

# Ticketflex Hopper Controller™

TFB1-AS

## Installation & Operation Instructions for connection to Asahi- Seiko SH-400 Hopper

Add coin or token output to any machine (pulse in/coin out operation) or dispense coins/tokens instead of tickets (coin hopper in place of the ticket dispenser).

- ◆ Pulse in/Coin out operation
  - ◆ Dispense coins/tokens instead of tickets
  - ◆ Adjust 1 to 15 coins per each pulse
  - ◆ Or adjust 1 to 15 pulses for each coin
- ◆ No Coins / Coin Jam Indicator
  - ◆ Hopper Test Mode
  - ◆ No Coins Mode
  - ◆ Small size – fits everywhere

### Operation Modes

#### PULSE IN / COIN OUT OPERATION (Dip Sw 7 = OFF)

Coin payout is initiated by active LOW pulse applied to the Coin Drive Input from an open collector NPN output or switch connected to GND from the host machine. Alternatively, opto isolated input can be used and is available via the JST 12 way connector, pins 10 and 11 or 12.

#### MULTIPLY (Dip Sw 6=ON)

Set Dip Switches 1 to 4 for the required number of coins per each pulse received on the coin drive input. **Example:** to dispense 4 coins per 1 pulse applied to the input 1 = ON, 2 = ON, 3 = OFF, 4 = ON.

ADJUSTABLE RANGE: 1 to 15 coins per each pulse.

#### DIVIDE (Dip Sw 6=OFF)

Set Dip Switches 1 to 4 for the required number of pulses received on the coin drive input to dispense 1 coin. **Example:** to dispense 1 coin for 4 pulses applied to the input 1 = On, 2 = ON, 3 = OFF, 4 = ON.

ADJUSTABLE RANGE: 1 to 15 pulses per each coin.

#### TIMED BONUS

This mode works in combination with the "Multiply" or "Divide" mode. If enabled, the Bonus Light will be flashing approx. every 5 minutes for duration of 1 minute. While the light is flashing the players will receive double amount of coins. This mode can be enabled by Dip Sw. 5 or via an external switch connected to the optoisolated input of the JST12 connector.

#### HOPPER TEST

Switch the machine OFF, adjust dip switches 1 to 6 for Hopper Test and switch the machine ON. 5 coins will be dispensed and the PCB LED and the Bonus Light will flash 2x at successful completion of the test. The LED and Bonus Light will stay "ON" if there is an ERROR!

#### CLEARING ERROR

An error will occur when the hopper runs out of coins or the coin opto sensor is not functioning. The PCB LED and the Bonus Light (if connected) will stay ON. Clean the hopper opto sensor with a paint brush, remove jams and press the reset button to clear the error.

#### DELTRONIC 1275 OPERATION (Dip Sw 7 = ON)

Allows operating coin hopper instead of Deltronic 1275 or compatible ticket dispenser. The coin/token payout maybe adjusted via the Multiply or Divide mode as required. This mode may not be suitable for some machines.

### LED or External Light

On power up or after clearing ERROR the number of flashes indicate selected mode.

Number of flashes	MODE
1	HOPPER TEST
2	DIVIDER
3	MULTIPLIER
4	DIVIDE WITH BONUS
5	MULTIPLY WITH BONUS

### Dip Switch

Adjust dip switches while the machine is switched off!

ADJUST COIN OUTPUT

Multiply/Divide by	Sw1	Sw2	Sw3	Sw4
1	OFF	ON	ON	ON
2	ON	OFF	ON	ON
3	OFF	OFF	ON	ON
4	ON	ON	OFF	ON
5	OFF	ON	OFF	ON
6	ON	OFF	OFF	ON
7	OFF	OFF	OFF	ON
8	ON	ON	ON	OFF
9	OFF	ON	ON	OFF
10	ON	OFF	ON	OFF
11	OFF	OFF	ON	OFF
12	ON	ON	OFF	OFF
13	OFF	ON	OFF	OFF
14	ON	OFF	OFF	OFF
15	OFF	OFF	OFF	OFF

SET MODE

Timed Bonus	Sw5
Timed Bonus OFF	OFF
Timed Bonus ON	ON

Divide/Multiply	Sw6
Divide	OFF
Multiply	ON

Set dip switch as shown below if operation without coins is desired.

No Coins Mode					
Sw1	Sw2	Sw3	Sw4	Sw5	Sw6
ON	ON	ON	ON	OFF	ON

Hopper Test					
Sw1	Sw2	Sw3	Sw4	Sw5	Sw6
ON	ON	ON	ON	OFF	OFF



On-Line Technical Support at: [www.ticketflex.com](http://www.ticketflex.com)

Email: [info@ticketflex.com](mailto:info@ticketflex.com)

# Instructions for the connection to the Asahi- Seiko SH-400 Hopper

## Ticketflex Wiring Loom

### Male 4 Way Molex Connector

1	Blue – Hopper Coin Sensor
2	Black – GND
3	Hopper Motor Drive
4	+12v Dc

### Hopper JST Connector

Pin 7
Pin 8
Pin 4
Pin 3

### Female 4 Way Molex Connector

1	Not Used in Pulse Operation *
2	GND
3	Drive Input (Pulses From Host Machine – Active Low)
4	+12v Dc In

\* Used only in the Deltronic 1275 mode as the ticket notch output (not used in the pulse operation mode). This connector plugs into the ticket dispenser output of the host machine when used in the Deltronic 1275 Mode.

