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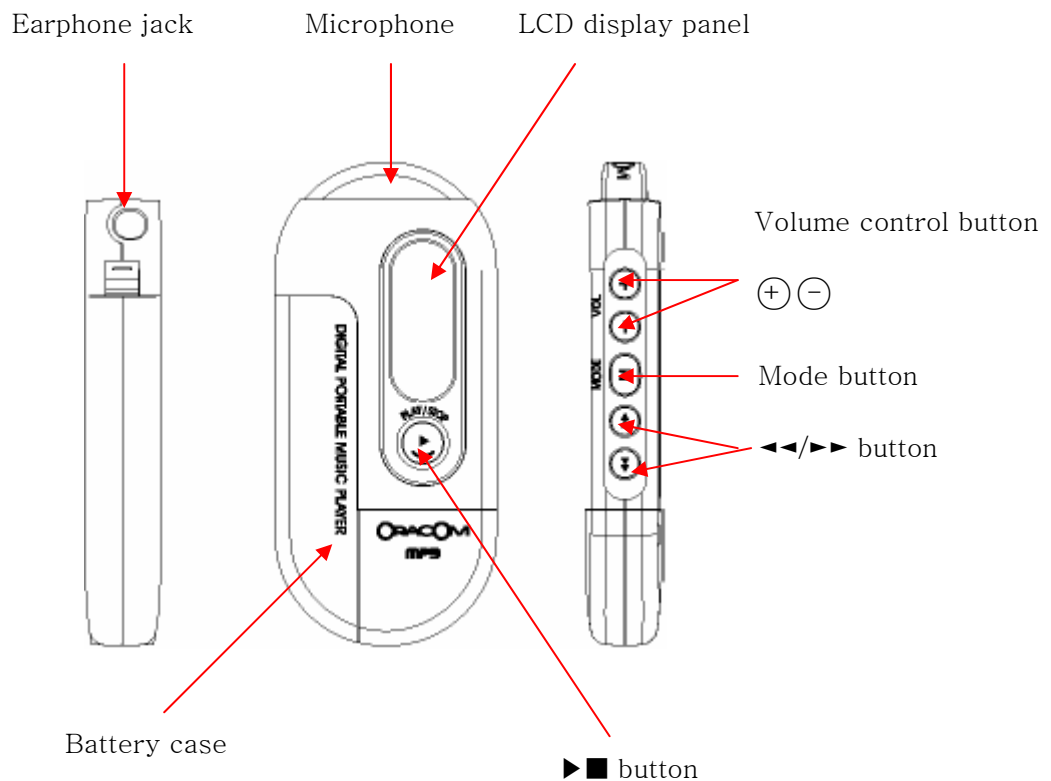
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■ FEATURE

- ° Compact and slim design
- ° Plug-and-Play USB flash drive (USB driver is needed only for Windows 98/SE)
- ° MP3, WMA music file playback
- ° Voice recording function
- ° F/W up gradable
- ° 10 band Equalizer
- ° Controlling diverse menu
- ° User logo support
- ° High-speed USB communication
- ° Indigo blue backlight
- ° Diverse OS support for Windows, Mac and Linux
- ° FM tuner
- ° 10 channels of user defined FM station

■ NAMES OF ORC-200M



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■ FUNCTIONS

• Main Function

- ① MP3 Playback : 32 ~ 320Kbps, VBR playback
- ② WMA Playback : 64 ~ 192Kbps
- ③ Voice Recording : ADPCM 8KHz Mono
- ④ FM Frequency Range : 87.5Mhz ~ 108Mhz
- ⑤ Logo image : 128 x 48 pixel
- ⑥ Data Transfer : USB 1.1, plug & play

