

# **NS-DVBxG Color TFT UI Spec**

## **Version History**

(1) Rev 2.0 2006-10-13

- 1) Backlight Off(Power Save) Settings Menu
- 2) Bluetooth Menu Settings Menu
- 3) Language Settings Menu
- 4) Graphical Main Menu

(2) Rev 2.1 2006-10-19

- 1) Bluetooth Status Icon

## 1. Basic Specification

### (1) Key : Total 9 Key



No.	Basic Function	
	Short	Long
1	Main Menu	Menu(Resume)
2	Play, Pause	
3	Next, FF	Fast Skip
4	Previous, REW	Backward Skip
5	Up	Fast Up
6	Down	Fast Down
7	Right Heel	
8	Left Heel	
9	Power On	Power Off

### (2) Design



### (3) LCD

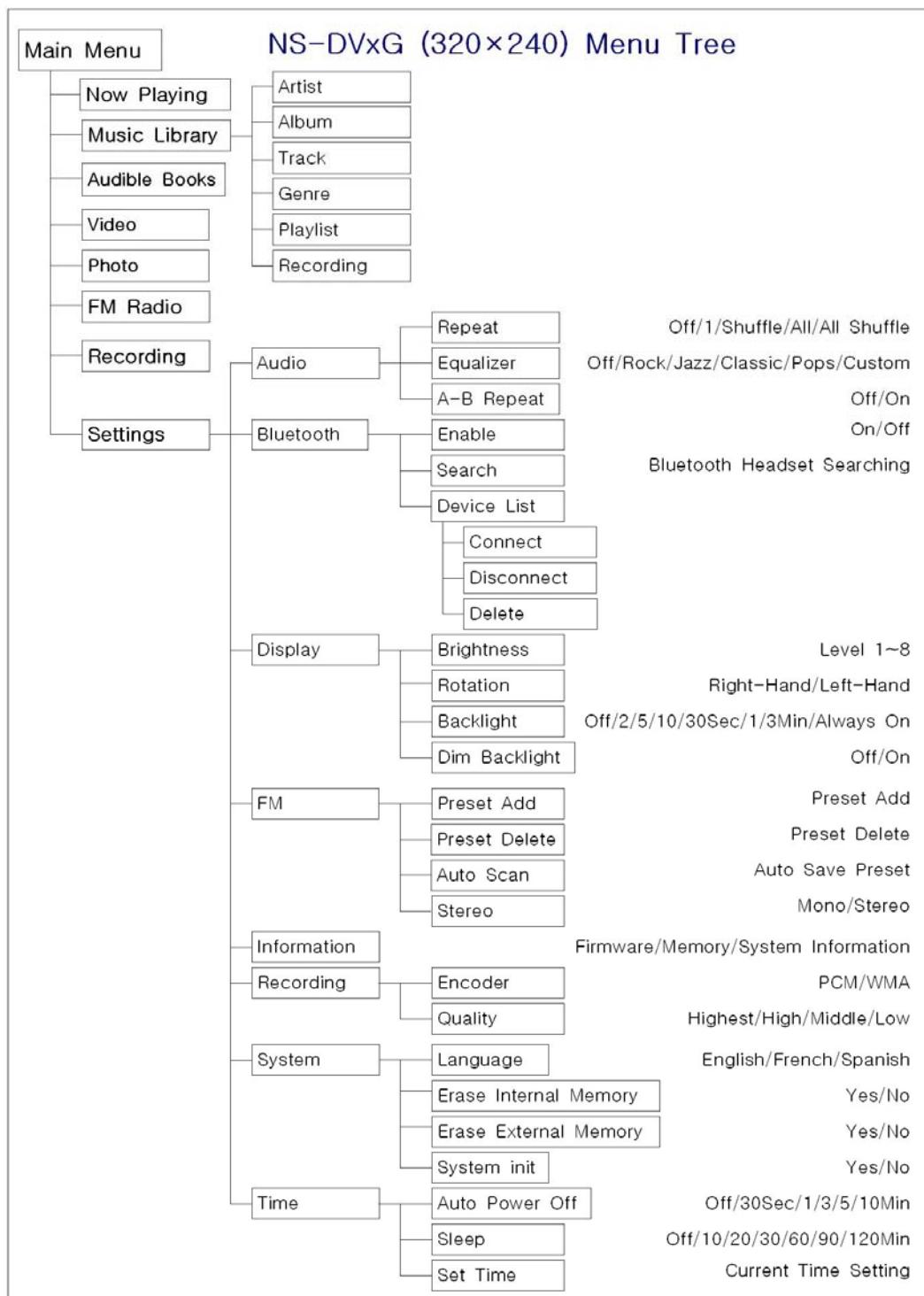
#### 1) Color

- 320 × 240 Dot 262K QVGA Color TFT LCD

#### 2) UI



## 2. Menu Tree



### 3. Music Mode

#### (1) Idle(Pause) Mode

##### 1) Key Function

Key	Key Function	
	Short Key	Long Key
1	Menu	Main Menu
2	Play	Play Mode
3	▶▶	Next Track
4	◀◀	Previous Track
5	▲	Album Jacket Size Change
6	▼	
7	Right Heel	Volume +
8	Left Heel	Volume -
9	Power	Power Off

##### 2) Timer Function

- Idle Auto Power Off
- Track or Artist or Album title scroll
- Back Light Off : Two level

##### 3) UI

- ① Mode Icon
- ② Track Name
- ③ Artist Name
- ④ Album Name
- ⑤ Current Track Number
- ⑥ Total Track Number
- ⑦ Play Time
- ⑧ Total Time
- ⑨ Battery Level
- ⑩ Repeat
- ⑪ Progress Bar
- ⑫ Album jacket
- ⑬ Current Time
- ⑭ Next Track Information
- ⑮ Volume Level



\* Album Jacket Size Change

If you Press Up(▲) Key, Screen will be toggled in order of Normal => Small => Full Screen => Now Playing List.

Unless there is Album Art, Screen will be toggled only in order of Normal => Now Playing List.



