RUT955 Activating DIN1 with relay

Activating DIN1 with relay

This section will provide example how to safely use an external Relay for RUT955 DIN1 (passive/dry) control, when using Common ground.

Connection scheme

Unlike other RUT955 inputs, DIN1 is a passive type and to change its state, pins 1 and 6 must be shorted. This can be done with push button, reed switch or a **Relay**.

When using the **Relay** for input control, one must have in mind, that after **Relay** deactivation (switching from **NO** to **NC**) the COIL still holds energy and can cause high voltage spikes which can, **through common ground**[1], damage router DIN1 input electronics.

To avoid this situation always use relays with integrated flyback back diodes or if one is not available, connect **External diode** parallel to coil contacts in reverse polarity as in picture above.

When connecting external diode make sure you connect it as close to Relay's coil contacts as possible.

---

[1] this scenario is possible1 when RUT955 power supply uses the same ground as Relay Control signal.