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ELECTRONICS

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9016 (MA) Talking Digital Compass 08/2007

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ELECTRONICS, INC.

User's Guide:

Talking Digital Car Compass



www.ExcaliburElectronics.com

Congratulations on your purchase of the Talking Digital Car Compass from Excalibur Electronics. This is a precise, easy-to-use compass that includes a world-time clock, alarm function and electronic mosquito repellent. Be sure to read your user's guide completely, taking special note of safety information.

Introduction

This is a precise Digital Compass with the following valuable features :

- 1.) Real human voice
- 2.) Digital Compass with declination function
- 3.) Thermometer with Fahrenheit (°F) & Celsius (°C) reading
- 4.) Real time clock with date, month, year and day of week display
- 5.) Daylight saving time
- 6.) World time clock for 32 different cities
- 7.) 12 / 24 hour mode
- 8.) Alarm with 5 minutes snooze function
- 9.) Chronograph up to 99 hrs. 59 min. 59 sec
- 10.) Key tone on/off
- 11.) EL Backlight
- 12.) Electronic mosquito repellent
- 13.) 10 minutes auto power off

Default Settings

Real time clock : 0:00 in 24-hour mode
 Date : 01-01-2000
 Alarm : Off
 Default home time : London
 Key tone : On
 Temperature format : Degree Celsius
 Electronic mosquito repellent : Off

Function of Buttons

- MODE** -- Press to choose different modes.
SET -- Press and hold to enter Real Time Setting mode and Alarm Time Setting mode.
 -- Press to enable/disable the electronic mosquito repellent in Mosquito Repellent mode.
 -- Press to confirm the setting in each mode.
▲ / ⌂ -- Press to increase the values in Setting mode.
 -- Press to increase the output repellent level in Mosquito Repellent mode.
 -- Press to enable/disable key tone in Real Time Clock mode.
▼ / C/F -- Press to decrease the values in Setting mode.
 -- Press to decrease the repellent output level in Mosquito Repellent mode.
 -- Press to change the temperature between °F & °C in Real Time Clock mode.
TALK -- Press to speak the direction ahead.
COMPASS -- Press to enter the compass mode directly.
 -- Press and hold to enter the calibration in Compass mode.
LIGHT -- Press to turn on the backlight for 5 seconds.
RESET -- Press to reset the device after installing batteries or if the unit malfunctions.

Setting Procedure

Real Time Clock Mode

When the power is turned on, a beep will be heard and the device will enter the Real Time Clock mode. A default city LONDON (LON), real time clock (0:00), weekday (SAT), date (01-01-2000) and temperature reading will be displayed on the screen. In the Real Time Clock mode, an icon ☉ (Real time) will be displayed on the screen.

Real Time Clock Setting

Before setting the real time clock, user needs enter the World Time Clock mode first by pressing

the **MODE** button twice to enter the World Time Clock mode. At World Time Clock mode, an icon ☉ will be displayed on the screen. There are total 32 cities to choose from. Press the ▲ or ▼ button to scroll to your home city alphabetically. Then press **SET** button to confirm and "SET OK!!!" will be shown. Press **MODE** button return to the Real Time Clock mode.

In Real Time mode, press and hold the **SET** button for 3 seconds to enter Real Time Setting mode. The year "2000" will flash. Press ▲ or ▼ to adjust the year. After the year is set, press the **SET** button to confirm and continue to set the month. Use the same method to finish the remaining settings. The order of the settings will be as follows :

YEAR → **MONTH** → **DATE** → 12/24 **MODE** → **SUMMER TIME** → **HOUR** → **MINUTE** → Setting Complete

After you have completed the setting procedure, it will return to Real Time Clock mode.

If the real time clock is in Daylight Saving Time, the icon ☼ will be displayed on the screen. This means the clock is moved forward one hour for Daylight Saving.

Tone On/Off

In Real Time Clock mode, press ▲ / ⌂ button to set the tone ON/OFF. When the tone is ON, the icon ⌂ will be shown on the screen.

Date Mode

In Real Time Clock mode, press **MODE** button four times enter the Date mode. The current year, month, date and day of the week will be shown on the screen.

Alarm Clock Setting

In Real Time Clock mode, press **MODE** button for three times enter the Alarm Time mode. An icon ((●)) will be shown on the screen. Initially, the alarm function is disabled. Press ▲ or ▼ button to enable the alarm. When the alarm is enabled, an icon ☼ will be shown on the screen. To set the alarm, the alarm function must be enabled. Press and hold **SET** button for 3 seconds enter the Alarm Time Setting mode. When the alarm hour flashes, press the ▲ or ▼ button to adjust the alarm hour. After the hour is set, press **SET** button to confirm and continue to set the alarm minute. Press ▲ or ▼ button to adjust the alarm minutes. Press **SET** button again return to the Alarm Time mode.

