empenoso / **diy-sound-alerts**   Public

ɢʙ Old speakers + Raspberry Pi 🔊 / ʀᴜ Старые колонки + выход аналогового звука на Малине Pi

⚖ MIT license

☆ **6** stars   ⑂ **0** forks   ⑂ Branches   🏷 Tags ∿ Activity

☆ Star	🔔 Notifications

‹› Code   ⊙ Issues   ⑂ Pull requests   ▶ Actions   ⛊ Security   ⬚ Insights

⑂ **1 Branch** 🏷 **0 Tags**	⑂ 🏷	🔍 Go to file	Go to file	‹› Code ▾	⋯

👤 **empenoso** Update README.md		4d280db · 6 years ago	🕓
🗋 00100dPORTRAIT_00…	Foto	6 years ago	
🗋 ESPHome.png	screenshot	6 years ago	
🗋 Home Assistant.png	screenshot	6 years ago	
🗋 IMG_20191110_16151…	Foto	6 years ago	
🗋 LICENSE	Initial commit	6 years ago	
🗋 README.md	Update README.md	6 years ago	
🗋 README.ru.md	Описание	6 years ago	
🗋 automations.yaml	Automation rule for Home A…	6 years ago	
🗋 ced7f955cfb440b12c4…	sound	6 years ago	
🗋 configuration.yaml	Configuration TTS - Home A…	6 years ago	
🗋 tda7492_speakers.yaml	ESPHome firmware	6 years ago	

📖 **README**   ⚖ MIT license   ☰

Sound alerts on the Raspberry Pi 📻 license MIT

labor hours 2 hours

Together with or without Home Assistant.

Read this in other languages: English, Русский язык.

After I literally found the old speakers, it was decided that I make voice alerts for my smart home. In order to power the speakers, an amplifier is needed - I chose the 2 x 50W TDA7492 Class D High-Power Digital Amplifier Board. I am not a music lover, and for the operation of my speakers, this amplifier is enough.

At first, I used a separate Raspberry Pi 1 with Volumio. Everything worked fine, but after updating Volumio in the summer of 2019, something broke and I had to use another image - Pi MusicBox. Such a bunch can be used without home automation.

Then, I decided to use it on the same Raspberry Pi on which Hass.io is installed. For a long time, I could not find a suitable addition, but eventually, the Mopidy addon for hass.io for hass.io was found.

Since the speakers are used only for voice alerts, it was found that they hiss in standby mode - perhaps the wire is of poor quality, the amplifier is not the best, or, more likely, because it does NOT use DAC+ ADC. In any case, the solution was the Sonoff SV relay, which supplies voltage to the amplifier before the announcement, and de-energizes the amplifier after.

ESPHome firmware for relay

I use the ESPHome Hass.io Add-On to compile yaml. I chose this firmware specifically because of the elementary integration in the Home Assistant:

