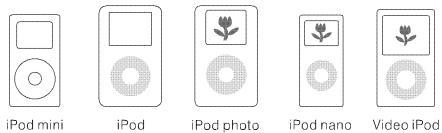


MODEL NO.: IAIR 07  
REVISION: 07  
DATE: DEC/23/05  
B/W ON 80 GSM PAPER

filename: IAIR07-IB-7.cdr

Compatible with:



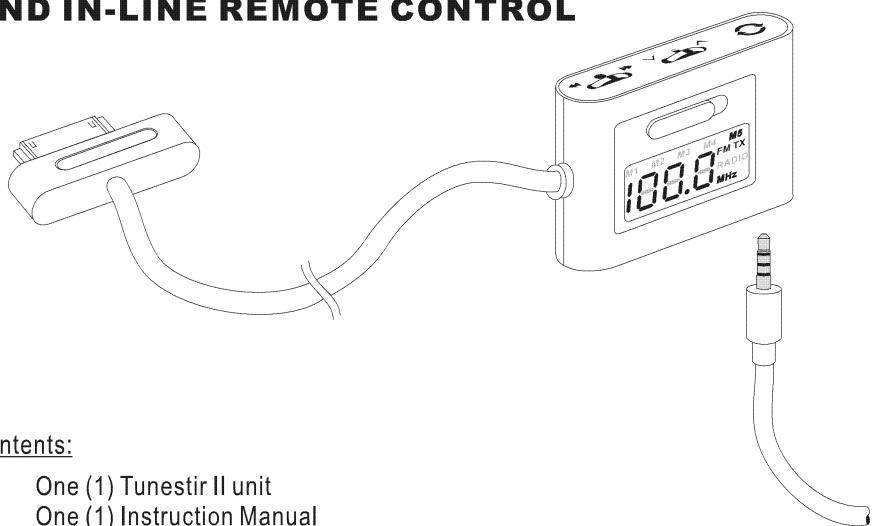
# **TUNESTiR II**

## **for iPod™**

### **INSTRUCTION MANUAL**

**3-in-1 ACCESSORY  
FM TRANSMITTER WITH DTS RADIO  
AND IN-LINE REMOTE CONTROL**

210 mm



#### Contents:

1. One (1) Tunestir II unit
2. One (1) Instruction Manual



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City of Industry, CA 91745



147 mm

Summary of Controls

Control	MODE	Radio Mode	FM Transmitter Mode	Press Once	Press & Hold	Press Once	Press & Hold	Press Once	Press & Hold	Remote Mode
▲	Manual Mode: Memory Mode:	+100kHz Next MEMORY	Auto Scan forward No function	+100kHz Next MEMORY	Smart Search forward No function	Next Track in both mode				Fast backward in both modes
●	Manual Mode: Memory Mode:	Mute Mute	No function No function		Toggle Play and Pause in both mode	No function				Toggle Play and Pause in both modes
▼	Manual Mode: Memory Mode:	-100kHz Previous MEMORY	Auto Scan backward No function	-100kHz Previous MEMORY	Smart Search backward No function	Last Track in both modes				Fast forward in both modes
↖	Manual Mode: Memory Mode:	Increase Volume by one step in both modes	Increase Volume rapidly in both modes		Previous track in both modes	Increase Volume in both modes				Increase Volume by one step in both modes
█	Manual Mode: Memory Mode:	Change MODE in both modes	Lock keypad in both modes	Change MODE in both modes	Lock keypad in both modes					Change MODE in both modes
▽	Manual Mode: Memory Mode:	Decrease Volume by one step in both modes	Decrease Volume rapidly in both modes		Next track in both modes	Decrease Volume in both modes				Decrease Volume one step in both modes
⟳	Manual Mode: Memory Mode:	Save to MEMORY No function	MEMORY<->MANUAL in both modes	Save to MEMORY No function	MEMORY<->MANUAL in both modes	MEMORY <-> MANUAL in both modes				Decrease Volume rapidly in both modes
										No function in both modes

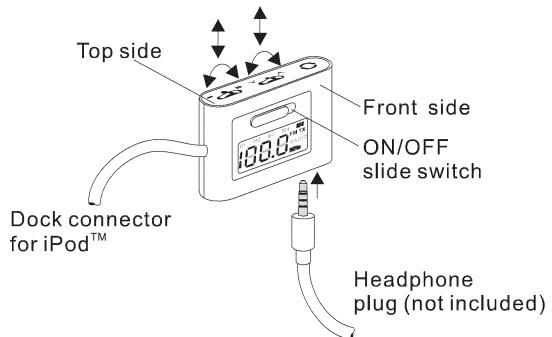
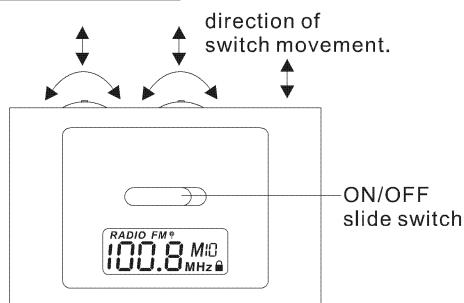
Note that using the thumb wheel on iPod will not be able to change the volume level through Tunestir II. To adjust the volume level, use the buttons of Tunestir II. The volume level already set by the thumb wheel will not be affected by adjusting volume UP/DOWN buttons of Tunestir II.

