MK22FBP & MK42FBP SPECIFICATIONS

SPECIFICATIONS	MK22FBP	MK42FBP
Autoswitch Device Output Ports	2	2
Autoswitch Computer Input Ports	2	4
Cable Type Required		
Computer to Autoswitch	DB25M/M (CC405D)	
Device to Autoswitch	DB25M/Cen36M (CC404D)	
Maximum Cable Distance	5 Meters	
Maximum Transfer Rate	2MBytes/Sec	
Number of Device LEDs	2	
Computer Input Port LEDs	4	
Input/Output Port Selection	Auto / Manual	
Time Out Selection	5, 10, 20, 40 Sec	
File Transfer	A, B	A - B, C - D
Software	DOS, Windows 3.1, 95, 98, NT	
Dimension (mm)	179 x 93 x 27	185 x 93 x 27
Weight	200	240
Operation Temperature	41 - 104 Fahrenheit	
Optional Power Adaptor	DC9V 500mA (TR1284-MK)	
Certification	FCC, CE	

For Additional Technical Support:

(734) 641-6700 EST

TECHSUPPORT@QVS.COM

☐ MK22FBP   ☐ MK42FBP

VISIT US ON THE WEB @

WWW.QVS.COM

Bi-Tronics Plus Auto Switch

User's Guide

QVS
The Connectivity Specialist

MK22FBP & MK42FBP

QVS IEEE1284 PARALLEL AUTOSWITCHES

The IEEE1284 standard is commonly found on most of the printers today. It enables bidirectional communication between PC and the printer to allow printer informations to be sent back to the host PC using it's built-in microprocessor. The MK22FBP & MK42FBP Level 5 IEEE1284 Autoswitch supports full compatibility with IEEE1284 including centronics, nibble, special nibble, byte, Enhanced Parallel Port (EPP), and Extended Capabilities Port (ECP). The Dual Bus Design allows simultaneous access of both devices by two attach computer, it features manual & auto mode channel port selection, and works with DOS, Windows 3.1, Windows 95, and Windows 98 & NT.

The autoswitch supports IEEE1284 parallel devices such as Zip Drive, Scanner, CD-ROM, Back-Up Tape, Digital CCD Camera, External Hard Drive, and Ethernet Adaptor.

➲ UP TO FOUR COMPUTERS SHARING TWO PRINTERS OR IEEE1284 DEVICES

➲ TWO COMPUTERS ACCESSING EITHER ONE OF THE SHARED DEVICE SIMULTANEOUSLY

➲ RECOMMENDED CABLES:
  INPUT: DB25M/M FOR PC DB25F PORT (CC405D), OR
    DB25M/HPCEN36M FOR PC HPCEN36F PORT (CC408D)
  OUTPUT: DB25M/CEN36M FOR PRINTER WITH CEN36F PORT (CC404D)
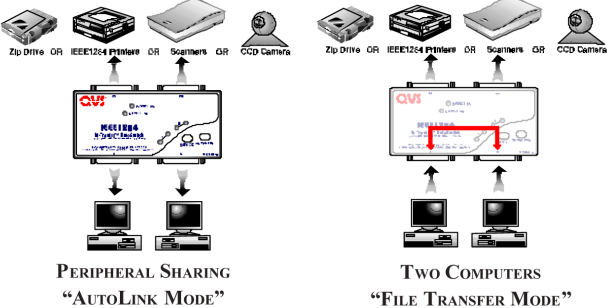   DB25M/HPCEN36M FOR PC HPCEN36F PORT (CC408D)

Quick Start

FOUR EASY STEPS TO SET-UP YOUR BI-TRONICS PLUS AUTOSWITCH

(2 - 2 & 4 - 2 Settings)

