



*Voice***Music**
MP3  SD  AUX IN by SEMITRON S.A.



User Manual



Conformed with the requirements of the applicable EC directives.



Conformed with quality management systems standards.



In accordance with 2014/32/EU



Conformed with directive 2002/96/EC on waste electrical and electronic equipment (WEEE)



IEC 61140 protection class II

OPERATION MANUAL For VoiceMusic

English v1.00

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1. Description

VoiceMusic

The VoiceMusic device was designed for simplicity of use. It is a high-tech product and is accompanied by unique features that make it stand out from competing products.

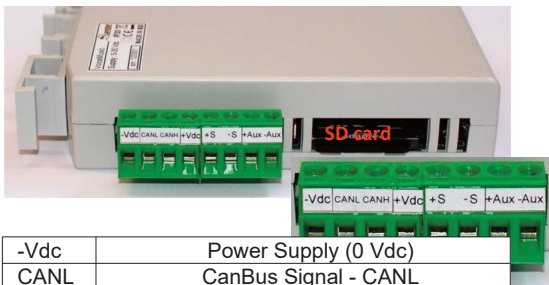
The VoiceMusic device can play audio files, with mp3 encoding, for music, floor announcement, information messages (eg overweight), ads, etc. All files are stored on a removable SD memory card which can be connected to a USB port on any computer using the appropriate converter. All the necessary settings are made via Dip switches which are easily accessible on the front of the device. Finally, the device can be easily installed on any elevator panel as it takes up little space while being mounted directly on a rail.



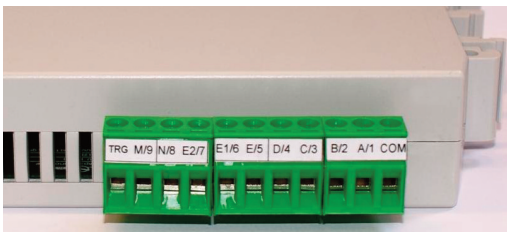
2. Specifications

Input Voltage	5-35 Vdc
Inputs	Common (+) or (-) 12 or 24 Vdc
Sound file type	mp3 44.1 KHz - 128Kbits/sec
Storage mean	Standard SD card till 2GB
Current Consumption	25mA without playing music 40mA while playing music
Weight	142gr
Functions	3 extra sounds Random music play Music play in a row Music play GONG 32 stops in BCD 10 stops in Decimal 32 stops in Gray code 24 stops in Can bus External audio input (e.g. radio) Night Mode Mute Mode
Dimensions	125mm x 105mm x 28mm
Mounting	standard DIN (on rail)
Ingress Protection	IP 20

3. The Device



-Vdc	Power Supply (0 Vdc)
CANL	CanBus Signal - CANL
CANH	CanBus Signal - CANH
+Vdc	Power Supply (+5 to +35 Vdc)
+S	+Sound Out
-S	-Sound Out
+Aux	+Aux In
-Aux	-Aux In



TRG	Triger
M/9	Mute Mode / 9 (Decimal input)
N/8	Night Mode / 8 (Decimal input)
E2/7	Extra 2 / 7 (Decimal input)
E1/6	Extra 1 / 6 (Decimal input)
E/5	E (BCD input) / 5 (Decimal input)
D/4	D (BCD input) / 4 (Decimal input)
C/3	C (BCD input) / 3 (Decimal input)
B/2	B (BCD input) / 2 (Decimal input)
A/1	A (BCD input) / 1 (Decimal input)
COM	Inputs Common (+ or -)



1	TERM	Terminal Resistor Can Bus
2	MUTE	Mute mode activation
3	NIGHT	Night mode activation
4	EXT_3	Music play extra_3.mp3 activation
5	SPARE	Not used
6	EXT_2	Music play extra_2.mp3 activation
7	EXT_1	Music play extra_1.mp3 activation
8	AUX	Audio input activation
9	SUF	Random music play activation
10	GONG	Music play GONG activation
11	TYP_1	The announcement input type is selected in collaboration with TYP_0
12	TYP_0	The announcement input type is selected in collaboration with TYP_1

4. Description of connections and settings

• 4.1 Power Supply

The device is powered by a dc voltage of 5-35 Volts while it is protected from reverse polarity. In case of proper power supply, the corresponding green LED remains on continuously. The following figure shows the power connections.



