

BestCo Printer Interface Setup

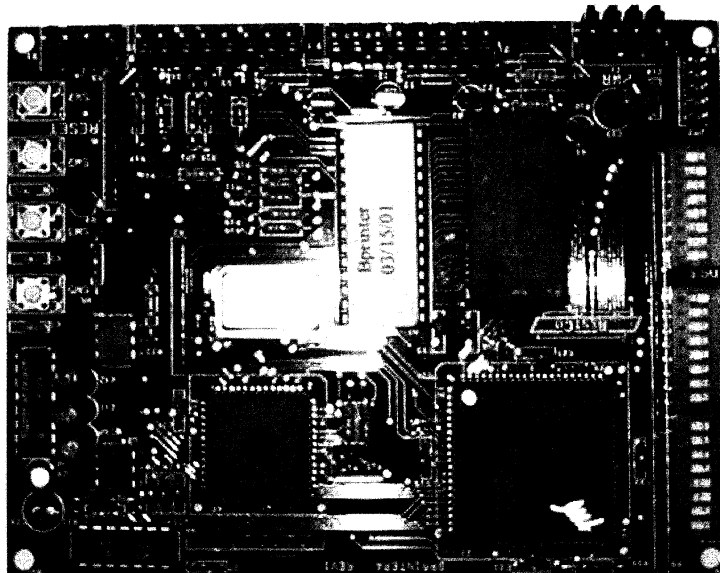
Overview:

BestCo Printer Interface board has been designed from the ground up to act as a reliable and flexible voucher printer that also can act as a complete bookkeeping center. Printer features such as double size and/or red characters used to make copycat printing more difficult (when the selected printer supports them). Also, each unit has a unique serial number. A custom message can be entered, and the date and time can be printed on every voucher. All major functions and settings can be done with the DIP switches or the on board push buttons. A cable is supplied to connect the board to a PC/Laptop or a terminal for all of the advanced functions.

Board Pin Out (See board below--all connector pins are denoted by square solder pad.)

J1 (power)	Pin 1 & 2	-5V DC
	Pin 3 & 4	Power Ground
J2 (Outputs)	Pin 1	Return pulses (service credit in on game PCB)
J3 (Inputs)	Pin 1	Pulse in (Payout meter driver from game PCB)
	Pin 5	Coin 1 input
	Pin 6	Coin 2 input
J4 Serial (RS-232 communications)	Pin 1	Serial Data Out
	Pin 2	-5V DC
	Pin 3	Serial Data In
	Pin 4	Ground

MAKE SURE LOCKING SIDE OF CONNECTORS ARE PUT ON THE CORRECT SIDE OF MATING CONNECTOR.



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Connections:

The following connections are what is required for a minimal installation:
Power in (+5VDC and Ground)
Serial cable to the printer
Pulse in wire to the **Payout** meter. (AKA keydown meter)

These optional connections may be required by certain state laws, or for your own personal tastes:

Coin 1 and Coin 2 inputs: These two inputs are to be tied into the coin and/or DBA inputs to the PCB. They allow the BPRINTER to count the credits going into the game so they can be reported on the bookkeeping printout. Any low going pulse can be connected as long as there are no more than 5 volts present on the wire.

Credit return: This wire is used to return any unprinted credits back to the game PCB.
For example: BPRINTER is set for 100 pulses in per point, and the player cashes out 120 credits, the 20 credits will be returned to the game. If this wire is not connected the unused credits are lost.

Hand Count: If the Hand Count feature is enabled these wires must be connected to a lamp or signal that changes states for each hand played. On Cherry Master type games, the start lamp is the normal connection point. If your game uses 5 volt lamps you may need to install the jumper JPI on the PCB.

(SW2) Function Button 1 Causes the printer to or terminal to display/print a summary of the current DIP switch settings. the unit serial number, and the software version number.

(SW 3) Function Button 2 Causes the printer or terminal to display/print the unit serial number, date and time, total pulses received, total pulses returned, total pulses paid, coin 1 in...coin 9 in, and the total of the paid out (printed) data based on the current DIP switch setting. After this print out you have 30 seconds to press button1 to clear the current bookkeeping totals.

(SW5)Function Button 3 This button causes the board to go into advanced function mode. It is assumed that a terminal is connected to the BPRINTER board at this time. If this button is mistakenly pressed, just press the reset button to return to normal operation. If a terminal is attached you will set a menu showing the available choices. Currently the choices allow for the entering or modification of the date/time clock and the custom message system.

(SW7) Reset Button This button does a master reset of the system at which time the printer will print a stub that shows the date and time of the reset.

Combinations Simultaneous pressing the Function Button 2(SW3) and Function Button 3 (SW5) will do a total memory reset on the battery backed memory.

