



## 【 Mini Hopper RED FLAG Communication Protocol 】

SWD-01

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# International Currency Technologies Corp.

Mini Hopper RED FLAG Communication Protocol	Permission : 邱 唯	Editor : 陳偉欽 Version : SWD-01	
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\*Apply device: MH125/245

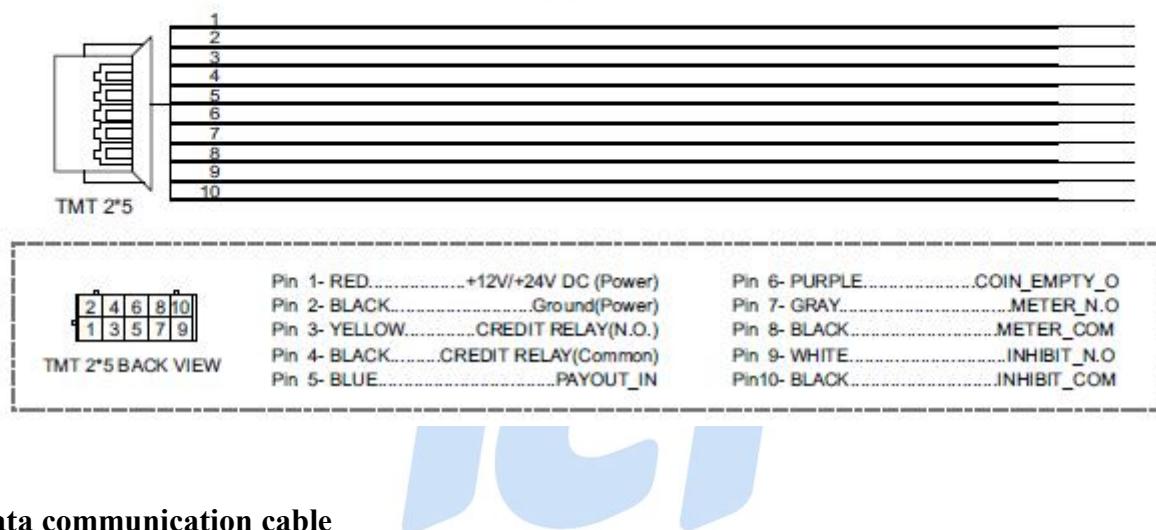
## Introduction:

Mini Hopper RED FLAG Communication Protocol that apply in MH125/245 via RS232 transmission to communicate with host and MH125/245.

