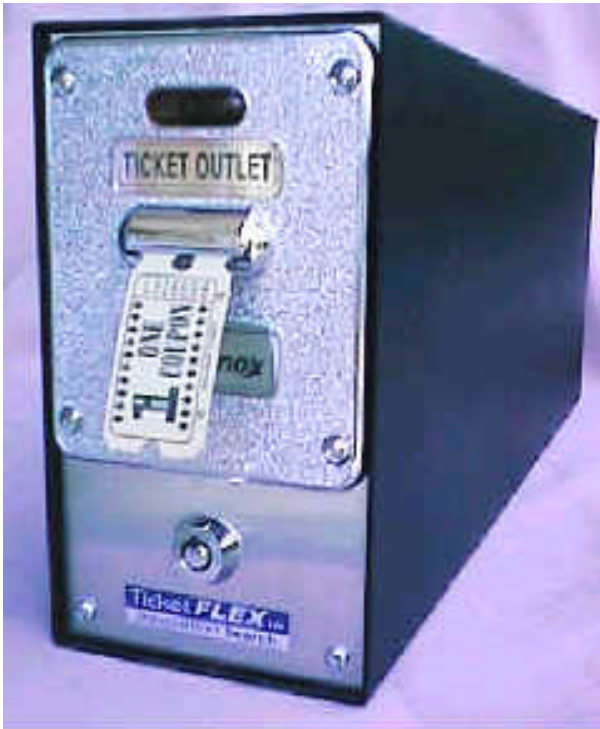


Ticket**FLEX** Conversion Box™



**Easy way
to add
tickets to
any arcade
game.**

- Installed in minutes
- Contains all wiring and mounting hardware
- Convert video games, pinballs, skill testers, jukeboxes ...
- Unique time bonus feature to increase the popularity of the game
- Skill Mode option to simulate skill dependant ticket payout



TicketFLEX**™**
Innovation Search

ticketflex.com

Instruction Sheet for CB-B3

MODES OF OPERATION

Multiply or Divide Mode

Tickets are dispensed per a credit pulse(s) applied to the ticket drive input. The "Multiply Mode" is the default mode when the Ticketflex Conversion Box is shipped.

Skill Mode

Tickets are dispensed during the game per a time played (longer game time = more tickets). This mode can be selected via EEPROM setting.

Time Bonus (Double Tickets) Mode

This mode works in combination with all modes. If enabled (Dip Sw.8 = ON), 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 tickets.

Dip Switch in Multiply/Divide Mode

Multiply/Divide

To select Divide or Multiply Mode the EEPROM setting for Game Time or Interval or both must be set to ZERO!

MULTIPLY

Adjust the dip switch to dispense 1 to 15 tickets per each pulse applied to the ticket drive input.

DIVIDE

Adjust dip switch to dispense 1 ticket per 1 to 15 pulses applied to the ticket drive input.

Please Note:

1. Dip Sw 7 must be OFF except when EEPROM Read Test is required.
2. Please note that the function of the Dip Switches changes depending on the selected mode.

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

SET MODE

Divide/Multiply	Sw6
Divide	OFF
Multiply	ON

Bonus Mode	Sw8
Timed Bonus OFF	OFF
Timed Bonus ON	ON

EEPROM TEST	Sw7
Normal Operation	OFF
EEPROM Test	ON

Skill Mode

This mode can be entered via EEPROM setting (see page 4). Both the Game Time and Interval MUST BE SET to a value other than zero.

The Skill Mode allows dispensing tickets during the game. It is suitable for games where each player has a dedicated coin acceptor. Tickets are dispensed on time bases. More skillful players will achieve longer game times and therefore will earn more tickets. In games where one coin acceptor is used for all players, Multiply/Divide Mode should be used.

The Ticketflex System monitors an **Activity Switch**, which can be any control panel switch or a trigger switch in gun games, which is frequently used during the game. If the activity stops for the preset time set by the dip switch, the Skill Mode will interpret it as a Game Over. **Four different parameters for the Skill Mode can be set:**

1. GAME TIME

This is the maximum time per credit during which tickets can be dispensed.

2. INTERVAL

This is a time interval at which a ticket will be dispensed during the game time.

3. WINNER LEVEL

A time starting from the first credit pulse (or game over if multiple credits where registered) at which tickets will start to be dispensed e.g. if set to 30 sec, no tickets will be dispensed in the first 30 seconds of the game.

