BOGNAR ELECTRONICS

# Bognar Pickup System **ST-PRO**

# **USER GUIDE**

# WARNING Fully charge the battery before first use!

# Safety and Cautions

Please read and follow all safety warnings and operating instructions before using this product, and keep all documentation for future reference.

- Heat and moisture can harm this product. Please do not install or operate this product near sources of moisture, and never store it near heat sources, such as heaters or radiators.
- Please do not charge the battery below 0°C / 32°F and above 45°C / 113°F.
- Avoid shorting or damaging the battery, as it can cause fire.
- Ensure the battery cannot short against other wire connections or components inside the guitar cavity.
- Do not install the product into guitars with copper shielding. Please remove the shielding before installation.
- For long-term (more than 3 months) storage please store the electronics in Deep Sleep mode.
- Do not store the electronics with a depleted battery. For long-term storage, the battery charge should be around 50%.
- For charging the battery use USB chargers that meet all your local safety and compliance standards. (e.g. CE/FCC marking)
- Before installation, please carefully read the installation guide.
- Do not attempt to service the electronics yourself. Please contact customer support for professional help.

# Installation and Setup

For the installation and setup guides please scan the QR codes below or visit https://bognarelectronics.com/docs/install-guide/.

#### Installation guide



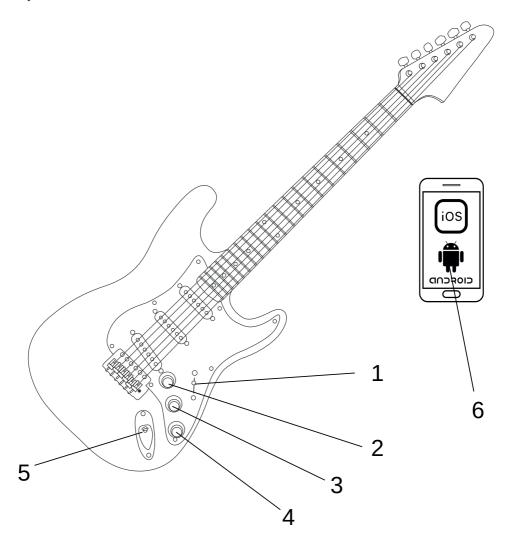
#### Installation video



#### Setup video



### System overview



- 1. 5-way switch with built-in LED
- 2. Programmable potentiometer (Volume)
- 3. Main switch (Main)
- 4. Programmable potentiometer (Tone)
- 5. Jack socket for output and charging
- 6. Smartphone app (iOS, Android)

#### Main switch (Main)

The Main Switch is a 12 position rotary switch used for the following functions:

- turn on, programming mode (PR)
- turn off (OFF)
- change Preset Bank (A-J)

A maximum of 50 presets can be loaded onto the guitar, which are stored in the 10 Preset Banks. Each Preset Bank has 5 Preset Positions. Presets in the Preset Positions can be recalled using the 5-way switch.

Main switch	5-way switch
Bank A	A1 - A5
Bank <b>B</b>	B1 - B5
Bank C	C1 - C5
Bank J	J1 - J5

Preset Positions (e.g. A1, B4, J3)

#### 5-way switch with built-in LED

The 5-way switch is used to change the Preset Position in the selected Preset Bank. The LED gives feedback about the actual state of the electronics.

#### **Programmable potentiometers**

The programmable Volume and Tone potentiometers can be assigned to control preset parameters, with unique assignments for each preset.

#### Jack socket for output and charging

The jack socket serves a dual purpose as both the output and charging point for the device. When the battery is fully depleted, it takes 3 hours to charge it completely. A full charge provides 8 hours of playtime.

#### Smartphone app (Android, iOS)

The guitar can be programmed and monitored via Bluetooth using the Bognar Pickups smartphone app.

# **Operating modes**

#### **Programming mode**

Programming mode is engaged when the Main switch is turned to PR. Connecting to the application is only possible in Programming mode. In this mode, the 5-way switch and the potentiometers are not active as only the application controls the guitar.

