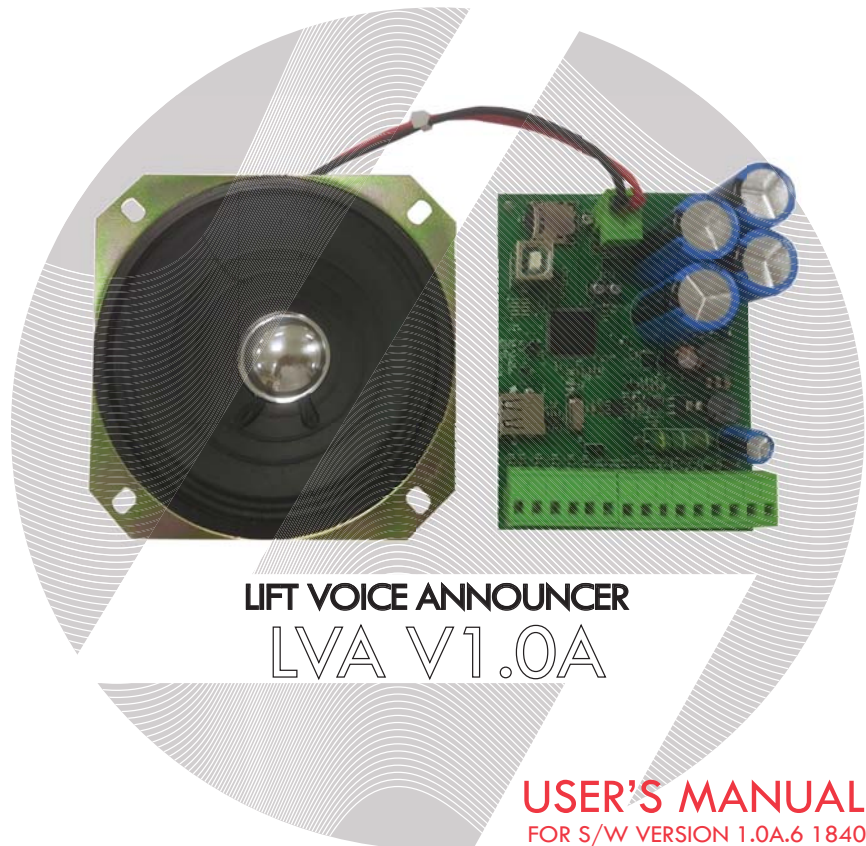




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W W W . S A S C O N T R O L L E R S . C O M



LIFT VOICE ANNOUNCER
LVA V1.0A

USER'S MANUAL
FOR S/W VERSION 1.0A.6 1840

1. GENERAL DESCRIPTION

1.1 MAIN FEATURES
1.2 TECHNICAL DATA

2. TERMINAL DESCRIPTION

2.1 TERMINAL LAYOUT`
2.2 INPUT TERMINALS
2.2.1 FOR INDICATOR TYPE
SET TO "ENHANCED".
2.2.2 FOR INDICATOR TYPE
SET TO "GRAY" OR "BINARY"
2.2.3 FOR INDICATOR TYPE
SET TO "7-SEGMENT".
2.3 AUDIO OUTPUT TERMINALS

**3. PARAMETERS
DESCRIPTION**

3. PARAMETERS DESCRIPTION

4. APPENDIX A

4. APPENDIX A


1 .GENERAL DESCRIPTION

1. GENERAL DESCRIPION

The Lift Voice Announcer is a dedicated, high-fidelity floor announcement system. It notifies the passengers the name or/and the number of the current floor with a human voice. It also plays background music. In addition, special messages may be broadcast notifying the passenger about the travel direction, the door status and more. Good sound quality, background MP3 music, an embedded SD card memory storage along with a built-in gong, multiple languages and other features make this lift announcer an autonomous voice playback unit. All inputs are user configurable. The firmware could be upgraded on site.

A user-friendly mobile application **LVA APP** , designed by S. & A.S. Ltd, can be used to configure this unit according to customer needs.