Snooze Function

There is a 5-minute Snooze function available for the alarm clock. During the alarm, press the **LIGHT** button stop the alarm temporarily and enter the Snooze mode. An icon ZZZ will be displayed on the screen. After 5 minutes, the alarm will resume again. During the alarm, press any button except **LIGHT** button to disable the Snooze function. The alarm will be stopped completely until the next time it occurs.

World Time Clock Setting

In Real Time Clock mode, press **MODE** twice to enter the World Time Clock mode. The icon ☉ will be displayed in the middle of the screen. There are total 32 cities in the World Time Clock mode that represent different time zones on the earth. The cities are arranged in alphabetical order as below :

City	City Code	Time Difference
ADELAIDE	ADL	GMT+9.5
ANCHORAGE	ANC	GMT-9
BANGKOK	BKK	GMT+7
BARCELONA	BAR	GMT+1
BEIJING	BEI	GMT+8
BERLIN	BER	GMT+1
CAIRO	CAI	GMT+2
CARACAS	CCS	GMT-4
CHICAGO	CHI	GMT-6
DACCA	DAC	GMT+6

DENVER	DEN	GMT-7
DELHI	DEL	GMT+5.5
DUBAI	DXB	GMT+4
HONG KONG	HKG	GMT+8
HONOLULU	HNL	GMT-10
JEDDAH	JED	GMT+3
JERUSALEM	JRS	GMT+2
JOHANNESBURG	JOH	GMT+2
KABUL	KBL	GMT+4.5
KARACHI	KHI	GMT+5
LONDON	LON	GMT
LOS ANGELES	LAX	GMT-8
NEW YORK	NYC	GMT-5
NOUMEA	NOU	GMT+11
PARIS	PAR	GMT+1
RANGOON	RGN	GMT+6.5
RIO DE JANEIRO	RIO	GMT-3
SYDNEY	SYD	GMT+10
TEHRAN	THR	GMT+3.5
TOKYO	TYO	GMT+9
UTC	UTC	GMT
WELLINGTON	WLG	GMT+12

If the user wants to use the chosen city time to be the default city time, press the **SET** button for that chosen city. The default time will be changed the time zone for that city. "SET OK!!!" will be shown on the screen.

Operation

Chronograph

In Real Time Clock mode, press **MODE** button once enter Chronograph mode. The icon ⌘ will be displayed on the screen. Press the **SET** button start or stop the counter. Press ▼ to reset the chronograph to zero.

[Thermometer]

There is a built-in thermometer that will measure the temperature range from 0°C (32°F) to 60°C (140°F). Press ▼/C/F button to interchange the temperature reading between °C and °F.

[EL Backlight]

Press **LIGHT** button turn the EL backlight on for 5 seconds. It will turn off automatically.

[Electronic Mosquito Repellent]

There is a built-in electronic mosquito repellent in this unit. It repels mosquitoes by using harmless ultrasonic waves.

From Real Time Clock mode, press the **MODE** button five times enter the Mosquito Repellent mode. Initially, the mosquito repellent function is disabled, and "MOS OFF" will be shown on the screen. Press the **SET** button to enable or disable the mosquito repellent function. If the mosquito repellent function is enabled, the icon ★ will be shown on the screen.

There are 3 levels of ultrasonic waves for the electronic mosquito repellent: LO, MID and HI. Press ▲ or ▼ button set the desired output level.

[Digital Compass]

There is a built-in digital compass in this unit. Press the **COMPASS** button to access Compass mode. The bearing reading of the compass will be shown on the screen. The bearing reading represents the bearing that you are facing. The direction shown on the half angle represents the magnetic North, East, South and West.

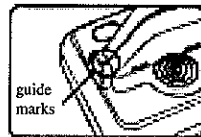
In this compass, there are total 16 cardinal directions:

North	N	349° --- 11°
North Northeast	NNE	12° --- 33°
Northeast	NE	34° --- 56°
East Northeast	ENE	57° --- 78°
East	E	79° --- 101°
East Southeast	ESE	102° --- 123°
Southeast	SE	124° --- 146°
South Southeast	SSE	147° --- 168°
South	S	169° --- 191°
South Southwest	SSW	192° --- 213°
Southwest	SW	214° --- 236°
West Southwest	WSW	237° --- 258°
West	W	259° --- 281°
West Northwest	WNW	282° --- 303°
Northwest	NW	304° --- 326°
North Northwest	NNW	327° --- 348°

The Compass will be activated for 2 minutes when the **COMPASS** button is pressed. If user wants to use further the compass, press **COMPASS** to enable the compass again. During the compass activation, press the **TALK** button to get the announcement of the direction ahead in clear human voice.

To get the most accurate bearings:

Push the compass backward until its stop points to the guide marks which are available on the right & left side of the compass base.



