

## OMC78系列单轴操纵杆 OMC78 single series axis joystick



手柄 A 银色  
handle A silver



手柄 A 黑色  
handle A black



手柄 B 黑色  
handle B black



手柄 D 银色  
handle D silver

OMC78系列单轴操纵杆是视频切换台产品的主要配件。采用德国进口霍尔传感器，全温度范围线性补偿，多点线性度较正，运动部件与传感器非接触，寿命长，采用先进结构设计和进口的阻尼材料，具有很好的手感，广泛用于广播电视产品上，我们提供除单轴推杆外还提供配套的3轴操纵杆，并提供完整的解决方案。

OMC78 Series of single-axis joystick is the main accessories of video switcher products. Using the Germany imported Hall sensor, the whole temperature range of linear compensation, Multi-point linearity correction, non-contact with the moving parts and sensors, long life, apply advanced structural design and imported damping materials, with good feeling. Widely used in radio and television products, provide 3-axis joystick in addition to single-axis push rods and provide a complete solution.

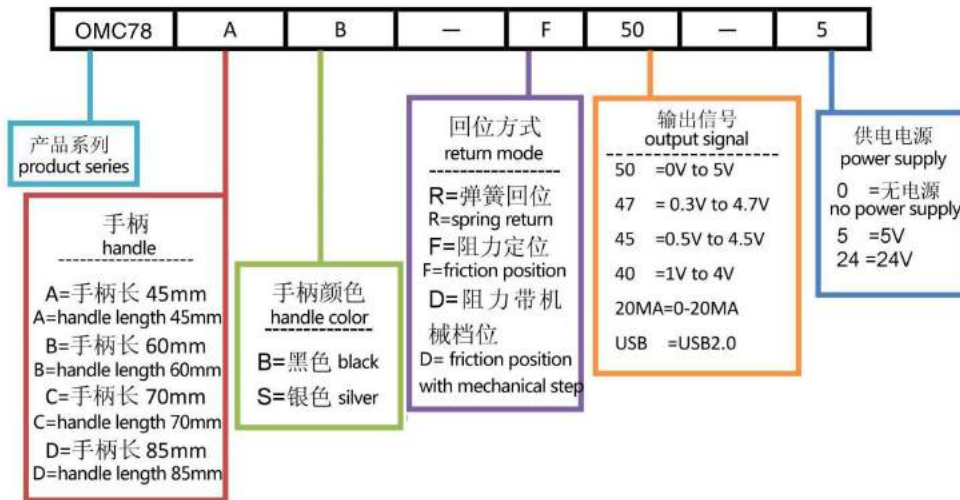
### 特点: Feature:

- ✧ 轴数: 1轴 Axis number: single axis
- ✧ 传感器: 霍尔传感器 Sensor: hall sensor
- ✧ 手柄材料: 铝合金, 表面阳极氧化 Handle material: aluminum alloy, anodized outside
- ✧ 定位方式: 摩擦阻力定位(标配); 弹簧自动回位(仅90mm手柄)  
Position mode: friction mode (standard mode), spring return (just 90mm handle)
- ✧ 中心档位: 中心机械档位(选配), 当经过中心位置时, 有机机械的档位感和档位的响声。  
Center stall: Center mechanical stalls (optional), when the center position, the organic machinery stalls and stalls sound.
- ✧ 操作角度: 76度(±38°) Operating voltage: 76 degrees (± 38°)
- ✧ 供电: DC5V, 24V, 默认是5V Power supply: DC5V, 24V, default is 5V
- ✧ 功耗: 12MA (测试条件: 5V供电, 模拟信号输出) Power consumption: 12MA (test conditions: 5V power supply, analog signal output)
- ✧ 信号输出: 模拟电压 0-5V, 电流 0-20MA, USB Signal output: analog voltage 0-5V, current 0-20MA, USB
- ✧ 寿命: 1000万次; Life: 10 million times;
- ✧ 操作温度: -40℃~+70℃ Operating temperature: -40℃ ~ +70℃
- ✧ 防护: IP54 Protection class: IP54