1.1 MAIN FEATURES

- High quality voice announcements of floor information and special messages.
- Background MP3 music.
- Embedded 8GB SD Card memory for storage of music tracks.
- Supports USB memory stick for music play. ¹
- Multiple language announcements.
- Multiple male and female voices.
- Can be interfaced with Gray, Binary, 7-segment and CAN inputs.
- 13 configurable inputs.
- Backup power to play a message at power failure.
- Mobile application **LVA APP**  available for LVA configuration.
- Enhanced volume management capabilities.
- Separate Volume Control for Announcements and background music.
- Build-in Gong

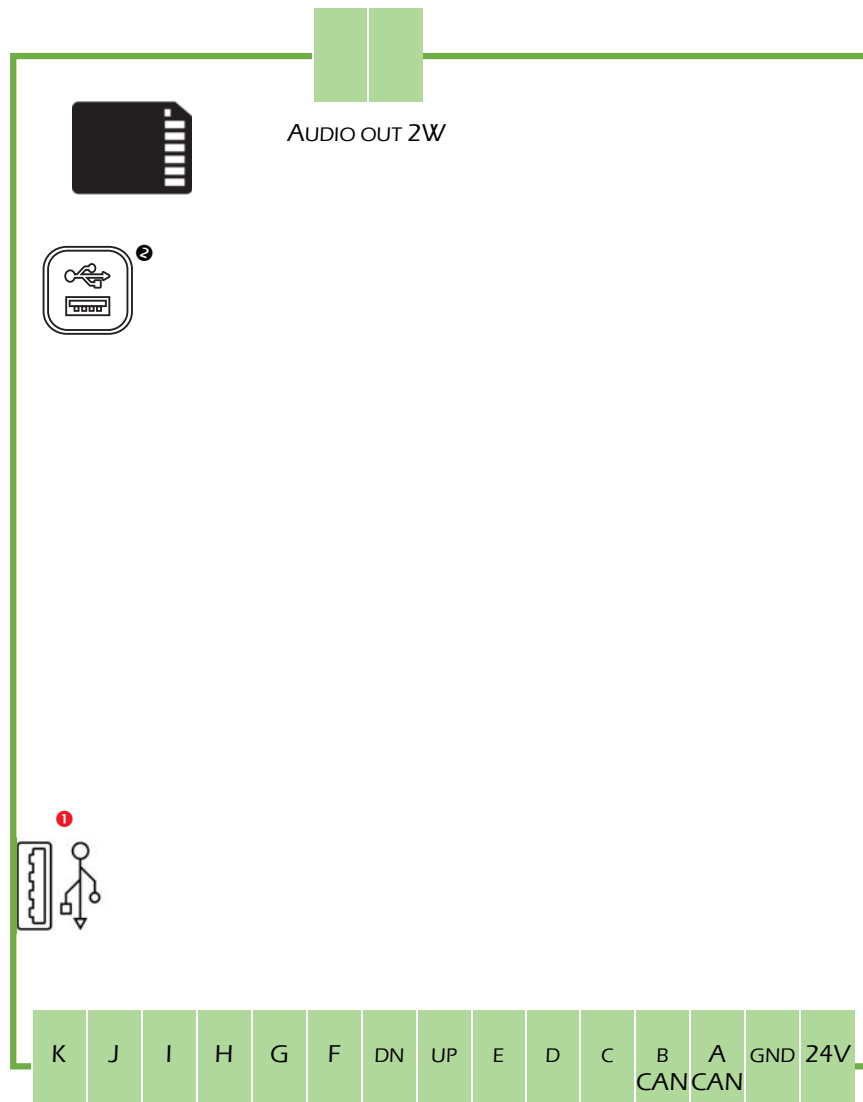
1.2 TECHNICAL DATA

Supply voltages	Board supply: 24vdc +15% -25%
Current Consumption	Low current consumption (<100mA)
Inputs	A,B,C,D,E,F,G,H,I,J,K Inputs active voltage level is 24vdc UP, DN Inputs active voltage level is 0vdc
Audio Output	External Speaker (4Ω, 2.2W) or (8Ω, 1.4W)
Connection	Screw type, plug-in connectors
Size	11cm x 8cm x 4 cm

¹ If USB memory stick is plugged in, LVA plays only mp3 music files stored in the USB memory stick under //music folder. Otherwise, LVA plays mp3 music files stored in the SD card.