## Cable:

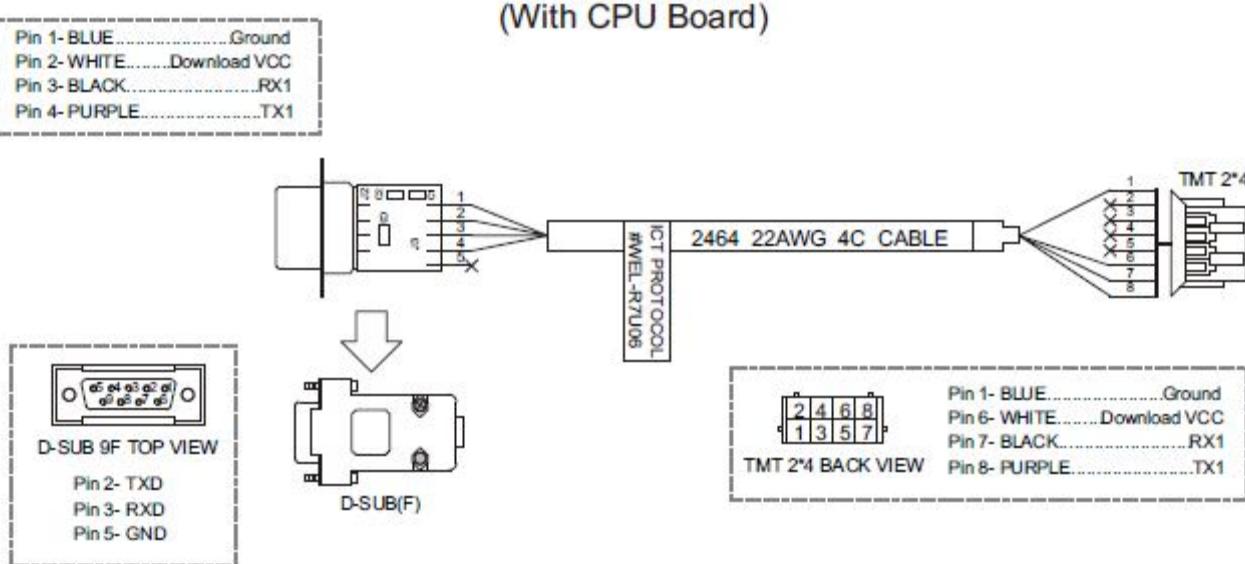
### Power Cable

**WEL-RHP17**  
(With CPU Board)



Data communication cable

**WEL-R7U06**  
(With CPU Board)



# Content:

## Transmission Specification

Transmission Method	Full Duplex Transmission
Transmission Speed	9600/19200 Baud Rate (by dip switch setting)
Synchronizing Method	Asynchronous Method
Connection Control Method	Request and Auto Reply Method
Data Format:	
Start bit	1
Data bit	8
Parity bit	Even
Stop bit	1
X parameter	none

## Communication Package Format

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
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## Communication Package Segment Definition

Segment	Number of Byte	Description
Header	1	Hopper: 05H
Master/Slave	1	Direction: Master → Slave =10H Slave → Master=01H
Machine No.	1	Machine Number: 00H~03H (By dip switch #1 & 2 setting)
Command/Status	1	Command Set: 00H~FFH
Data	1	Data
CheckSum	1	Header + M/S + Machine Number + Command/Status + Data

## Host Control Command Description

### Function 1: Payout Request (without live message)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	10H	XXH	XXH

Description: Data shall contain the number of coin requested by the host to pay out without live message response.

### Function 2: Status Request

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	11H	00H	XXH

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Description: The hopper response its status as described in the hopper to the host.

Function 3: Reset Request

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	12H	00H	XXH

Description: Reset hopper.

Function 4: Remaining Coin(s) Request (Not dispense)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	13H	00H	XXH

Description: As function description.

Function 5: Payout Request (with live message)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	14H	XXH	XXH

Description: Data shall contain the number of coin requested by the host to pay out with live message response.

Function 6: Empty Hopper (with live message)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	15H	00H	XXH

Description: Empty the complete coin inventory. The hopper will reply live message for remain coin(s) information.

Function 7: Low level coin(s)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	10H	00H~03H	16H	00H/FFH	XXH

Description: 00H -> stop takes dispenses command from the host when hopper is reaching the low level.

FFH -> continue takes dispenses command from the host when hopper is reaching the low level.

(Please use this command to configure the function desired, and the hopper will store its configuration until next changes has been made.)

## Hopper Response Description

### Response 1: Hopper Status

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	01H	00H~03H	04H	XXH	XXH

Description:

00H: idling

Following status information is containing inside Data byte. (0: Normal 1: Yes)

Bit 0: Motor Problem

Bit 1: Hopper Low Level Detected

Bit 2: Reserved

Bit 3: Prism Sensor Failure

Bit 4: Shaft Sensor Failure

Bit 5: Busy

Bit 6: Reserved

Bit 7: Reserved

### Response 2: Live message (Payout one coin)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	01H	00H~03H	07H	00H	XXH

### Response 3: Pay out finished

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	01H	00H~03H	08H	00H	XXH

### Response 4: ACK message / Response Remain Coin

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	01H	00H~03H	AAH	XXH	XXH

### Response 5: Unable to take command (Busy)

Header	Master/slave	Machine Number	Command/Status	Data	Checksum
05H	01H	00H~03H	BBH	XXH	XXH

Description: The hopper is busy on the last command, and cannot execute next command.

Data: Remain Coin(s)

## Contact Information



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## Note