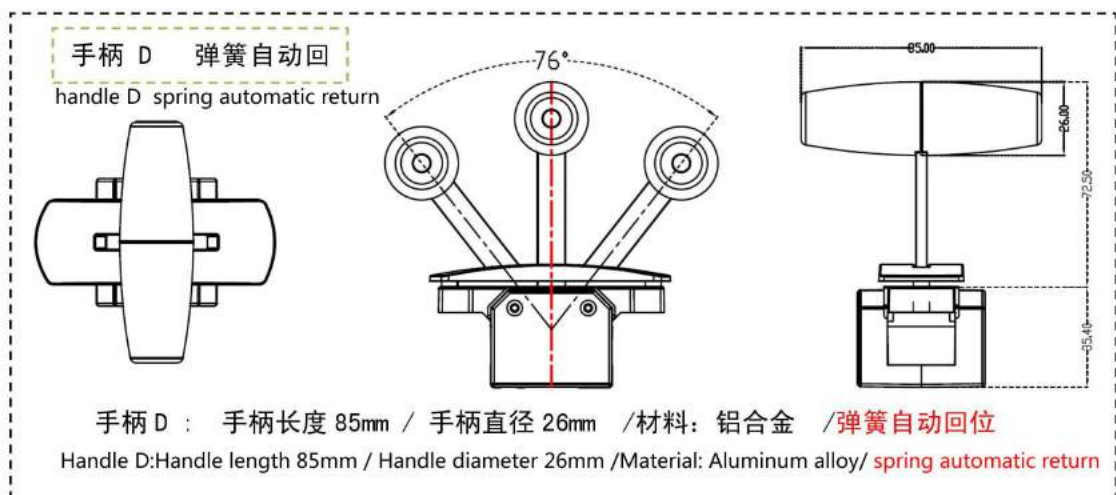
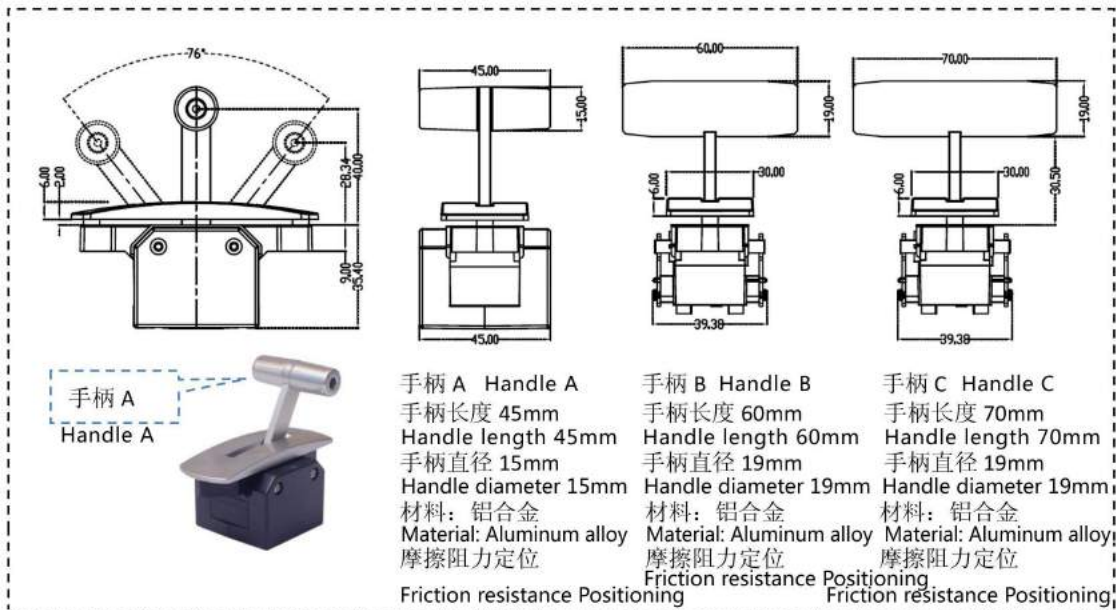
### 产品应用 Applications



