

# **BO:S:S**

## **Boccia Score System**

Timekeeper System Installation and Administration

ATAK software, s.r.o.

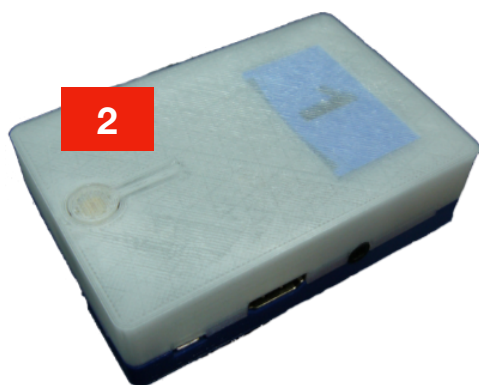
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*The information in this guide is for the timekeeper installation and administration, usage information is in a separate User Guide.*

## Package contents

1. case
2. minicomputer
3. minicomputer power supply (micro-USB)
4. HDMI cable
5. tablet\*
6. tablet power supply (USB)\*
7. tablet power cable (USB -> micro-USB)\*
8. spare microSD card
9. Installation Guide (this document)
10. User Guide

\* - full version only with a tablet



# System connection

1. Connect the minicomputer to the TV or monitor with an HDMI cable
2. Connect the minicomputer to the power supply (standard micro-USB, it just has to be strong enough, at least 2A), it is ideal to use the supplied power supply, which has sufficient power.
3. The supplied tablet has the Boccia Remote control application installed and has a USB power cable and a power supply. It is also possible to charge the tablet from the TV's USB port or even a minicomputer, but it is more reliable to use the supplied power supply again. If you use your own mobile phone or tablet with the Android OS, install the freely available 'Boccia Remote' application by ATTACK from the Google Play Store.
4. Connect the mobile device to the Wi-Fi network with the installed application according to court number, e.g., to the BOSS\_Kurt\_2 network (Fig. 1 and 2). **If Android expresses that you have no internet connection, confirm that it does not matter and you still want to connect, otherwise it will not be possible to connect to a minicomputer and control the score! (Fig. 3)**

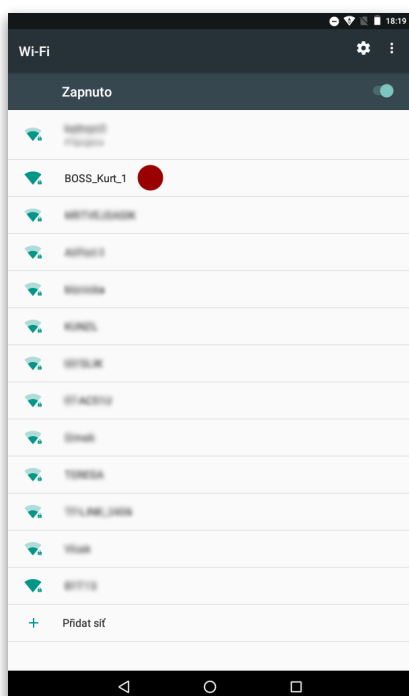
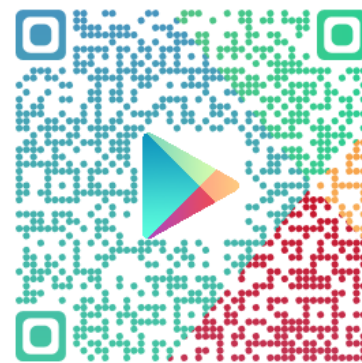


