CONTROL PACK

DH-2

TECHNICAL SPECIFICATIONS

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- Controller Model : DH Series
- Hopper Applicable Models : All Hopper Series
- Input Voltage Range : 24VDC, MAX 12.00A
- Output Voltage Range : 23VDC
- Environment Temperature : -10° C ~+50° C
- Environment Humidity : below 85% (noncondensing)

ACCESSORIES:

- 6PIN male female connector
- 5 output cables (30cm)

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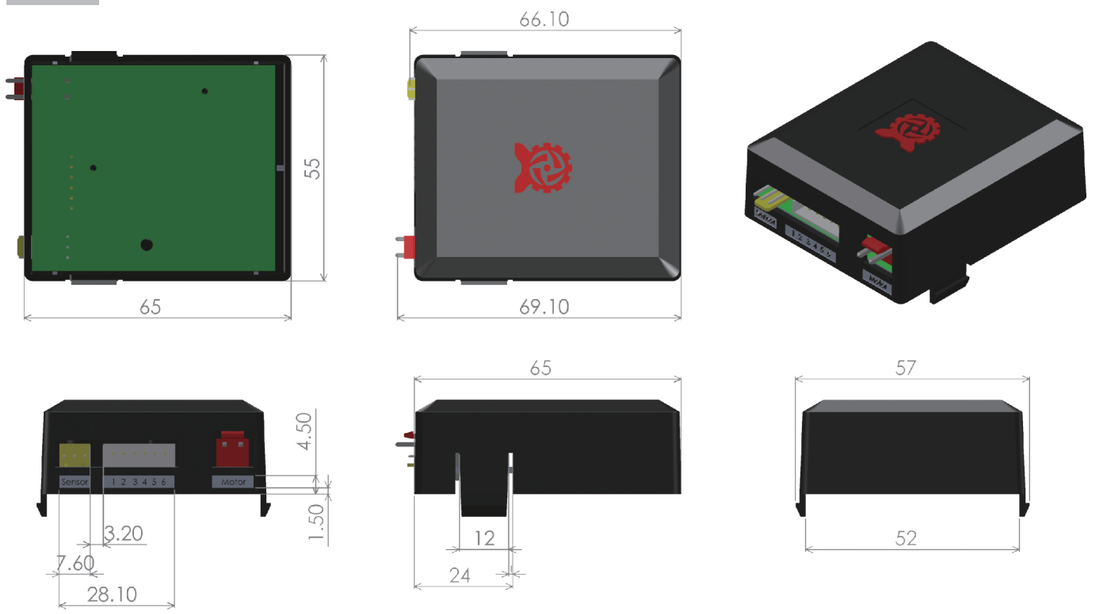
- 控制器型號：DH 系列
- 退幣機使用範圍：All Hopper Series
- 入電力範圍：12VDC、24VDC
  MAX 24.00A、12.00A
- 輸出電力範圍：11VDC、23VDC
- 概要：本控制器與DH-1同為無接點控制器，保護功能亦同，主要差異為電壓差動作方式與縮小體積，卡榫式安裝，光電可內接於控制器，簡化導線複雜度。
- 環境溫度：14° F~122° F (-10° C~+50° C)
- 環境濕度：85% 以下 (noncondensing)
- 標準配件：標準6PIN公母端子插座、與出口導線5條(30公分)

DIMENSIONS

Unit: mm

DH-1



DH-2 Series
Patent

FEATURES

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Brief Description : This controller and DH-1 are non-contact types.
They provide the same protective function. The main difference lies in the voltage difference control mode and in the size that is shrunk more than 50%.
The latch design allows for easy installation and dismantling.
The Proximity Sensor connects with the controller, thus simplifying wire installation.

- Built-in brake and auto-reverse achieve excellent dispensing performance.
- Built-in current protection device.
- A non-contact signal for controlling operation and brake with voltage difference.
- Pin 5 for the positive signals of the brake while Pin 6 for the negative one.
- Built-in optical-electrical input, output (power supply by the controller) & Pin3 0VDC~12VDC.
- Built-in reverse current protection, over current protection & polarity reversal protection.
- Easy to remove or exchange without specific tools or equipment.

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概要：
與 DH-1 主要差異為 控制方式，DH-2 採電壓控制，並縮小50%空間，使用卡榫安裝，容易安裝與 拆卸，光電可選擇連結控制器，簡化連接線路。

- 內建剎車功能。
- 內建堵住反轉功能。
- 內建電流保護裝置。
- 使用無接點訊號控制運轉與剎車，控制方式為電壓差動作，Pin5為剎車信號正端、Pin6為剎車信號負端。
- 內建光電輸入與輸出功能，Pin3 (0VDC~12VDC)。(光電電源由控制器供應)
- 逆電流保護、過電流保護功能、極性反接保護。
- 節省空間，安裝、拆除皆迅速便利。

ATTENTION

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- SYMOTOR SEIKO cannot honor warranty terms or be held legally liable for damages caused by the hoppers not using hopper control pack from SYMOTOR SEIKO.

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- 若購買退幣機，卻無搭配敝司控制器使用者，所發生之一切損壞，將不享有保固責任。

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WIRING DIAGRAMS

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- A non-contact signal control is used to control operation and brake with voltage difference. Pin 5 controls the positive signals of the brake while Pin 6 controls the negative signals.
- When the hopper is not in operation, the dispensing signal will show a HIGH status. To maintain the status, voltage levels should be kept the same by connecting positive electricity to Pin 5 and making Pin6 work for the signal that may change. When Pin6 shows a LOW status, Pin 5 is between 5-12V and when Pin6 reads LOW (OV), the hopper will be in operation.
- A LOW status will be shown if the hopper is not in operation. GND should be connected with Pin6 and the signal that may change (positive electricity) should be connected to Pin5. When the signal reads 'HIGH', Pin 5 will be at HIGH (5-12V) and Pin6 should keep connected to the ground (GND, OV) to begin operation.