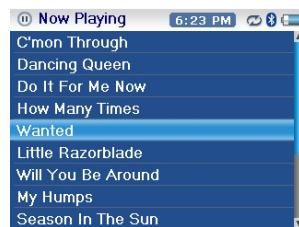
- Normal Album Art Screen



No Album Art Screen



- Full Screen Album Art



- Now Playing List Screen

## (2) Play Mode

### 1) Key Function

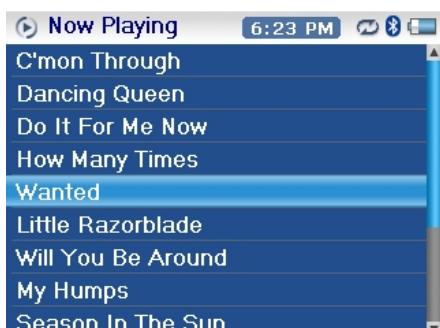
Key		Key Function	
		Short Key	Long Key
1	Menu	Main Menu	Menu Mode(Resume)
2	Play	Idle Mode	
3	▶▶	Next Track	Fast Skip
4	◀◀	Previous Track (within 5Sec) Start of this track(after 5Sec)	Backward Skip
5	▲	Album Jacket Size Change	
6	▼	A-B Repeat A/B/Off	
7	Right Heel	Volume +	
8	Left Heel	Volume -	
9	Power		Power Off

### 2) Timer Function

- Track or Artist or Album title scroll
- Back Light Off : Two level

### 3) UI

- ① Mode Icon
- ② Track Name
- ③ Artist Name
- ④ Album Name
- ⑤ Current Track Number
- ⑥ Total Track Number
- ⑦ Play Time
- ⑧ Total Time
- ⑨ Battery Level
- ⑩ Repeat
- ⑪ Progress Bar
- ⑫ Album jacket
- ⑬ Current Time
- ⑭ Next Track Information
- ⑮ Volume Level



### (3) Now Playing List

#### 1) Key Function

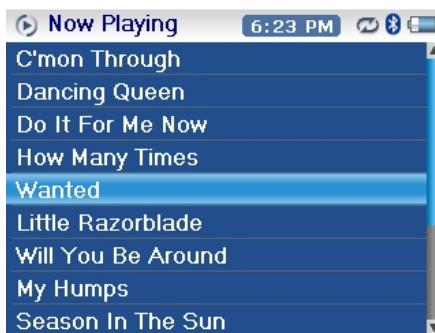
Key		Key Function	
		Short Key	Long Key
1	Menu	Main Menu	Menu Mode(Resume)
2	Play	Play Current Select Track	
3	▶▶	Play Current Select Track	
4	◀◀		
5	▲	Album Jacket Size Change	
6	▼	A-B Repeat A/B/Off	
7	Right Heel	Down List Item	
8	Left Heel	Up List Item	
9	Power		Power Off

#### 2) Timer Function

- Track or Artist or Album title scroll
- Back Light Off : Two level

#### 3) UI

- ① Mode Icon
- ② Battery Level
- ③ Current Time
- ④ Repeat
- ⑤ Now Playing List



\* Now Playing List is not made an array of Alphabet.