Communications Settings:

The basic RS-232 parameters are 9600B, 8 Data Bits, 1 Stop Bit, NO Parity.
A new line is the combination CR LF.
If the printer double spaces its lines check the CR setting.
Make sure the printer and /or your terminal package is set for these values. Also, make sure your terminal software is set up for NO Flow control.

Recommended Printers:

Citizen iDP3541-F40R.FI201B

Friction Feed, 40 Column, RS-232. International Character Set
120V AC, Character, w/battery backup. 7K buffer, Auto
cutter, and 2 color printing.

Epson 200 series w/auto-cutter

Ithaca 70 Series w/auto-cutter

Star Micronics w/auto-cutter

DIP Switch Function Summary-

Pulses in to equal 1 point	The point is an internal representation of the credits in divided by this number. Further processing may be done on this number by the next setting.
Each Point is worth	The above number of Points is multiplied by this number to achieve the printed value. For example: Setting the pulses in equal to 1 point to 100 and each point is worth to 5 makes 100 pulses in equal to 5 dollars or 5 points.
Multiple Vouchers	If this option is selected the printer will print one voucher every time the Pulses in to equal 1 point value is reached. You can think of this as working like ticket dispenser, each voucher will have a fixed value.
Printed Value equal to	Is the printed point value going to be MONEY or POINTS
Money equal to	If the above is set to MONEY then is the value DOLLARS or CENTS . This setting has no effect if points are equal to points.
Use Custom Message	Turns the 4 line custom message, that can be entered with a computer or terminal, on or off . This is handy if the game is being moved to a new location and a terminal is not available to change the message.
Use Date & Time backed RAM	Turns on or off the printing of the date and time stored in the battery
Use Signature Line	Turns on or off the printing of the Customer Signature line. This setting is forced ON anytime a LAW is selected
State Laws	Adds the listed state's redemption law to the printed voucher
Hand Counter	Should the software count the number hands the player played and use the number as the maximum number of POINTS to print out. The remaining credits will be returned to the game.
Divide Hand Count by 2	This divides the hand count by 2. Some games flash the START lamp twice during play instead of once. This will correct the count.
Hand Timeout	This is an idle timer that is running anytime there are hands played but the hand count signal is not active. This allows a player to add credits after a game over, or a bonus round being played not to dump the players hands.

Printer Type

Sets the board to take advantage of any special features a particular printer may have. **For example:** If you are using the Citizens printer the board will use double sized and red printing for selected areas to make copycat printing more difficult.

Custom Programming of the BestCo Printer Interface Board

1. You must use Hyperterminal to custom program. You can access Hyperterminal in Windows 95 and above using the Accessories folder .Go to Settings Communications. Pull down to set the computer/laptop to 9600 baud, 8 data bits, no parity, and no flow control.
2. Hook the Interface board to the computer using the serial cable provided. Power up the interface board. You should be able to read **POWER ON** on the computer.
3. Press SW5 on the features board. You now should go into Setup Mode. Follow the instructions on the computer.

Goose-it DIP Switch Settings V3.00

Function	Value	Goose-it DIP Switch Settings V3.00																									
		DIP Switch 1								DIP Switch 2								DIP Switch 3									
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Pulses In To Equal 1 point	1	0	0	0	0	0																					
	2	1	0	0	0	0																					
	4	0	1	0	0	0																					
	5	1	1	0	0	0																					
	8	0	0	1	0	0																					
	10	1	0	1	0	0																					
	15	0	1	1	0	0																					
	20	1	1	1	0	0																					
	25	0	0	0	1	0																					
	40	1	0	0	1	0																					
	50	0	1	0	1	0																					
	75	1	1	0	1	0																					
	100	0	0	1	1	0																					
	150	1	0	1	1	0																					
	200	0	1	1	1	0																					
	250	1	1	1	1	0																					
	400	0	0	0	0	1																					
500	1	0	0	0	1																						
1000	0	1	0	0	1																						
2000	1	1	0	0	1																						
2500	0	0	1	0	1																						
5000	1	0	1	0	1																						
Each Point Is worth (It's printed Value)	1						0	0	0	0																	
	2						1	0	0	0																	
	5						0	1	0	0																	
	10						1	1	0	0																	
	15						0	0	1	0																	
	20						1	0	1	0																	
	25						0	1	1	0																	
	50						1	1	1	0																	
	75						0	0	0	1																	
	100						1	0	0	1																	
	150						0	1	0	1																	
	200						1	1	0	1																	
	250						0	0	1	1																	
400						1	0	1	1																		
500						0	1	1	1																		
1000						1	1	1	1																		
Multiple Vouchers	No																									0	
	Yes																									1	

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