产品型号参数选择 Product model parameter selection



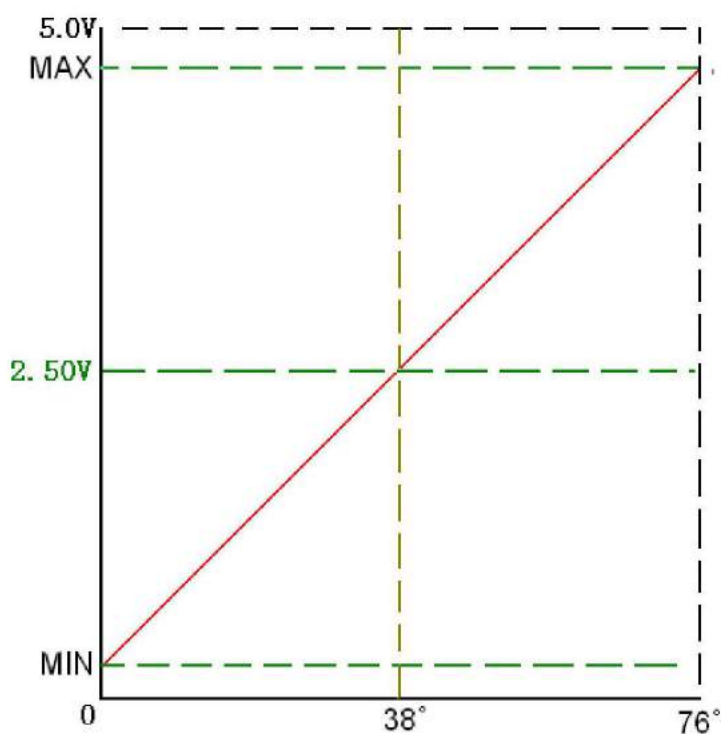
- ◇ 20MA 是指电流输出, 选电流信号输出时, 供电有 24V, 信号输出范围可选 0-20MA 或 4-20MA 定货时注明信号范围;  
20MA is the current output, the power supply has 24V when the election current signal output, the signal output range optional 0-20MA or 4-20MA order
- ◇ USB 是指 USB 信号输出, 供电由 USB 供电, 电源选无电源, HID 协议, 免驱动。  
USB is the USB signal output, power supply from the USB power supply, no power supply, HID protocol, free drive.



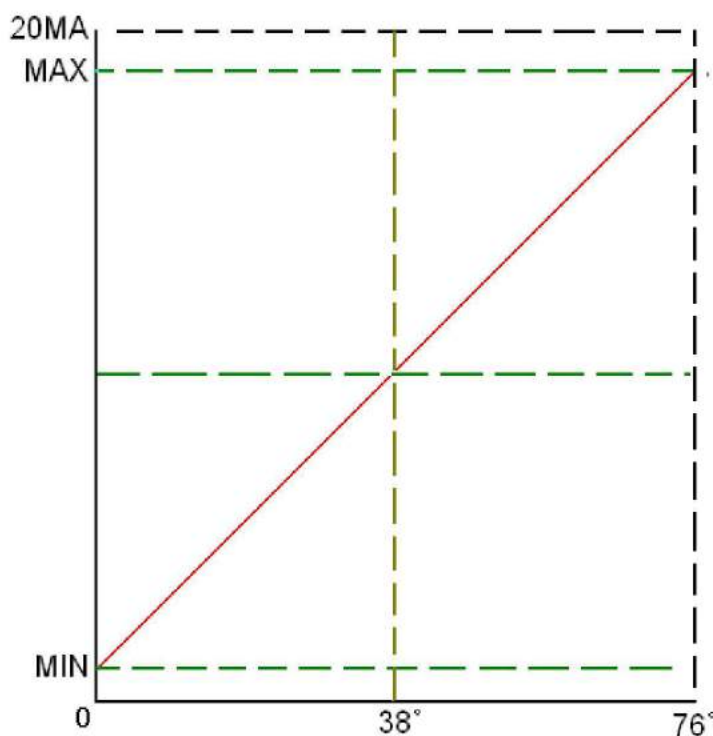
极限技术参数: Limit technical parameters:

