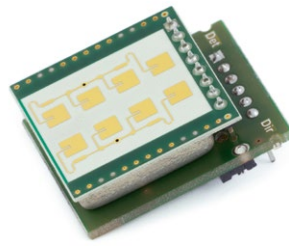


K-LD2-EVAL

radar transceiver



Features

- Powerful control panel software included
- Easy K-LD2 parameter setting over GUI
- Converted units for easy development
- Real-time streaming of ADC values and FFT spectrum
- Saves time to market and reduces NRE

Applications

- Optimizing parameters for the K-LD2 sensor in your application
- Getting started with the K-LD2
- Learning about the potential of a K-LD2 sensor

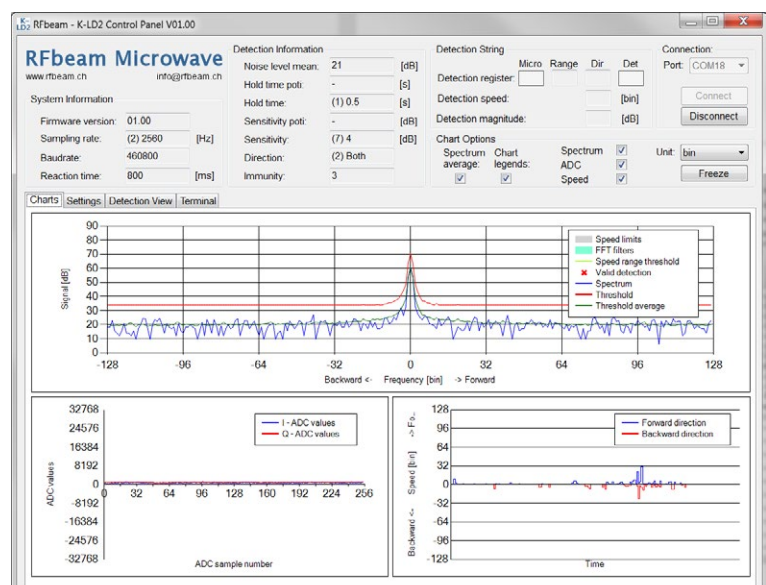
Description

The K-LD2 Evaluation Kit is a fully operational movement detector. The evaluation board visualises the two digital outputs of the K-LD2 over LED's. Two potentiometers allow quick adjustments of the sensor's sensitivity and hold time.

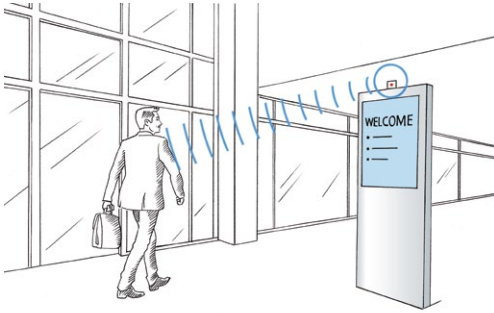
With the included powerful Control Panel software, development time is reduced drastically. All the parameters can be modified using the Control Panel, without having to look at the command list of the K-LD2. The influence of changed parameters can be directly checked in the real-time spectrum. Also ADC values and the dominant movements are displayed at the same time. Other parameters like sensitivity, filters and thresholds are directly shown in the spectrum to allow visual control. A unit conversion function allows to see spectrum and detection information either in bin, Hz or km/h. Simply save different settings of your K-LD2 and load them later for comparison or to order preprogramed K-LD2 sensors from RFbeam.

Control Panel

Figure 1: Control Panel GUI overview



APPLICATION IDEAS



Movement detection

The K-LD2's default parameters are already optimised for movement detection. It is not necessary to reconfigure anything.

Key Features:

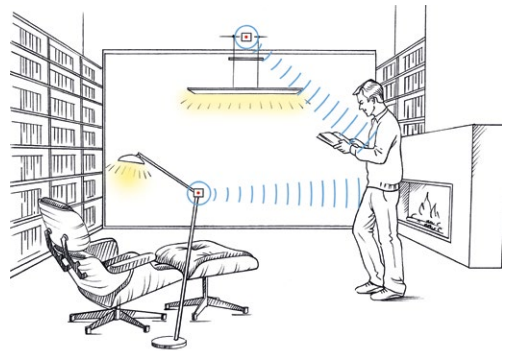
- Change hold time with potentiometer
- Change sensitivity with potentiometer
- Evaluate detection output
- Evaluate miscellaneous output as direction indicator

Indoor lighting

The typical situation in which an automatic light switches off even when you're in the scope of the sensor. The micro detection feature of the K-LD2 solves this problem by evaluating very slow movements to retrigger a valid detection.

Key Features:

- Use micro detection for retriggering
- Micro detection threshold
- Sampling rate
- Use miscellaneous output as micro detection

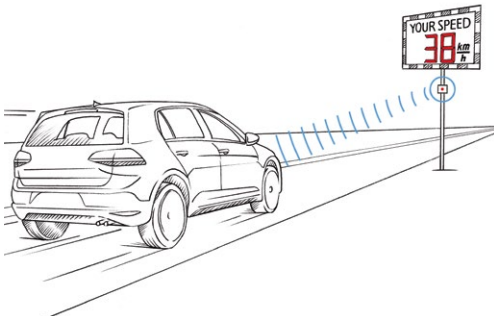


Speed measurement

Build a speed board or count the passing objects. Objects can also easily be divided into speed classes.

Key Features:

- Sampling rate
- Speed range threshold
- Low & high speed limit
- Use miscellaneous output as range indicator



Interference suppression

The K-LD2 can independently avoid wrong detections caused by fluorescent light. Additional interferences suppression can be achieved with the immunity feature to achieve an extremely robust sensor.

Key Features:

- Immunity
- Sampling rate
- Sensitivity