2. TERMINAL DESCRIPTION

2.1 CONTROL TERMINAL



❶ This port is used to play music from a USB memory stick instead of the micro SD card.

❷ This port is used for firmware upgrading and for configuration via mobile application.

2. TERMINAL DESCRIPTION

2.2 INPUT TERMINALS

2.2.1 FOR INDICATOR TYPE SET TO “ENHANCED”

Input	Description
24V	Supply voltage – positive side +24Vdc
GND	Supply voltage - negative side
A/CAN	Floor information A for Enhanced code interface Active High
B/CAN	Floor information B for Gray/Binary code interface Active High
C	Floor information C for Gray/Binary code interface Active High
D	Floor information D for Gray/Binary code interface Active High
E	Floor information E for Gray/Binary code interface Active High
UP	Going Up Input Active Low
DN	Going Down Input Active Low
F	Door Zone Input Active High
G	Door is Closing Input Active High
H	Door is Opening Input Active High
I	Evacuation Input Active High
J	Out of Service Input Active High
K	Ready input Active High

2.2.2 FOR INDICATOR TYPE SET TO “GRAY” OR “BINARY”

Input	Description
24V	Supply voltage – positive side +24Vdc
GND	Supply voltage – negative side
A/CAN	Floor information A for Gray/Binary code interface Active High
B/CAN	Floor information B for Gray/Binary code interface Active High
C	Floor information C for Gray/Binary code interface Active High
D	Floor information D for Gray/Binary code interface Active High
E	Floor information E for Gray/Binary code interface Active High

Input	Description
UP	Going Up Input Active Low
DN	Going Down Input Active Low
F	Slowing down Input Active High
G	Door is Closing Input Active High
H	Door is Opening Input Active High
I	Evacuation Input Active High
J	Out of Service Input Active High
K	Ready input Active High

2.2.3 FOR INDICATOR TYPE SET TO "7-SEGMENT"

Input	Description
24V	Supply voltage - positive side +24Vdc
GND	Supply voltage - negative side
A/CAN	Floor information A for 7-segment code interface Active High
B/CAN	Floor information B for 7-segment code interface Active High
C	Floor information C for 7-segment code interface Active High
D	Floor information D for 7-segment code interface Active High
E	Floor information E for 7-segment code interface Active High
UP	Going Up Input Active Low
DN	Going Down Input Active Low
F	Floor information F for 7-segment code interface Active High
G	Floor information G for 7-segment code interface Active High
H	Door is closing Input Active High
I	Door is opening Input Active High
J	Slowing down Input Active Low
K	Ready input Active High

2. TERMINAL DESCRIPTION

2.3 AUDIO OUTPUT TERMINALS

Output	Description
AUDIO OUT 2W	External Speaker (4Ω, 2.2W) or (8Ω, 1.4W)

3. PARAMETERS DESCRIPTION

Displayed Parameter	Description	Range	Factory Settings
Indicator Type	Indicator Type	Gray, binary, enhanced, 7-Segment	Gray
First Stop	Gray/Binary code output for the first stop	0, 1	0
Basements	Number of basements	0 → 8	0
Floor Announcement	Edge floor announcement	Off, On Slow edge, On Floor Stop	On Floor Stop
First Language	Announcement language	English, French, Arabic, Spanish	Arabic
First Language Gender	Reader gender	Male, Female	Female
First Language Reader	Reader ID	*English: TIRA, ALEX *French: CHANTAL *Arabic: SAHAR, GHADI *SPANISH: ELENA, DIEGO	SAHAR
Second Language	Announcement second language	None, English, French, Arabic, Spanish	None
Second Language Gender ³	Reader gender	Male, Female	Male
Second Language Reader ³	Reader ID	*English: TIRA, ALEX *French: CHANTAL *Arabic: SAHAR, GHADI *SPANISH: ELENA, DIEGO	ALEX
Gong Announcement	Edge gong announcement	Off, On Slow Edge, On Floor Stop	On Slow Edge
Gong Type	Gong Type	Gong 1, Gong 2	Gong 1
LVA Announcement Type	Announcement Type	Standard, Customized	Standard
Announcement Volume	Announcement Volume	20 → 100	70
Play Music		ON, OFF	ON
Shuffle Music		ON, OFF	ON
Music Volume		20 → 100	75
Music Attenuation	Music volume during announcements	0 → 100	20
A Terminal Config	Terminal Configuration	NA, Ind_A ¹ , Ind_B ¹ , Ind_C ¹ , Ind_D ¹ , Ind_E ¹ , Ind_F ² , Ind_G ² , Ind_Minus ² , Ind_10 ² , DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ind_A
B Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ind_B
C Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ind_C
D Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ind_D
E Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ind_E
F Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	DZ

¹ Indicator inputs (Gray code or binary code or 7-segment)

² Used when "Indicator type" is set to "7-segment".

