



Applications

Suitable for engineering machinery (mobile cranes, crawler cranes, RTG), port machinery (overhead cranes, gantry cranes) and material conveyor equipment (belt conveyor)

Features

- Superior sealing for excellent waterproof and dustproof performance
- Super bright RGB, and a lone lifetime of more than 100,000h
- PC cover provides excellent impact resistance and heat stability and glossiness
- Special integrated chip design to ensure strong EMC antiinterference ability
- Industrial microchip design, multi-tones in one fixture for wide applications

Specifications					
Electrical		Mechanical			
Operating Voltage	18-40VDC/100-240VAC	Housing material	PC/ABS/Red•		
Frequency	50Hz/60Hz	Cover material	PC		
Power	<45W	Cover color	Transparent		
Tone	Built-in 32 Tones	IP rate	IEC60529 IP65		
Single/Dual voice	Micro USB	Operating temperature	Ta-30°C ~ +55°C		
Alarm mode	Audible visible synchronized/ Audible visible separated	Operating humidity	10% ~ 95%RH		
Sound level	120dB(max)	Mounting	Wall mount / Wall mount(with bracket) / Floor mount		
Light source	LED	Wiring	M20 cable gland(Φ6-12.5)		
Color	RGB	Weight	3kg		
Lifetime	100,000h				

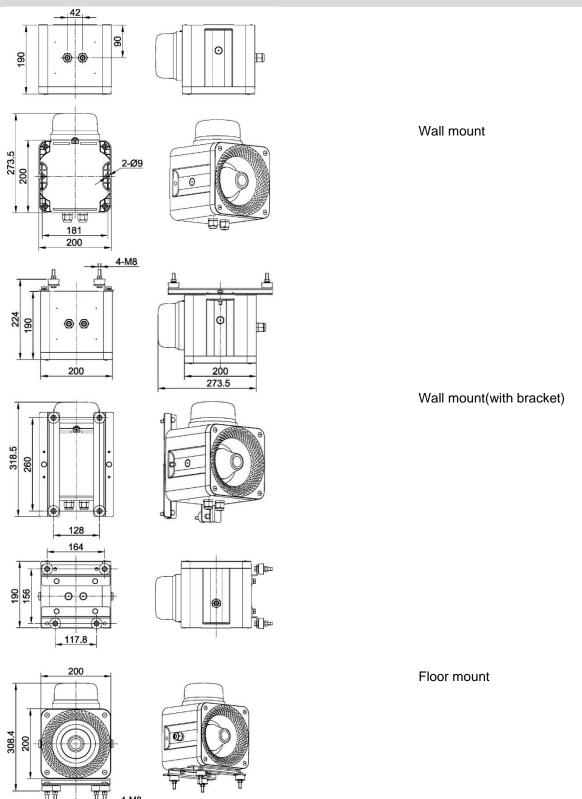
1|8 Datasheet-AL120D-2110-en.1.0

AL120

Audible Visual Alarm

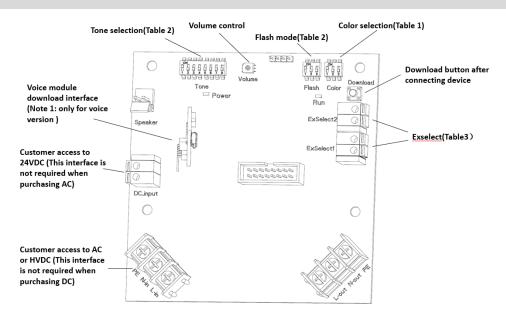


Mounting dimensions (unit: mm)





Wiring diagram



Note: HVDC220-350V input is acceptable, but polarity switching is required according to the diagram

Luminous color—Table 1

DIP figure	Display
ON	Off
ON 1 2 3	Green
ON	Blue
	Cyan
ON 1 2 3	Red(default)
ON	Yellow
	Scarlet
ON 1 2 3	White



Flash mode—Table 2

DIP figure	Flash Status
	Steady burning
	Continuous flash
	Interval flash
ON 1 2 3	Rotating(default mode)