Fig. 1 - Wi-Fi network selection

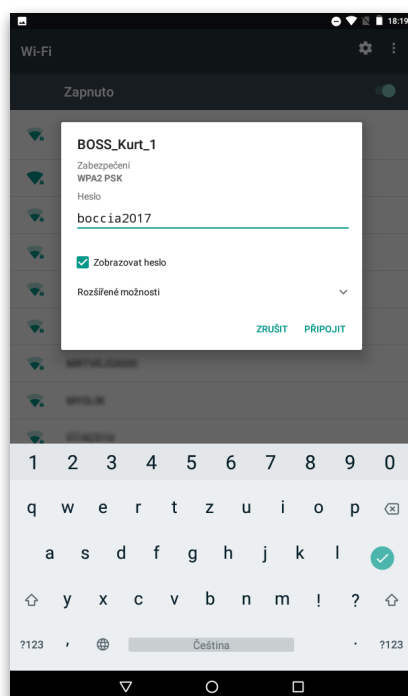


Fig. 2 - Wi-Fi connection

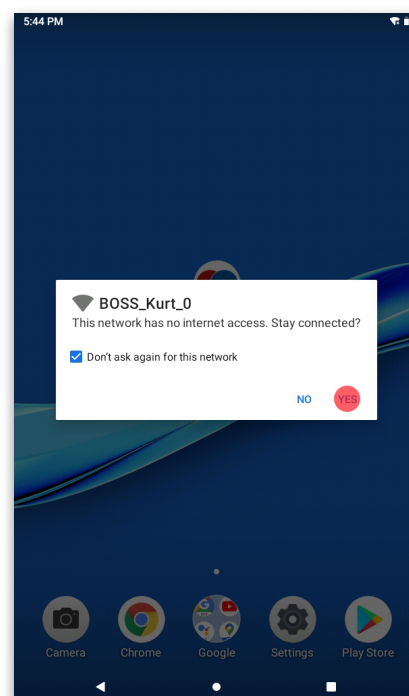


Fig. 3 - no Internet does not matter

5. After connecting to the minicomputer Wi-Fi, you can launch the score control application, Boccia RC.
6. The application will list the minicomputers it sees in the network, it will usually be one record and the name should correspond to it according to the court number (Fig. 4). Select the given record, e.g., kurt2@172.24.2.1 and the current values will be displayed, which are also visible on the connected TV/monitor. Any change made in the mobile application should be reflected immediately on the TV/monitor. If the minicomputer works in Wi-Fi client mode and is therefore connected to a Wi-Fi access point (AP), it will have an address from the network like other devices on the network. The control mobile device must then be connected to the same network in order for the minicomputer to be visible.
7. If the minicomputer is equipped with an antenna, it means it contains an IoT module for automatic connection to the cloud (<https://results.boccia-score.eu>). The antenna should be in a horizontal position, firmly tightened, and directed away from the device.

The timekeeper is currently ready to be used by the timekeeper/referee.

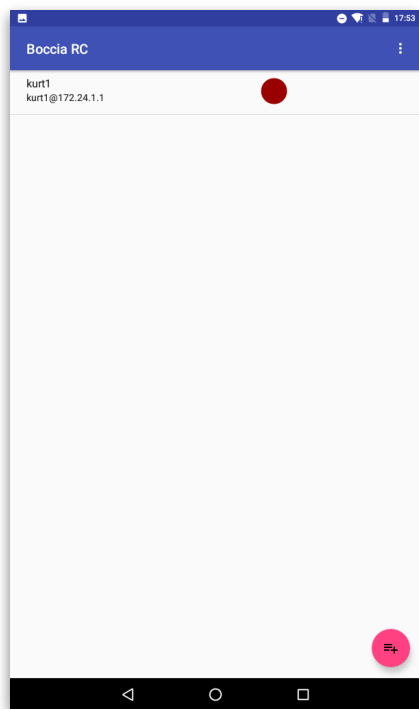


Fig. 4 - court selection

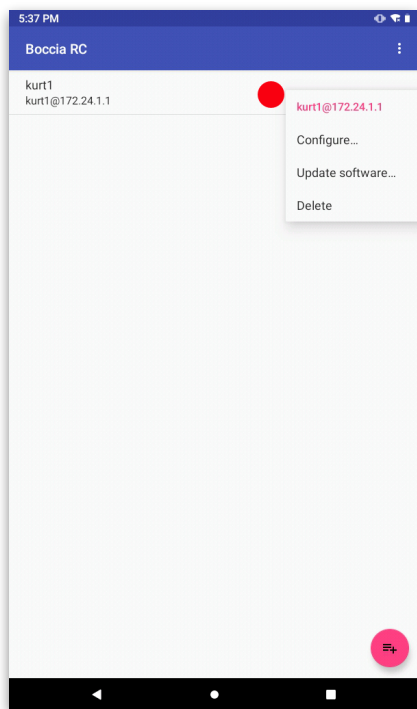


Fig. 5 - court options

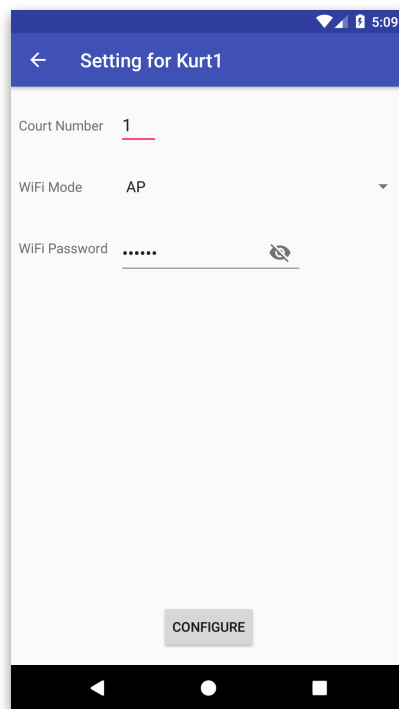


Fig. 6 - court settings

## System settings

By default, each timekeeper has (if no pre-setting has been ordered), or after resetting to factory settings, the following values:

