Technical information

Selecting power supply

1. Switching power supply
   - 24VDC +/- 5%, Rating: over 3.2A (Eco mode), 4.5A (Boost mode)

2. Rectifier power supply
   - with smoothing capacitor: *ripple ratio: 10% max; Rating: over 4.5A (Eco mode), 5.5A (Boost mode)

3. 24V battery
   - Rating: over 4.5A (Eco mode), 5.5A (Boost mode).
   - Peak current: over 20A

Commercially available "Switching mode" power supply is recommended as the DC power (24V +/- 5%) applied to Driver card. It must have a minimum equivalent to the total rated current values of used Pulse Rollers.

No transformer type power supplies can be used.

Ensure that the power supply voltage is 24V +/- 5% at the driver card's power terminal.

If the capacity of the power supply is insufficient, voltage-drop may occur, resulting in a malfunction or damage.

Please ensure to use the power supply whose protective device will not be tripped when the peak current of all Driver cards is applied for 50ms.

*Ripple ratio
When alternating current (AC) is rectified into direct current (DC), the ratio of the fluctuations in the AC waveforms, is called a ripple ratio.

![Diagram of DC24V pulsating waveform (ripple)]

Cable length between power supply and driver card

Use a cable of AWG14 or larger size between the driver card and the power supply and ensure that the distance up to the power supply is 5 meters maximum to avoid voltage-drop.

If the power cable length is needed to extended, be sure to apply 24VDC +/- 5% at the Driver card’s power terminal.