list option to remove unwanted stations or stations that can no longer be received. Navigate to and highlight station to be removed; select “YES” to delete from list.
 - System - The DAB main menu contains other options to customize the radio:
 - Sleep – The radio has a built-in Sleep Timer with multiple delay options to enable listening while falling asleep. To turn off the timer select off in the time delay list.
 - Alarm - There are two separate wake up alarms that are set up independently i.e. act as two completely separate alarms.
Rotate **Tune/Select** knob to highlight Alarm mode; press knob to select Alarm mode and display a list of options.
To setup or change option selections navigate and highlight option by rotating the **Tune/Select** knob; press knob to confirm selection:
 - 1) Select Alarm 1 or Alarm 2 for setup
 - 2) Select ON to enable the Alarm function for the Alarm selected
 - 3) Set the time when the Alarm will sound

Main Menu – Options and Settings

- 4) Select Alarm sound duration option i.e. 15, 30, 45, 60 or 90 minutes
- 5) Select the source for the Alarm sound i.e. Buzzer or DAB and FM radio station in My Favorite list
- 6) Select option for the Alarm to automatically repeat i.e. daily, weekdays, weekends or once
- 7) Set Alarm sound volume; rotate **Tune/Select** knob to adjust volume level; press knob to confirm level
- 8) When Alarm setup is complete the display will show **SAVED** to confirm setup

Snooze - When the alarm sounds, press the **Snooze** button to mute the alarm for 9 minutes before the Alarms sounds again. The Snooze feature can be repeated multiple times.



To turn off the “Snooze” function, press the Power(⏻) button.

- Time - Select option from list to setup time standard to use along with preferred display format for the time and date:
 - 1) Set Time/Date – manual setup of current time and date
 - 2) Auto Update – For manual time and date setup select “No Update” option or select automatic updates from either DAB or FM radio signal

Main Menu – Options and Settings

- 3) Set 12/24 – option to select time display in 12 or 24 hour format
- 4) Set Date Format – Select DD/MM/YYYY or MM/DD/YYYY display format

Note: FM time updates are not always available in some areas.

- Backlight – options for setting functionality and brightness level for the color LCD.
Timeout – options for how long the backlight remains on with no user activity e.g. making selections, changing volume level etc. There are 9 options; ON to keep the backlight on until the radio is turned off or 8 delay times from 10 – 180 seconds.
- Language – Select one of five different languages used for displays: ENGLISH, DEUTSCH, ITALIANO, FRANCAIS, NEDERLANDS and NORSK.
- Reset – This is a factory reset to set all options and settings to the exit factory condition, delete all other user input (e.g. Presets); reboot the radio and go to DAB mode.
- SW VER – System information display e.g. Firmware / Software version.

FM Mode

With the pig tail antenna fully extended, position for strongest signal reception and select FM mode (Mode>FM).

To setup FM mode options press and hold **Info/Menu** button until the option list is displayed. The list contains all the same options as in the DAB main menu with two specific FM options added.

1) Scan setting – An option to scan for all stations or list only stations with good reception such that stations with low signal and noisy reception are not included in the FM station list.

If there is no FM station list or the list needs to be refreshed / updated press and hold the **Mode/Scan** button for a full station scan; add all the stations found in the Preset station list (maximum of 20 stations) and automatically start playing the first station on the list.



To select a different station press **Preset** button to display the station list, navigate the list using the **Tune/Select** knob to highlight the next station to play; press knob to start playing the station.

To fine tune the reception frequency (i.e. tune in) rotate the **Tune/Select** knob to change the frequency up or down in 0.05 MHz (50 KHz) steps.

Station Preset and Recall

Preset

Up to 20 DAB and 20 FM stations (i.e. 20 for DAB and 20 for FM) can be stored in the Preset memory for easy and fast access of favorite stations.

To set a Preset play the station to be stored in the preset memory; press and hold the **Preset** button to display current preset list.

Navigate the list by rotating the **Tune/Select** knob to highlight one of the 20 locations to store the station; press the knob to store the station in the location shown on the display and return to playing the station with the display updated to show the preset number / location.



The station assigned to a **Preset** button can be changed at any time by following the same procedure.

Recall

To recall any preset DAB or FM station press and release the **Preset** button to display the current list of Presets.

