Ticket *Flex* Maximizer ™

BONUS START (MERCY TICKETS)

Model TFB1-BS

Installation & Operation Instructions

Add Bonus Start (Mercy Tickets) to any ticket redemption game.

- ♦ Plugs into Deltronic or Entropy dispenser
- ♦ Will drive almost any ticket dispenser
- ♦ 15 settings of 1 to 15 Mercy Tickets
- Opto-isolated input for easy hook up
- Selection of fast or delayed trigger

- ◆ Ticket Meter Output
- No Tickets of Ticket Jam Indicator
- Ticket Dispenser Test Mode
- Small size fits everywhere
- 5 minutes installation

Dip Switch

Adjust dip switches while the machine is switched off!

ADJUST TICKETS

Tickets	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

MUST STAY OFF	Sw5

Game Up Signal	Sw6
Delayed Trigger	OFF
Fast Trigger	ON

Dispenser Test			
Sw1	Sw2	Sw3	Sw4
ON	ON	ON	ON

LED or External Light

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

Number of flashes	MODE
1	DISPENSER TEST
6	BONUS START MODE

Modes of operation and hook up.

BONUS START (MERCY TICKETS)

Adjust dip switches 1 to 4 for the desired number of mercy tickets. The payout from the machine will remain unaffected.

CONNECTION

Plug in the TicketFlex board between the ticket dispenser and the machine harness.

WHAT TRIGGERS THE MERCY TICKET PAYOUT?

It can be coin switch/credit pulse, coin counter pulse, game over light, start button light etc. Here are a few examples:

- Connection to coin switch: connect JST12/ pin 4 to +5V and pin 1 to the coin switch or credit output of an electronic coin acceptor.
- Connection to coin counter: connect JST12/ pin 4 to the positive side of the counter (usually +12V) and pin 1 to the other side of the counter.
- Connection to game over light: connect JST12/ pin 4 to the positive side of the light and pin 1 to the other side of the light (it must be light working form 5 to 30VDC).
- Connection to start button light: connect JST12/ pin 4 to the positive side of the light and pin 1 to the other side of the light (it must be light working form 5 to 30VDC).

FAST TRIGGER (Dip Sw 6 = ON)

Suitable for connection to coin switch/credit pulse or coin counter. The Game Up input will be able to handle fast and successive pulses. For each pulse (active low –rising edge) preset number of tickets will be dispensed.

DELAYED TRIGGER (Dip Sw 6 = OFF)

Suitable for trigger from flashing start button or game over light. This mode can ignore flashing light due to a 3 second delay. The payout is triggered when the light stops flashing (e.g. at the start of the game).

DISPENSER TEST

Switch the machine OFF, adjust dip switches 1 to 4 for Dispenser Test and switch the machine ON. 5 tickets 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 machine runs out of tickets or the ticket dispenser jams or the ticket notch opto sensor is not functioning. The PCB LED and the External Light (if connected) will stay ON. Clean the opto sensor of the ticket dispenser with a paint brush, remove jams, reload tickets. The unit will automatically reset and resume normal operation.



On-Line Technical Support at: www.ticketflex.com
Email: info@ticketflex.com

Setting the Input and Output to suit the ticket dispenser.

The Ticketflex Maximizer is supplied preset for the Deltronic 1275, Entropy TD963CR or compatible Ticket dispenser.

Dip Sw 7 = ON, Dip Sw 8 = OFF, JUMPER = DOWN

The input and output can be set independently to suit other styles of Ticket Dispensers and various machines.

Dip Switch

Input	Sw7
Pulse Operation	OFF
Continuous Operation	ON

Output	Sw8
Pulse Operation	ON
Continuous Operation	OFF

Continuous Input Operation (Deltronic 1275 compatible)

The ticket drive input (pin 3 of the 8 Way JST connector) must be driven "high" to initiate ticket dispensing. The Ticketflex Maximizer will output ticket notch pulses for the host game (pin 1 of the 8 Way JST connector).

Pulse Input Operation (Deltronic DL 4 compatible)

In the Pulse Input Operation the ticket drive input (pin 3 of the 8 Way JST connector) must be pulsed "low" to initiate ticket dispensing. The notch output is not used.

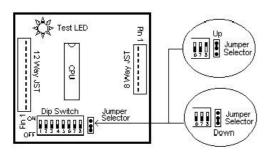
Continuous Output Operation (Deltronic 1275 compatible)

The ticket drive output (pin 2 of the 8 Way JST connector) is driven "high" to initiate ticket dispensing. The ticket notch feedback from the dispenser is required. The Jumper Selector must be "Down".

Pulse Output Operation (Deltronic DL 4 compatible)

The ticket drive output is pulsed "low" to initiate ticket dispensing (Jumper Selector must be "UP"). The ticket notch feed back is not utilized. The ticket dispenser will dispense one ticket for each pulse received.

Jumper Selector (Inverts Drive Output Voltage Level)



"UP" for active LOW Open Collector Ticket Drive Output (Used with DL4 Ticket Dispenser).

'DOWN' for active HIGH Ticket Drive Output. (Used with DL1275 Ticket Dispenser).

The Standard Harness Supplied with the Maximizer

(For connection to Deltronic 1275 or Entropy TD-963CR Ticket Dispenser).

4 WAY UTILUX (MALE) CONNECTORConnected to the ticket dispenser.

PIN	Description	Wire
1	Notch Input	Blue
2	GND	Black
3	Tick. Drive Output	White
4	+12V	Orange

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

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

Important Notes

- To minimize the likelihood of damage by electrostatic discharge it is recommended that the ticket dispenser body is connected to the protection earth.
- The rating of the 12V Globe for the external Light (ticket jam or ticket empty indicator-an optional connection) is 10W Max.
- Pins 10, 11, 12 of JST 12 connector (opto-isolated ticket drive for pulse input operation) are not normally used.

12 WAY JST CONNECTOR (PCB)

PIN	Description
1	- Game Up
2	- Game Up
3	GND (Out)
4	+ Game Up 5-30V
5	+12 V (Out)
6	+12 V (Out)
7	Lamp Output
8	Lamp Output
9	Ticket Meter Output
10	- Opto Ticket Drive
11	+Opto Ticket Dr 5-30V
12	+Opto Ticket Dr 14-60V

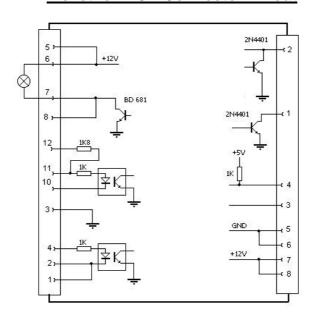
Ticket Meter

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

External Light

Connect 12V/10W light globe between pin 6 and 7 of JST 12 connector.

Ticketflex PCB Connector Pinout



8 WAY JST CONNECTOR (PCB)

PIN	Description	
1	Notch Output	
2	Tick. Drive Output	
3	Tick. Drive Input	
4	Tick. Notch 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

