



# MultiPath VALCOM

Schools - Universities



Hospitals

Medical



Airports

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Manufacturing



Rev 3.03

[www.valcom.com/multipath](http://www.valcom.com/multipath)

## INTRODUCTION

The Valcom MultiPath/Class Connection™ Communications System is a high-performance microprocessor controlled communications system designed for the needs of large facilities. It combines the features of an electronic telephone system with the capabilities of a sound and program distribution system, and includes emergency all call paging and alarm functions.

The system supports up to four administrative ports for communications between administrators and zones. Each administrative port can be connected to a single line telephone, key system, or PBX as required for unlimited answering positions. The system also includes eight audio paths to simultaneously allow any combination of administrative phone and zone communications, paging, scheduled tones, and distribution of program material.

Each zone is equipped with one or more loudspeakers to receive scheduled tones, program material, such as background music, emergency tones, page announcements and intercom. The system may also be equipped with call in switches, and supports both one-way and talkback speakers and horns to provide audio to production areas, hallways, outside locations, individual offices or classrooms.

Since most features are controlled by software, system configuration is easily changed or upgraded. A Windows® based programming tool is provided for system setup.



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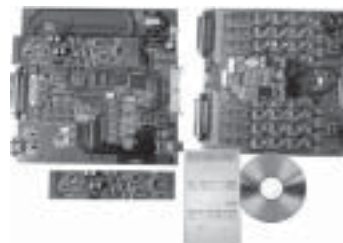
## INDEX

<b>SYSTEM PACKAGES</b>	<b>4</b>
<b>MAIN EQUIPMENT</b>	
<b>Main Boards</b>	<b>5</b>
<b>Accessories</b>	<b>6-9</b>
<b>CAROUSEL SERVER</b>	<b>9</b>
<b>SPEAKERS/HORNS</b>	<b>10</b>

## SYSTEM PACKAGES

All Class Connection™ and Valcom MultiPath™ systems feature a common set of features and benefits regardless of the system size:

- 8 user defined relay outputs
- 6 user defined switch inputs
- 3 auxiliary music inputs
- 1 microphone input
- 1 DB-9 serial port for administration
- 1 Ethernet port for network administration
- Real Time Clock
- 4 telephone interface circuits
- Speaker Outputs (quantity varies from 24 to 360)
- Call Button Input (talkback systems) or Zone Relay Outputs (one way) per zone
- 8 Time Schedules
- Numerous Built In Tones for Alerts



Because of this common feature set, all Class Connection™ and Valcom MultiPath™ systems, regardless of size, begin with a base “package”. Additional equipment may be added to these base packages to create systems up to 360 zones.

Number Of Zones	One Way Package		Talkback Package	
	Wall Mount	19" Rack Mount	Wall Mount	19" Rack Mount
24	V-PW24	V-PR24	V-TW24	V-TR24
48	V-PW48	V-PR48	V-TW48	V-TR48
72		V-PR72		V-TR72
96		V-PR96		V-TR96

What's In The Base Packages?									
	V-CPU4 System CPU Card	V-TCM Talkback Station Card	V-STX One Way Station Card	VCWRK Wall Rack	VCCRK 19" Rack Insert	V-MPT Programming Tool/Cable	V-C6124P Power Supply	VC40R-4 Ribbon Cable	VC40R-9T Ribbon Cable
V-PW24	1		1	1		1	1	1	
V-PW48	1		2	1		1	1	1	
V-PR24	1		1		1	1	1	1	
V-PR48	1		2		1	1	1	1	
V-PR72	1		3		1	1	2	1	
V-PR96	1		4		1	1	2		1
V-TW24	1	1		1		1	1	1	
V-TW48	1	2		1		1	1	1	
V-TR24	1	1			1	1	1	1	
V-TR48	1	2			1	1	1	1	
V-TR72	1	3			1	1	2	1	
V-TR96	1	4			1	1	2		1

Note – Our free system configuration software should be used to configure all Class Connection™ and Valcom MultiPath™ systems. (Download from [www.valcom.com/multipath](http://www.valcom.com/multipath))

## MAIN EQUIPMENT

### V-CPU4 CPU BOARD -- MAIN COMMON CONTROL BOARD

- Provides storage medium for customer data base information
- Provides internal common control for the system peripheral cards
- Provides an access point for external communication functions
- Supports up to fifteen feature cards and 360 station ports

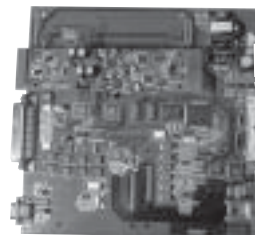
#### *Other features provided are as follows:*

- Includes 2 V-SLC
- System tone generator
- 2 channels of synthesized voice annunciation
- 8 user defined relay outputs
- 6 user defined contact closure inputs

#### **SPECIFICATIONS:**

**Dimensions:** 10.0" (25.40 cm) H x 10.75" (27.31 cm) L x 1.3" (3.30 cm) D

**Weight:** 0.91 lbs (0.41 kg)



- 3 auxiliary music and program inputs
- 1 microphone input
- 1 DB-9 serial port for programming
- 1 Ethernet Port
- 1 other data port and real time clock for master clock function

### V-SLC SLIC CARD -- TELEPHONE INTERFACE 2 CIRCUITS

- Connects directly to the CPU
- Provides 2 telephone interface circuits
- Provides two DTMF detector circuits and ring generator
- Pop suppression and battery feed