Navigate the list by rotating the **Tune/Select** knob to highlight a station; press the knob to start playing the station.

Bluetooth mode

Press Mode button repeatedly to show “BT” on the display. The radio’s Bluetooth wireless receiver can receive and play audio data files but does not support Bluetooth headphones.

Before the radio can be used as a powered speaker to play audio files received from a Bluetooth source device it must be connected (i.e. paired) to the device.

The Bluetooth source device controls the pairing process; find DK-821B in the list of available devices on the Bluetooth source device and pair the two devices. The “BT” icon will stop flickering when the two devices are paired.

Once paired the radio and source device will recognize each other, automatically connect and start playing the received audio files.

After pairing the radio and Bluetooth device will automatically recognize each other whenever the radio is in Bluetooth mode and in range i.e. less than 10 meters.

The audio files are played as they are received by the radio with playback volume controlled by the **Volume+/-** knob.

To go to the main menu while in Bluetooth mode; press and hold the **Info/Menu** button; press and release to return to Bluetooth mode.

Micro SD/TF Playback mode

Insert a Micro SD/TF card with audio files stored in MP3 format, into the slot on the rear of the radio; press the **Mode** button repeatedly to navigate to Micro SD/TF mode to automatically start playing the first track.

Playback/Select song

While playing, rotate the **Tune/Select** knob to skip to different tracks; press the knob to pause and resume playing.

Volume control

Increase or decrease playback volume by rotating the V+/V- knob.

While in Micro SD/TF mode, press and hold the **Info/Mode** button to go to the main menu; and press again to return to Micro SD/TF mode.

Reboot Radio

In the unlikely event that the radio becomes unresponsive or a mode stops functioning correctly, disconnect the power adaptor, wait a few seconds and then plug it in again. The radio will reset and turn itself off without changing any of the options or setting previously made.

Use Factory Reset option (in the DAB Main Menu) to reset all options and setting previously made back to exit factory condition.

Radio does not turn on

- Connect the power adaptor to the radio and plug it into the A/C wall socket.

No DAB or poor reception

- Make sure the pig tail antenna is fully extended and positioned (i.e. angle and direction) to improve reception.
- Move radio closer to a window for a stronger DAB signal reception.
- Move the radio away from other electrical equipment.
- Confirm that DAB is available in the area.
- Go to DAB Main Menu and select Factory Reset to reset the software. Note that this will reset all options and setting previously made.

No sound in DAB or FM mode

- Volume level is too low for the weak reception of the radio signal.

No or very low sound in Bluetooth mode

- The volume level on the Bluetooth source device or the radio is too low.
- Distance from Bluetooth source device is too far; maximum distance must be less than 10 meters with no obstructions (e.g. wall, furniture) or less distance if there are obstructions.
- Check the pairing status on Bluetooth source device and radio i.e. check that the Radio Bluetooth code is in the “paired” device list and playing or connected is displayed on the radio.
- Delete the radio from the paired devices list on the Bluetooth source device, edit the Radio Bluetooth code in the available device list to remove the radio name (i.e. use only Bluetooth code) and pair the radio with the device.

Technical Specifications

Model	DK-821B
DC Power Input	5 Volts 1.2 Amp (Power adaptor included)
Radio Reception Frequency Range	DAB+/DAB Band III, 5A – 13F FM 87.5 – 108 MHz
Bluetooth Version	V4.2 BR, EDR Compliant
Frequency	2.4 GHz
Range	≤10 meters (Line of sight)
BT Transmit Power	0 dBm Receive only (not for earphones)
SD Storage	Micro SD/TF card (maximum 32 GB) MP3 format
Audio Output	2 Watts
Analogue Output	3.5 mm Stereo Headphone
Battery back up	AAA x 2pcs (for clock)
USB power output	5 Volts 1Amp (Maximum)
Dimension	L 120 x W 120 x H 120 mm
Weight	415g

Specifications subject to change without notice

In the box

- DAB Radio
- User Manual
- Power adaptor

WEEE and Recycling



The European laws do not allow any more the disposal of old or defective electric or electronic devices with the household waste. Return your product to a municipal collection point for recycling to dispose of it. This system is financed by the industry and the ensures environmentally responsible disposal and the recycling of valuable raw materials.

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