• 4.2 Audio Output

In order to achieve the best possible sound quality, a good quality speaker should be used. In any case, the speaker must have a resistance of 8Ω and a minimum power of 1Watt.

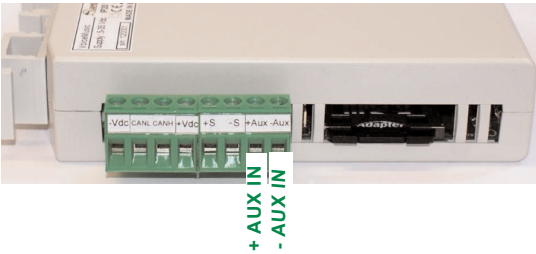
Connections



• 4.3 Audio Input

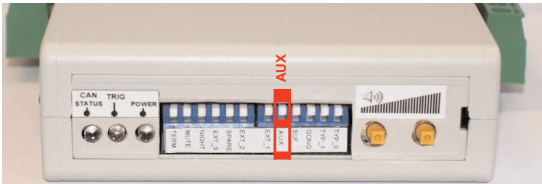
The device can also play audio from an external source (eg radio). In this case it will need to be adjusted to reproduce the sound it receives from the audio input instead of the mp3 music files inside the SD card. The announcement of the floors as well as the reproduction of information sounds is done normally.

Connections



Settings

In order to set the device to play audio input instead of mp3 music files, the AUX switch must be in the ON position.



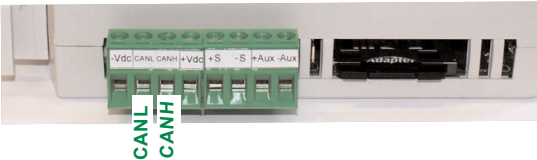
	AUX
Audio input activated	ON

• 4.4 CAN BUS

General

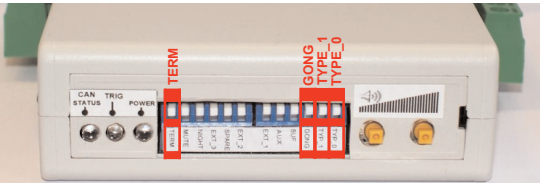
The device also cooperates with the elevator control panels of SEMITRON that have four-wiring CAN BUS. In this case the device receives the information for the floor announcement through the CAN BUS signals so no other connections to the elevator control panel are required.

Connections



Settings

When the terminal resistance must be activated on this device (due to the topology of the CAN BUS connections), this can be done simply by switching the terminal resistance (TERM) to ON position. In order to set up the device to receive information about the floor announcement from CAN BUS it is required to make the settings shown below.



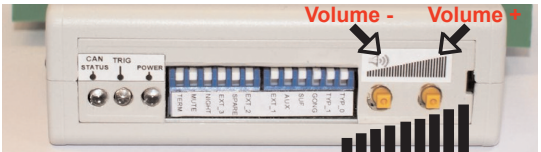
	GONG	TYPE_1	TYPE_0
CAN_BUS	OFF	ON	ON

• 4.5 Volume Adjustment

General

The volume on the audio output is set by the two keys on the front of the device. This volume concerns the music files play, floor announcements and information. It DOES NOT concern the volume of the audio input. In order to adjust the volume of the audio input it should be done by properly adjusting the device from which the sound is received (e.g. radio).

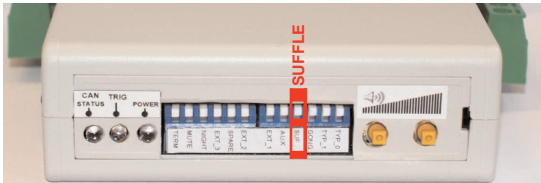
Note: Volume adjustment is automatically saved 5 seconds after the last adjustment so it remains the same after power failure.