4. MERCY TICKETS

Extra tickets dispensed immediately after credit pulse is received (the ticket range is 0 – 15).

Dip Switch in Skill Mode

Coin/Credits	Sw1	Sw2	Sw6
1 coin/1cr	ON	ON	ON
1 coin/2cr	OFF	ON	ON
1 coin/3cr	ON	OFF	ON
1 coin/4cr	OFF	OFF	ON
2 coins/1cr	ON	ON	OFF
3 coins/1cr	OFF	ON	OFF
4 coins/1cr	ON	OFF	OFF
5 coins/1cr	OFF	OFF	OFF

ACTIVITY	Sw3	Sw4	Sw5
10 SEC	ON	ON	OFF
20 SEC	OFF	ON	OFF
30 SEC	ON	OFF	OFF
40 SEC	OFF	OFF	OFF
DISABLED	x	x	ON

EEPROM TEST	Sw7
Normal Operation	OFF
EEPROM Test	ON

Bonus Mode	Sw8
Timed Bonus OFF	OFF
Timed Bonus ON	ON

Dip Switches 1,2,6

Set price per game.

Dip Switches 3,4,5

Time setting for the Activity Switch e.g. if set for 10 sec the Activity Switch must be activated at least once in 10s otherwise Game Over is assumed and no more tickets will be dispensed. The Activity Switch can be the fire button, joystick switch, gun trigger switch etc. (any switch, which is frequently used during the game). If not connected the Activity must be disabled Sw 5 = ON.

Dip Switch 7. Check EEPROM setting.

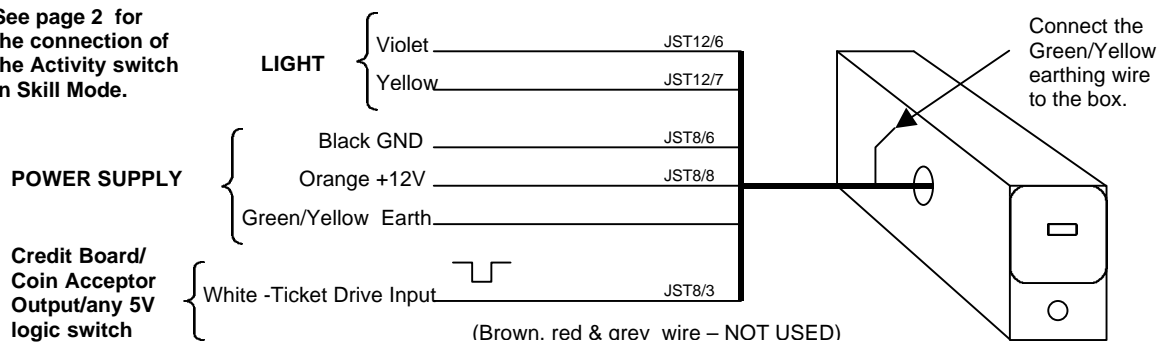
The LED will start flashing. The number of flashes will correspond to the set values. See page 4 for details.

Dip Switch 8 If enabled (Sw 8 = ON) 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 tickets.

Installation Sheet for Ticketflex Conversion Box (CB-B3)

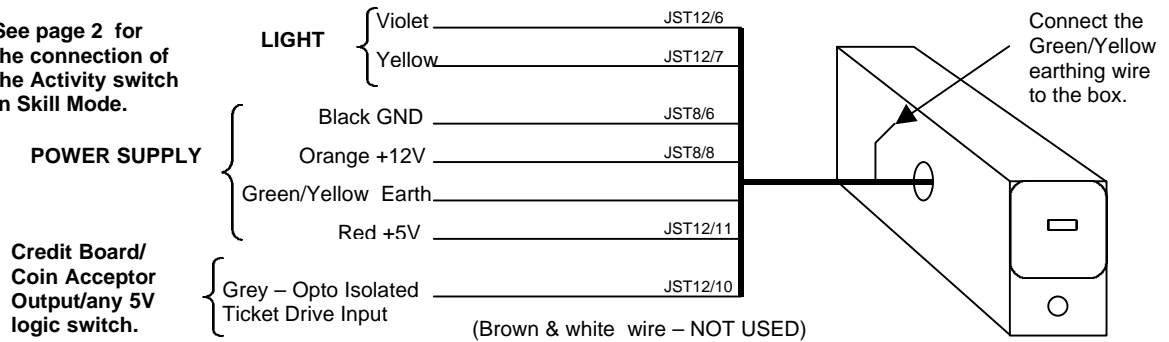
Standard connection for Video Games (Suitable for all games where 5V logic switch will trigger ticket payout).