1. Be sure to turn OFF all power to your computers and printers.

2. Using an IEEE1284 straight thru DB25M/M (QVS CC405D), connect your computers to the Auto Switch.

3. Using an IEEE1284 parallel cable (QVS CC404D), connect your printer to the Auto Switch.

4. Now, turn ON the power to your Auto Switch, computers, and printers. All computers will print to the printer on a first come, first serve basis.
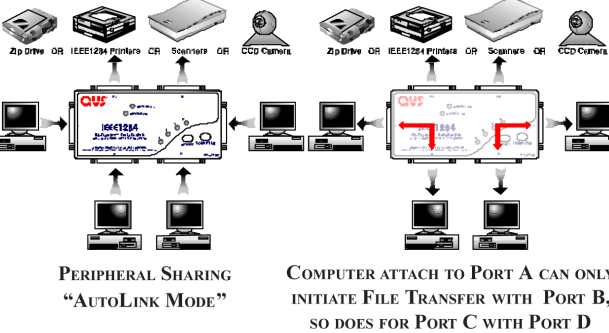
Please print the "README" file on the diskette for autoswitch software driver setup instructions.

http://www.qvs.com/qvsguide/mkx2fbp.html

All names and trademarks are property of their respective companies.

PERIPHERAL SHARING & FILE TRANSFER SETUP

MK22FBP SETUP

PERIPHERAL SHARING "AUTOLINK MODE"

TWO COMPUTERS "FILE TRANSFER MODE"

MK42FBP SETUP

PERIPHERAL SHARING "AUTOLINK MODE"

COMPUTER ATTACH TO PORT A CAN ONLY INITIATE FILE TRANSFER WITH PORT B, SO DOES FOR PORT C WITH PORT D

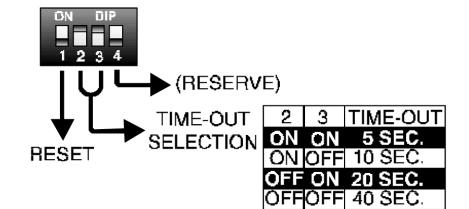### "AUTO-LINK" MODE
The autoswitch will constantly scan it's input ports and send the job to the selected attach parallel device. The cycle start from Port A, B, C, D, then A again.

"MANUAL" MODE
Both the MK22FBP & MK42FBP has a "Select" button for manual port selection (Device or Computer). When the autoswitch is first power ON, it is on AutoLink Mode. After pressing the "Select" button, it will be on manual mode. Pressing the "Select" button completing one cycle will put the autoswitch back in AutoLink Mode.

"RESET" SWITCH
If the LEDs for computers do not flash alternately and at the same time, or none of the computers can access the attach devices, or if one of the computer runs parallel device software to lock the port all the time, then switch need to be reset for synchronization between computers and parallel devices to force the switch to return to default mode using the DIP Switch #1 ON & OFF function.

DEVICE OUT PORTS LED INDICATOR
    PA & PB LED Remain Lit   AutoLink Mode
    PA & PB LED are OFF   File Transfer Mode

TROUBLESHOOTING

1. **Check all the cables**. Used an IEEE1284 rated cables.

2. **Check the Computer BIOS**. Please make sure that the BIOS parallel setup is set to EPP or EPP/SPP mode for faster data transfer and bidirectional communication.

2. **Working with Portable Drives**. The autoswitch must be in Manual Mode selecting the port where the portable drive is attach until driver software recognize and assign a logical drive. After the driver has been loaded, you can put the autoswitch back into AutoLink Mode.

3. **Used the optional AC power adaptor.** The autoswitch usually powered by the signal drawned from the computer and parallel device parallel port. However, if the computer or the device failed to supply enough power to the autoswitch, a DC 9v 500mA power adaptor can be used. It is highly recommended to use the power adaptor on InkJet and DeskJet printers.

4. **Adjust the time out.** If you print long document files with graphics, or use printer spooler, adjust the time out to a higher value. This is because as the computer process complex file, it will pause more often. If the pause is longer than the time out window, the autoswitch will assume that the transmission is over and prematurely finishing the job.

SEE REVERSE SIDE FOR COMPLETE EXPLANATION OF THE DUAL BUS FEATURE

DIP SWITCH SETTINGS

(RESERVE)

RESET

TIME-OUT SELECTION

2	3	TIME-OUT
ON	ON	5 SEC.
ON	OFF	10 SEC.
OFF	ON	20 SEC.
OFF	OFF	40 SEC.

