

Here is a brief operational description of the Multireader:

After Power-ON the Multireader does not make anything, it is on standby.

With the first serial read command, the Multireader carries out an oscillating circuit tuning/match process.

The 120.0 kHz, 128.7 kHz, 131.072 kHz and 134.2 kHz frequencies are sent consecutively as Power-Burst via the transmitter coil and checked/read in via the receiving coil for the maximum incoming level. To do this, for each frequency a "C-2C-ladder" consisting of 3 different capacitors (8 combinations) is activated. The settings combination for the maximum incoming level of the individual frequencies is stored as the default value.

With the second read command the real detection cycle takes place. Thereby a Power-Burst is carried out with a 134.2 kHz frequency and already after a few milliseconds an attempt is made on the same frequency to read in a transponder via the air.

If there is no reply, no ISO-FDX-B-transponder can be in the field. The HF-field will be switched off after 50 ms and an attempt will be made on the 128.7 kHz frequency to read in a ISO-HDX-transponder. After that, on the 120 kHz frequency a Power-Burst will be carried out and already after a few milliseconds a Non-ISO-FDX-A will be read in on the same frequency.

After this "NISO-episode" has been completed, a Power-Burst will be carried out on the 131.072 kHz frequency with a duration of 60 ms followed by a reading on the 98.304 kHz frequency.

A reading result will be transmitted to the automatic feeder via the serial interface.