Note: Flash setting DIP switch 3 is used for stage 2

Tone/Voice DIP figure —Table 3

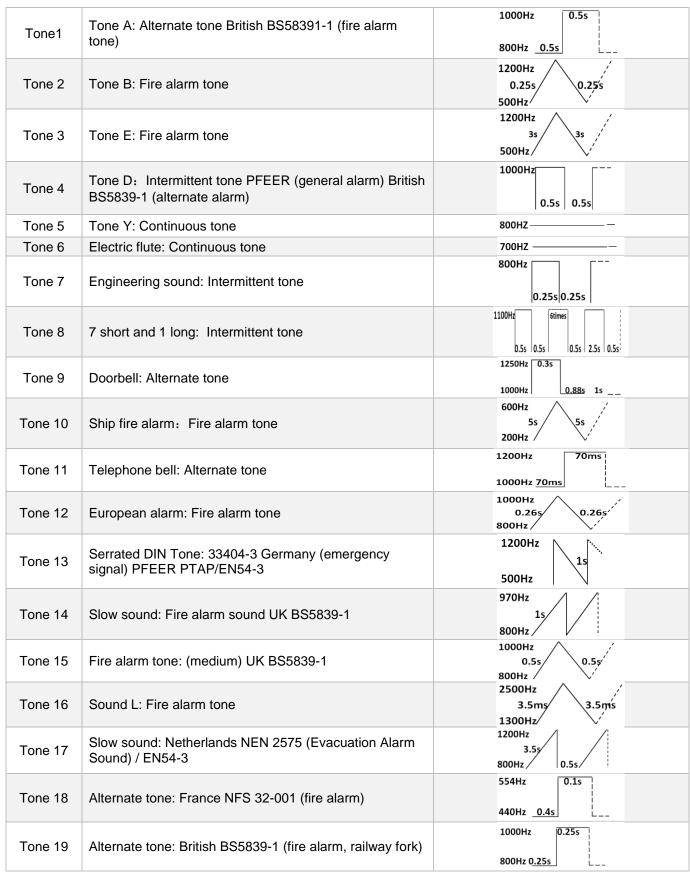
	ExSelect1 (NC)	ExSelect1 (C) (note 4)	ExSelect1 (NC)	ExSelect1 (C)
	ExSelect2 (NC)	ExSelect2 (NC)	ExSelect2 (C)	ExSelect2 (C)
ON	Tone/Voice 1	Tone/Voice 2	Tone/Voice 3	Mute
ON	Tone/Voice 2	Tone/Voice 3	Tone/Voice 4	Mute
ON	Tone/Voice 3	Tone/Voice 4	Tone/Voice 5	Mute
ON	Tone/Voice 4	Tone/Voice 5	Tone/Voice 6	Mute
ON	Tone/Voice 5	Tone/Voice 6	Tone/Voice 7	Mute
ON	Tone/Voice 6	Tone/Voice 7	Tone/Voice 8	Mute
32 tones/4 default voices(Dial 6 is for voice/tone selection)	Analogy	Analogy	Analogy	Mute

Note 1: voice download is used by customers who need to modify voice temporarily. Use micro-USB data cable to connect the interface to the computer, and the computer recognizes a "removable disk" (at this time, the original audio files can be copied out). After formatting the removable disk, copy the sound file, "USER_DIR" (MP3 format file) one by one in the order of voice 1, voice 2 and voice 3 required by the customer, and finally pop it up safely on the PC.

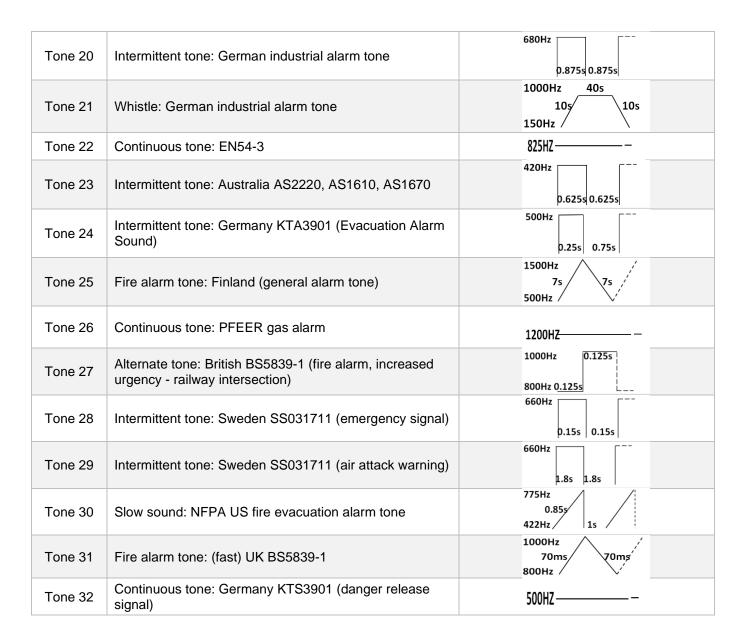
Note 4: (C) is shorting the interface jumper, (NC) is "disconnect".