## 4. FM Mode

### 1) Key Function

Key		Key Function	
		Short Key	Long Key
1	Menu	Main Menu	Menu Mode(Resume)
2	Play	Preset Add	FM Recording
3	▶▶	Frequency Up	Search FM Station (Up)
4	◀◀	Frequency Down	Search FM Station (Down)
5	▲	Preset Up	Fast Preset Up
6	▼	Preset Down	Fast Preset Down
7	Right Heel	Volume +	
8	Left Heel	Volume -	
9	Power		Power Off

### 2) Timer Function

- Key Check
- Back Light Off : Two level

### 3) UI

- ① Mode Icon
- ② Battery Level
- ③ FM Frequency
- ④ Preset Frequency
- ⑤ Preset
- ⑥ FM Stereo
- ⑦ Frequency Bar
- ⑧ Current Time



### 4) Operation Description

In case there are Preset channels, there will be displayed Preset frequency upside and downside presently selected channel.

As above, if you press Up key, will move to Preset 99.1 MHz and if you press Down key, will move to Preset 93.6 MHz.

If you press FF key, will move to 98.0 MHz, and if you press REW key, will move to 97.8 MHz.

## 5. FM Recording

### 1) Key Function

Key	Key Function	
	Short Key	Long Key
1	Menu	Recording Stop Backlight On
2	Play	Recording Pause / Continue Recording Stop
3	▶▶	Backlight On
4	◀◀	Backlight On
5	▲	Backlight On
6	▼	Backlight On
7	Right Heel	Backlight On
8	Left Heel	Backlight On
9	Power	Power Off

### 2) Timer Function

- Key Check
- Back Light Off : Two level

### 3) UI

- ① Mode Icon
- ② Battery Level
- ③ FM Frequency
- ④ Preset
- ⑤ FM Stereo
- ⑥ Recording Time
- ⑦ Remain Time
- ⑧ Scroll Bar
- ⑨ Encoder Information



\* During Recording,  icon will be Blinking.

## 6. Main Menu Mode

\* Graphical Menu will be called as Main Menu

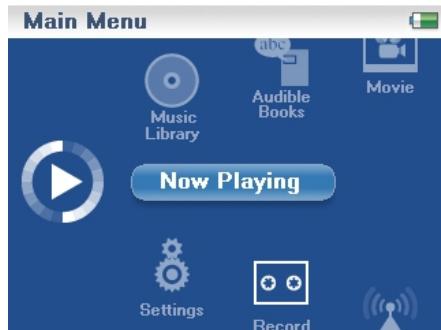
### 1) Key Function

Key	Key Function	
	Short Key	Long Key
1	Menu	Exit Main Menu Mode
2	Play	Select Menu Item
3	▶▶	Menu Item Right Move
4	◀◀	Menu Item Left Move
5	▲	Menu Item Up
6	▼	Menu Item Down
7	Right Heel	Menu Item Right Move
8	Left Heel	Menu Item Left Move
9	Power	Power Off

