# User manual

( VELLUX BELL )

12 Aug., 2006

Dunan Co., Ltd.

## Contents

- 1 General description and construction
- 2 Specification
- 3 Operation
- 4 Installation
- 5 Maintenance

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:

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

## 1 General description and construction

## 1.1 General description

This VELLUX BELL is a component of wireless data management system which is used in restaurant, hospital, and so on. This VELLUX BELL is usually mounted on the table, and the user press the button for calling the service man. When the button is pressed that data is transferred to VELLUX MAIN through RF signal.

### 1.2 Construction

The construction of this VELLUX BELL is as below:

- 1) BELL TABLE UNIT 1EA
- 2) BATTERY 1EA

## 2 Specification

Tx Frequency	433.050 ~ 434.790 MHz			
Tx power	Less than 10 mW			
Temperature range (when operation)	-10~+50 °C			
Type of radio	F1D			
Modulation type	FSK			
Oscillation	X-TAL			
Communication type	Simplex			
Color	RED, GRAY, SILVER, WHITE on request			

## 3 Operation



[ VELLUX BELL ]

Above figure is the VELLUX BELL. The function of each number is as below:

## Calling button

Press this button when calling serviceman.

#### Order button

Press this button when ordering water and menu.

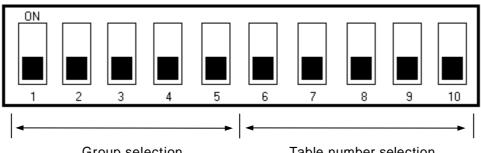
#### Count button

Press this button when user would like to pay the money.

## LED Lamp (Blue / Red)

Status button indicate the status when each button is pressed.

#### Bell ID Programming – Set the Dip Switch as below:



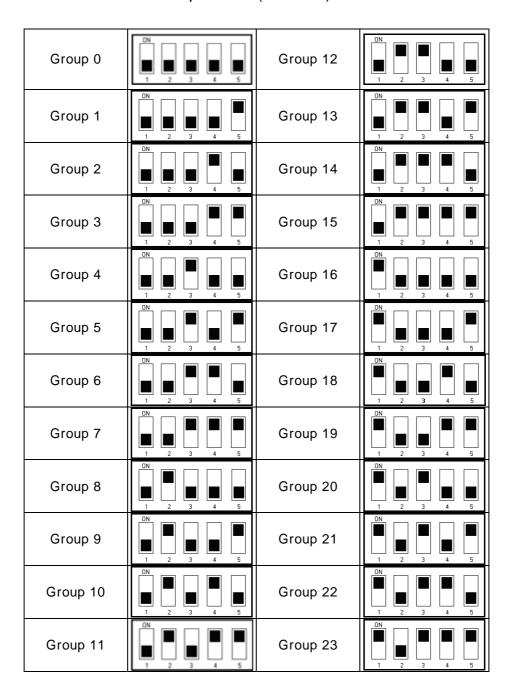
Group selection

Table number selection

#### 3.1 Function

#### 1) 24 EA of Group

Using address A5 $\sim$ A8, can divide to 24 Group. It is achieved by the combination of Dip switch (No. 1 $\sim$ 5).



## 2) 31 EA of Table

Using address A0 $\sim$ A4, it is consisted with 31 Tables. It is achieved by the combination of Dip switch (No. 6 $\sim$ 10).

	lation of Dip switt	(1101 0 10)	-
Table 0	ON	Table 16	ON
Table 1	ON	Table 17	ON
Table 2	ON	Table 18	ON
Table 3	ON	Table 19	ON
Table 4	ON	Table 20	ON
Table 5	ON	Table 21	ON
Table 6	ON	Table 22	ON
Table 7	ON	Table 23	ON
Table 8	ON	Table 24	1 2 3 4 5
Table 9	ON	Table 25	0N
Table 10	ON	Table 26	0N
Table 11	ON	Table 27	1 2 3 4 9
Table 12	ON	Table 28	1 2 3 4 5
Table 13	ON	Table 29	0N
Table 14	ON	Table 30	1 2 3 4 9
Table 15	ON	Table 31	0N

#### 3) Bell coverage range

Each group generates No. 1~31 Table number. Table number 0 is not assigned to the table number. Center button is No. 0, left button is No. 1, Right button is No. 2. When indicating to the pager, No. 0 is not indicated.

The quantity of a channel is 1~31, but using all 24 Group, user can select max 744 EA of table number.

#### 4) The Frame Format of the signal

12-bit of Waveform, which notes 0, 1, and F.

A0	A1	A2	А3	A4	A5	A6	A7	A8	Α9	D0	D1
----	----	----	----	----	----	----	----	----	----	----	----

A0~A4 : Table number 0~31 : (High, Low Status)

A5~A8 : Group 0~23 : (High, Low, Floating Status)

A9: Destinction key. Stabled to Floating Status

D0~D1 : Indicate button number 1~3 : (High, Low Status)

#### 3.2 Other tips

- 1) Zoning: Using ID Writer, we adopted allocating any table number to the any pager
- 2) At same table, when user press same button again, by max 10 sec, the input is not activated. This is "duplicate message controlling function".

## 4. Installation

- 1) Polish the place that VELLUX BELL will be mounted and polish the bottom of VELLUX BELL.
  - 2) Stick dual-stick tape on the bottom side of VELLUX BELL, and then mount VELLUX BELL firmly to the place that you would like to stick.

### 5. Maintenance

- 5.1 When the power is not indicated (LED is off)
  - → Check the polarity of the Battery whether correctly placed.
- 5.2 The power is indicated (LED is on), but there is no transmission
  - → Call the A/S number which is marked on the label.