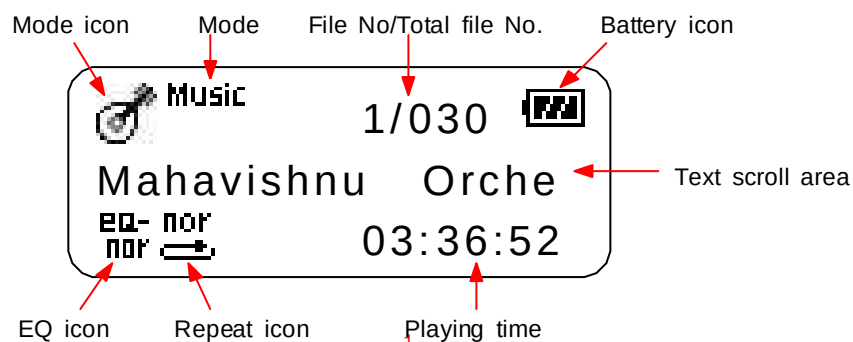
• Key Function

- Button table

- ① Power On :Soft Touch - Power On / Off / Play / Pause / Stop
- ② Volume Up :Soft Touch - Volume Up / Menu search
- ③ Volume Down :Soft Touch - Volume Down / Menu search
- ④ Mode :Soft Touch - Music / Voice / Record / FM Radio / Menu mode
- ⑤ Forward :Soft Touch - Forward skip, search
- ⑥ Backward :Soft Touch - Backward skip, search

• LCD Display

- ① Blue EL backlight graphic animation LCD
- ② 3 Line : 1 Line - Mode icon , Mode name , File No./ Total File No. , Battery
 - 2 Line - Text (English 16 Char, Simplified Chinese, Korean 8 Character)
 - 3 Line - Icons (Repeat, EQ) File Playing Time



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- Menu Function
- Menu table