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- 控制方式，使用電壓差作動，由 Pin5 與 Pin6 觸發，Pin5為剎車信號正端、Pin6為剎車信號負端。
- 退幣信號平時不動作為HIGH，那麼為了讓電壓差的結果是不動作，就必須兩個電壓是一樣的，所以就要拉正電來Pin5，會變動信號當Pin6，這樣當信號變LOW的時候，Pin5是5~12V，Pin6是LOW(0V)，就會動作。
- 同理如果平時不動作為LOW，那GND就要接Pin6，信號接Pin5，當信號變成HIGH的時候，Pin5 會是HIGH(5~12V)，Pin6還是接地(0V)，這樣就會動作。
- Pin5 和 Pin6，有做極相保護，正電負電都可接。

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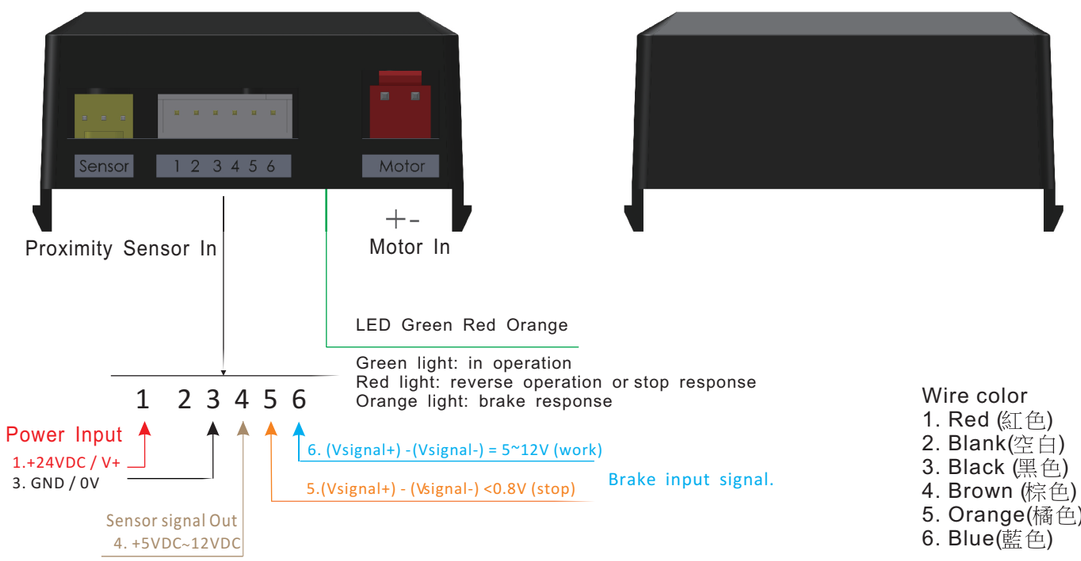

Wire color
1. Red (紅色)
2. Blank(空白)
3. Black (黑色)
4. Brown (棕色)
5. Orange(橘色)
6. Blue(藍色)

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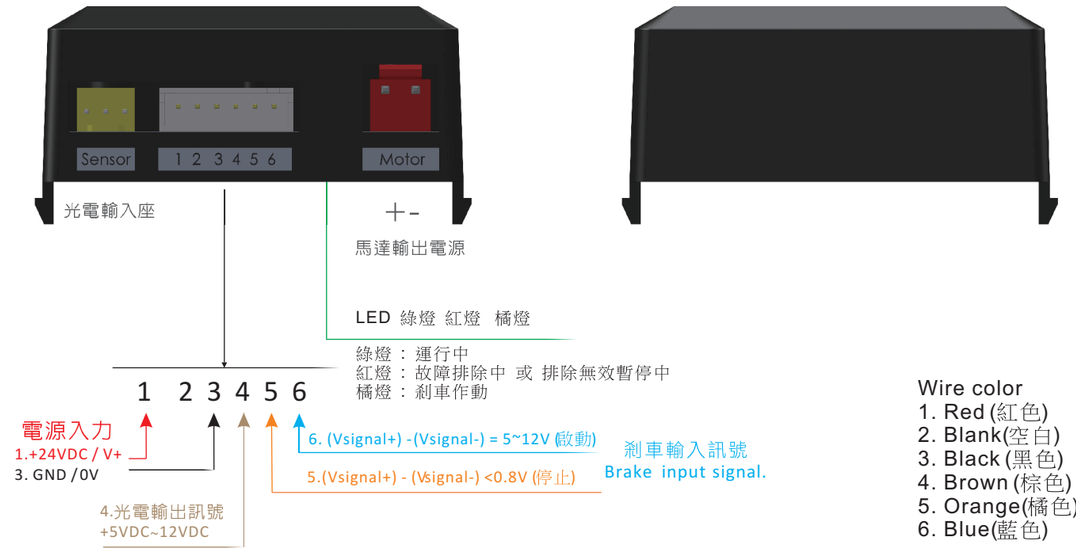

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⚠ LED Red Flashing

It means that the motor reverse rotation is not workable for the troubleshooting, and the controller will stop running in order to protect the hoppers inner function device.

The way to clean LED red flashing is resend the stop order for the brake or restart the power.

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⚠ LED紅光閃爍狀態

代表馬達反轉功能，無法將卡幣故障排除，此時控器器會自動停止一切動作，保護退幣機裝置安全，若要解除此狀態，則將剎車輸入訊號停止後重送，或將電源關閉後重新啓動，即恢復正常。

EXAMPLE

EN ●control by the switch

CH ●開關控制方式。