### 2) Timer Function

- Key Check
- Back Light Off
- Exit Menu Mode

### 3) UI



## 7. Menu Mode

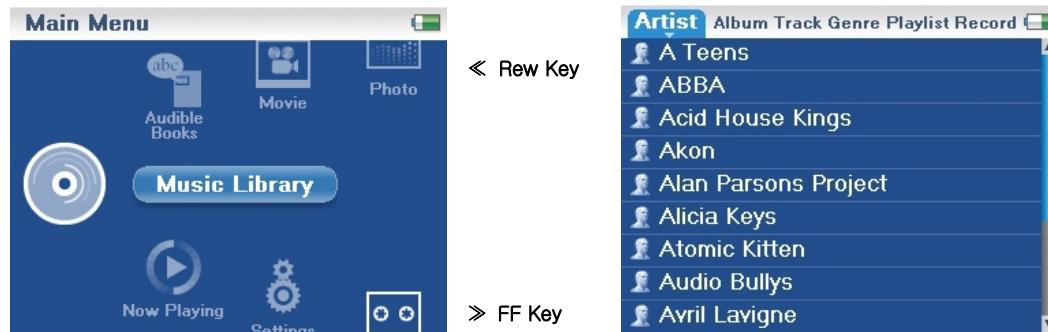
### 1) Key Function

Key		Key Function	
		Short Key	Long Key
		Extensible Menu	End Menu
1	Menu	Exit Menu Mode	Exit Menu Mode
2	Play	List Extension	Popup List
3	▶▶	List Extension	Popup List
4	◀◀	List Reduction	List Reduction
5	▲	Menu Item Up	Menu Item Up
6	▼	Menu Item Down	Menu Item Down
7	Right Heel	Menu Item Up	Menu Item Up
8	Left Heel	Menu Item Down	Menu Item Down
9	Power		Power Off

### 2) Timer Function

- Key Check
- Back Light Off
- Exit Menu Mode

### 3) UI

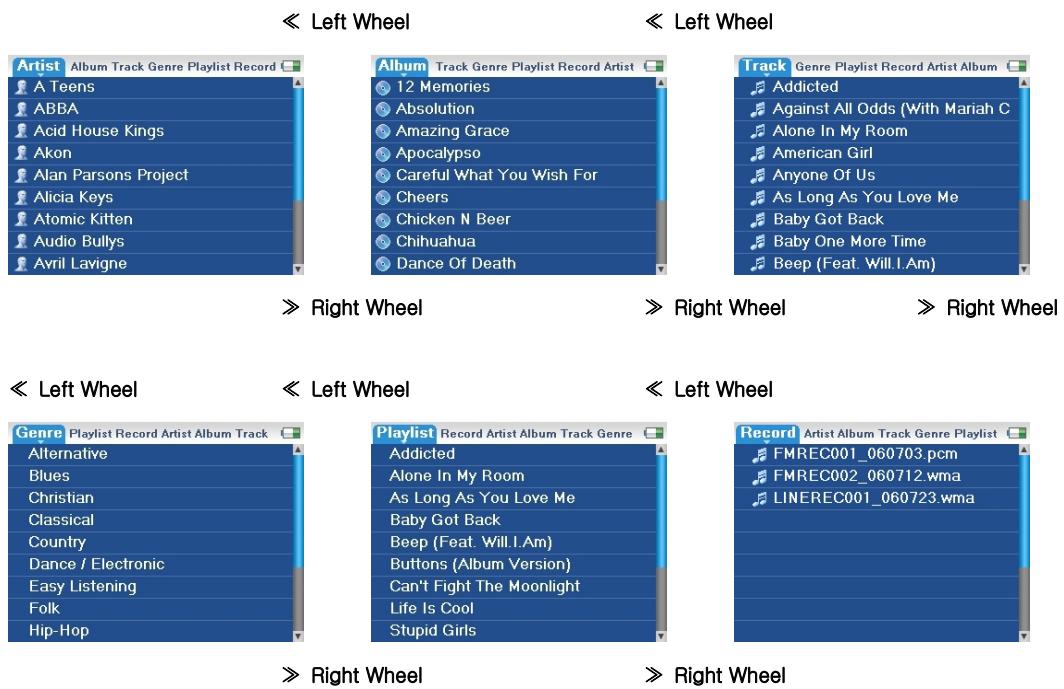


## 8. Library Mode

### - Basic Key Function

Key		Key Function	
		Short Key	Long Key
		Track	Non Track
1	Menu	Exit Menu	Main Menu
2	Play	Popup Menu	Popup Menu
3	▶▶	Play Track	List Extension
4	◀◀	List Reduction	
5	▲	Alphabet Item Up	
6	▼	Alphabet Item Down	
7	Right Heel	Item Up	
8	Left Heel	Item Down	
9	Power		Power Off

## - Basic Library Mode

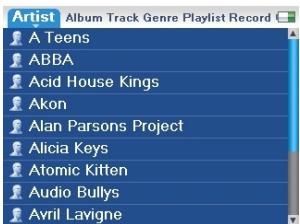


### (1) Artist Library

- If you press FF key at the item which has extensible list, the top item at the extended list will be selected as list is extended.
- If you press OK(Play) key, Popup Menu will be displayed.
  - 1) If you select Play All at Popup Menu, all the Content will be registered on the Now Playing list and pass to the Play screen.
  - 2) If you select Add Now Playing at Popup Menu, the selected Content will be additionally registered on the Now Playing list and back to the previous List.
  - 3) If you select Play at Popup Menu, Selected Content will be registered on the Now Playing list and pass to the Play screen.
  - 4) If you select Exit at Popup Menu, just back to the previous List.