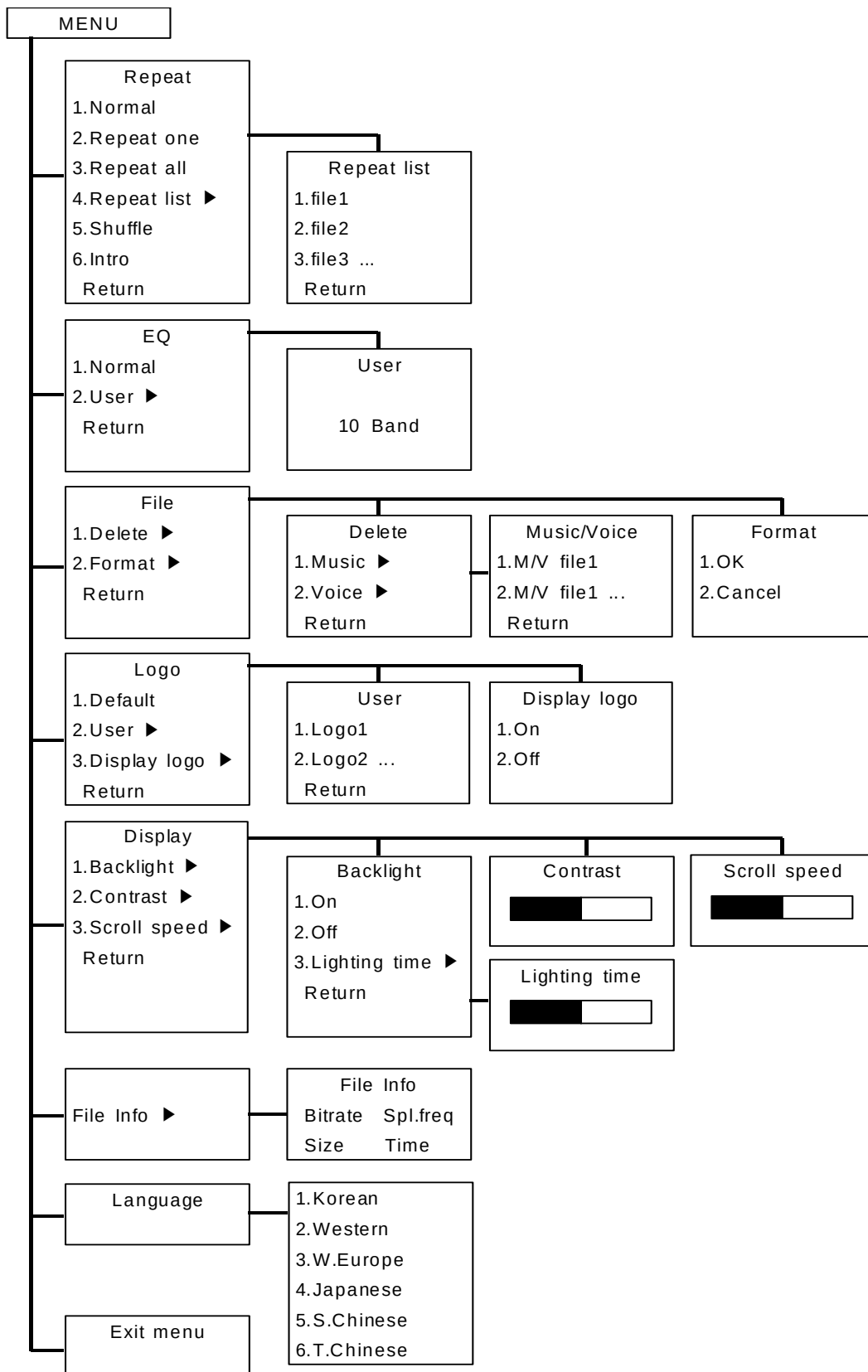
■ BUTTON TABLE

Button	Former status	Push time	Operation
▷□	Power off	Briefly	Playback after power on
	Music/Voice playback	Briefly	Stop
	Music/Voice playback Recording Stop	Longer	Power off
	Stop (Music/Voice mode)	Briefly	Playback
	Stop (Recording mode)	Briefly	Start Voice Recording
	Recording	Briefly	Finish Voice Recording
	FM Radio Scan Mode	Briefly	Memorize current Frequency
	Menu status	Briefly	To exit menu
▶▶	Playback	Briefly	Playback the next file
	Playback	Longer	Fast backward search in playback file
	FM Radio Scan mode	Briefly	Tune Frequency up (100KHz)
	FM Radio Scan mode	Longer	Search next station available
	FM Radio Memory mode	Briefly	Select next channel memorized
	Stop	Briefly	To move the next file
◀◀	Playback	Briefly	Less than 5 sec. after beginning playback : Former file playback Longer than 5 sec. after beginning playback : File playback from the start
	Playback	Longer	Fast forward search in playback file
	FM Radio Scan mode	Briefly	Tune Frequency down (100KHz)
	FM Radio Scan mode	Longer	Search previous station available
	FM Radio Memory mode	Briefly	Select previous channel memorized
	Stop	Briefly	To move the former file
+	Playback / Stop	Briefly/longer	Volume(↑)
	Menu status	Briefly	To move in the menu
-	Playback / Stop	Briefly/longer	Volume(↓)
	Menu status	Briefly	To move in the menu
MODE	Stop	Briefly	To change the mode (Music → Voice → Record)

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Playback	Briefly	To appoint the starting spot of the section repeating
During setting section repeating	Briefly	To appoint the ending spot of the section repeating
Status of setting section repeating	Briefly	To cancel the section repeating
Playback / Stop	Longer	To move the menu mode
Menu status	Briefly	To select the menu item
FM Radio	Briefly	Convert mode to MUSIC mode
FM Radio	Longer	Toggle Scan mode $\leftrightarrow$ Memory mode

■ MENU TABLE



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■ SPECIFICATIONS

• General

Capacity	☐ 64/128/256MB built in memory
I/O	☐ USB 1.1
Dimension /Weight	☐ 39 x 86 x 13.2mm ☐ 32g (without battery)
Case	☐ Plastic mold
Power	☐ AAA x 1ea
Connectors	☐ Earphone connector ☐ USB port connector
LCD	☐ Indigo blue EL backlight graphical animation LCD
Key	☐ Tact s/w 6ea
Accessory	☐ Earphone ☐ USB cable ☐ Software CD (Win98/SE device driver, Logo editor) ☐ User manual ☐ Battery AAA x 1ea
OS	☐ Microsoft Windows98/se / ME / 2000 / XP ☐ Linux kernel 2.4.0 or higher ☐ Mac OS 8.6 or higher