Calibration

In the Compass mode, press and hold **COMPASS** for 3 seconds enter Calibration mode. "CAL" will be shown on the screen. Slowly turn the compass clockwise at horizontal level for 360° and press the **COMPASS** button. The calibration result will be shown on the screen. If the calibration is successful, "CAL. OK" will be shown and the unit will enter Compass mode automatically. If the calibration fails, "CAL. ERR" will be shown on the screen. To re-calibrate, press and hold **COMPASS** for 3 seconds enter Calibration mode and repeat the previous steps.

Declination

Since there is an angle difference between Magnetic North and True North on the earth, the "declination" function is programmed in this compass to compensate the angle difference.

If your declination is WEST, ADD the number of degrees of your westerly declination to the number of degree that you got there. Then the reading you see is now based on True North. If your declination is EAST, SUBTRACT the number of the degrees of your easterly declination to the number of degrees that you got there. Then the reading you read now is based on True North.

To set the declination, press and hold the **SET** button for 3 seconds enter the Declination Setting mode. Press ▲ or ▼ button set the declination angle and **SET** button to save. The compass will return to Compass mode automatically thereafter.

Note : The declination angle is dependent on the location where you are standing. In the Compass mode, press ▲ button enable or disable the declination function. If the declina-

tion function is enabled, the icon **D** will be shown on the screen. The compass reading now includes declination and the head of the pointer always points to True North.

If the declination function is disabled, the icon **D** disappears. The compass reading is now without declination and the direction shown on the half circle represents Magnetic North, East, South and West.

Installation of Compass Unit

Clean the bottom of the compass base. Stick the enclosed Velcro tape to the rectangular space on the battery compartment. Adhere the compass to the most horizontal area on your dashboard.

Auto Power Off Function

This machine includes an auto power-off function. It will turn itself off when no button is pressed within 10 minutes. Press any button to wake up the machine again.

Operation Temperature Range

-10°C to 60°C or 14°F to 140°F

Storage Temperature Range

-20 °C to 70°C or -4°F to 158°F

Changing Batteries

When the screen becomes faded, the batteries are low and need to be changed. To change the batteries, recommended to remove all the batteries and re-insert new batteries one by one.

Note: The unit will return to Real Time Clock mode if there is no button pressed within 1 minute. If your unit malfunctions, press **RESET**. All saved data will be erased.

Battery Rating

Operating voltage: 4.5V

Battery requirements: AA/LR6 x 3

Notice : For best results, use alkaline batteries in this product.

Safety Information

- Avoid rough handling such as bumping or dropping.
- Avoid moisture or extreme temperatures.
- Clean using only a slightly damp cloth. Do not use cleansers with chemical agents.

Battery Safety

- Only batteries of the same or equivalent type are recommended to use.
- Do not mix old and new batteries.
- Insert batteries with the (+) & (-) ends as shown on the product.
- Remove the exhausted batteries and dispose of them properly.
- Do not short circuit battery terminals.
- Remove batteries and store them in a cool, dry place when not in use.
- Always keep this product away from reach of children.
- Keep this product away from open flames and other heating sources.

90-DAY LIMITED WARRANTY

EXCALIBUR ELECTRONICS, INC., warrants to the original consumer that its products are free from any electrical or mechanical defects for a period of 90 DAYS from the date of purchase. If any such defect is discovered within the warranty period, EXCALIBUR ELECTRONICS, INC., will repair or replace the unit free of charge upon receipt of the unit, shipped postage prepaid and insured to the factory address below.

The warranty covers normal consumer use and does not cover damage that occurs in shipment or failure that results from alterations, accident, misuse, abuse, neglect, wear and tear, inadequate maintenance, commercial use, or unreasonable use of the unit. This warranty does not cover cost of repairs made or attempted outside of the factory.

Any applicable implied warranties, including warranties of merchantability and fitness, are hereby limited to 90 DAYS from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded. Some states do not allow limitations on the duration of LIMITED 90-DAY WARRANTY implied warranties and do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions in these instances may not apply. The only authorized service center in the United States is:

Excalibur Electronics, Inc.
13755 SW 119th Ave
Miami, Florida 33186 U.S.A.
Phone: 305.477.8080
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Ship the unit carefully packed, preferably in the original carton, and send it prepaid, and adequately insured. Include a letter, detailing the complaint and including your daytime telephone number, inside the shipping carton. If your warranty has expired and you want an estimated fee for service, write to the above address, specifying the model and the problem.

NOTE: Please do not send your unit without first receiving an estimate for servicing from EXCALIBUR ELECTRONICS, INC. Contact us before sending your unit.

We cannot store your unit!

Excalibur Electronics, Inc. reserves the right to make technical changes without notice in the interest of progress.

FCC Part 15 Compliance

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.

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.