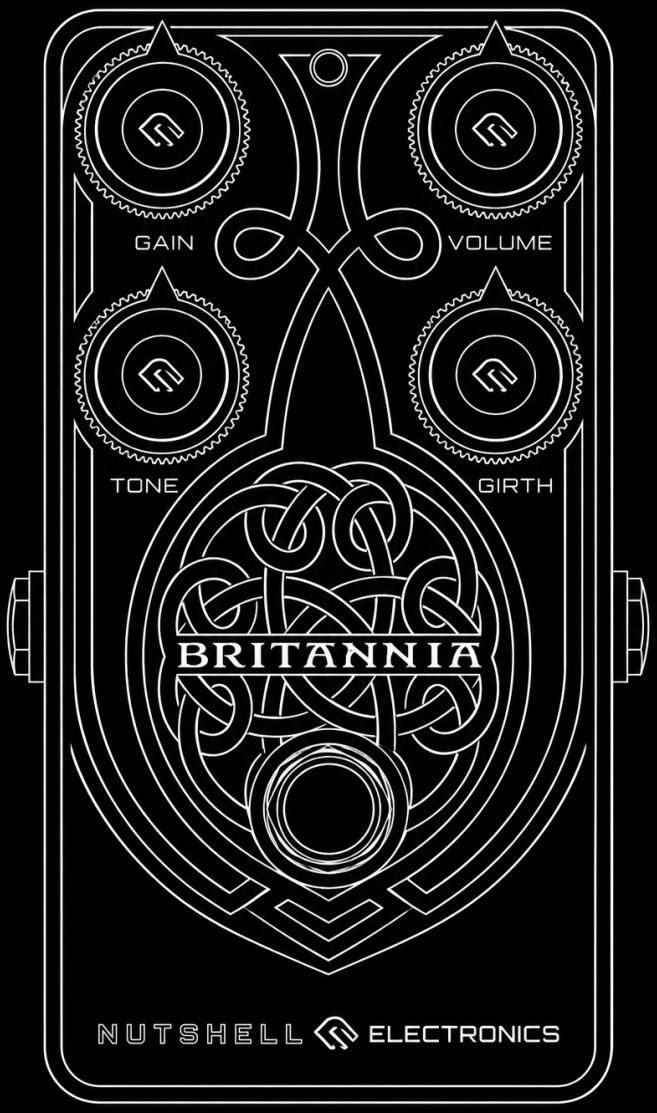
NUTSHELL ELECTRONICS

BRITANNIA

OVERDRIVE



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Thank you for choosing Britannia.

Britannia is a colored overdrive pedal designed for electric guitar.

This manual describes the features of the device, its connections, and the functions of its controls, providing all the information necessary for proper operation. Please read the following sections carefully before using the pedal.

TABLE OF CONTENTS

NUTSHELL ELECTRONICS

1. SAFETY PRECAUTIONS

Power supply

- Use only a regulated 9 V DC power supply with center-negative polarity.
- Verify that the supply voltage is correct before connecting the device.
- Do not apply voltages higher than those specified.
- Disconnect the power supply before connecting or disconnecting any cables.

Use and maintenance

- The device is intended for indoor use only.
- Avoid exposure to rain, moisture, and liquids.
- Do not expose the device to excessive heat sources or direct sunlight for prolonged periods.
- Do not open the enclosure or modify the internal circuitry.
- Use only a soft, dry cloth for cleaning.
- In the event of a malfunction, discontinue use and disconnect the power supply.

2. PACKAGE CONTENTS

Please verify that the package contains the following items:

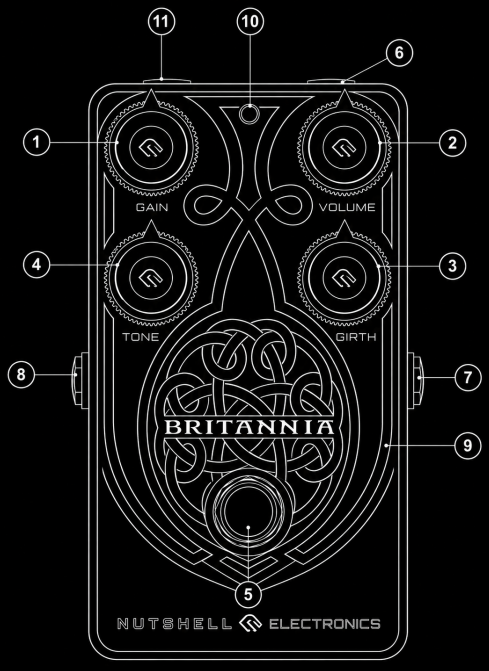
- Britannia overdrive pedal
- User manual
- Certificate of authenticity
- Set of adhesive rubber feet

3. GENERAL DESCRIPTION

Key Features

- Analog “natural” overdrive
- True bypass
- 128 MIDI-recallable presets
- TRS Type A MIDI IN and MIDI OUT
- Remote control via Program Change and Control Change messages
- 9 V DC center-negative power supply

Top panel and connections



1. Gain control
2. Volume control
3. Girth control
4. Tone control
5. True bypass switch
6. MIDI input
7. Audio signal input
8. Audio signal output
9. Power supply input
10. Status LED
11. MIDI output

4. CONTROLS AND FUNCTIONS

Gain
The Gain control adjusts the overall gain of the overdrive.

Tone
The Tone control simultaneously shapes the low and high frequencies, allowing the sound to range from bright and articulate to warmer tones with enhanced low-end richness.