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- Electrical

Load condition: 16Ω

① Audio Section: MP3 Part

ITEM	Measure Conditions			Specification		
	File	Filter	etc	Normal	Limit	Unit
Output Power	1KHz_0dB.mp3 Bit rate 128Kbps SPL freq. 44.1KHz	-	EQ: Normal Vol : Max	5	>4.7	mW
S/N Ratio	Infinity Zerow, 0 emphasis.mp3 Bit rate 128Kbps SPL freq 44.1KHz	With A Filter	EQ: Normal Vol: Max	80	>75	dB
T.H.D	1KHz_0dB.mp3 Bit rate 128Kbps SPL freq 44.1KHz	With A Filter	EQ: Normal Vol: Max	0.15	<0.25	%
Channel Separation	1KHz_0dB_R.mp3 & 1KHz_0dB_L.mp3 Bit rate 128Kbps SPL freq 44.1KHz	-	EQ: Normal Vol: Max	30	>25	dB
Frequency Response	100Hz_0dB.mp3 & 500Hz_0dB.mp3 & 2KHz_0dB.mp3 & 5KHz_0dB.mp3 & 10KHz_0dB.mp3 & 16KHz_0dB.mp3 Bit rate 128Kbps SPL freq 44.1KHz	With 30KHz LPF	EQ: Normal Vol: Max	0~0.9	<1.2	dB

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② Audio Section: FM Radio

ITEM	Measure Conditions			Specification		
	Condition	Filter	etc	Normal	Limit	Unit
Output Power	90.1MHz DEV 75KHz INPUT 60dBuV MOD 1KHz	-	EQ: Normal Vol : Max	5	>4.7	mW
T.H.D	90.1MHz DEV 40KHz INPUT 60dBuV MOD 1KHz	With A Filter	EQ: Normal Vol: Max	1	<1.5	%
Usable Sensitivity	90.1MHz DEV 40KHz MOD 1KHz	With A Filter	EQ: Normal Vol: Max	15	<20	dBuV
SEEK LEVEL	90.1MHz DEV 40KHz MOD 1KHz	With A Filter	EQ: Normal Vol: Max	45 (TBD)	>40 (TBD)	dBuV
S/N Ratio	90.1MHz DEV 40KHz INPUT 60dBuV MOD 1KHz	With A Filter	EQ: Normal Vol: Max	60	>55	dB
Channel Separation	90.1MHz DEV 75KHz PILOT 10% INPUT 60dBuV MOD 1KHz		EQ: Normal Vol: Max	TBD	TBD	TBD
Frequency Range	Korea, USA, EU 87.5MHz~108MHz Step 100KHz Japan 76MHz ~ 108MHz Step 50KHz	-	-	-	-	-

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③ Power Section: MP3 Part

Item	Measure Conditions			Specification		
	Power condition	File	etc	Normal	Limit	Unit
Playing Time	AAA x 1EA	- MP3 Music files - Bit rate: 128Kbps - SPL freq: 44.1KHz	EQ: Normal Volume: 15Step	10	>9	Hour
Power Down				0.3	<1.0	mA
Current	1.5V	- 1KHz_0dB.mp3 - Bit rate: 128Kbps	EQ: Normal Volume: Max	110	<120	mA
	1.0V	- SPL freq: 44.1KHz		180	<200	mA

④ Power Section: FM Radio

Item	Measure Conditions			Specification		
	Power condition	File	etc	Normal	Limit	Unit
Playing Time	AAA x 1EA	87.5MHz ~ 108.0MHz	EQ: Normal Volume: 15Step	16	>15	Hour
Power Down				0.3	<1.0	mA
Current	1.5V	- 90.1MHz - DEV 75KHz	EQ: Normal Volume: Max	90	>100	mA
	1.0V	- INPUT 60dBuV - MOD 1KHz		140	<150	mA
	1.5V	- 87.5MHz ~ 108.0MHz		60	<70	mA

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⑤ Data Transfer Section

MODE	Measure Conditions	Specification		
		Normal	Limit	Unit
Download	After Format	TBD	1.98	Mbps
	After Delete	TBD	1.97	
Upload		TBD	1.63	

• Temperature Range

- ① Operation Temperature Range: -5℃ to 50℃
- ② Storage Temperature Range: -20℃ to 70℃

• Certification

- ① Domestic: MIC
- ② Export: CE, FCC