

USB HID Programmable Switch Cable

User Manual_v1.0

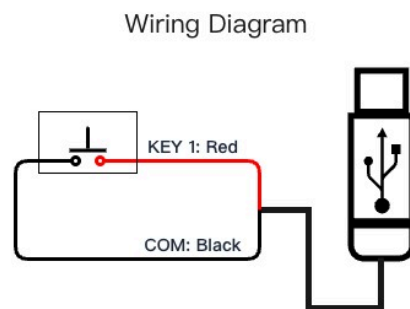
1. Product Specifications and Wiring Guide

1.1 Three Model Variants

Model 1: USB Switch 6-1

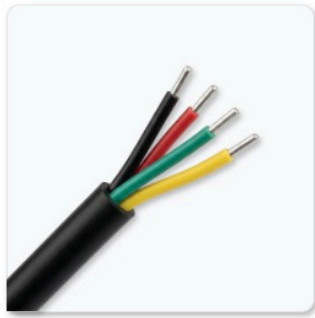


Physical View

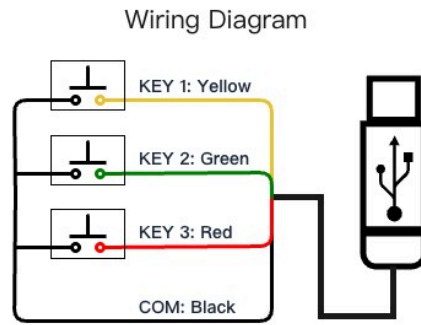


- **Application:** Basic single-button applications, simple triggers (**2-wire, 1-channel**)
- **Wiring Configuration:**
 - Red wire (KEY 1): First signal channel
 - Black wire (COM): Ground, common terminal
- **Factory Preset:** A key output

Model 2: USB Switch 6-3



Physical View

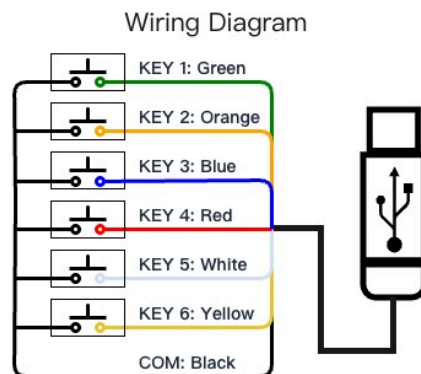


- **Application:** Multi-function control, complex operation panels (**4-Wire, 3-Channel**)
- **Wiring Configuration:**
 - Yellow wire (KEY 1): First signal channel
 - Green wire (KEY 2): Second signal channel
 - Red wire (KEY 3): Third signal channel
 - Black wire (COM): Ground, common terminal
- **Factory Preset:** A-B-C key output

Model 3: USB Switch 6-6



Physical View



- **Application:** Professional control consoles, complex automation systems (**7-Wire, 6-Channel**)
- **Wiring Configuration:**
 - Green wire (KEY 1): First signal channel
 - Orange wire (KEY 2): Second signal channel

- Blue wire (KEY 3): Third signal channel
 - Red wire (KEY 4): Fourth signal channel
 - White wire (KEY 5): Fifth signal channel
 - Yellow wire (KEY 6): Sixth signal channel
 - Black wire (COM): Ground, common terminal
- **Factory Preset:** A-B-C-D-E-F key output

1.2 Wiring Instructions

The pre-tinned wire ends support both soldering connections and quick DIY assembly using terminal blocks. All models feature standard USB interface with plug-and-play functionality, requiring no additional drivers.

Common Ground (GND) Logic: The Black wire (GND/COM) serves as the common terminal for all key channels. When connecting multiple physical switches, the ground pole of each switch must be connected to this single Black wire.

2. Product Introduction

2.1 What is USB HID Programmable Switch Cable

LYRIXEN USB HID Programmable Switch Cable is a professional-grade programmable Human Interface Device that converts ordinary physical switches (non-powered switches) into standard USB HID keyboard/mouse input devices. With the companion ElfKey software, users can fully customize the function of each switch, enabling unlimited creative possibilities.