## LOCATIONS OF CONTROLS

### Controls on top side



### Controls on front side



210 mm

## LCD ICONS

### FM Radio Mode

This icon is ON if you are in the FM radio mode.



### FM Transmitter Mode

This icon is ON if you are in the FM Transmitter mode.

### MEMORY LOCATION

If you are in the MEMORY mode, the M is shown with the location number. Otherwise, this icon will not be displayed.

Keypad Locked:  
ON when the keypad is locked

### ⚠ REMARK ON VOLUME ADJUSTMENT ⚡

Note that using the thumb wheel on iPod will not be able to change the volume level through Tunestir II. To adjust the volume level, use the buttons of Tunestir II. The volume level already set by the thumb wheel will not be affected by adjusting volume UP/DOWN buttons of Tunestir II.

147 mm



## **LISTENING TO iPod™**

1. Connect the Tunestir II to your iPod™.
2. Press  once each time until LCD shows "iPod".  
Caution! Don't press and hold  or it will lock the keypad.



## **In-line Remote Control**

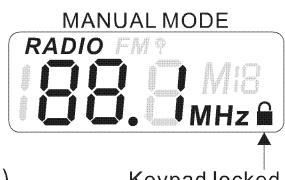
1. Whenever you are in the iPod mode, you may use your in-line remote control to access the iPod (if the keypad is not locked).
2. The following keys are available:
  - \* Play / Pause
  - \* Forward (Press once for the next track, Press and hold will fast-forward to the end of the playlist).
  - \* Backward (Press once for the previous track. Press and hold will rewind to the beginning of the playlist)
  - \* Volume Up (LCD will show the volume level)
  - \* Volume Down (LCD will show the volume level)
  - \*  - Press and hold will lock the keypad or unlock the keypad.

## **LISTENING TO RADIO**

### CAUTION

IN BOTH FM RADIO AND FM TRANSMITTER MODE, MAKE SURE YOU ARE IN THE MANUAL MODE OR MEMORY MODE. YOU CANNOT CHANGE FREQUENCY IN MEMORY MODE, ONLY MEMORY LOCATION.

1. Connect the Tunestir II to your iPod™.
2. Press  once each time to change the mode to RADIO mode (**RADIO** icon shown on LCD).
3. If this is the first time you are using the Tunestir II, the frequency has been pre-set to 88.1MHz. Otherwise, the LCD will display the last frequency (station) you listened to.
4. To tune the desired frequency (station), press the  or  buttons once to adjust the frequency. Each press of the button will either increase or decrease by 0.1MHz (100kHz).
5. Pressing and holding  button will perform automatic scan in the forward direction. Pressing and holding  button will perform automatic scan in the backward direction.





### Auto Scan for Radio Station

1. Make sure you are in "MANUAL" mode and in the "RADIO" mode.
2. Press and hold **◀** or **▶** button to scan backward or forward. The frequency as shown on the LCD will automatically decrease or increase until a station is detected. The starting frequency will be the current frequency (station) you are listening to.
3. The detected frequency (station) will be displayed on the LCD.



### Volume Control

1. In RADIO mode, each press of the **^** or **▼** button will increase or decrease the volume by 3dB. The Tunestir II has 12 available volume settings.



### Operating the MEMORY mode (FM Radio)

You can store the current frequency (station) for easy retrieval in future. There are a total of 15 memory locations to store the frequency.

#### Saving frequency to MEMORY location

1. In MANUAL mode after a frequency is displayed on LCD, press **○** button (press and hold this button to change to MEMORY mode) once to store this frequency to the last available frequency location.
2. If this is the first time you use the Tunestir II, the frequency has been pre-set to 88.1MHz. Otherwise, the LCD will display the last frequency (station) listened to.
3. You may use the **◀** or **▶** buttons to change the MEMORY location for the frequency to be stored. The corresponding frequency will be displayed on LCD.
4. You may need to press **○** again to confirm the setting, or press any other buttons (keys) to cancel the operation. The unit will then return to "MANUAL" mode.
5. If desired, repeat above steps to store another frequency to another MEMORY location.



### Recalling MEMORY location

1. In MANUAL mode, press and hold **○** button to change from Manual mode to Memory mode. The last listened MEMORY location will appear on LCD. This confirms that you are in the MEMORY mode.
2. You may use the **◀** or **▶** buttons to change the MEMORY location. The corresponding frequency will be displayed on LCD.
3. To exit MEMORY mode to MANUAL mode, press and hold **○** button. The MEMORY location will disappear on the LCD. This confirms that you are no longer in the MEMORY mode.



### USING FM TRANSMITTER

#### **! CAUTION !**

IN BOTH FM RADIO AND FM TRANSMITTER MODE, MAKE SURE YOU ARE IN THE MANUAL MODE OR MEMORY MODE. YOU CANNOT CHANGE FREQUENCY IN MEMORY MODE, ONLY MEMORY LOCATION.

