



## **User's Guide for USB-SC09-FX Programming Cable**

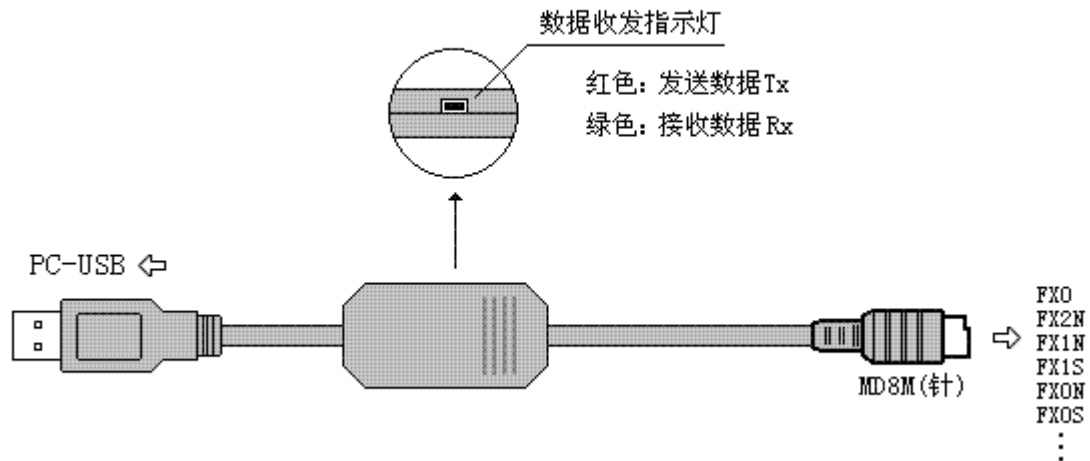
### **Summary:**

USB-SC09-FX is the programming cable in which USB interface provided both the serial connection and RS232 signal conversion. Under the control of computer-driven driver, the programming cable makes it possible for the computer's USB interface to simulate the traditional serial (known as COM interface), thus various existing programming software such as communications software, monitoring software and other applications can be normally used. The working power supply of this cable is directly from the USB port, but not the PLC programming interface. The two-color LED on the converter box indicates data's transceiving status.

USB-SC09-FX is applicable to the FX series PLC which has the MD8F radio socket of Mitsubishi, such as FX2N/FX1N/FX0/FX0N/FX0S/FX1S/FX3U, and it can substitute the FX-232AW module. The largest communications distance is two kilometers.

Do choose the USB-SC09 programming cable, for A and all FX series Mitsubishi PLC  
(including the old products FX2/FX2C).

**Outline configuration:**



**Features and technological index:**

- Support USB-SC09-FX operating system: Windows2000/XP (WinNT4/95/98/Me/DOS not included )
- Support USB-SC09-FX programming software version: FXGP / WIN V1.0, GPP V4.0, GX Developer V7.0 and above. ● Fully compatible with USB V1.1 norms and USB CDC V1.1
- USB-bus powered, with current consumption of 50 mA
- Baud rate: 300 bps ~ 1Mbps automatically adapt to the standard baud rate
- Support UART data format: data bits: 7-8; stop bit: 1, 2; check-bit: odd / even / no parity
- Support long-distance communications, the largest communications is two kilometers (9600 bps)
- Each PC only supports one USB cable programming

- Working temperature: -20 ~ +75 °C
- Cable length: 2.5m; Color: black

**Usage:**

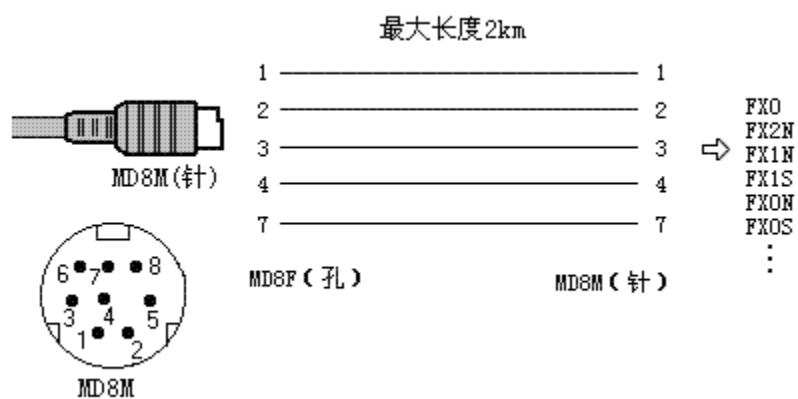
USB device drivers should be installed before using USB-SC09-FX programming cable, which are available on the CD-ROM sold together with the cable. And for the specific installation steps, please refer to the instruction files on the CD-ROM drivers, and details are not necessarily listed here.

After completing Driver installation, the corresponding COM port for the USB-SC09-FX programming cable will be displayed in the “Device Manager” of Window. The step next is just to choose this COM port in the programming software and other application software and keep other communication parameters as in the Default settings. And the following steps are exactly the same as in the traditional programming cables with RS232 interfaces.

**Long-distance communications:**

the largest communications range between the USB-SC09-FX programming cable and the PLC is up to two kilometers (9600 bps). The user must follow the self-made plans to extend cable. Transmission Line should be 0.22mm<sup>2</sup> or more, twisted pair wire. When the distance is over 2,000 m , RS422 repeater (model: E485GA, products of FOURSTAR as well) could be installed to extend the distance

Please Note: USB interface cable cannot be extended.



Due to internal resistance have been installed in USB-SC09-FX and the PLC, no external terminal resistance is needed.