```
>>> Install Universal PCCOM Driver <<<

1. Login as a root user.

2. install all relative files
   # cd /
   # doscp a:unix/dc.tz ./dc.tar.Z   ["dosget" in Interactive Unix]
   # zcat dc.tar | tar xvfp -

3. # cd /usr/sys/pccom/dc

4. Install PCCOM driver to the kernel.
   # ./install


>>> Remove Universal PCCOM Driver <<<

1. Login as a root user

2. # cd /usr/sys/pccom/dc

3. Remove PCCOM Driver from the kernel
   # ./remove


>>> PCI Support for PCCOM PCI 4/8-Port Card <<<

1. Currently, we support PCCOM PCI 4/8-Port cards for SCO Open Server 5.0+.


>>> Hardware Configuration for PCCOM 2/4/8-Port Card <<<

1. Hardware configuration for every installed PCCOM 2/4/8-Port card is
   selectable about

   - Bus Type: AT or PCI

   - PCI ID: for PCCOM PCI Cards only

   - Number of Ports: 2, 4, or 8

   - I/O Base Address: for PCCOM AT Cards only

   - IRQ: for PCCOM AT Cards only

     % The possible selections are
        3, 4, 5, 7, 10, 11, 12, or 15

   - Vector Address: for PCCOM AT Cards

     % for 4/8-port cards only


>>> Default Device Names to PCCOM 2/4/8-Port Driver <<<

   X:  j(for null modem)
       J(for modem)
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   YY: 11, 12, 13, 14, 15, 16, 17, 18(for the first card)
       21, 22, 23, 24, 25, 26, 27, 28(for the second card)
       31, 32, 33, 34, 35, 36, 37, 38(for the third card)
       41, 42, 43, 44, 45, 46, 47, 48(for the fourth card)
```

>>> Enclosed Uilities for PCCOM 2/4/8-Port Driver <<<

1. For USL Unix, Interactive Unix

   1.1 Enable terminal
       # entty tty...

   1.2 Disable terminal
       # distty tty...

>>> Option for High Speed <<<

1. If you would like High-Speed Baud Rate for 16650 only,
   you can specify when installing.

2. If you choose High-Speed Baud Rate, the configuration of Baud Rate is
   changed as follows:

Original	Extensible	
50	14.4 K	
75	28.8 K	
110	57.6 K	
134	76.8 K	
150	115.2 K	
200	153.6 K	
300	230.4 K	
600	460.8 K	
1200	1200	(unchanged)
2400	2400	(unchanged)
4800	4800	(unchanged)
9600	9600	(unchanged)
EXTA	19200	(unchanged)
EXTB	38400	(unchanged)

>>> Transparent Printer upon the Universal PCCOM Driver <<<

1. The default device names to Transparent Printer(TP) are /dev/lpXYY,
   that is, the prefix name is changed from "tty" to "lp" but the other
   "XYY" is the same.

2 How to use TP

  2.1 Firstly, the corresponding TTY line must be opened formerly;

      2.1.1 e.g. under default device names, the corresponding TTY line of
            /dev/lpj11 is /dev/ttyj11.

      2.1.2 If the /dev/ttyj11 is used for a TTY, it has to be enabled before

you would like to print data through /dev/lpi11 to a printer
connected to the terminal which is operated via /dev/ttyj11.

2.2 Actually, any data transmission by means of /dev/lpXYY or /dev/ttyXYY
is through the same serial line from PCCOM cards.

2.2.1 By multiplexing a serial line, there are two sorts of data
channels for TTY data(by /dev/ttyXYY) and TP data(by
/dev/lpXYY).

2.2.2 The channel for TP data which is uni-directional is used to
transmit the data from a host to a terminal only.

2.2.3 How to differentiate TTY data and TP data in the same serial line
is that TP data are encapsulated within a couple of PRINT-ON and
PRINT-OFF escape strings which are recognized by connected
terminals.

2.2.4 The PRINT-ON and PRTIN-OFF is defined by connected terminals.

2.3 The scheme to multiplex a serial line for these two channels is based
on time-division method.

2.3.1 The time slices for TTY or TP data are generated according to the
entry procedure, polling, in the PCCOM driver, which is
periodically called by system clock.

2.3.2 The period of system clocks are different among various
operating systems, e.g. most Unixs is 100hz, but SCO Xenix is 50hz.

2.4 The interval reserved for TTY or TP channel in the same serial line
is important to output TP data to a low-speed printer through
high-throughput line from PCCOM cards if there is no flow control
XON/XOFF to the serial line.

2.5 There is a utility "lpx" to adjust the time interval for TTY or TP data
and the TP protocol.

2.5.1 Usage:
lpx [option] device_name
option:
   -t number: set interval for TTY
   -l number: set interval for Transparent Printer
   -n string: set esc string to turn on printer
   -f string: set esc string to turn off printer
   -T : get interval for TTY
   -L : get interval for Transparent Printer
   -N : get esc_string to turn on printer
   -F : get esc_string to turn off printer
device_name : lp<X><YY>
   <X> : j, J
   <x> : 11, 12, 13, 14, 15, 16, 17, 18
           21, 22, 23, 24, 25, 26, 27, 28
           31, 32, 33, 34, 35, 36, 37, 38
           41, 42, 43, 44, 45, 46, 47, 48

2.5.2 The range of interval reserved for TTY or TP channel is from 1 to

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        maximum integer.

2.5.3 The default setting for any /dev/lpXYY is as follows

        Interval for TTY : 50
        Interval for TP  : 1
        PRINT-ON escape  : "\033[5i" (ESC[5i)
        PRINT-OFF escape : "\033[4i" (ESC[4i)

2.5.4 Examples to invoke lpx

        1. set 60 time slices reserved for /dev/lpj11

           # lpx -t 60 /dev/lpj11

        2. set 2 time silces reserved for /dev/lpj11

           # lpx -l 2 /dev/lpj11

        3. get the time slices reserved for /dev/lpj11

           # lpx -L /dev/lpj11

        4. set PRINT-ON string for /dev/lpj11

           # lpx -n "\033[5i" /dev/lpj11

        5. get PRINT-OFF string for /dev/lpj11

           # lpx -F /dev/lpj11
           \033[4i
```