tda7492_speakers.yaml

---

tda7492_speakers 🔗   ⋮

● Online. Full path: `/config/esphome/tda7492_speakers.yaml`
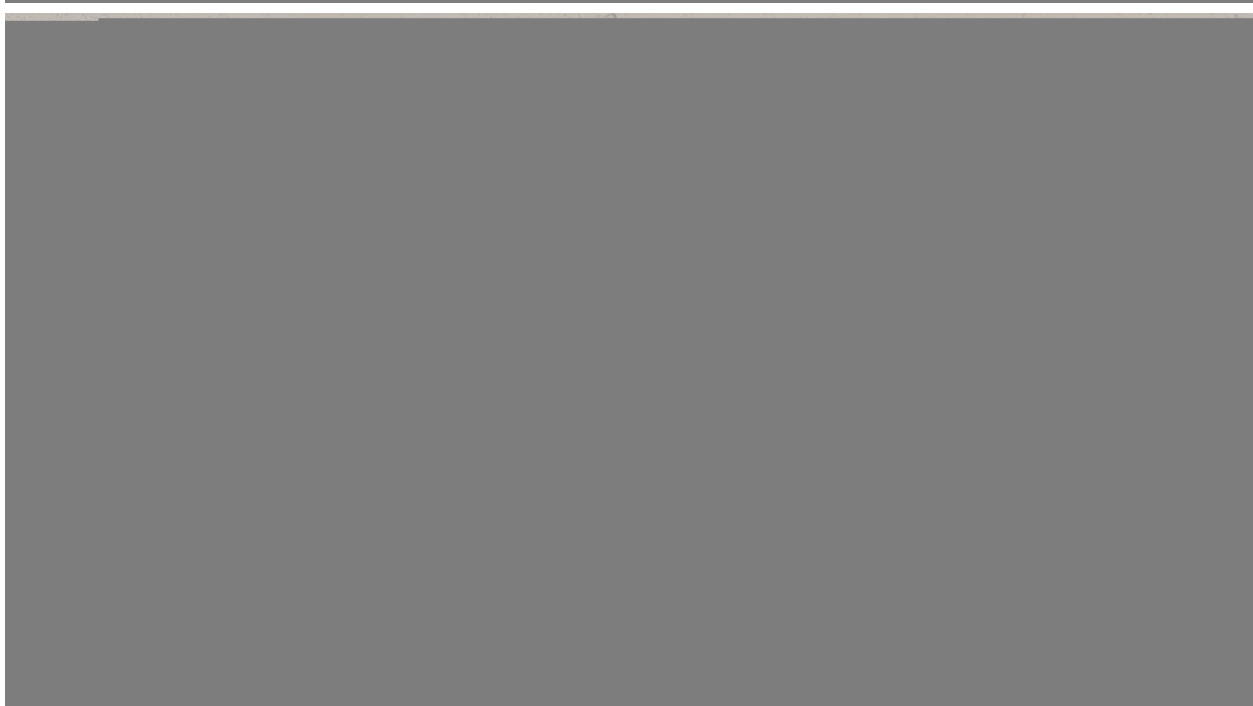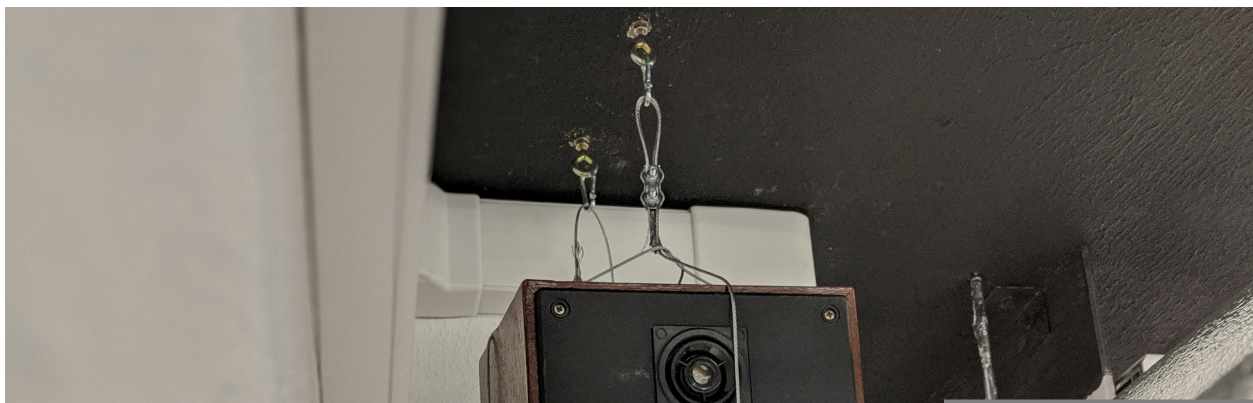
UPLOAD   EDIT   SHOW LOGS   VALIDATE