Girth
The Girth control adjusts the thickness of the sound by shaping the low and mid frequencies. Turning it clockwise produces fuller and richer tones, while rotating it counterclockwise results in a tighter and more focused sound.

Volume
Adjusts the output level.

Footswitch
Short press: effect on/off (true bypass).
Long press: saves the current settings to the active preset (MIDI functionality).

Status LED
The multicolor LED indicates the status of the currently selected preset:
- Fast flashing: preset saving in progress.
- Off: pedal in bypass mode.
- Steady multicolor illumination: effect active.

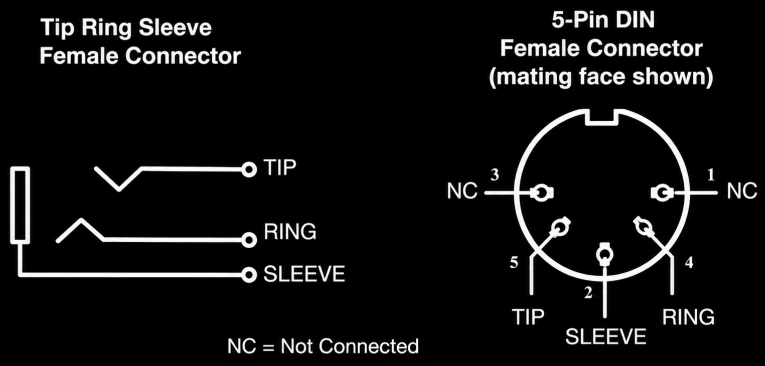
5. CONNECTIONS

Input and output

The input and output connectors are standard 1/4" mono jacks.

MIDI

The MIDI input and output connectors are 1/8" TRS jacks and follow the official MIDI Association Type A wiring standard.



Power supply

The power connector is a 2.1 mm center-negative DC barrel jack.

Standard pinout (center negative).

6. MIDI

MIDI Reception

Britannia is capable of receiving MIDI messages and is factory-configured in OMNI mode, allowing it to accept commands from any MIDI channel.

To use MIDI control, simply connect a controller to the 1/8" TRS MIDI input using a cable wired according to the official MIDI Association Type A standard.

Recalling Presets via Program Change

Britannia provides 128 memory locations that can be recalled directly using Program Change messages.

The mapping is straightforward:

* Program Change #0 → Preset 0
* Program Change #1 → Preset 1
* ...
* Program Change #127 → Preset 127

Program Change reception is always enabled, allowing any stored preset to be recalled instantly.

MIDI Channel Assignment

To assign a specific MIDI channel, send Control Change message #126. The message value determines the receive channel according to the following table:

* Values 0 to 15 → MIDI channels 1 to 16.
* Value 16 → OMNI mode.
* values 17 to 127 → ignored.

For example, sending CC #126 with a value of 10 configures Britannia to receive on MIDI channel 11.

Once the procedure is complete, the LED flashes twice to confirm that the setting has been stored.

Using Control Change messages

In more complex systems, it may be preferable to control the effect state directly using Control Change messages rather than recalling presets via Program Change.

By default, Britannia is assigned to Control Change #40.

* Sending a value of 0 turns the effect off.
* Sending any value greater than 0 turns the effect on.

Control Change number assignment

To change the Control Change number used by Britannia, send Control Change message #127. The message value specifies the new Control Change number to be assigned.

For example, sending CC #127 with a value of 24 configures the device to use CC #24 for receiving control commands.

The LED flashes twice to confirm that the setting has been stored.

Warning

Control Change messages #126 and #127 are reserved for device configuration and cannot be assigned as control commands.

Factory reset

If necessary, the device can be restored to its original factory configuration.

To perform a reset, send Program Change #127 ten consecutive times.

During the procedure, the LED will begin flashing. Once the process is complete, all factory settings will be restored, including all 128 memory locations.

7. TECHNICAL SPECIFICATIONS

Power supply

Voltage: 9 V DC (center negative)
Current consumption: 30 mA (effect active), 2 mA (bypass)

Impedance

Input: 1 MΩ
Output: 100 kΩ max

Dimensions and weight

Dimensions: 112 x 60 x 45 mm
Weight: 210 g

8. COMPLIANCE AND DISPOSAL

Declaration of conformity

Nutshell Electronics hereby declares that the Britannia overdrive pedal complies with the essential requirements and other relevant provisions of the applicable regulations.

The product has undergone electromagnetic compatibility (EMC) testing and complies with the following directives and standards:

European Union CE

- EMC directive 2014/30/UE
  - EN 55032:2015+A11:2020 – Electromagnetic compatibility of multimedia equipment – Emission requirements.
  - EN 55035:2017+A11:2020 – Electromagnetic compatibility of multimedia equipment – Immunity requirements.

- RoHS Directive 2011/65/EU, as amended by Directive (EU) 2015/863
  - Restriction of the use of certain hazardous substances in electrical and electronic equipment.

United Kingdom UKCA

- Electromagnetic Compatibility Regulations 2016
  (SI 2016 No. 1091)
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
  (SI 2012 No. 3032)

United States FC

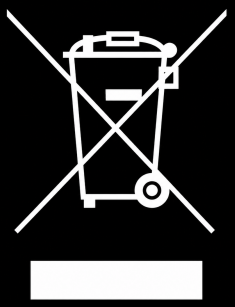
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

The product has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

NUTSHELL ELECTRONICS

Disposal



This symbol indicates that the product must not be disposed of with household waste. At the end of its service life, the device must be taken to an authorized collection facility for the recycling of Waste Electrical and Electronic Equipment (WEEE), in accordance with applicable local regulations.