Key		Key Function	
		Short Key	Long Key
	Track	Non Track	
1	Menu	Cancel & Exit Popup Menu	
2	Play	OK & Exit Popup Menu	OK & Exit Popup Menu
3	▶▶	OK & Exit Popup Menu	OK & Exit Popup Menu
4	◀◀	Cancel & Exit Popup Menu	
5	▲	Item Up	
6	▼	Item Down	
7	Right Heel	Item Up	
8	Left Heel	Item Down	
9	Power		

« Left Wheel, Rew Key



↓ Play, FF Key

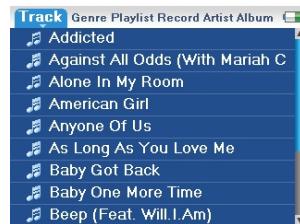
↑ Rew Key



» Right Wheel, FF Key

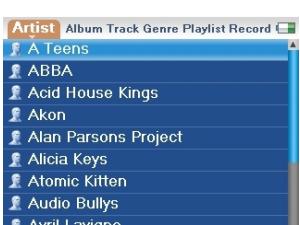
» Down Key

« Left Wheel, Rew Key



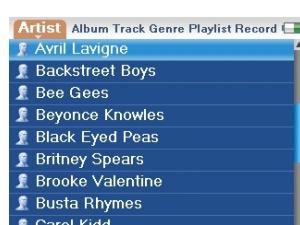
» Right Wheel, FF Key

» Play Key



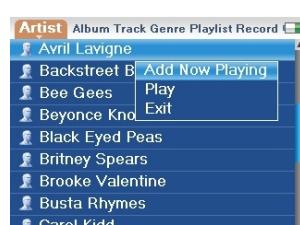
↓ Right Wheel

↑ Left Wheel



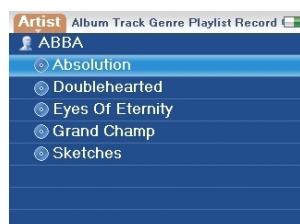
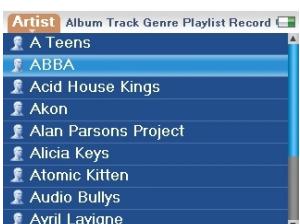
« Up Key

» FF Key



« Rew, FF, Play Key

» FF Key



« Rew Key



« Rew Key

**\* Alphabet Fast Scroll \* : changed into Page Down because we have some difficulty in realization.  
If you press Up, Down Key, List will be displayed in Pages.**

## 9. Photo View

### (1) Photo List



### (2) Photo View

#### 1) Key Function

Key		Key Function	
		Short Key	Long Key
1	Menu	Main Menu	Menu Mode
2	Play	Toggle between zoom in and zoom out	
3	▶▶	Zoom out : Display the next JPEG file on the selected JPEG file list. zoom in : move right	
4	◀◀	Zoom out : Display the previous JPEG file on the selected JPEG file list. Zoom in : move left	
5	▲	Zoom in : move up Default : picture rotation	
6	▼	Zoom in : move down	
7	Right Heel	Volume +	
8	Left Heel	Volume -	
9	Power		Power Off

## 2) UI

- Horizontal view : Default screen



- Vertical view : Picture rotated screen by pressing Up Key – vertical image viewing



- Zoom In : Zoom in mode by pressing Play Key



- Screen will move if you press FF, REW, Up, Down key at Zoom Mode, presently shown position is displayed at the position icon below.