Court number	0
ESSID	BOSS_Kurt_0
Wi-Fi password	boccia2017
Wi-Fi IP address	172.24.0.1
LAN IP address	DHCP

The timekeeper system is set from the mobile application. For a found timekeeper, pressing it for a longer time will bring up a menu where you can select the settings and/or update the timekeeper (Fig. 4 and 5). You can change the court number and password for Wi-Fi connection (recommended!) in the settings. (Fig. 6)

The Wi-Fi password must comply with the rules for WPA2 passwords, i.e., **at least 8 characters**. According to the selected court number, the system automatically sets other values, such as IP address, Wi-Fi channel and voice for announcing time, a male voice is used for odd court, a female for even court. The announcement is in English only and the volume is set on the side of the display device, i.e., with the TV remote control or in the monitor menu. If the minicomputer is in Wi-Fi client mode, you must set the network ESSID where it is to connect as a client in addition to the WPA2 password, usually it is the same Wi-Fi network to which the control mobile device is also connected. In the Wi-Fi client mode, the minicomputer constantly tries to send the current values of the match to the CLOUD system, where they can be processed and where Boccia fans from all over the world can view them (see the link at the end). In the Wi-Fi client mode, the minicomputer receives an IP address from the connected network.

## Timekeeper button

There is a single control button on the upper side of the timekeeper, which has a function according to the length it is pressed, and after releasing the button the selected action will be performed. The second LED flashes for better orientation.

If the timekeeper is connected to a display panel (TV, monitor), it also displays the performed action on the screen.

Button press length	Function	Red LED
Short (up to 2s)	QR code display with Wi-Fi settings	no flashing
Longer (from 2s to 8s)	Wi-Fi password reset to default value (boccia2017)	flashes slowly
Long (from 8s to 14s)	reset to factory settings (see chapter System settings)	flashes quickly
Longest (more than 14s)	no action is taken	no flashing

When resetting to the default factory settings, in addition to the values, the original version of the application displaying the timekeeper will also be used, so the currently used version will be overwritten.

After resetting the password or setting the factory values, the timekeeper will be rebooted immediately.

## Update

### Mobile application update

The 'Boccia Remote' mobile application update is standardly performed in the Android system as in other mobile applications, i.e., a new version is installed automatically or manually from Google Play (depending on how your update system is set-up). We recommend regular updates (new features and bug fixes are added) and running the application itself, which downloads new application versions for the minicomputer, see the next sections.

### Timekeeper - minicomputer update

After connecting to the minicomputer, you can also update its application for displaying timekeeper. Due to the fact that the control mobile device is connected either to the Internet or to the court network (minicomputer), where there is no internet connection, it is not possible to update the application for the minicomputer at once and you must first download the new version when connecting to the Internet, select the Check for updates item (Fig. 7, 8).

If a newer version is available than the mobile application has from the previous update, the new version is downloaded and can be sent to the minicomputers. After connecting to the court Wi-Fi, you can select the Update... option in the court menu (Fig. 5) and an update is offered (Fig. 9), if the downloaded version is newer than on the currently connected court. After the update, the minicomputer will restart and the system will use the new version.



