btServoTester

User's Guide

Version 1.0

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1

Overview

With the *btServoTester* app and a *PiKoder/SSC RX* bluetooth-receiver you can test a servo with your Android smart phone or tablet using an intuitive and very efficient user interface.

The core function of the app is build around the well known miniSSC protocol. Therefore the App can be used with a number of serial servo controllers besides the *PiKoder* family.

Commissioning the app requires two simple steps:

- Install the app through the Google Play Store and
- Pair your Android device with the bluetooth transceiver module following standard Android procedures

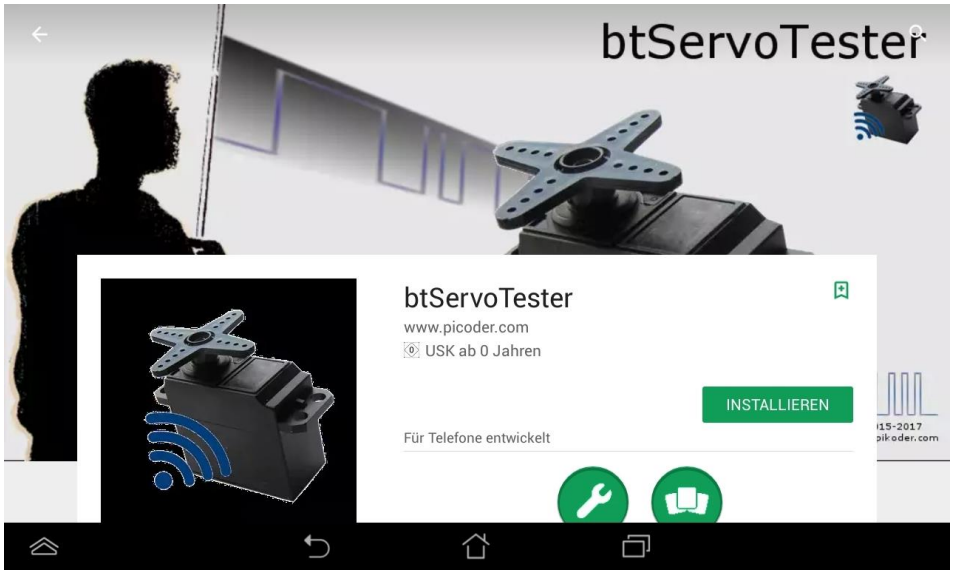
These initial steps are described in section 2; after commissioning the app you simply start the app like any other app on your device. Section 3 presents the user interface and section 4 illustrates the preferences and settings of the app.

The servo tester will output the servo pulses at channel 1of the PiKoder/SSC RX. Please refer to this PiKoder's User Manual to identify the correct pinning.

2

Commissioning

The btServoTester app is available free of charge in the Play Store; the installation is started after hitting the button and does not require any user interference. Please bear in mind though that you have to grant Bluetooth priveliges for the app.



The second and final step requires the pairing of your Android device with the receiver's bluetooth module (a standard HC-06 transceiver).

To do this, enter the Bluetooth menu inside Settings, then search for new devices. After a moment the device "HC06" will appear. Tap the HC06 in the list, and you will then be asked for the PIN - it is 1234. This completes the setup of app.