## 10. Video Play

### (1) Video List



### (2) Video Play

#### 1) Key Function

Key	Key Function		
	Short Key	Long Key	
1	Menu	Main Menu	Menu Mode
2	Play	Pause	
3	▶▶	Next Movie	Fast Forward Skip
4	◀◀	Previous Movie	Fast Backward Skip
5	▲		
6	▼		
7	Right Heel	Volume +	
8	Left Heel	Volume -	
9	Power		Power Off

2) UI



**Basic Full screen**



Play screen when Pause

## 11. Audible

### 1) Key Function

Key		Key Function		
		Short Key		Long Key
1	Menu	Main Menu		Menu Mode(Resume)
2	Play	Play/Pause		
3	▶▶	Next Track	Next Section	Fast Skip
4	◀◀	Previous Track (within 5Sec) Start of this track(after 5Sec)	Previous Section	Backward Skip
5	▲	Section Mode Change	Track Mode Change	
6	▼	A-B Repeat A/B/Off		
7	Right Heel	Volume +		
8	Left Heel	Volume -		
9	Power			Power Off

### 2) Timer Function

- Track or Artist or Album title scroll
- Back Light Off : Two level

### 3) UI

- ① Mode Icon
- ② Track Name
- ③ Author Name
- ④ Current Track Number
- ⑤ Total Track Number
- ⑥ Section Information
- ⑦ Play Time
- ⑧ Total Time
- ⑨ Battery Level
- ⑩ Repeat
- ⑪ Progress Bar
- ⑫ Book Title
- ⑬ Current Time
- ⑭ Next Track Information
- ⑮ Volume Level

**Track Mode****Section Mode**

\* If you press FF, REW Key at Track Mode, Next or Previous Audible File will be played.

\* If you press FF, REW Key at Chapter Mode, Chapter will be changed.

**● No Book Jacket Cover Art****Track Mode****Section Mode**

## 12. Recording (Line IN)

### (1) Recording Ready

#### 1) Key Function

Key	Key Function	
	Short Key	Long Key
1	Menu	Main Menu
2	Play	Recording Start
3	▶▶	
4	◀◀	
5	▲	
6	▼	
7	Right Heel	Volume +
8	Left Heel	Volume -
9	Power	Power Off

#### 2) UI

- ① Mode Icon
- ② Battery Level
- ③ Recording Time
- ④ Remain Time
- ⑤ Scroll Bar
- ⑥ Encoder Information



## (2) Recording

### 1) Key Function

Key		Key Function	
		Short Key	Long Key
1	Menu	Recording Stop	Backlight On
2	Play	Recording Stop	Backlight On
3	▶▶	Backlight On	Backlight On
4	◀◀	Backlight On	Backlight On
5	▲	Backlight On	Backlight On
6	▼	Backlight On	Backlight On
7	Right Heel	Backlight On	Backlight On
8	Left Heel	Backlight On	Backlight On
9	Power		Power Off

### 2) UI

- ① Mode Icon
- ② Battery Level
- ③ Recording Time
- ④ Remain Time
- ⑤ Scroll Bar
- ⑥ Encoder Information

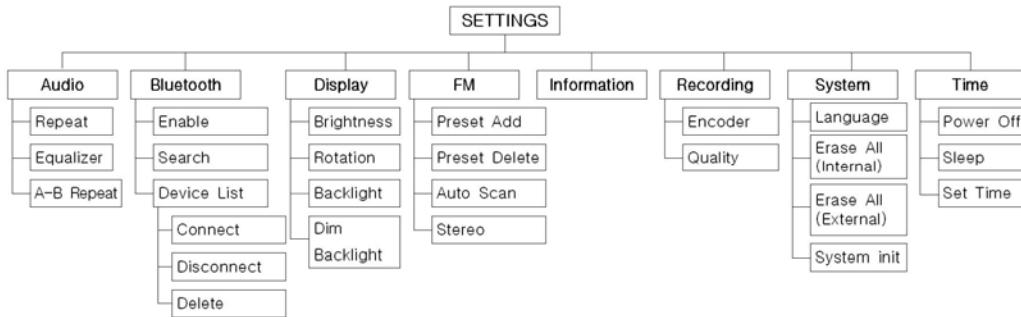


## 13. Settings Mode

### - Basic Key Function

Key		Key Function	
		Short Key	Long Key
	Main, Sub Setting	End Setting	
1	Menu	Exit Setting Mode	
2	Play	List Extension	Save Setting (High Setting)
3	▶▶	List Extension	Save Setting (High Setting)
4	◀◀	List Reduction	List (Don't save setting)
5	▲	Item Up	Item Up
6	▼	Item Down	Item Down
7	Right Heel	Item Up	Fast Up
8	Left Heel	Item Down	Fast Down
9	Power		Power Off