FUNCTION DESCRIPTIONS

"AUTO-LINK" MODE

When powering the autoswitch, you will see the LEDs of the Computer Input Ports circularly scanned from LED A to D and Printer Output Ports LEDs remain lit. Your autoswitch constantly scans its computer input ports, looking for a job to send to one of its output ports. You will see the input ports LEDs blink in sequence as the switch goes through its scan cycle.

DEVICE OUT PORTS LED INDICATOR:
PA & PB LED Remain Lit   AutoLink Mode
PA & PB LED are OFF   File Transfer Mode

"MANUAL" MODE

The switch has two input push buttons, label "DEVICE" and "COMPUTER". When you power on the switch, the switch is in AutoLink Mode. After pressing the "COMPUTER" button, it is in manual setting mode. Press "COMPUTER" button several times and you will see the LEDs light in order as the active selection moves from AutoScan to LED A, B, C, D. Stop pressing the button when the LED lights for the computer input port you want to set up. You can press the "PRINTER" button several times to cycle thru the three level of available choices (PA, PB, & File Transfer). Finish the cycle to go back to AutoLink Mode.

"FILE TRANSFER" MODE

Use the software selection utility to setup the autoswitch to "File Transfer" mode. The MK42FBP dual bus permits only that the computer attach to Port A can only do file transfer with the computer attach to Port B. The same goes to Port C and Port D.

SOFTWARE SELECTION

See the "README" file on the driver disk for complete instruction. This software driver will run an application running on the background and will not do any modification to your system .INI settings.
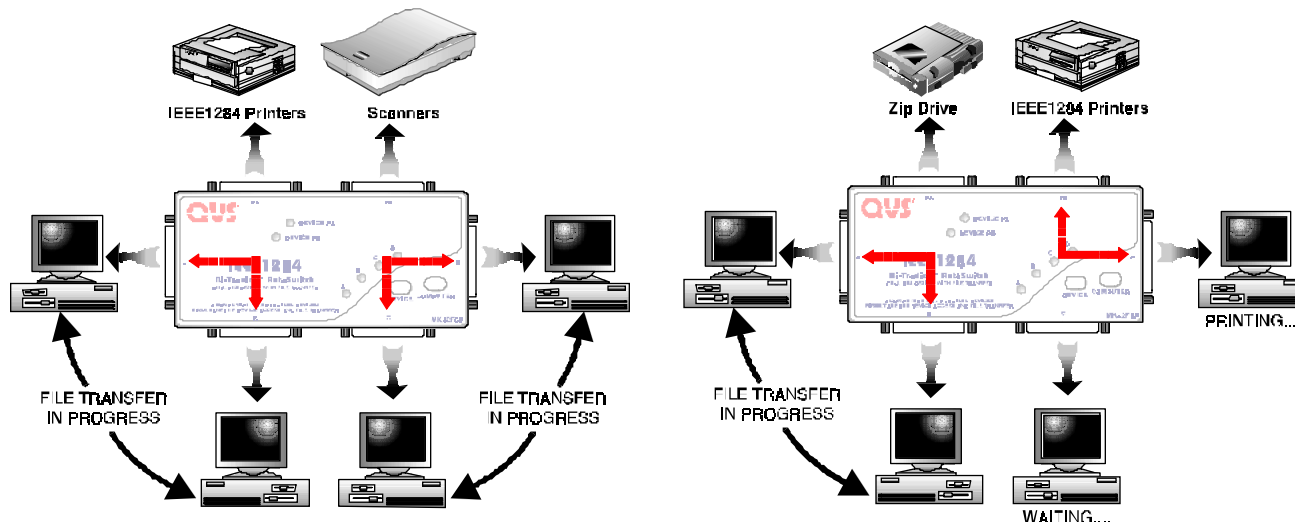
AUTOSWITCH DUAL BUS DESIGN

The MK22FBP and MK42FBP has two independent channels for the switch which provide sumultaneous access of the either device by any of the two attach computers. If two PC's send their job simultaneosly to two different ports, the print job will be process at the same time. But if send to the output port, the first-come, first-serve rule will be follow.