See page 2 for the connection of the Activity switch in Skill Mode.

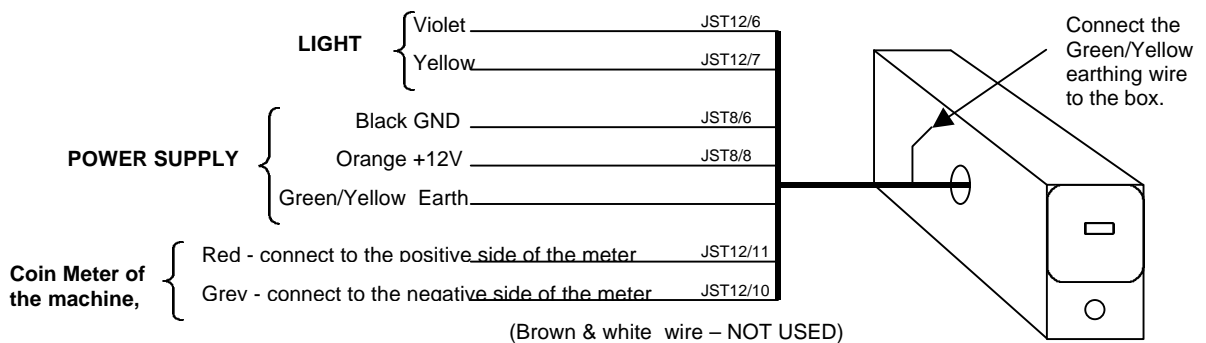


Alternative connection using opto isolated input. (Suitable for all games where 5V logic switch will trigger ticket payout).

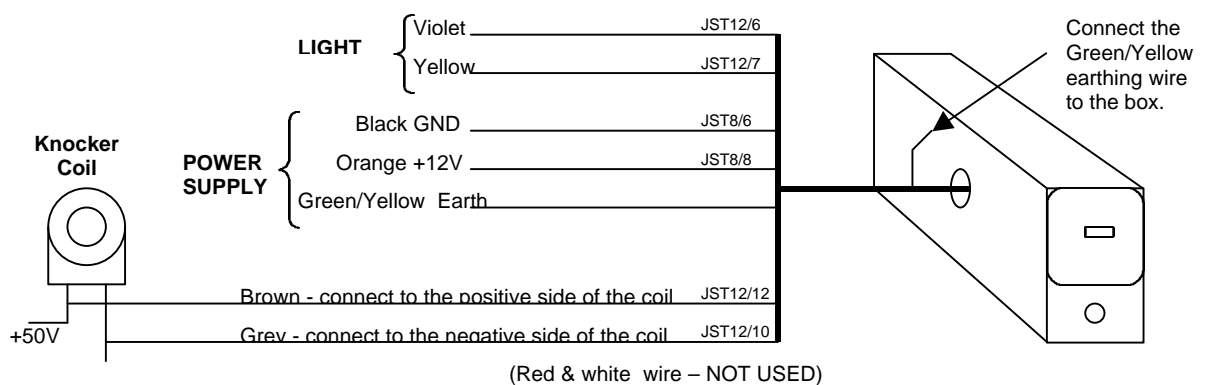
See page 2 for the connection of the Activity switch in Skill Mode.



Video Game, Skill Tester, any coin-op machine (where a coin meter pulse triggers ticket payout).



Pinball Machine (Coil pulse triggers ticket payout) - direct connection to the coil.



INSTALLATION:

- The conversion box can be mounted from the left-hand side or the right-hand side of the cabinet. To switch over the sides, pull out the draw, turn the box upside down and insert the draw back. If it is mounted to the left-hand side of the cabinet, reposition the harness inside the draw to the right hand side of the ticket holder. See the 3 empty holes for cable ties.
- Mark and drill the harness hole and 4 mounting holes to the side of your machine. **DO NOT USE THE BOTTOM FRONT MOUNTING HOLE!**
- Insert 4 cap head bolts from the inside of the box through the mounting holes and the holes you drilled in the cabinet and secure them with nuts from the inside of the cabinet.
- Pass the wiring through the harness hole and connect the ring terminal of the earthing wire (GREEN/YELLOW) under one of the cap head bolt nuts and tighten it up well.
- Mount the Bonus Light (optional) at the front of the cabinet. Affix the red self adhesive label next to the light. If the light is mounted on a metal cabinet separate the terminal for the wire connection from the mounting hole by bending it away and solder on the wire.
- Affix the blue self adhesive label to a clearly visible place at the front of the cabinet.
- Follow one of the diagrams above to connect the wiring.