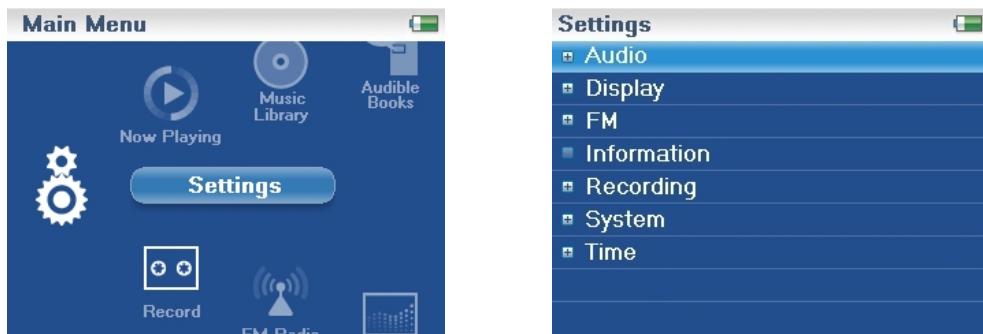
### - Settings Structure



### - Timer Function

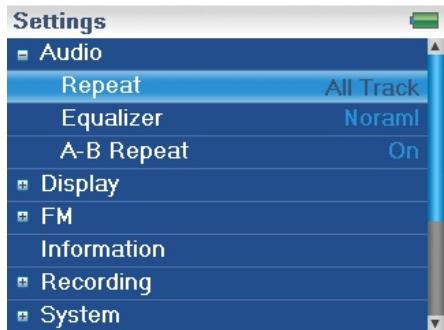
- Key Check
- Back Light Off
- Exit settings menu

## (1) Main Settings

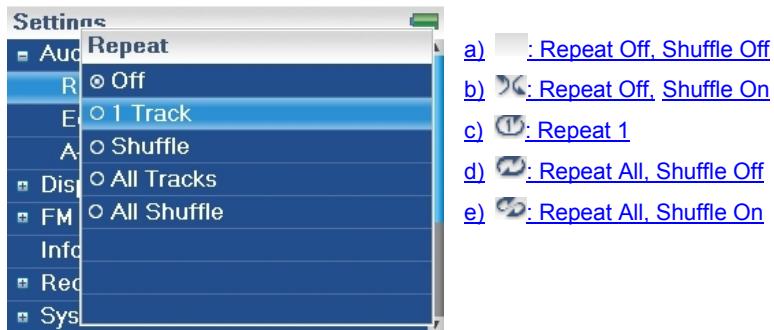


## (2) Sub Settings

### 1) Audio Settings



#### ① Repeat



## ② Equalizer



- If you change EQ, properly set amount will be shown at Graphic Level part.

▼ If you select FF(Play) Key at Custom EQ Menu, Graphic Level part will be selected.

삭제됨: <sp>



### - Custom Equalizer

▼ Play key : Save & Exit custom equalizer menu

- Menu Key : Don't save & Exit custom equalizer menu

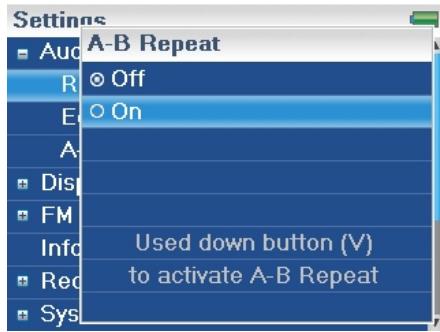
- FF, REW Key : Frequency change (60~14KHz)

- Up, Down Key : Level Change (+12 ~ -12dB)

- Wheel Key : Level Change (+12 ~ -12dB)

삭제됨: <sp>

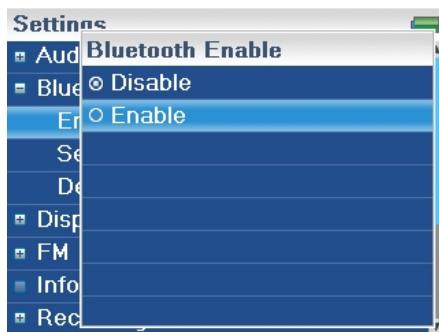
## ③ A-B Repeat



## 2) Bluetooth Settings



### ① Enable



### ② Search



Search Device Message

Found



Search Device Function completed - Devices