• 4.6 SUFFLE (random play)

General

When playing music from the SD card, the device can be set to play the files in random order. To activate this function, the Suffle switch must be ON.



	SUFFLE mode
SUFFLE Mode	ON
Play in a row	OFF

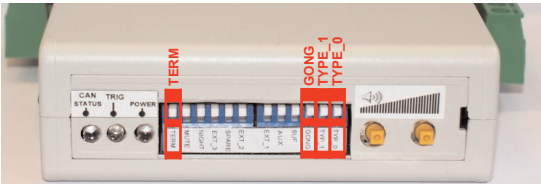
• 4.7 Input of Announcement signals

General

The device can receive signals in its inputs with BCD, Decimal, Gray Code or CAN BUS encoding. The CAN BUS case has already been analyzed in section 4.4. In other cases the inputs are common and the adjustment for the type is done using the corresponding switches on the front of the device. The inputs can be activated with common (+) or (-) and voltage 12Vdc or 24Vdc while the floor is announced each time the TRIGGER signal is received.

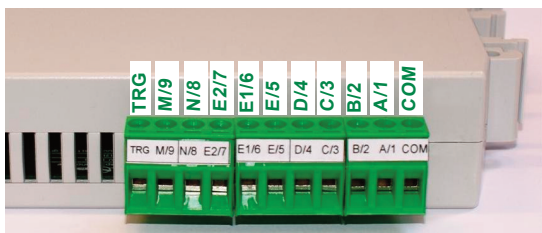
Settings

In order to set the type of inputs encoding of the device, set the three switches as shown below.



	GONG	TYPE_1	TYPE_0
BCD	OFF	OFF	OFF
DECIMAL	OFF	ON	OFF
GRAY CODE	OFF	OFF	ON
CAN BUS	OFF	ON	ON
GONG	ON	-	-

Connections

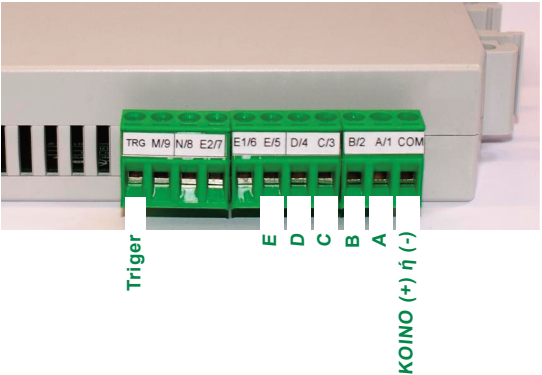


TRG	Triger
M/9	Mute Mode / 9 (Decimal input)
N/8	Night Mode / 8 (Decimal input)
E2/7	Extra 2 / 7 (Decimal input)
E1/6	Extra 1 / 6 (Decimal input)
E/5	E (BCD input) / 5 (Decimal input)
D/4	D (BCD input) / 4 (Decimal input)
C/3	C (BCD input) / 3 (Decimal input)
B/2	B (BCD input) / 2 (Decimal input)
A/1	A (BCD input) / 1 (Decimal input)
COM	Inputs Common (+ or -)

As shown in the picture above, the device has 11 terminals, 10 of which are inputs, while the last one is the terminal that indicates that the device works with common (+) or (-) and voltage 12 or 24 Vdc. For example, if it is required the inputs to be activated when they receive a voltage of +24Vdc, 0Vdc must be permanently connected to the last terminal.

