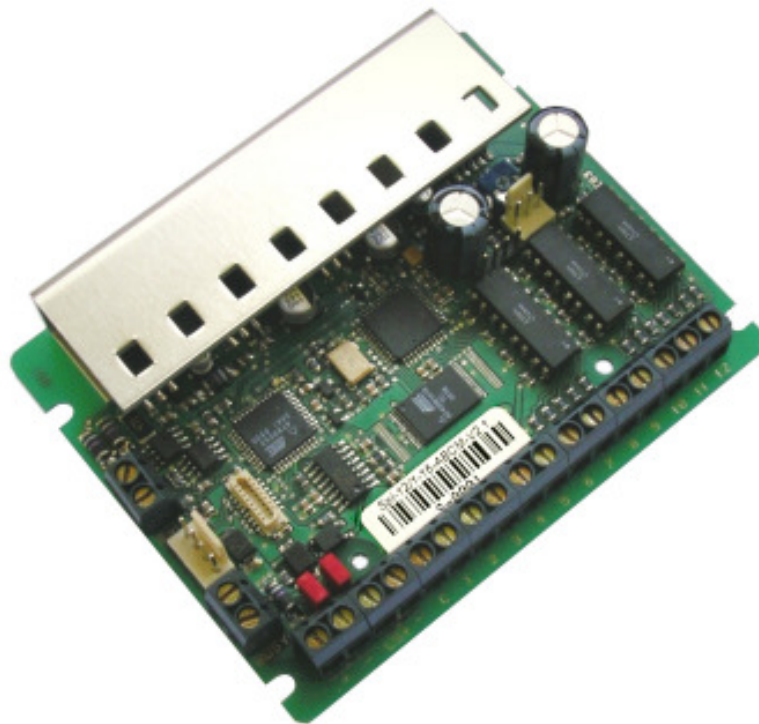




Datasheet

SPL 12

Voice module



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Description

Voice module SPL 12 is an independent and freely programmable sound replay system, designed for all applications which demand both highest quality of sound as well simple, flexible operation and programming.

In view of possible future functions a consistent ISP programmability of the system has been realized. Through this, a new firmware version can be simply programmed with a special mobile programming device even to modules which are already delivered and installed.

With the comfortable programming software the voice module can be programmed (also if it is already built-in) with new announcements or drive schemes. Through this the voice module can be adapted to changing requests anytime.

The 16 MB on board memory stores up to 92 seconds of sound files at a 22 kHz sampling frequency rate. With the programming software the sampling frequency can be switched to 11 kHz, which will double the replay time to 184 seconds.

Optionally, the SPL 12 is available with a 32 MB memory.

The SPL 12 can be easily installed by means of 4 fastening drillings and is also available with two different housings.

Technical Description

Replay Functions

- Replay of files in the wav format 8 bit unsigned 22 kHz or 11 kHz
- Storage of up to 250 files
- Loop Operation (repeat), Loop lock or mixed Operation possible
- Combinations of Files via the Next function (i.e. plays different files with only one start signal)
- Interruption justifiable Announcements definable (priority circuit stages)
- Short-circuit-proof 10 Watts Amplifier, directly regulable

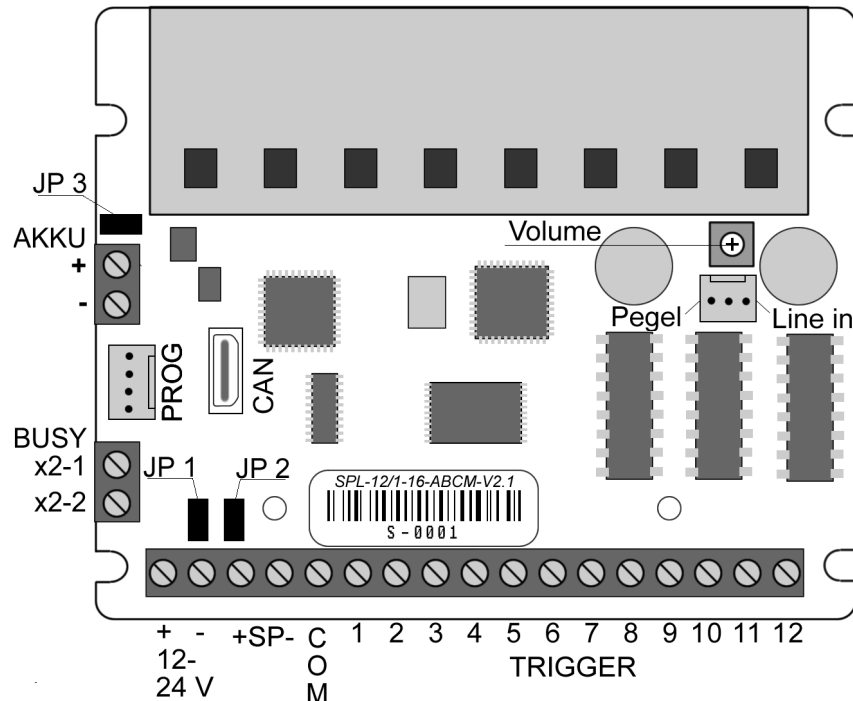
Controls

- by 12 opto-coupled trigger inputs with one common return. Four of these (9 - 12) with a hierarchical interruption function and 1 (8) and a programmable special function, all protocols like Grey, Binary, 1 out of N (one per floor) even with or without start signal or customer designed protocols are programmable.
A signal length of 100 ms is required
- via RS 232 Interface
- via CAN Protocol with an additional CAN Adapter