Instruction Sheet for CB-B3

CLEARING ERROR

An error will occur when the machine runs out of tickets or the ticket notch opto sensor is not functioning. The PCB LED and the Bonus Light will stay ON. Clean the opto sensor with paint brush, remove jams, reload tickets and slide the bottom switch on the ticket dispenser up and back down. The unit will reset and resume normal operation.

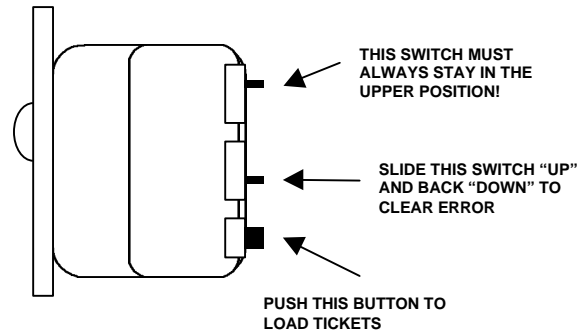
DISPENSER TEST (In Multiply/Divide Mode Only!)

Switch the machine OFF, adjust the dip switches 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!

Dispenser Test

Sw1	Sw2	Sw3	Sw4	Sw6	Sw7
ON	ON	ON	ON	OFF	OFF

Ticket Dispenser



LOADING TICKETS

Press the button on the ticket dispenser and insert the tickets. Release the button to stop the tickets.

LED or External Lamp

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

Number of flashes	MODE
1	DISPENSER TEST
2	DIVIDER
3	MULTIPLIER
4	DIVIDE WITH BONUS
5	MULTIPLY WITH BONUS
6	SKILL MODE
7	SKILL MODE WITH BONUS

NOTES:

- The ticket payout can be initiated via the Ticket Drive Input (JST8 – Pin 3) which is a direct 5V logic input triggered by a ground pulse or via Opto Isolated Ticket Drive (preferred option) JST12 – pins 10,11.
- The Activity Switch is required in Skill Mode only.

CONNECTING ACTIVITY SWITCH (FOR SKILL MODE ONLY).

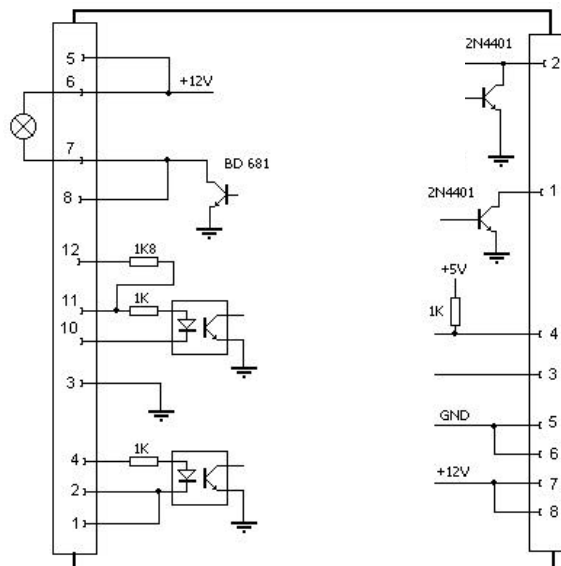
The Activity Switch can be any control panel switch or a trigger switch in gun games, which is frequently used during the game (These switches usually connect ground to the 5V logic circuit of the game board).

Connect the switch to JST12 connector pin 1. Connect +5V to JST12 pin 4. This is an opto isolated input.

