

Technical Article

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USB Voice Board SPV4 (May 2024)

USB Voice Board SPV4

The USB Voice Board SPV4 (Serial Protocol) outputs floor, direction and message MP3 files which are played in the elevator car via the supplied speaker.

The Voice Board has the option of receiving inputs directly using 24VDC inputs or via Serial Data.

The Voice Board requires a USB memory stick, loaded with MP3 files, to be inserted for programming. Once programmed, the USB is removed as files are now stored on the Voice Board data-flash.



Features:

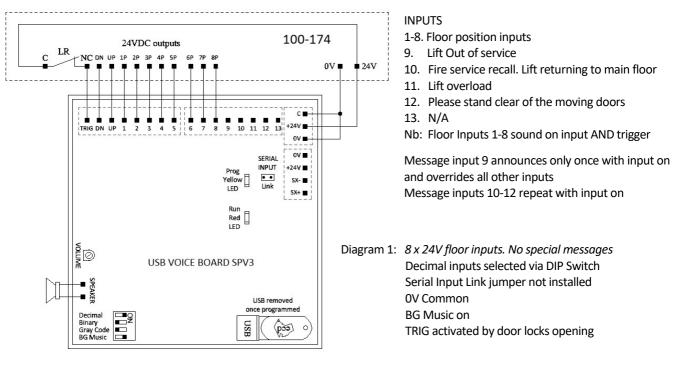
- Direct 24VDC inputs or Serial Data input.
- 8 inputs (1-8) for floor messages. Direct inputs may be configured as Decimal, Binary or Gray Code.
- Inputs may be positive or negative switched.
- Trigger (TRIG) input for initiating floor messages.
- 2 direction inputs (DN, UP) for direction messages.
- 4 special message inputs.
- Background music on/off selectable. BG music turns off 30s after last floor announcement.
- Program Voice Board with USB stick. USB stick removed once programmed. Programming software available
- Adjustable volume.

Wiring Using Direct inputs: See Diagram 1

- Ensure the Serial Input link jumper is not installed for Direct input operation.
- A 24VDC supply (100-150mA) is wired to the +24V and 0V terminals. A twisted pair looped through a ferrite core is recommended.
- All inputs use the "C" common terminal as their reference. If "C" is wired to 0V then the inputs shall be +24V. If "C" is wired to +24V then the inputs shall be 0V.
- Inputs 1 to 8 and TRIG When any of the floor Inputs (1-8) is turned on <u>and</u> TRIG is switched from off to on, the floor message shall be played. Floor inputs may be Decimal, Binary or Gray Code, selectable via DIP switches.
- Select Background music on/off with BG Music DIP switch.
- UP, DN input Direction of travel messages, "going up or "going down", shall be sounded after a floor input message, while a direction input is on.
- Inputs 9,10,11,12 Special message inputs. Input 13. N/A. See Diagram 1.

Programming:

- 1. Program the USB memory stick for correct floor annunciation.
- 2. With power off, insert the USB stick into the Voice Board.
- 3. Power on the Voice Board. MP3 files from the USB stick will now be copied to the data-flash, indicated by the yellow Prog LED being on. When Prog LED turns off, power off the Voice Board and remove the USB stick. Power on the Voice Board, the red Run LED shall flash slowly at first, then quickly to indicate the Voice Board is running. Test operation by connecting the speaker, applying inputs and adjusting the volume.
- 4. Nb: If the USB stick is not removed, the Voice Board shall still operate. However, we recommend removal of the USB stick after programming is completed.



Wiring Using Serial Data input: See Diagram 2

- Ensure the Serial Input link jumper is installed.
- A 24VDC supply (100-150mA) is wired to the +24V and 0V terminals. A twisted pair looped through a ferrite
 core is recommended.
- Wire SX+ and SX- (Serial Data) from an ECD Encoder Board to the Voice Board using a shielded twisted pair. Nb: The direct inputs are wired to the Encoder Board.
- Select Background music on/off with BG Music DIP switch.

Programming:

- 1. Program the USB memory stick for correct floor annunciation.
- 2. With power off, insert the USB stick into Voice Board.
- 3. Power on the Voice Board. MP3 files from the USB stick will now be copied to the data-flash, indicated by the yellow Prog LED being on. When Prog LED turns off, power off the Voice Board and remove the USB stick. Power on the Voice Board, the red Run LED shall flash slowly at first, then quickly to indicate the Voice Board is running. Test operation by connecting the speaker, applying Encoder Board inputs and adjusting the volume.
- 4. Nb: If the USB stick is not removed, the Voice Board shall still operate. However, we recommend removal of the USB stick after programming is completed.