2.2 Core Value and Advantages

Unlike common PCBA modules available in the market, LYRIXEN switch cables provide a complete ready-to-use solution:

- **Flexible Connection:** Pre-tinned wire ends support both soldering and terminal block connections
- **Plug-and-Play:** Standard USB interface with factory preset standard keyboard key outputs, no additional drivers required
- **Premium Software:** ElfKey configuration software provides an intuitive and user-friendly interface for advanced customization
- **Unlimited Creativity:** Compatible with various types of physical switches, from arcade buttons to industrial micro switches

3. Typical Application Scenarios

3.1 Gaming and Entertainment

- Arcade game controllers: Connect classic arcade buttons for retro gaming experience
- Flight simulators: Build professional-grade flight control panels
- Racing simulators: Create gear shifters and pedal controllers
- Gaming peripherals: Custom dedicated gaming control devices

3.2 Industrial Control

- Automation control panels: Replace traditional PLC input modules
- Equipment start/stop control: Simple and reliable equipment control solutions
- Testing and validation equipment: Product quality inspection and verification
- Laboratory equipment: Signal triggers for scientific experiments

3.3 Accessibility Solutions

- Assistive technology devices: Provide convenient computer input methods for users with mobility challenges
- Rehabilitation training equipment: Customized rehabilitation training controllers
- Special education tools: Teaching equipment suitable for students with special needs

3.4 Creative DIY Projects

- Desktop controllers: Dedicated control panels for audio/video workstations
- Art installations: Input devices for interactive art projects
- Smart home: Custom smart home control switches
- Educational projects: Practical tools for electronics engineering and programming learning
- **Workplace Productivity:** Create a "Big Red Button" for instant mute/unmute in Zoom or Teams meetings.

4. Safety Instructions

4.1 Important Safety Reminders

- **Power Off:** Always disconnect USB before wiring to avoid short circuits and equipment damage
- **Voltage Limitation:** Supports only 5V USB power supply, do not connect to other power sources
- **Insulation:** Ensure bare copper wires are completely inserted into terminals or properly soldered to prevent short circuits
- **HIGH VOLTAGE WARNING:** This cable is designed for dry contact / low voltage signals only. NEVER connect the signal wires to any high-voltage circuit (AC 110V/220V) or powered industrial control lines above 5V. Doing so may result in fire, electric shock, or damage to your computer.

4.2 Wiring Steps Guide

1. **Strip Wire:** Use wire strippers to remove insulation to appropriate length, not too long
2. **Connection:** Choose between soldering or terminal block connection
3. **Function Test:** Connect to computer and verify proper device recognition

5. Compatible Switch Types

5.1 Compatible Types Include But Are Not Limited To

- Mechanical switches (such as Cherry MX series)
- Hall effect switches
- Micro switches
- Latching button switches

Users can select appropriate switch types based on specific application requirements.

6. Package Contents and Accessories

6.1 Package Contents

Standard package includes: USB HID Programmable Switch Cable × 1, Terminal blocks, Quick Start Guide

6.2 Terminal Block Usage Guide

1. **Open Terminal:** Press down the transparent cover to expose internal metal clips
2. **Insert Wire:** Fully insert the stripped wire into the metal clip
3. **Close Terminal:** Release the cover to automatically secure the wire
4. **Check Connection:** Verify wire position through the transparent window

Note: Users can also use terminal blocks from other brands for connection without compatibility issues.

7. Software Configuration and Technical Support

7.1 Software Configuration

All models come with factory preset standard keyboard key outputs for immediate basic functionality. For advanced customization features, please use the **ElfKey software**.

- **Software Download:** <https://lyrixen.com/software>
- **Detailed Setup Guide:** [ElfKey Software Configuration Page](#)
- Note: The configuration software is developed and maintained by our technical partner PCsensor.

7.2 Technical Support

For any assistance, please contact: support@lyrixen.com

LYRIXEN - Boundless Switches. Endless Possibilities.