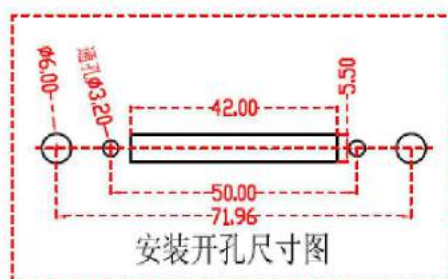
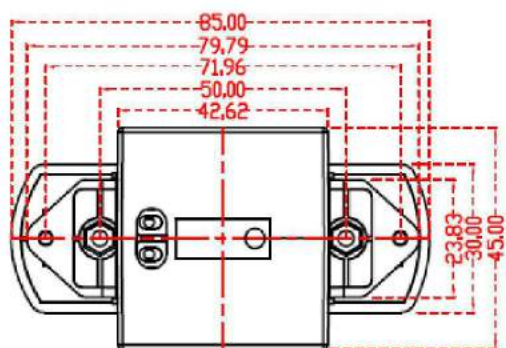
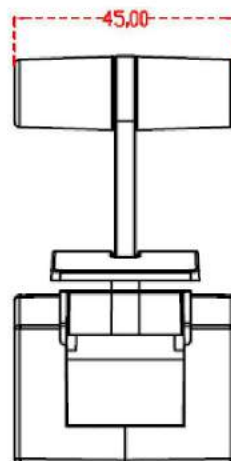
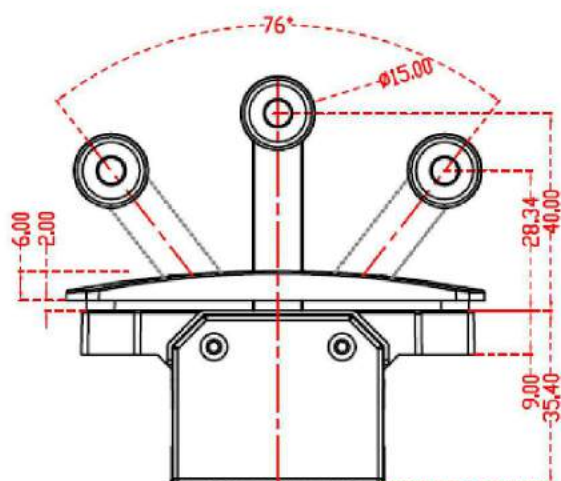
- ◇ 最小供电电压: 4.2V / (5V 时最大供电电压)  
Minimum supply voltage: 4.2V / (maximum supply voltage at 5V)
- ◇ 最大供电电压: 5.5V / (5V 时最大供电电压), 28V / (24V 供电时)  
Maximum supply voltage: 5.5V / (maximum supply voltage at 5V), 28V / (24V power supply)
- ◇ 最大电流 (5V 时): 15ma  
Maximum current (5V): 15ma

模拟电压信号输出曲线图: Analog voltage signal output curve:



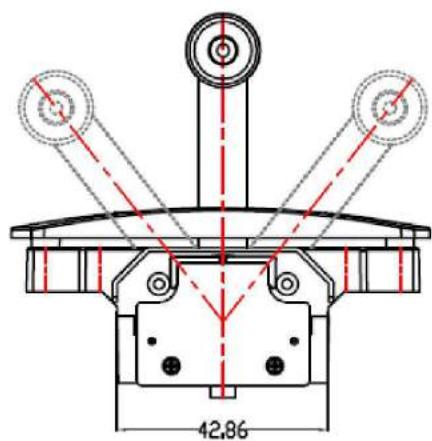
模拟电流信号输出曲线图: Analog current signal output curve:



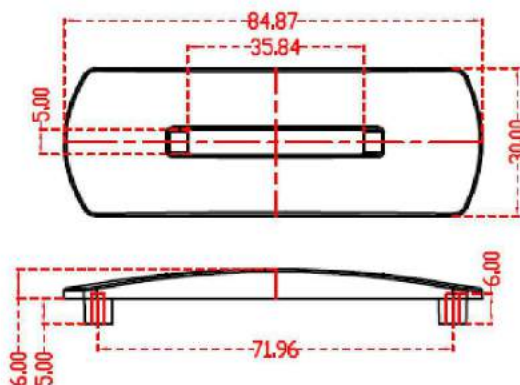
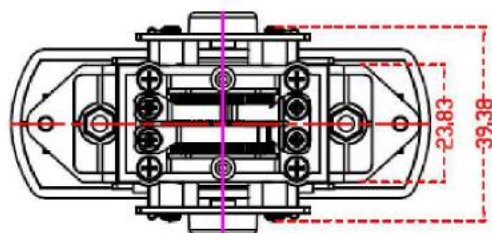
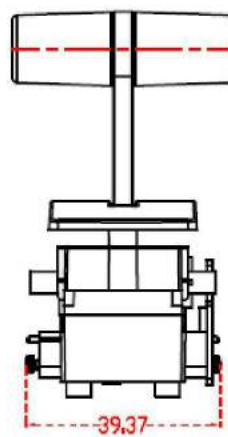