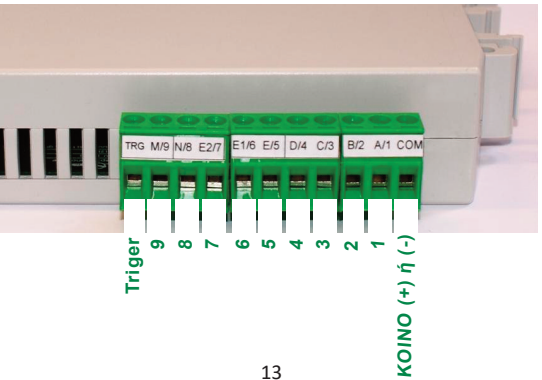
4.7.1 BCD/GRAY CODE

In case the device operates with BCD or GRAY CODE, up to 32 stops can be announced, while the inputs that must be connected are shown in the image below.



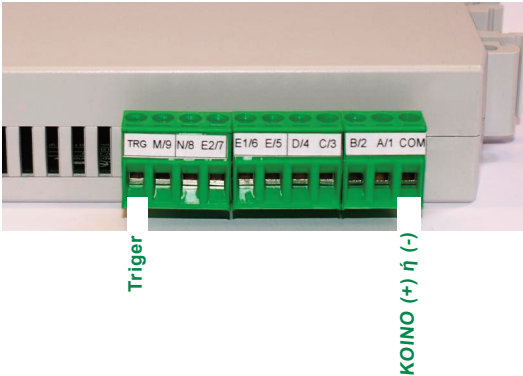
4.7.2 Decimal

In case the device works with decimal encoding, up to 10 stops can be announced, while the inputs that must be connected are shown in the image below.



4.7.3 Announcement GONG

If the user wishes, the device can be set to play the GONG sound instead of a floor announcement. In this case the only signal required is the Trigger.



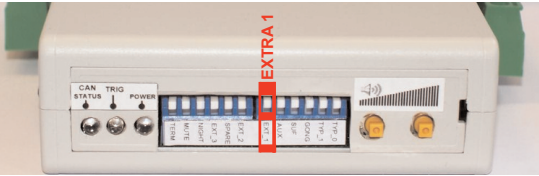
• 4.8 Other Functions

General

As shown in the previous pictures, the inputs of the device have more than one function. Each function will be described and analyzed.

4.8.1 6/Extra 1

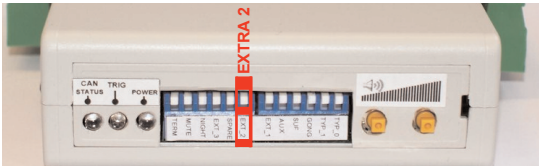
This input can be used either to announce a stop when decimal encoding is used or to play the file named extra_1.mp3. To activate the extra_1.mp3 play, the Extra 1 switch must be ON.



Input 6/Extra 1	Extra 1 Switch
Function Extra 1	ON
Function 6	OFF

4.8.2 7/Extra 2

This input can be used either to announce a stop when decimal encoding is used or to play the file named extra_2.mp3. To activate the extra_2.mp3 play, the Extra 2 switch must be ON.

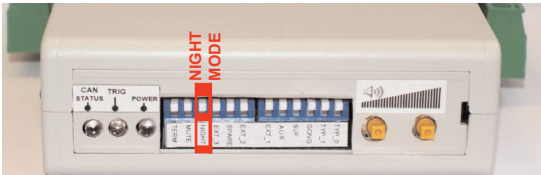


Input 7/Extra 2	Extra 2 Switch
Function Extra 2	ON
Function 7	OFF

4.8.3 8/Night Mode

This input can be used either to announce a stop when decimal encoding is used or to activate the Night Mode function. In Night Mode while the input remains on, the volume of the audio output drops to 50% of the defined volume for normal operation. Alternatively, the user can adjust the volume he prefers for Night mode using the two keys while the Night mode is enabled. In this case the audio volume in normal mode and the audio volume in Night mode will be independent of each other.

Note: Night mode is not supported when the device uses the audio input (and not the SD card)



Input 8/Night Mode	Night Mode Switch
Function 8	OFF
Function Night Mode	ON

4.8.4 9/Mute Mode

This input can be used either to announce a stop when decimal encoding is used or to activate the Mute Mode function. During Mute Mode and while the input remains off, the volume of the audio output is reset.