Voice alerts from Home Assistant

In automations.yaml, there are various rules for voice alerts, and in configuration.yaml - settings for free Text to Speech (TTS). Sample sound (RU) in the file: ced7f955cfb440b12c419befd25ffa7fd7854989_ru_-_google_translate.mp3.
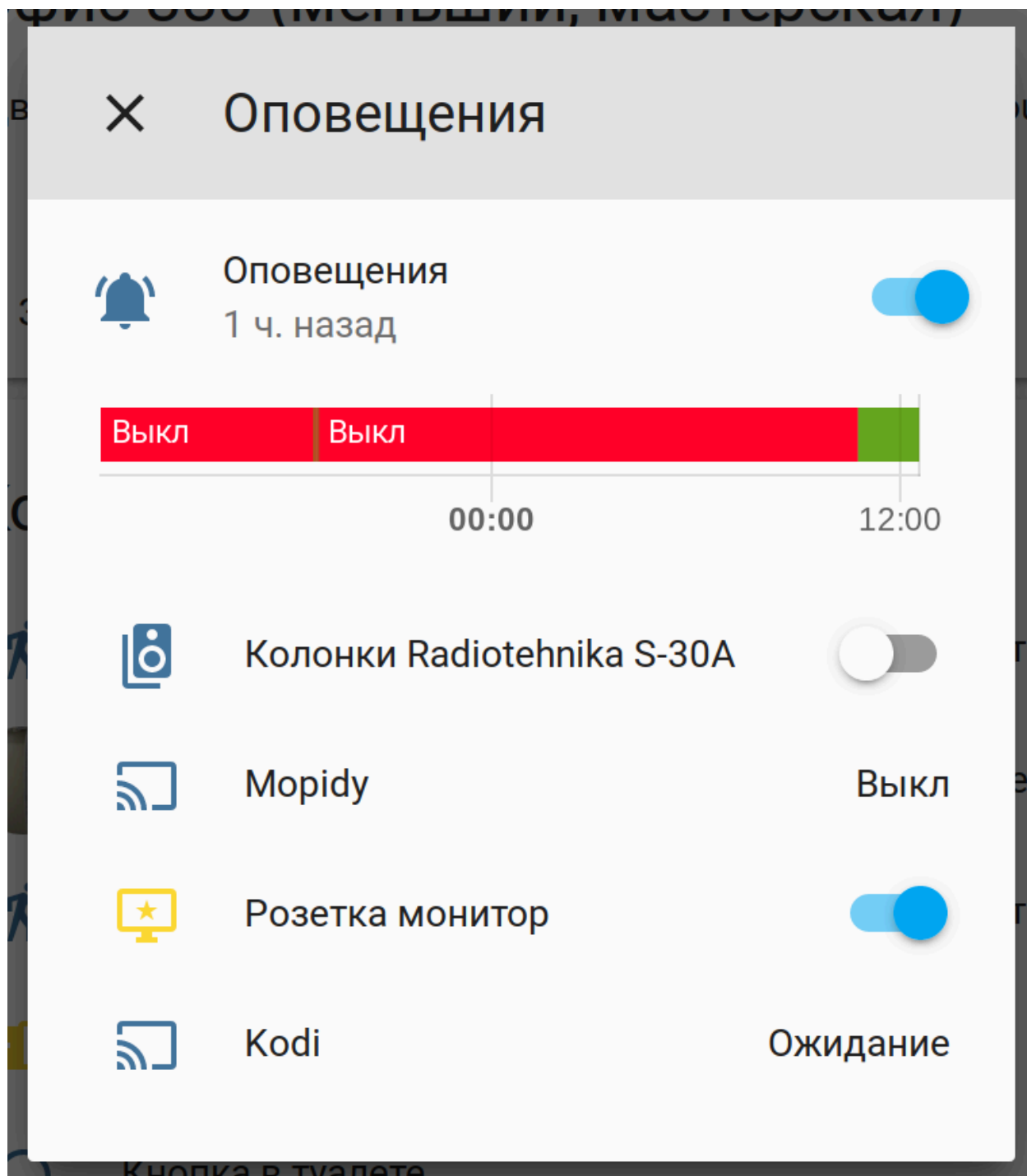
Photos

Releases

No releases published

Packages

No packages published