安装开孔尺寸图

Install hole dimension diagram



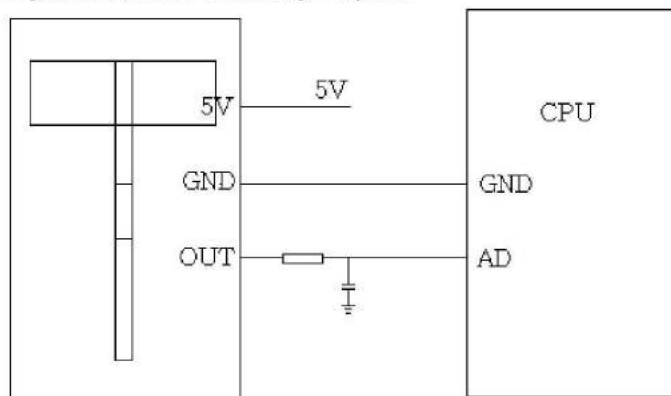
无底部外壳  
No bottom shell





### 模拟电压信号输出方式接线图

Analogue Voltage Signal Output Mode Wiring Diagram



电阻  $R=100\Omega -1K\Omega$

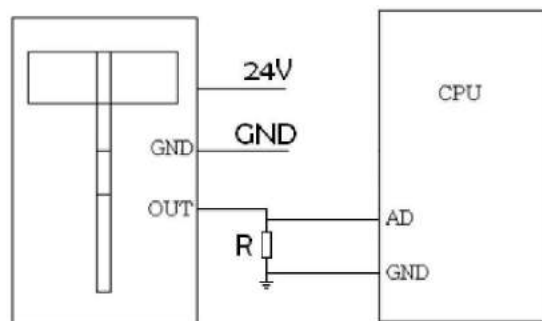
电容  $C=1NF$

Resistance  $R = 100\Omega -1K\Omega$

Capacitance  $C = 1NF$

### 电流输出方式接线图

Current Output Mode Wiring Diagram



电阻  $R= 100\Omega -1000\Omega$       Resistance  $R = 100\Omega -1000\Omega$

例如:  $R=250\Omega / 0.25W$ , AD 采样的值是 0-5V

Example:  $R = 250\Omega / 0.25W$ , AD Sampled Value is 0-5V

引线定义:

Lead Definition:

红色: 电源+

Red: Power +

黑色: GND

Black: GND

黄色: 信号输出

Yellow: Signal output

## USB 通信协议 USB communication protocol

- ◇ 接口方式: USB2.0  
Interface: USB2.0
- ◇ 驱动: USB HID 接口通信协议, 免驱动, 适用于 WindowsXP, Windows7, Windows10  
Drive: USB HID interface communication protocol, free drive, for WindowsXP, Windows7, Windows10
- ◇ 在电脑中识别为油门设备  
Identify the throttle device in the computer
- ◇ 支持微软的 DirectX, 写程序时, 在网上查 “Usb joystick Direct input “  
Support Microsoft's DirectX, write procedures, check the Internet "Usb joystick Direct input"

协议: **USB2.0 HID** Protocol: USB2.0 HID

识别名称: **3D Joystick Keyboard** Recognition Name: 3D Joystick Keyboard

USB 键盘发送的数据格式 (3 个字节 HEX): USB keyboard to send the data format (3 bytes HEX):

USB 键盘发送键盘的 3 轴操纵杆的角度参数和按键盘的状态值

USB keyboard to send the keyboard 3-axis joystick angle parameters and press the keyboard status value

byte1	byte2	byte3
DataL	DataH	0X00
数据位低位 Data bits low	数据位高位 Data bit high	没有使用 No use

**XXXX: X 轴数据,0000-03FF,(BYTE1 数据高位,BYTE2 数据低位)**

**XXXX: X-axis data, 0000-03FF, (BYTE1 data high, BYTE2 data low)**





欧姆特尔电子切换台解决方案