3

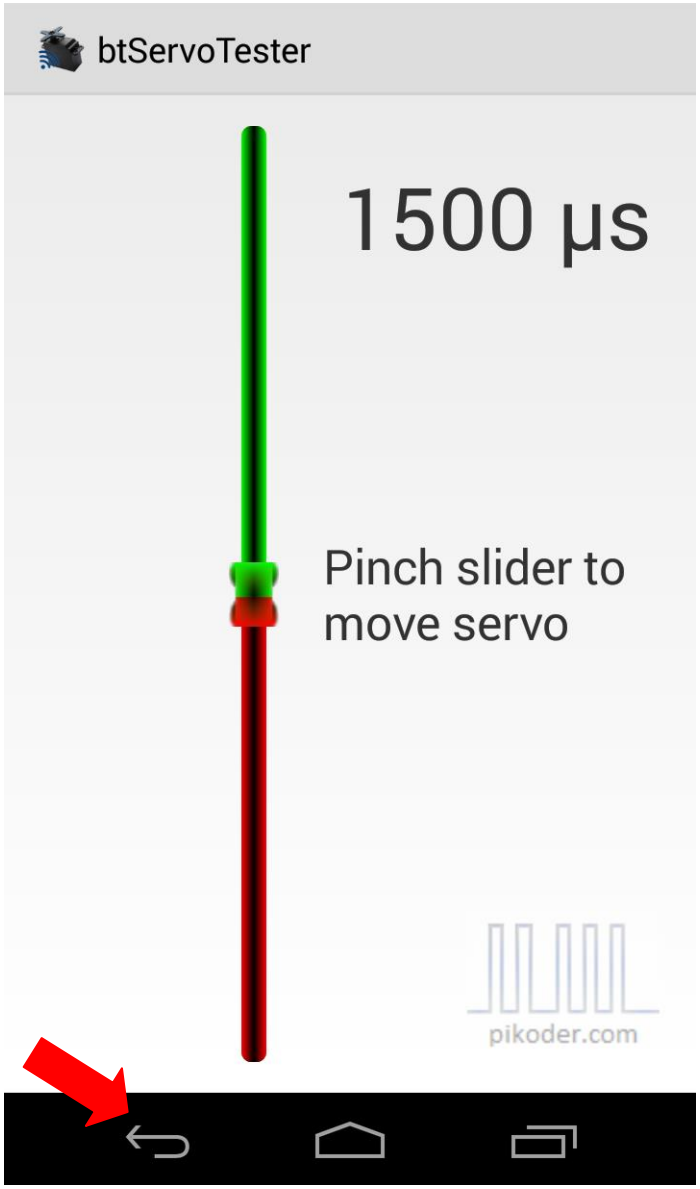
User Interface

After starting the app you will be seeing the main screen which allows you to set any specific preferences you may need to adjust. Please note that most of the screens are fixed to a portrait format to simplify operation.

To start operating your servo you would hit the "Connect…" Button. You would see a message indicating that building up the connection is in progress.

Servotesting

The screen would change to the following layout offering a slider to control the servo position. The pulse length – in this particular screen shot 1,500 µs – will reflect the actual pulse length when you move the slider. Releasing the slider will automatically set the slider back to the middle or neutral position, which is 1,500 µs per default.



You can always return to the initial screen by using the return button indicated with a red arrow in the image above.

4

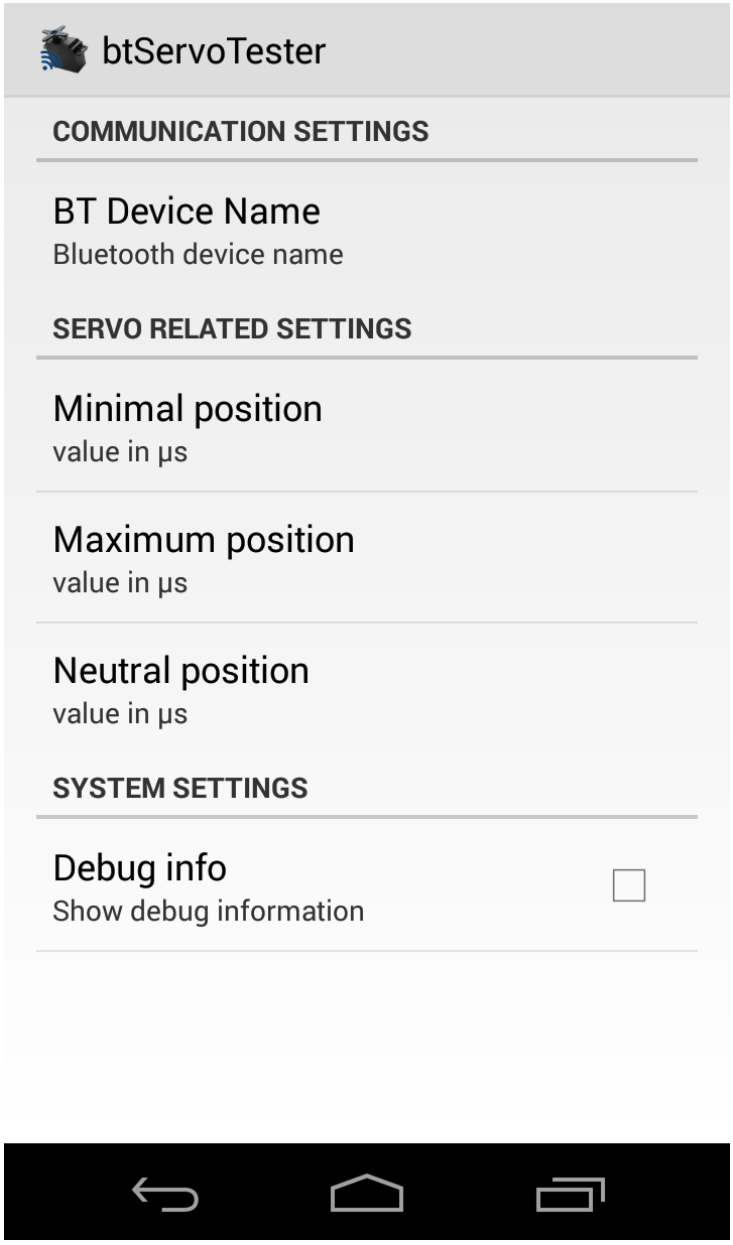
Settings

Your starting point for settings would also be the main screen (s. red arrow).

After activating the preference menue you are presented another menue offering APP Settings and the general help link to the PiKoder web page.

APP Settings

In this section you would be able to review basic settings of the app. The most relevant settings cover the bluetooth receiver device name and the setting for channel neutral, min. and max pulse length.



The default device name would be "HC-06" reflecting the PiKoder/SSC RX standard configuration. If you are employing another device then you can adapt the device name by tapping the field. Please note that the device which you are using has to be paired with your Android device.

The servo related settings allow you to adapt to different servo types. The total slider range is stretches from min. to max value assuming that neutral would be exactly in the middle between max. and min.