³ This parameter does not appear in the parameters' list if "Second language" is set to "None".

3. PARAMETERS DESCRIPTION

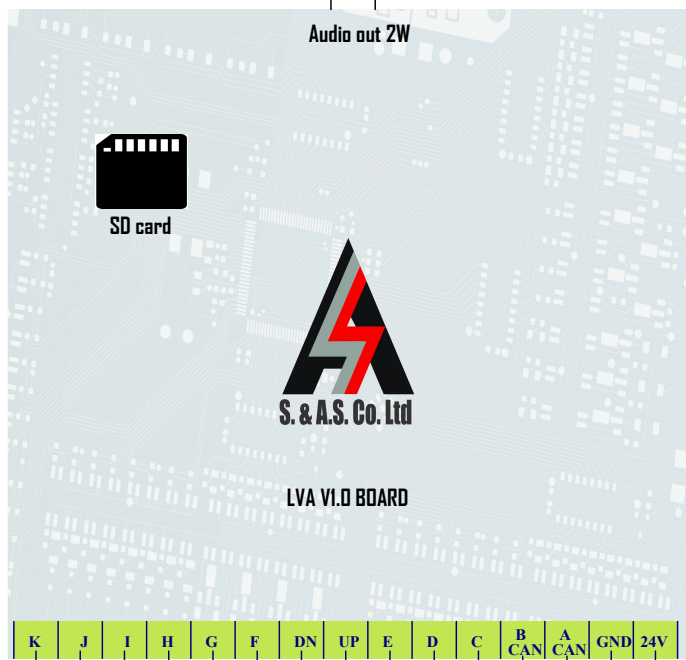
Displayed Parameter	Description	Range	Factory Settings
G Terminal Config	Terminal Configuration	NA, Ind_A ^① , Ind_B ^① , Ind_C ^① , Ind_D ^① , Ind_E ^① , Ind_F ^② , Ind_G ^② , Ind_Minus ^② , Ind_10 ^② , DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Open
H Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Close
I Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Evac
J Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Out of service
K Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Ready
Up Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Up dir
Dn Terminal Config	Terminal Configuration	NA, Ind_A, Ind_B, Ind_C, Ind_D, Ind_E, Ind_F, Ind_G, Ind_Minus, Ind_10, DZ, Open, Close, Ready, Up dir, Dn dir, Slow Edge, Gong, Full Load, Over Load, Fireman, Evacuation, Out of Service	Dn dir

① Indicator inputs (Gray code or binary code or 7-segment)

② Used when "Indicator type" is set to "7-segment".

4. APPENDIX A

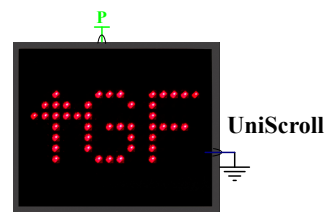
This appendix contains all wiring diagrams relevant to assembling the board in a panel.