Optional Functions

- Memory Expansion up to 32 MB
- Busy Output with 4 configurable Operation Modes
- Line in Card for direct Replay of Music or Advertising Announcements to the speaker
- Level Module for Adjustment of Replay Volume to Environmental Noise Level
- CAN Adapter for Operating via CAN Protocol

Connection Diagram

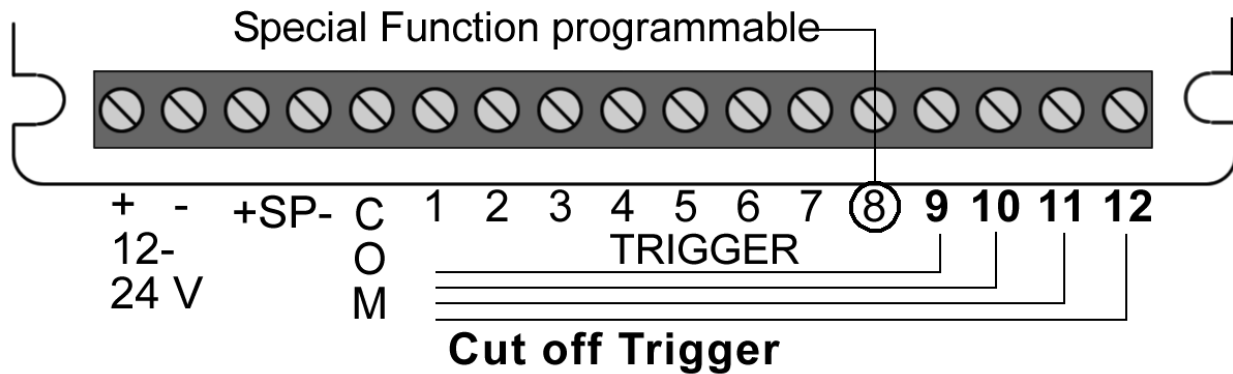


- 12 – 24** Power Supply 12 -24 Volts regulated 1 A
- SP** Speaker min. 10 W at 4 -16 Ω
- COM** Common Return of Trigger Inputs (positive or negative)
- Prog** RS 232 Terminal Connection for Programming Cable PK2
- Volume** Volume Control for Output Volume

Following terminal connections are only equipped if the additional functions were ordered:

- Accu** Terminal connection for an external power failure supply. If an accumulator is attached, it will receive a preservation charge of 12 Volts (+/ 0.5 Volts) at set jumper **JP3** and a supply power of 24 Volts.
If the supply power drops to under 14.8 Volts, a one-time text announcement, which was assigned to the Trigger10, will follow. (Only with equipped accumulator terminal connection)
- Busy** This output is activated during the replay. The output mode can be adjusted via jumpers **JP1** and **JP2** (see table on page 6).
- Level** The level module is an automatic volume control unit which reacts to the environmental noise level (e.g. underground stations, department stores, hotels, etc..)
- Line in** The line in module sees to it that external sounds(e.g. music) are **output** directly to the speaker via the voice module (connected to the speaker). In case of an announcement the external signal is faded out and after cessation faded in again. The input can be adjusted to different signal sources by an input volume control.
- CAN** The CAN module (standard controller SJA 1000) drives the voice module by CAN protocol (CAN2.0B).

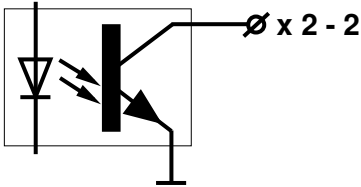
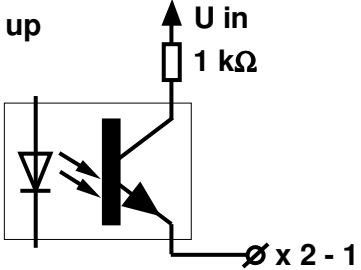
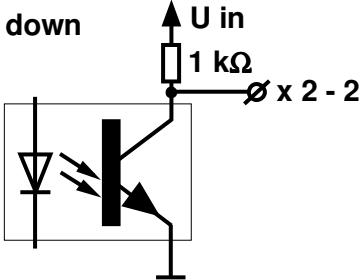
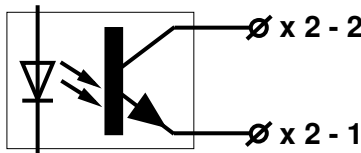
Trigger Inputs



- COM** Potential-free opposite input to triggers 1 – 12. 5 - 35 V AC / DC
- Trigger** Freely programmable, potential-free inputs for start signals 5 - 35 V AC / DC, selectable positive oder negative (acc. to the polarity at COM), signal length min. 100 ms
- Triggers 1 - 8** To start the replay, you can programme every possibility - Codes like 1 o N, binary, grey or your own.
- Trigger 8** By selecting the mode *Special function* on Trig 8 (in the software), the module will ignore all other signals present on Triggers 1-7 and only consider the signal on Trigger 8. Announcements already running are not cut off, therefore this function is convenient for texts announced on all floors of the building, such as “door opens”.
- Trigger 9 - 12** Cut off all running texts in hierarchical arrangement. Trig 9 stops 1 - 8, Trig 10 stops 1-9, etc. Triggers 9 - 12 are for emergency texts.