### Dip Switch 7

Pulse Operation = OFF , Deltronic 1275 Mode = ON

### Dip Switch 8

Always OFF

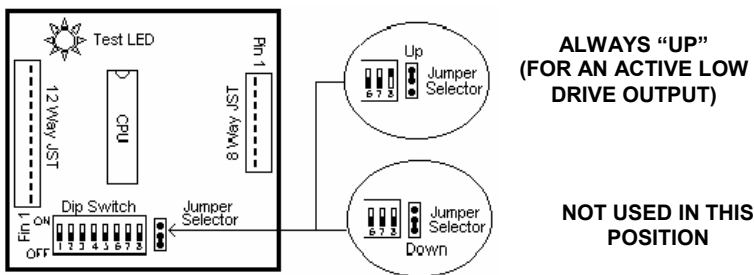
## Pinout of the Hopper Connector (8 Way JST)

PIN	
1	12V DC or 24V DC *SEE NOTE 1
2	GND
3	12V DC (Motor On +)
4	Motor Drive (Motor On -)
5	Reset Button *SEE NOTE 2
6	+5V DC
7	Payout Sensor Output
8	GND (Payout Sensor)

**NOTE 1:** depends on the model used, Check the Hopper Manual for the correct voltage.

**NOTE 2:** Connect the button between Pin 5 and Pin 2 (GND). If the hopper runs out of coins during dispensing, the motor will stop. Replenish the hopper with coins and press the reset button. The hopper will finish dispensing the remaining coins.

## Jumper Selector (Inverts Drive Output Voltage Level)



## Important Notes

- To minimize the likelihood of damage by electrostatic discharge it is recommended that the hopper is connected to the protection earth.
- The rating of the 12V Globe for the external Bonus Light is 10W Max.
- All connections on JST 12 way connector e.g. the Coin Meter, Lamp etc. are optional. All the essential connections are done via the JST 8 way connector.

## The Standard Harness Supplied with the Maximizer

4 WAY UTILUX (MALE) CONNECTOR  
Connected to the hopper.

PIN	Description	Wire
1	Coin Opto Input	Blue
2	GND	Black
3	Coin Drive Output	White
4	+12V	Orange

4 WAY UTILUX (FEMALE) CONNECTOR  
Connected to the machine.

PIN	Description	Wire
1	Coin Opto Output*	Blue
2	GND	Black
3	Coin Drive Input	White
4	+12V	Orange

## 12 WAY JST CONNECTOR (PCB)

PIN	Description
1	- Enable Timed Bonus
2	- Enable Timed Bonus
3	GND (Out)
4	+ Timed Bonus 5-30V
5	+12 V (Out)
6	+12 V (Out)
7	Lamp Output
8	Lamp Output
9	Coin Meter Output
10	- Opto Coin Drive Input
11	+Opto Drive Input 5-30V
12	+Opto Drive Input 14-60V

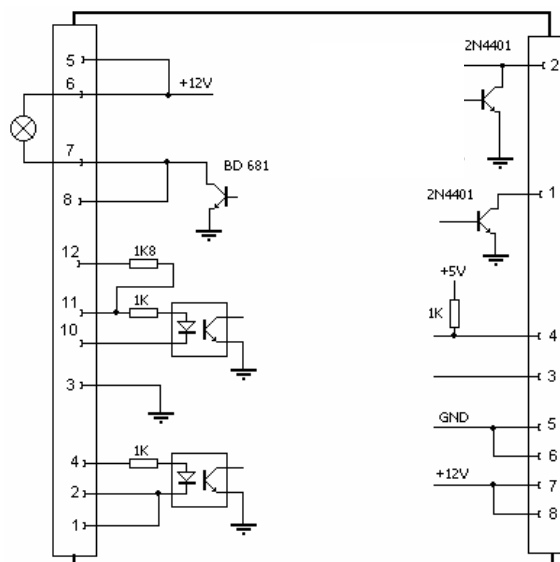
### Coin Meter

Connect Coin Meter between pin 5 and 9 of JST 12 connector.

### Bonus Light

Connect Bonus Light between pin 6 and 7 of JST 12 connector.

## Ticketflex PCB Connector Pinout



## 8 WAY JST CONNECTOR (PCB)

PIN	Description
1	Coin Opto Output
2	Coin Drive Output
3	Coin Drive Input
4	Coin Opto Input
5	GND Out
6	GND In
7	+12V Out
8	+12V In (9 to14V)

For On-Line Help and application notes visit:  
[www.ticketflex.com](http://www.ticketflex.com)

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