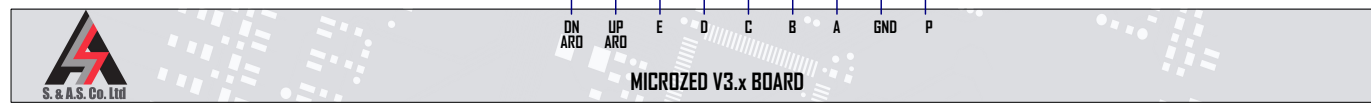
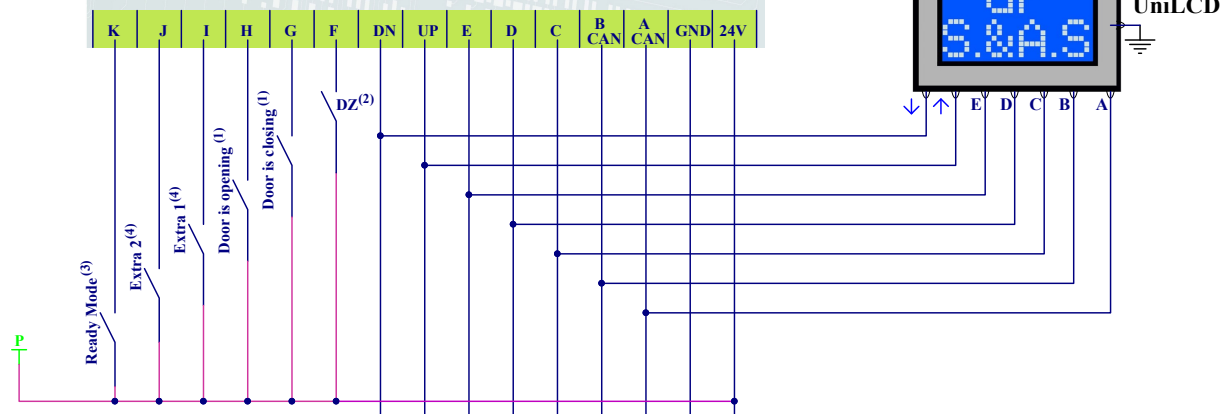
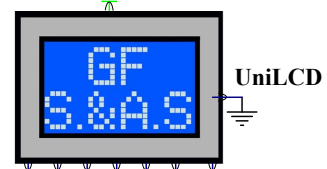
Speaker 4Ω, 2.2W
OR
Speaker 8Ω, 1.4W

Available Announcements

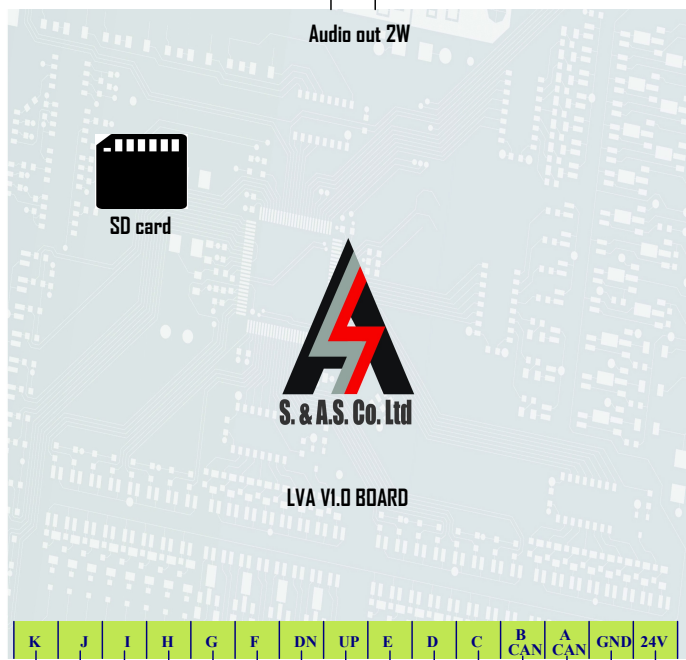
- * Floor number at slow edge⁽²⁾
 - * Moving direction
 - * Overload
 - * Out of service
 - * Homing trip in progress
 - * Gong
- (1) For door status announcement
(2) For floor number announcement/gong at floor edge
(3) To start/stop background music
(4) For customized announcements