Busy output

During the replay of an announcement this connector is activated. It can be configured by means of two jumpers (JP1 and JP2) according to your requirements.

Busy Exit	Jumper JP 1	Jumper JP 2
Open Collector 	X	O
Pull up 	O	X
Pull down 	X	X
Opto-Coupler Exit 	O	O

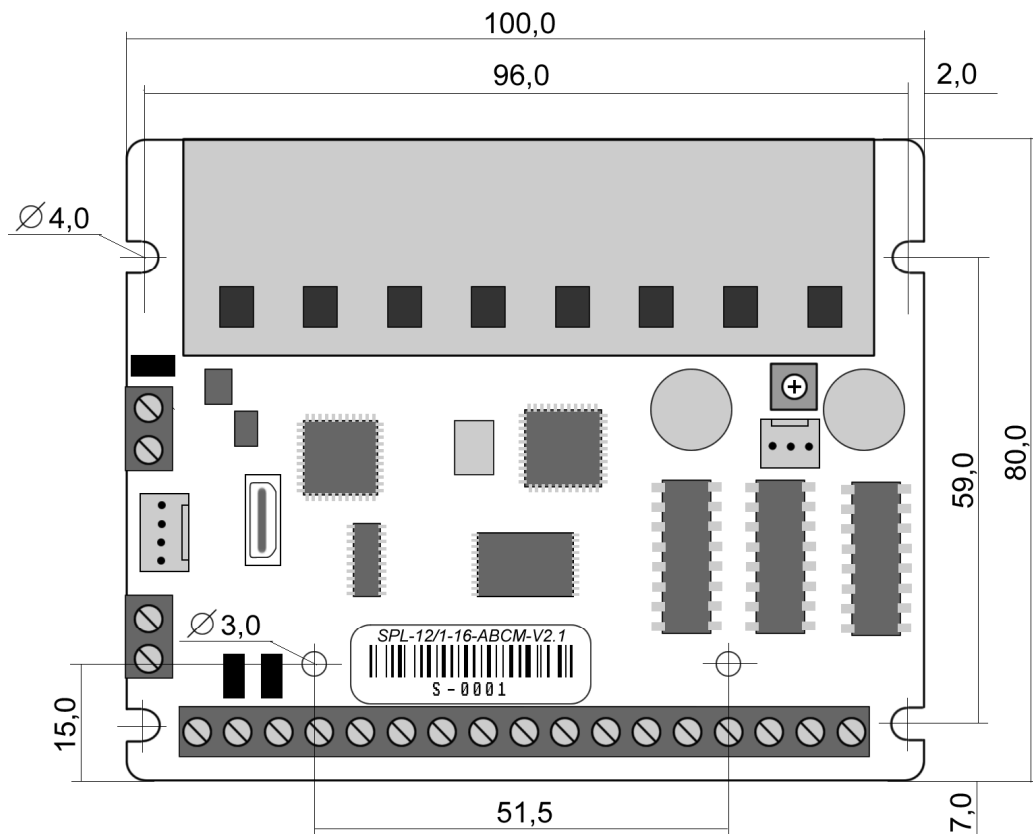
O = not set
X = set

x 2-1= Output Terminal 1
x 2-2= Output Terminal 2

U in = U – Power Supply for the Module

Switching Capacity:
 24 V, 80 mA max. of the transistor in the **Open Collector** and **Opto-coupler Output Operation**

Dimension Diagram



Max. Installation Clearance = 25 mm

Technical Datas

Supply Voltage	:	12..24V DC/ 1A
Signal Voltage	:	5..35V DC/AC Signal Length 100 ms Potential-free Inputs
Consumption	:	Average 130 mA, max 1 A
Audio Output	:	10W at Ub 14.5V, RL= 2 Ohm
Speaker	:	4..16 Ohm
Dimensions PCB L x B x H	:	100 x 80 x 25 mm
Dimensions Housing :		130 x 94 x 58 mm (IP 66) or 130 x 130 x 75 mm (IP 66)
Memory	:	16 MB (92 sec. at 22kHz / 182 sec. at 11 kHz) 32 MB (184 sec. at 22kHz 366 sec at 11 kHz)
Addressable Records	:	250

Version List

Designation Code

Spl-12/1-16-ABCMPU-V2.1

Firmware Version

- A** Accumulator Connection
- B** Busy Exit
- C** CAN-Bus Module
- M** Line In Entrance
- P** Level Module
- U** 12 Bits Version

Equipped Memory (16/32 MB)

Product Name with Hardware Version (here 1)

Product Identification

Adhesive Label 30 x10mm on Top Side