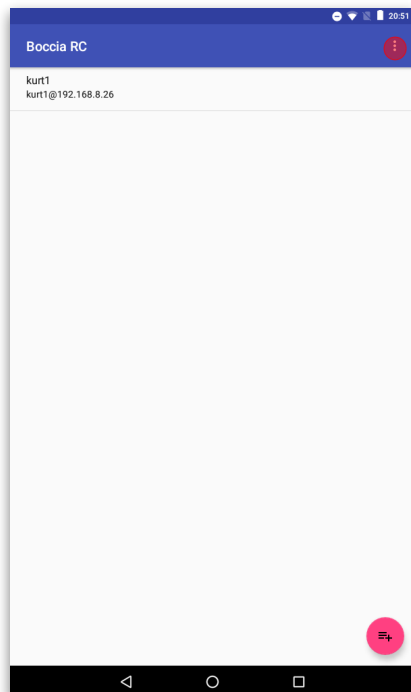


Fig. 7 - system menu

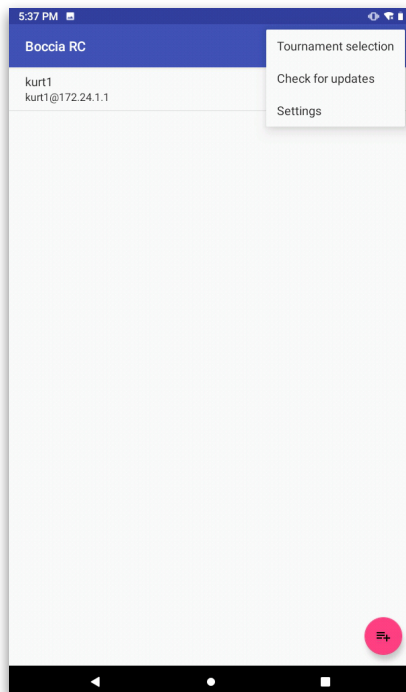


Fig. 8 - system menu

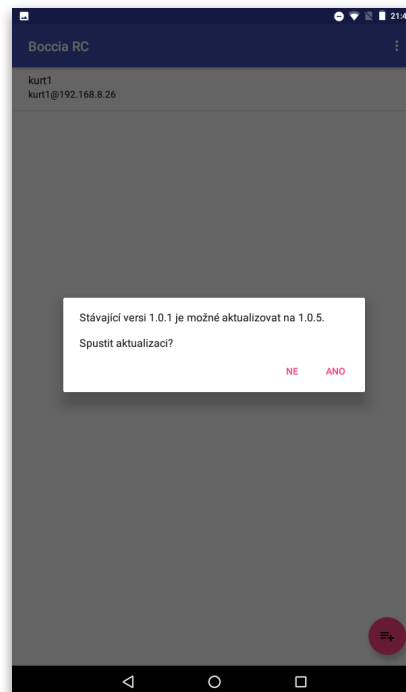


Fig. 9 - update

## Troubleshooting

### Mobile application not offering any computer for control or control not responding

- wait 30s for the minicomputer to appear in the list of courts. If the problem recurs and the time to find a court is too long, you can use the button on the bottom right to add a court statically (just enter its IP address and any name), the court IP address is always 172.24.X.1, where X is the number of the court (for court 1 it is 172.24.1.1)
- close the mobile application and, if necessary, delete it from the memory of the mobile device using the running application manager (usually called up by a button with a rectangle icon)
- disconnect and reconnect to the court's Wi-Fi network and restart the mobile application

### Minicomputer not displaying anything

- check cable connections
- check that the correct HDMI input is set on the TV, usually the TV inputs are described (HDMI1, HDMI2, etc.) and the one to which you have connected, the timekeeper must be selected as the signal source
- check whether the minicomputer (LED is lit) and the TV are switched on, or unplug the device and plug it in again
- try to replace the micro-SD card and use a spare one (item 8 of the package contents), in the minicomputer the card is on the bottom on the side of the button, the card can be pulled out with your finger. The spare card has factory settings. Replace the card with the power of the disconnected minicomputer.

### Minicomputer not displaying timekeeper on connected TV

- it could occur that the application displaying the timekeeper does not start after an update or a file failure in the minicomputer, you can use the reset to factory values, see the Timekeeper button chapter

### I do not know password to connect the court Wi-Fi

- use the timekeeper button, see chapter Timekeeper button

## **After a while, the screen turns black and shows nothing**

- *turn the automatic shutdown off when idle after X hours on the display device*

If necessary, it is possible to turn the minicomputer off by unplugging and plugging it in again. Before switching off during the match, we recommend writing down the values (scores, rally, times) and setting them again via the mobile application after switching on again. The data also remain in the connected mobile control device, and after the minicomputer fails and reconnects to the control device, you have the option to send data from the mobile device to the minicomputer, but it is safer to copy them in an important tournament if you have the opportunity. Multiple mobile devices can simultaneously control one minicomputer, but they must all be connected to the same Wi-Fi network of the minicomputer.

Technical support is available by email at: [podpora@boccia-score.eu](mailto:podpora@boccia-score.eu)

You can always find updated documentation on: <https://www.boccia-score.eu>

The cloud with online results is on: <https://results.boccia-score.eu>