

K+K phase and frequency counter Getting started

Version 1.0 2025-05-07

History

Date	Who	Version	Description
07.05.25	Loryn	1.0	Initial version

Contents

1. Overview.....3

2. Configuration.....3

 2.1 IP settings.....3

 2.2 Serial Baud Rate.....4

3. FXX-App.....4

4. K+K Library.....4

1. Overview

The hardware of the K+K phase and frequency counters is described in *ManE_FXE_200420.pdf*. This document can be downloaded from the K+K website (kplusk-messtechnik.de/downloads) section *Documents (Hardware)*.

The devices are supplied with a standard configuration that can be changed using the *FXE Firmware Upload and Configuration tool* (see download website).

Please use *KK FXX Graphic User Interface Application Software* to receive measurement data from K+K device and to configure measurement report mode and report intervall.

If you would like to write your own application software, please use *KK Library*, which is available for Windows systems (32 or 64 bit), Linux systems (32 or 64 bit) or ARM based Linux systems (32 or 64 bit) like Raspberry Pi.

Wrapper classes that integrate the K+K Library are available for C++, Python and Java programming languages.

2. Configuration

Please download *FXE Firmware Upload and Configuration tool* (available for Windows or Linux) and the associated manual *Manual KK Firmware Upload* from K+K website.

Use this tool to update firmware or change configuration of K+K devices.

2.1 IP settings

The default configuration is:

- static IP
- IP address 192.168.178.98
- Subnetmask 255.255.255.0
- Standard gateway 192.168.178.1

Please change the IP settings to match your LAN.

The easiest way to do this is with a USB connection. Please connect K+K device via USB to Windows- or Linux-computer and start *FXE Firmware Upload and Configuration tool*. Details can be found in the tools manual.

2.2 Serial Baud Rate

The standard baud rate is 115200 baud.

The baud rate can be configured for FXE2 devices. All other devices use 115200 baud.

Default for FXE2 devices is 576000 baud.

3. FXX-App

Before you write your own analysis software, we recommend our FXX-App.

This graphical user interface can establish several connections to one or more K+K devices simultaneously and display the measurement data in various text or graphic windows. Furthermore, the measurement data received from one or more connections can be saved in logs for later evaluation.

Please download *KK FXX Graphic User Interface Application Software* and associated manual *Manual FXX Graphic User Interface PC Application*.

FXX-App is available for Windows and Linux systems.

4. K+K Library

The KK library is primarily used for communication with K+K devices to receive measurement data and messages from the devices and to send control commands to the devices.

Please download *KK Library* according to your operating system and associated manual *Manual KK Multi Source Library* from K+K website.

Suitable wrapper classes for C++, Python and Java as well as corresponding sample programmes can also be found on the K+K website.