Note: Mute Mode is also supported if the device uses the audio input (and not the SD card)

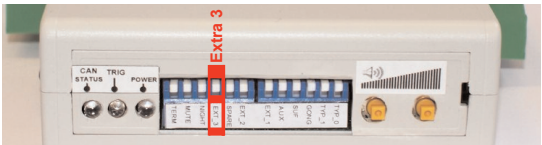


Input 9/Mute Mode	Mute Mode Switch
Function 9	OFF
Function Mute Mode	ON

4.8.5 TRIGGER/Extra 3

This entry can be used either as a TRIGGER signal to announce a stop or to play a file named extra_3.mp3. To activate the extra_3.mp3 play, the Extra 3 switch must be ON.

(Note: Announcement of the Extra 3 file can only be done when it is not required the floor announcement or when CAN_BUS signals are used for floor announcement)



Input TRIGGER/Extra 3	Extra 3 Switch
Function TRIGGER	OFF
Function Extra 3	ON

5. Insert sounds to SD card

General

The device supports any standard SD card with capacity up to 2 GB. In order to be able to play sounds, the following rules must be followed:

1. The SD card must have two folders named **music** and **announce**. All mp3 music files must be copied to the music folder (these files can have any name). Only the floor announcements, GONG and information files should be in the announce folder.

2. The mp3 files must be encoded with maximum sampling frequency 44100 Hertz and 128 Kbits/second.

3. The names of the files in the announce folder related to the floor announcements must be:

Lower stop	: floor_0.mp3
Next stop	: floor_1.mp3
.....	: floor_2.mp3
.....	:
.....	: floor_10.mp3
.....	:
.....	: floor_21.mp3
.....	:

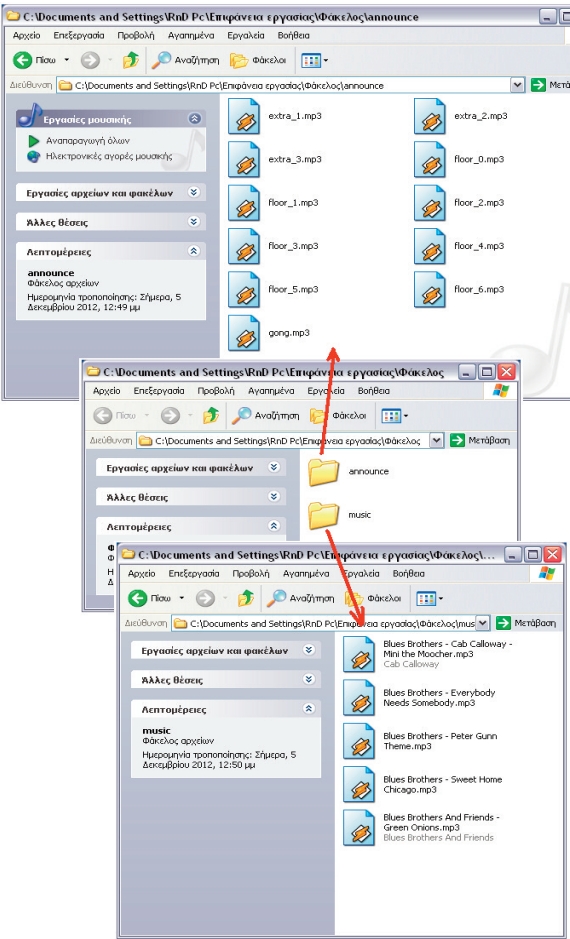
4. Information messages in the announce folder must have the following names:

Message input extra 1	: extra_1.mp3
Message input extra 2	: extra_2.mp3
Message input extra 3	: extra_3.mp3

5. The GONG message in the announce folder must be named gong.mp3

Note: In any case, the floor_0.mp3 file must correspond to the announcement of the lower stop, whether it is the ground floor or the third basement.

The following figure shows an example with proper file nomenclature.





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