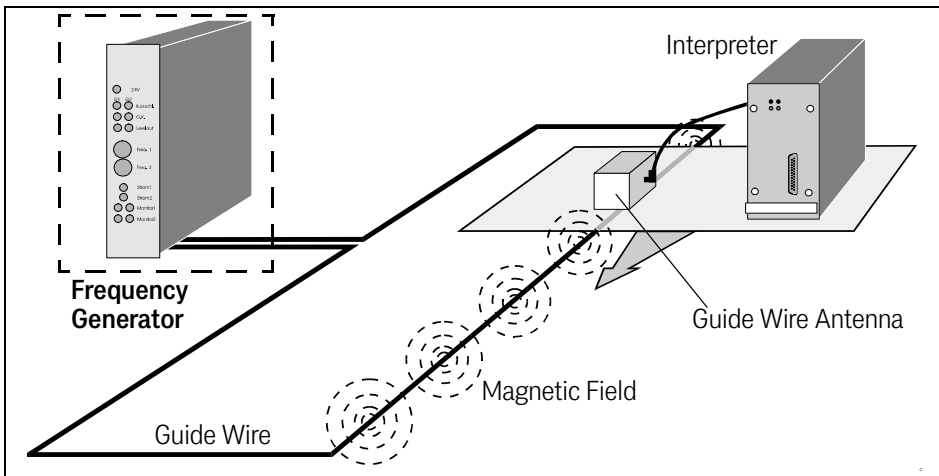


Function



Overview

- One-loop frequency generator for track guidance of automated guided vehicles (AGV)
- Alternating current generation with a current intensity of up to $I = 600\text{mA}$
- for use with guide wire antennas
- one of 16 frequencies selectable
- Quartz stabilized frequency generation, accuracy better than 0.02 %
- mountable on 35 mm top hat rail
- synchronizable up to 5.1 kHz, max. 6 sub masters, max. 6 slaves per master/sub master

A frequency generator generates an alternating current in a conductive loop for guidance of driverless transport vehicles (FTF).

The circuit board contains a generator with power amplifiers and a transformer for galvanic isolation. The operating frequency can be selected via a HEX rotary switch with 16 positions.

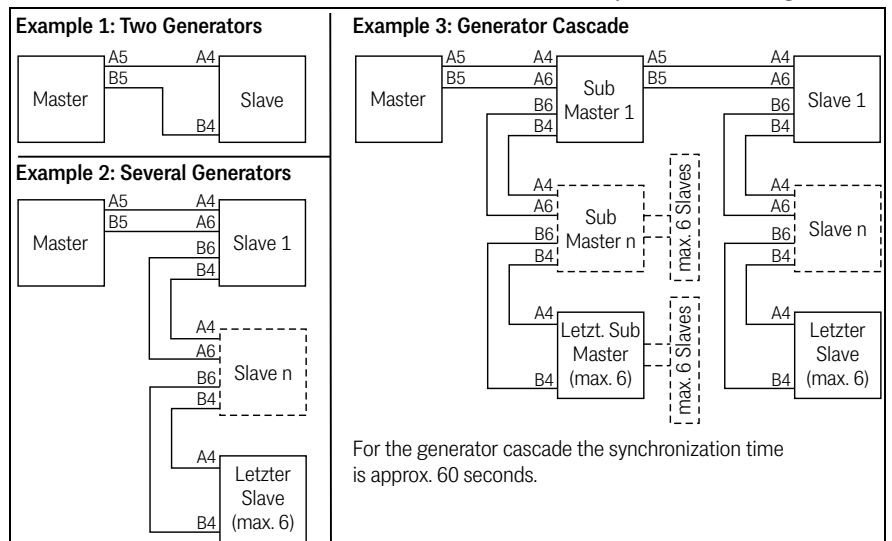
The generator generates a constant output current. Short circuits or too low load impedances as well as loop interruptions or too high load impedances are indicated by an LED on the front panel and a potential-free fault signal output.

The frequency generator has separate connections for long or short loops. The maximum load impedance differs between long and short loops in a ratio of about 1:2. The loop current can be adjusted via a trimming potentiometer on the front panel.

Synchronization of generators

Several generators can be synchronized to avoid beatings when using the same frequency. To do this, the generators must be set to the same frequency (up to max. 5.1 kHz) and connected according to the following scheme:

Synchronization of generators



For the generator cascade the synchronization time is approx. 60 seconds.