MK22FBP APPLICATION GUIDE FOR SIMULTANEOUS OPERATION:
Computer A sends a print job to PA (PB) and Computer B sends a print job to PB (PA).
Computer A and Computer B run File Transfer Program.

MK42FBP APPLICATION GUIDE FOR SIMULTANEOUS OPERATION:
Computer A sends a print job to PA (PB) and Computer C sends a print job to PB (PA).
Computer A and Computer B run File Transfer Program while Computer D sends a print job to PA

For Additional Technical Support:

(734) 641-6700 EST
TECHSUPPORT@QVS.COM

❑ MK22FBP   ❑ MK42FBP

http://www.qvs.com/qvsguide/mkx2fbp.html

VISIT US ON THE WEB @
WWW.QVS.COM

VERSION: SEPTEMBER, 1998

IEEE 1284 HIGH SPEED BI-TRONICS ECP/EPP CABLES

DB25M/Cen36M	• HP Part # C2950A (2m/6ft) • HP Part # C2951A (3m/10ft) • IEEE1284 Nomenclature: A - B	**CC404D** Also available in: 15, 25, 33, 50ft
DB25M/HPCen36M	• HP Part # C2945A (2m/6ft) • HP Part # C2946A (3m/10ft) • HP Part # C2947A (10m/33ft) • IEEE1284 Nomenclature: A - C	**CC408D** Also available in: 15, 25, 33ft
Cen36M/M	• IEEE1284 Nomenclature: B - B • Also for Dataswitch	**CC401D**
DB25M/M	• IEEE1284 Nomenclature: A - A • Also for Dataswitch	**CC405D** Also available in: 15, 25ft
DB25M/F	• IEEE1284 Nomenclature: A - A • Also as an Extension Cable	**CC406D** Also available in: 15, 25ft
HPCen36M/Cen36M	• IEEE1284 Nomenclature: C - B	**CC409D**
HPCen36M/M	• IEEE1284 Nomenclature: C - C	**CC410D**

Double Shielded & Twisted Pairs. All are available in standard lenghts of 6ft & 10ft except when noted. Works for all Bi-Tronics & regular printers. Compatible with regular parallel & high speed EPP/ECP ports.

EXTENDER & CONVERTER

IEEE1284 PARALLEL SIGNAL BOOSTER   **CB140**
Extends signal up to 15 Meters in Nibble Mode

IEEE1284 TO USB ADAPTOR   **UC-1284**
Connects IEEE1284 Printer into a USB Hub

For Serial & Ethernet to USB Adaptor, please call for availability.
http://www.qvs.com/qvsguide/ieee1284.html

Use
IEEE1284 Compliant Cables for
Parallel Devices' Maximum Performance!

Highlights

• **IEEE1284** •
The **Standard Signalling Method for a Bidirectional Enhanced Parallel Interface for Personal Computers** provides high-speed bidirectional communications between a PC and an external peripheral that can communicate 10 to 50 times faster than the original parallel port

EPP
(Enhanced Parallel Port)
is used by new generation of fast bi-directional printers (like HP LaserJet IV & V, Tektronix Phasers, Lexmark Optra, IBM 4029 or 4039, Texas Instruments MicroLaser Pro 600) & peripherals (like CD-ROMs, tapes, & hard drives).

ECP
(Extended Capabilities Port)
EPP with daisy chain capability and utilizes new high-speed signalling method.

DB25
PARALLEL & SERIAL
IEEE 1284 TYPE A

CENTRONICS 36
IEEE 1284 TYPE B
& REGULAR PARALLEL

HALF PITCH CENTRONICS 36
IEEE 1284 TYPE C

Note: The IEEE1284 5 Modes of Data Transfer are Centronics (Backward Compatibility), Nibble (4 Bit), Byte (8 Bit), EPP (Enhanced Parallel Port), and ECP (Extended Capabilities Port) modes.

33ft or 10Meters is the maximum cable length allowed by IEEE1284 standard.
A 50ft cable can be use without degradation as long as it is not in the noise prone area.