



SOUND MODULE ETS 841

Operating Instructions

Our sound module for ETS locomotives creates authentic sounds and allows remote control of whistles.

The sound module works only with the ETS #702N controller, as well as with the older version #701 and #702 controllers. The module can be programmed to create the sounds of steam, diesel and electric locomotives.



Fasten the module into the locomotive with screws through the notches on the short side of the printed circuit board, or attach it with double-sided tape. The underside of the sound module must be insulated from the metal parts of the locomotive using insulating tape.

Mount the loudspeaker so that the body of the locomotive does not block the passage of sound waves.

The module is powered by voltage from the ETS #702 that is led from the track to the module. You can adjust the volume and the speed of the sound on the module with the potentiometer. The “rotation speed” potentiometer should be set so that the wheel rotation speed matches the locomotive sound frequency.

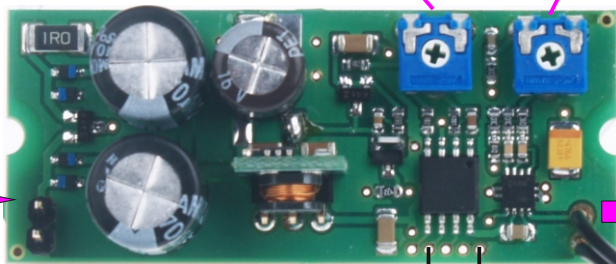
By connecting the soldering points with an insulated jumper or tweezer, the pitch of the whistle can be adjusted. When the points are connected and the model is in operation, the pitch first increases gradually to its maximum and then falls to its lowest. Once the module reaches the desired pitch, interrupt the setting. The module will remember this tone.

Rotation speed

Volume

Power supply

Loudspeaker



points

Setting the whistle tone

Warnings:

- The underside of the printed circuit board and its components must not touch the conductive parts of the locomotive body or frame, as this may damage the module.
- The module can be connected to a larger speaker with a 4 to 8 ohm impedance and a minimum 0.5 watt rating.
- Track operating voltage must never be connected to the loudspeaker terminals, or the module will be totally destroyed.
- The module is supplied with a 36 mm diameter loudspeaker with a baffle for the speaker.

Basic technical information:

Power supply: Pulse from source ETS 702, maximum 24 volts

Current draw: Maximum of 0.1 amp and 24 volts.

The power rating for the speaker: maximum of 1 watt and 8 ohms.

Size: length 53mm, width 24 mm, height 20 mm

Design variants:

#841 STEAM: ETS sound module imitating a steam locomotive with a whistle

#841 DIESEL: ETS sound module imitating a diesel locomotive with a horn

#841 EL: ETS sound module imitating an electric locomotive with a horn

We also offer **#842** sound modules designed for DC power supplies from other model railway manufacturers. These modules imitate locomotive engine sounds and provide random whistle sounds when the locomotive is operating.

**ETS Trains s.r.o., Komořanská 326/63, 143 00 PRAHA 4,
tel. +420 244 403 500 Czech Republic**

e-mail: zuzana@ets.cz

www.ets.cz



Model Railway "0" Scale