Ticketflex PCB Connector Pinout

12 WAY JST CONNECTOR (PCB)

PIN	JST Connector	Wire
1	- Activity Input	
2	- Activity Input	
3	GND (Out)	
4	+ Activity Input 5-30V	
5	+12 V (Out)	
6	+12 V (Out)	Yellow
7	Lamp Output	Violet
8	Lamp Output	
9	Ticket Meter	
10	- Opto Ticket Drive	Grey
11	+Opto Ticket Dr 5-30V	Red
12	+Opto Ticket Dr 14-60V	Brown



8 WAY JST CONNECTOR (PCB)

PIN	JST Connector	Wire
1	Notch Output	Blue
2	Tick. Drive Output	Dis-Wht.
3	Tick. Drive Input	White
4	Tick. Notch Input	Dis-Grn.
5	GND (Out)	Dis-Blk.
6	GND (In)	Black
7	+12V (Out)	Dis-Red
8	+12V (In)	Orange

4 WAY UTILUX CONNECTOR (HARNES INSIDE THEBOX)

PIN	4 WAY Utilux	Wire
1	Notch Output N/U	Blue
2	GND	Black
3	Game Drive Input	White
4	+12V	Orange

For On-Line Help visit:
Ticket**FLEX**.com



Instruction Sheet for CB-B3

SETTING UP SKILL MODE

The Skill Mode can be entered via the EEPROM memory, which will retain the set up data even when the power is switched off. It is important to follow the set up procedure exactly as described below. The Skill Mode may not be suitable for all games and all types of operation situations. Amusement machines like video games do not provide any signals, which we could use to know when one game finishes and another starts. Therefore it is very important to select the game time, interval, the winner level and also the dip switch setting for activity very thoughtfully to suit the particular game. Even with perfect adjustments the Skill Mode will never be perfectly synchronized with the Game Up/Game Over state of the game and tickets may be dispensed in seemingly wrong time, especially when multiple credits are played. Play the game to familiarize yourself with its features then select settings for the optimum performance of the Skill Mode.

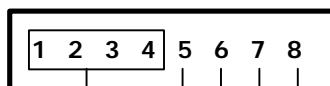
SELECT GAME TIME, INTERVAL, WINNER LEVEL AND MERCY TICKETS

1. Switch the power OFF.
2. Set dip switches 5,6,7,8 ON.
3. Switch the power ON, the LED will flash briefly twice to indicate EEPROM set up mode.
4. For example to set the GAME TIME, set dip switches 1,2,3,4 for the desired value and turn the dip switch 5 OFF. The selected value will be written into the EEPROM memory. The LED will start flashing to verify successful 'EEPROM WRITE'. The number of flashes will correspond to the set value (one longer flash represents ZERO).
5. Return the dip switches 5 to 8 back to the ON position, the LED will again briefly flash twice. The board is ready for next EEPROM WRITE.
6. You can repeat steps 4 and 5 as many times as you want to set other values. By turning OFF dip switch 5 – 8 (only one switch at the time) you can select which setting you want to change.
7. After you finished all settings, set dip switches as required for normal operation (Coin/Credits, Activity, Bonus Mode) see page 3. SW7 must be in OFF position.

EXAMPLES:

- To select Game Time of 60 seconds, select value 4 by setting dip switches as follows: SW1=ON, SW2=ON, SW3=OFF, SW4=ON. Switch dip switch 5 off to write this value in the memory.
- To select Interval of 15 seconds, select value 5 by setting dip switches as follows: SW1=OFF, SW2=ON, SW3=OFF, SW4=ON. Switch dip switch 6 off to write this value in the memory.

Dip Switch



SET VALUE				
SET	Sw1	Sw2	Sw3	Sw4
0	ON	ON	ON	ON
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

GAME TIME	
SET	TIME (s)
0	0
1	15
2	30
3	45
4	60
5	75
6	90
7	105
8	120
9	135
10	150
11	165
12	180
13	195
14	210
15	235

INTERVAL	
SET	TIME (s)
0	0
1	3
2	6
3	9
4	12
5	15
6	18
7	21
8	24
9	27
10	30
11	33
12	36
13	39
14	42
15	45

WINNER LEVEL	
SET	TIME (s)
0	0
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100
11	110
12	120
13	130
14	140
15	150

MERCY TICKETS	
SET	TICKETS
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15

EEPROM TEST – READ SETTINGS

1. Switch the power OFF.
2. Turn dip switch 7 ON (at least one of the dip switches 5,6 or 8 must be turned off).
3. Turn the power ON. The LED will start flashing indicating all EEPROM settings in this order: Game Time, Interval, Winner, Mercy Tickets.
4. There is a short pause between settings. Zero setting is indicated by one longer flash.
5. Turn dip switch 7 OFF for normal operation.