When the guitar is connected, the application provides the following features:

- Listen to the presets stored in the application
- Edit the presets stored in the application
- Overview of the presets stored in the guitar
- Assign presets to the preset positions
- Delete preset assignments

Both Guitar Editing and Standalone modes are accessible from this mode.

#### **Guitar Editing**

To access this mode the guitar must be connected to the app.

Guitar Editing is engaged when the Main switch is turned to one of the A-J positions (Preset Banks).

In this mode, the application provides the following features:

- Displays the content of the selected Preset Bank (Preset positions and presets)
- Edit the active Preset Position, selected by the 5-way switch, as follows:
  - 1. Assign presets to positions
  - 2. Change or delete the current assignment
  - 3. Edit the preset parameters
  - 4. Listen to the preset (potentiometers are **active** in this mode)

In this mode, every feature presented in Programming mode is also available.

#### Standalone mode (usage without the app)

Standalone mode is engaged when the Main switch is turned to one of the A-J positions (Preset Banks), while the app is not connected to the guitar.

In Standalone mode, the guitar can be used without the app by utilizing the loaded presets.

To select the active preset, use the Main switch (A-J) and the 5-way switch. It is not possible to edit the presets in this mode.

#### Auto Standby

Auto Standby reduces power consumption to extend playing time. When the guitar has not been played for a set amount of time, Auto Standby switches off the main power consumers and mutes the guitar. This mode is indicated by alternating blue and red flashes on the guitar LED. You can switch back to normal mode by moving any of the guitar's switches.

The timer for Auto Standby can be set to your preference using the application. Please refer to the App User Guide for more information.

#### Auto Off

Auto Off is used to prevent battery depletion when the guitar is accidentally left turned on. When the guitar has not been played for a set amount of time, Auto Off turns off the guitar, regardless of the position of the Main switch. The guitar can be turned on again by turning the Main switch to PR.

The timer for Auto Off can be set to your preference using the application. Please refer to the App User Guide for more information.

#### Deep sleep / Reset

In a deep sleep state, the guitar is completely switched off, and all of its data, including presets and unique Bluetooth settings (e.g. unique Bluetooth Name and PIN), are lost. Use this mode to reset your guitar if needed.

For long-term storage, it is highly recommended to put the guitar into "Deep sleep" to protect the battery. The battery charge should be around 50% for optimal storage. To wake up the guitar, the charger must be plugged in.

You can Deep sleep the guitar using the application. (Guitar Settings screen) Please refer to the App User Guide for more information.

#### Charging

To charge the battery use the included USB to JACK cable and a 5V / minimum 1A USB charger.

For optimal charging performance and safety, please use a good quality USB Charger that produces at least 1A of current. Charging a fully depleted battery takes around 3 hours to complete. Note that charging time depends on the quality of the USB charger and may take longer than 3 hours. We recommend fully charging the battery before using it for the first time.

The charger can be plugged in regardless of which mode the guitar is in. While charging, the LED lights up in red, then turns blue when the charging is finished. The app can be connected to the guitar while charging in Programming Mode. While connected, the current state of the battery and the charging process can be monitored on the Status screen. Please refer to the App User Guide for more information.

#### State of the Battery

The state of charge can be monitored on the Status screen of the application while connected.

In Standalone mode, the battery level can be checked by turning the Volume pot all the way down. The LED will signal the level according to this table:

LED	State of charge
2 blue blinks	100-75%
1 blue blink	75-50%
1 red blink	50-25%
2 red blinks	25-10%
3 red blinks	10-0%

When the battery reaches it's minimum level, the LED starts to blink quickly in red and the guitar switches off in minutes.

# LED signals and the states of the guitar

LED	State of the guitar	Main switch
Lights up red, then no light	OFF	OFF
Lights up blue, then blinks in red	Turned On and waiting for connection	PR
Blinks in blue	Connected (PR mode or Guitar editing)	PR/A-J
No light	Deep sleep, Auto OFF, Standalone mode, OFF	OFF/ PR/A-J
Alternating blinks in red and blue	Standby	PR,/A-J
Lights up red	Charging	OFF/ PR/A-J
Lights up blue	Charged	OFF/ PR/A-J
Quick blinks in red	Battery level very low	PR, A-J

# **Getting Started**

#### 1. Charge the guitar

Please fully charge the battery before first use. To charge the battery use the included USB to JACK cable and a 5V USB charger. Plug the cable into the output JACK of the guitar. While charging, the LED lights up in red and turns blue when the charging is finished.