OR



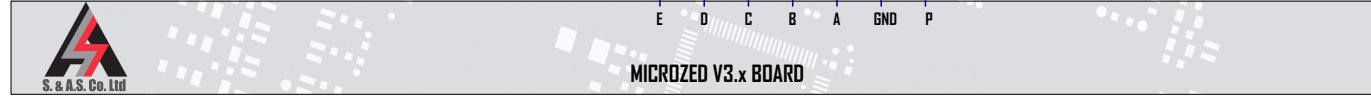
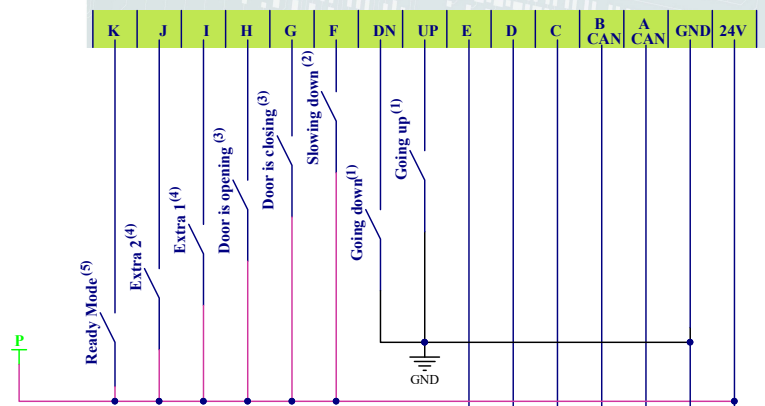
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Size B	Number	Revision
Date: 9/21/2018	Sheet 1 of 3	
File: \\LVA_W1_Enhanced.SchDoc	Drawn By:	



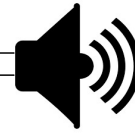
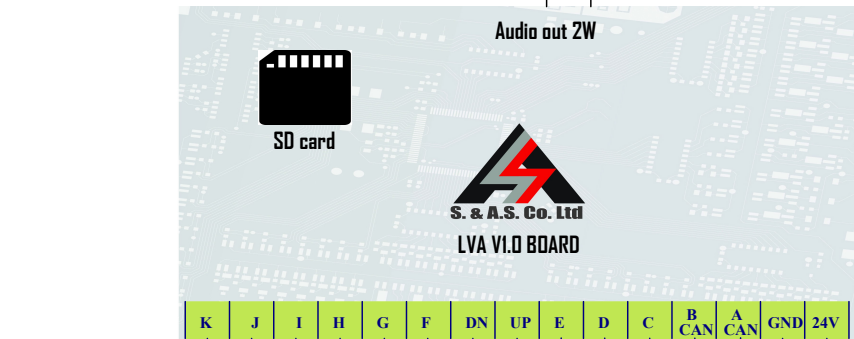
Speaker 4Ω, 2.2W
OR
Speaker 8Ω, 1.4W

Available Announcements

- (1) For floor number announcement/gong at floor edge
For moving direction announcement
- (2) For floor number announcement/gong at slow edge
- (3) For door status announcement
- (4) For customized announcements
- (5) To start/stop background music



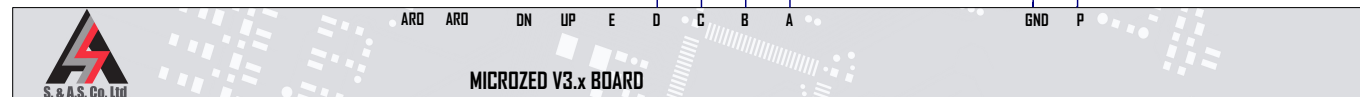
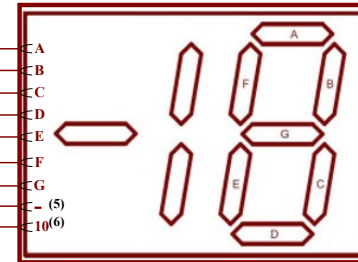
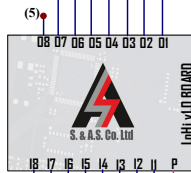
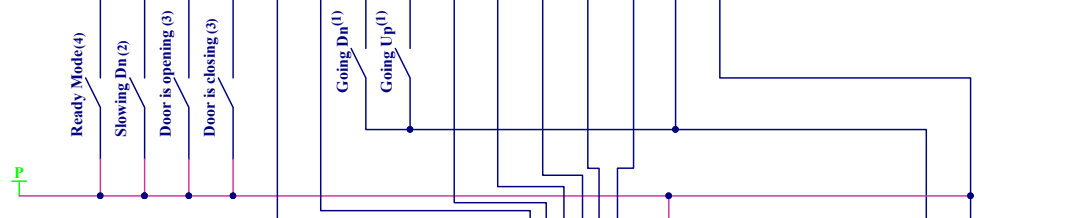
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Size B	Number	Revision
Date: 9/21/2018	Sheet 2 of 3	
File: \\LVA_W2_Gray.SchDoc	Drawn By:	