1. Connect the Tunestir II to your iPod™.
2. Press **■** button once each time until the icon **FM**  appears on the LCD. "--" will appear for approximately one second during mode changing. Wait until a frequency (station) is displayed.
3. **MAKE SURE YOUR IPOD™ IS PLAYING A SONG.**
4. If this is the first time you are using the Tunestir II, the frequency has been pre-set to 88.1MHz. Otherwise, the LCD will display the last frequency (station) listened to.
5. To tune in to the desired frequency (station), press the **◀** or **▶** button to adjust the frequency. Each press of the button will either increase or decrease by 0.1MHz (100kHz).
6. If the last song on the playlist has finished playing, the iPod™ will automatically stop. In this case, if you do not activate the playlist and begin playing again, the Tunestir II will stop transmitting and "--" will be displayed on the LCD. To rectify this, press "PLAY / PAUSE" on the iPod™ again to start playing a song.



### Operating the MEMORY mode (FM Transmitter)

You can store the current frequency (station) for easy retrieval in future. There are a total of 15 memory locations.

#### Saving frequency to MEMORY location

1. In MANUAL mode after a frequency is displayed on LCD, press  button (press and hold this button will change to MEMORY mode) once to store this frequency to the last available frequency location.
2. If this is the first time you use the Tunestir II, the frequency has been pre-set to 88.1MHz. Otherwise, the LCD will display the last frequency (station) listened to.
3. You may use the  or  buttons to change the MEMORY location for the frequency to be stored. The corresponding frequency will be displayed on LCD.
4. You may need to press  again to confirm the setting, or press any other buttons (keys) to cancel the operation. The unit will then return to "MANUAL" mode.
5. If desired, repeat above steps to store another frequency to another MEMORY location.



#### Recalling MEMORY location

1. In MANUAL mode, press and hold  button to change from MANUAL mode to MEMORY mode. The last listened MEMORY location will appear on LCD. This confirms that you are in the MEMORY mode.
2. You may use the  or  buttons to change the MEMORY location. The corresponding frequency will be displayed on LCD.
3. To exit MEMORY mode to MANUAL mode, press and hold  button. The MEMORY location will disappear on the LCD. This confirms that you are no longer in the MEMORY mode. The last frequency before entering into MEMORY mode will resume and displayed on LCD.



### **Smart Search (FM Transmitter)**

You can follow the steps from the previous page to transmit at a particular frequency. However, you can also ask Tunestir II to do it for you. We have added a new feature which could help you find the best channel. Tunestir II will scan the spectrum and find the right channel with less interference, just at a touch of finger tip. The recommended frequency will appear on the LCD and will immediately start transmitting. Tunestir II will perform a search in a span of 10MHz each time the Smart Search is activated.

Follow below steps for using **Smart Search**.

1. In MANUAL mode, press and hold **►** button. The LCD will show **00**. Tunestir II will search in the forward direction.
2. In MANUAL mode, press and hold **◀** button. The LCD will show **00**. Tunestir II will search in the backward direction.
3. When a frequency is found, the frequency is displayed on the LCD and will immediately start transmitting. Please tune in the FM stereo at this frequency.
4. If the reception quality is still not satisfied, perform either step 1 or step 2 again until the channel is found.



MANUAL mode



Remark: For best results, please plug in the earphone during **Smart Search**. Note that when the earphone is removed in actual transmission, you will have a louder sound. This is normal.

Disclaimer: **Smart Search** is based on an algorithm to search for the "best" frequency to transmit. However, there is no guarantee that the recommended frequency will be free from interference. It is the relatively best frequency to transmit. The recommended frequency might not always be the best due to the changing spectrum purity and locations. There are many factors affecting the reception.



### Locking the keypad

1. To avoid any accidental touching of buttons, use button to lock the keypad.
2. Press and hold the button for approximately two seconds. All buttons (keys) will be locked and an icon will be displayed on the LCD.
3. To release, press and hold the button again. The lock icon will disappear. This confirms the unlocking of keypad.

### Specifications

#### FM Transmitter :

Frequency :	: Stereo 88.1 ~ 107.9 MHz step 100kHz by
Pre-emphasis :	: 75 $\mu$ s
RF power :	: Subject to regulation
Audio Frequency response	: 100 Hz ~ 15kHz (+/- 6dB)

#### FM Radio :

Frequency	: Stereo 88.1 ~ 107.9 MHz step 100kHz
Sensitivity	: 2.5 $\mu$ V S/N 30 dB
Signal to Noise Ratio	: >40dB
Auto Stop Sensitivity	: -85dBm
Channel Separation	: > 30 dB

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.

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



Check out our complete line of accessory products for iPod™ & MP3 devices at [www.batterytech.com](http://www.batterytech.com).

Battery Technology, Inc.  
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City of Industry, CA 91745  
[www.batterytech.com](http://www.batterytech.com)

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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.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER AUTHORITY TO OPERATE THE EQUIPMENT

**FCC ID: S8GAWWINWC2006**

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.