Tone selection table —Table 3 (Annex 1)







Voice selection table 3 (Annex 2)

Voice 1	Caution please, watch for moving massive vehicles(available customized voice)
Voice 2	Caution please, someone is entering(available customized voice)
Voice 3	This is a restricted area, please(available customized voice)
Voice 4 Caution please, crane in operation(available customized voice)	
••••	Available customized voice

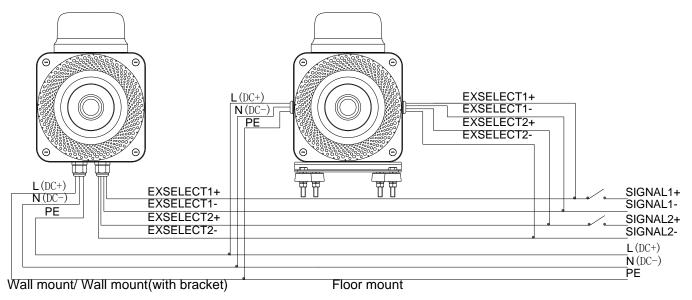
Note 2: Volume adjustment method

To increase the volume, use a flathead screwdriver and rotate the knob in a clockwise direction. (the default volume plays at max sound)

Note 3: Voice content is in Chinese



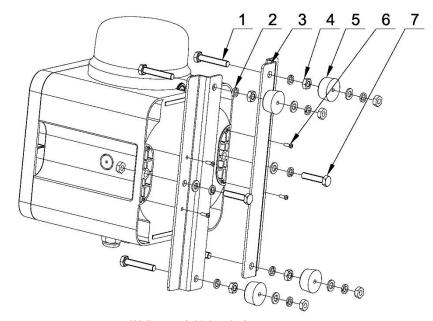
Wiring diagram:



Installation and operation

- Position the alarm horn horizontally and secure it on a sturdy and smooth mounting surface
- Wall mount: Use 4 M8 bolts, washers, spring washers and nuts to fix the mounting surface.
- Wall mount(with bracket): Take out the two brackets in the box, fix the bracket to the alarm as shown below, and then fix the alarm to the mounting surface.
- Floor mount: Remove the 4 nuts, spring washers and flat washers at the red rubber feet, fix the alarm to the mounting surface, and fix the alarm with the removed fasteners.
- Unscrew the 4 screws that secure the top cover and remove the top cover to expose the terminal block.
- Connect the power control cable from the M20 stuffing box and connect the power control cable correctly according to the wiring diagram.
- Check that the power supply and the alarm's rated voltage match, and check that the power cord is connected properly before power on.
- Adjust the DIP switch to select different tones/voices. For the tone selection, refer to "Tone/Voice Selection Table".
- Insert the 4 silicone plugs into the screw slots on the top cover.





Wall mount(with bracket)

1.Bolt M8X45 2. Spring padΦ8 3. Bracket 4. Nut M8 5. Red rubber feet 6. Screw ST4.2X9.5 7. Bolt M8X35

Notice:

- 1. The product adopts PC material parts and cannot be directly or indirectly contacted with organic solvents such as industrial alcohol, banana water, isopropanol, carbon tetrachloride or cyclohexanone, otherwise it will be cracked by corrosion.
- 2. Do not install the bell mouth up to avoid water accumulation.
- 3. Please be careful not to touch the power terminal to avoid electric shock for any adjustments.
- 4. Please read the instructions carefully, and if you have any questions, please contact us.

Thanks for choosing our products, NANHUA Electronics is the professional brand of signal transmission and high quality industrial lighting which is trusted and loved by global users from various industries. Read and understand these instructions completely and carefully. Wrong installation and operation may lead to fires, electric shock, and others. Due to our continued efforts to improve our products, product specifications are subject to change without notice. ©NANHUA Electronics Co., Ltd. All rights reserved. www.nanhua.com