#### 2. Download the Bognar Pickups App

Bognar Pickups App is available for Android and iOS devices. You can find the Android version at Google Play Store and the iOS version at the Apple App Store, or scan the QR codes below.

Android

iOS





#### 3. Connect to the guitar

**Step 1.** Enter Programming Mode by turning the MAIN switch on your guitar to "PR" position. In Programming Mode the LED flashes red repeatedly, which indicates that the guitar is ready for connection.

Step 2. Start the App.

**Step 3.** Press the NEW GUITAR button to create your guitar in the app.

**Step 4.** Start scanning for your guitar by pressing the START SCAN button. Bluetooth<sup>®</sup> scan requires Bluetooth to be turned on, along with access to device location. Accept any the permission requests to continue.

**Step 5.** Select the guitar from the scan results.

**Step 6.** Name your guitar on the next screen and optionally set the Battery Saver timers. To load the factory presets onto your guitar, make sure that the Load Factory Presets switch is turned on (blue color), otherwise the guitar will be empty. Finally, press the CREATE GUITAR button.

**Step 7**. The name of your newly created guitar will appear in the GUITAR SELECTOR box on the start screen. Press the CONNECT button.

**Step 8.** The initial Bluetooth<sup>®</sup> pairing begins. Pairing is indicated by a sound and a pop-up notification. If the notification did not appear automatically, swipe down on your screen for the notification, and press it.

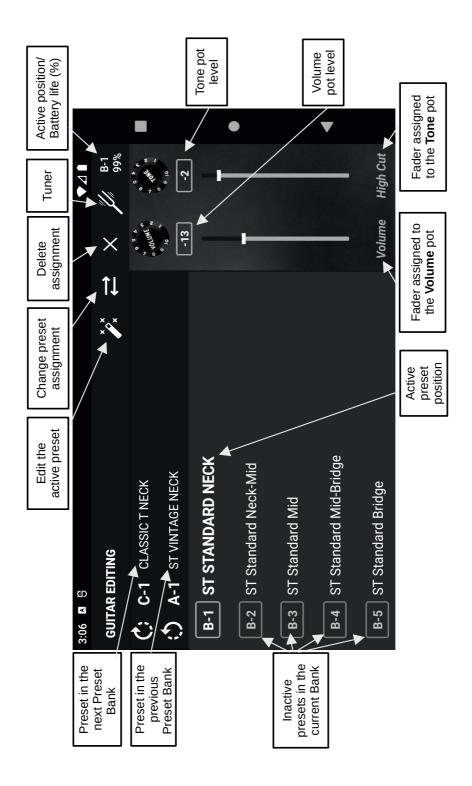
**Step 9.** Type in the default Pin (123456) in the popup window, then press OK. The app will connect to the guitar. Upon successful connection, the guitar LED will repeatedly flash blue, and synchronization with the guitar begins. During the synchronization process, the factory presets are loaded onto the guitar. This may take 15-45 seconds.

**Step 10.** After successful connection, turn the MAIN switch to position "A" to engage Guitar Editing. Every preset position in bank "A" will appear on the screen. Use the 5-way switch to navigate through the presets. The selected preset will be active and audible. The potentiometers are also active in this mode, so make sure to turn them up if the guitar remains muted. In GUITAR EDI-TING, all functions for programming the guitar are accessible.

For further information about programming the system please read the App User Guide on our website.

**App User Guide** 





# Safety and Compliance Information

This product has been tested and complies with all the following standards and certifications.

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EN 55032:2015+A11:2020 EN 55035:2017ClassB EN 61000-4-3:2020 EN 61000-4-2:2009

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **Contains FCC ID: S9NBNRGM0AL**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **Industry Canada**

This device complies with RSS-247 of the IC rules. Contains IC ID: 8976C-BNRGM0AL CAN ICES-003(B)/NMB-3(B)