Speaker 4Ω, 2.2W
OR
Speaker 8Ω, 1.4W

Available Announcements






- (1) For floor number announcement/gong at floor edge
For moving direction announcement
- (2) For floor number announcement/gong at slow edge
- (3) For door status announcement
- (4) To start/Stop background music
- (5) If Minus signal is used on 7-Segment indicator,
configure H, I or K as "Ind_Minus"
- (6) If 7-Segment indicator is used with floor indication ≥ 10 ,
configure H, I or K as "Ind_10"



Title LVA V1.0 wiring with 7-Segment Indicator		
Size B	Number	Revision
Date:	10/1/2018	Sheet 3 of 3
File:	\\LVA_W1_7-Segmet.SchDoc	Drawn By:

WHICH ELEVATOR CONTROLLER IS RIGHT FOR YOU?

	MicroZed-A v3.1 	MicroZed-AR v3.1 	ASTRA v1.2 	MicroZed v3.3a 	MicroZed v3.5a 
AC 1 speed	✓	✓	✓	✓	✓
AC 2 speed	✓	✓	✓	✓	✓
Hydraulic	✓	✓	✓	✓	✓
VVVF (1m/s speed)	✓	✓	✓	✓	✓
VVVF (1.6m/s speed)	—	—	—	✓	✓
VVVF (>=2m/s speed)	—	—	—	—	✓
Magnetic Switches for Shaft Information	✓	✓	✓	✓	✓
Incremental encoder for direct approach	—	—	—	—	✓
Simplex mode	✓	✓	✓	✓	✓
Group mode	—	—	—	✓	✓
Down Collective	—	—	✓	✓	✓
Full Collective	—	—	✓	✓	✓
Pseudo-collective	✓	✓	—	—	—
Maximum Number of Stops	10	10	10	32	48
Serial Calls	—	—	—	—	✓
Swinging door	✓	✓	✓	✓	✓
Automatic door	✓	✓	✓	✓	✓
Half automatic door	✓	✓	✓	✓	✓
Gray Code Indicator	✓	✓	✓	✓	✓

	MicroZed-A v3.1	MicroZed-AR v3.1	ASTRA v1.2	MicroZed v3.3a	MicroZed v3.5a
					
Binary Code Indicator	✓	✓	✓	✓	✓
Enhanced Code Indicator	✓	✓	✓	✓	✓
Decimal code Indicator	✓	✓	✓	—	—
DC Contactors	✓	—	—	✓	—
AC/DC Contactors	—	✓	✓	—	✓
Real Time Clock	—	—	—	✓	✓
Spare Outputs	1	1	2	2	8
Reservation Input	—	—	—	✓	✓
Fullload Input	—	—	—	✓	✓
Overload Input	—	—	—	✓	✓
Evacuation Input	—	—	—	✓	✓
Firemen switch and operation	—	—	—	✓	✓
Final Limit Switch Input	—	—	—	✓	✓
Integrated Evacuation	—	—	✓	✓	✓
Inspection Command via COP option	—	—	✓	✓	✓
Access Control	—	—	—	✓	✓
CarCall Cancellation	—	—	—	✓	✓
Double Door Entrance	—	—	—	✓	✓

	MicroZed-A v3.1	MicroZed-AR v3.1	ASTRA v1.2	MicroZed v3.3a	MicroZed v3.5a
					
Graphical Display	✓	✓	✓	—	—
24-Charx2-lines LCD alphanumeric display	—	—	—	✓	✓
Diagnostic Tool	—	—	—	✓	✓
English language	✓	✓	✓	✓	✓
French language	—	—	—	✓	✓
Arabic language	—	—	—	✓	✓
Swedish language	—	—	—	✓	✓
Faults Log	9	9	9	15	15
Events log	—	—	—	—	✓
Desktop Application for monitoring and control	—	—	—	✓	✓
USB port	✓	✓	✓	✓	✓
RS485 port	—	—	—	✓	✓
Firmware Upgrade on site	✓	✓	✓	✓	✓



S. & A.S. Co. Ltd