#### **SPECIFICATIONS:**

**Dimensions:** 1.85" (4.70 cm) H x 7.75" (19.69 cm) L x .65" (1.65 cm) D

**Weight:** 0.14 lbs (0.063 kg)



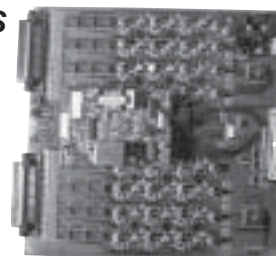
### V-TCM TALKBACK STATION BOARD -- 24 SPEAKER OUTPUTS

- 45 Ohm handsfree card included
- Provides handsfree card and is connected as a package
- 1 watt amplifier is built into each station output
- Allows voice and tone annunciation
- 24 switch inputs to facilitate call in switches

#### **SPECIFICATIONS:**

**Dimensions:** 10.0" (25.40 cm) H x 10.75" (27.31 cm) L x 1.0" (2.54 cm) D

**Weight:** 0.89 lbs (0.40 kg)



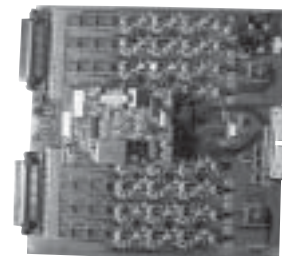
### V-STX ONE-WAY PAGING BOARD -- 24 SPEAKER OUTPUTS

- 24 Line Level Speaker Outputs
- Allows voice and tone annunciation
- Relay Output Per Zone

#### **SPECIFICATIONS:**

**Dimensions:** 10.0" (25.40 cm) H x 10.75" (27.31 cm) L x 1.0" (2.54 cm) D

**Weight:** 0.89 lbs (0.40 kg)



### V-SER SERIAL (SER) BOARD PROVIDES SMDR OUTPUT

- Mounts to the CPU
- Provides SMDR Data

#### **SPECIFICATIONS:**

**Dimensions:** 4.0" (10.16 cm) H x 3.6" (9.14 cm) L x 0.6" (1.52 cm) D

**Weight:** 0.20 lbs (0.09 kg)



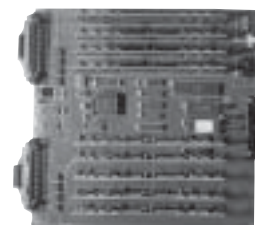
### V-URI GRAPHIC I/O (GIO) BOARD 72 I/O POINTS

- 8 door unlock relays
- 72 user defined switch input, ADA, call-in etc.
- 72 user defined drivers

#### **SPECIFICATIONS:**

**Dimensions:** 10.0" (25.40 cm) H x 10.75" (27.31 cm) L x 1.75" (4.45 cm) D

**Weight:** 1.6 lbs (0.72 kg)



## MAIN EQUIPMENT

### Accessories

#### **V-CLK**      **CLOCK CONTROL INTERFACE PACKAGE**

- Isolated high voltage contact closures
- 2 separate types of analog clocks
- Digital clocks
- Includes power supply, V-SER and VCCIO Clock Relay Board

**SPECIFICATIONS:**

**Dimensions:** 2.4" (6.10 cm) H x 7.0" (17.78 cm) L x 1.1" (2.79 cm) D

**Weight:** 0.5 lbs (0.23 kg):



#### **VCCIO**      **CLOCK RELAY BOARD**

- Isolated high voltage contact closures
- 2 separate types of analog clocks
- Digital clocks
- Includes power supply

**SPECIFICATIONS:**

**Dimensions:** 2.4" (6.10 cm) H x 7.0" (17.78 cm) L x 1.1" (2.79 cm) D

**Weight:** 0.5 lbs (0.23 kg)



#### **V-2970**      **EMERGENCY/NORMAL CALL SWITCH WITH VOLUME CONTROL**

- Fits a single-gang electrical box
- Black "Call" button for normal call
- Red "Call" button for emergency calls
- Brushed stainless-steel wall plate
- Phantom powered no additional power supply required

**SPECIFICATIONS: Switches:** Single pole, N.O. momentary pushbuttons.

"Emergency Call" button electronically generates multiple pulses.

**Dimensions:** 2.75" (6.99 cm) H x 4.5" (11.43 cm) W x 2.125" (5.4 cm) D.

**Weight:** 1.0 lb. (0.45 kg).



#### **V-2971**      **CALL SWITCH WITH VOLUME CONTROL**

- Built-in volume control
- Fits a single-gang electrical box
- Brushed stainless-steel wall plate
- "Call" button

**SPECIFICATIONS: Switch:** Single pole momentary pushbutton.

**Dimensions:** 2.75" (6.99 cm) H x 4.5" (11.43 cm) W x 2.125" (5.4 cm) D.

**Weight:** 1.0 lb (.45 kg).



#### **V-2972PK**      **CALL SWITCH (packaged in quantities of six)**

- Fits a single-gang electrical box
- Brushed stainless-steel wall plate
- "Call" button

**SPECIFICATIONS: Switch:** Single pole momentary pushbutton.

**Dimensions:** 2.75" (6.99 cm) H x 4.5" (11.43 cm) W x 2.125" (5.4 cm) D.

**Weight:** 1.0 lb (.45 kg).



## MAIN EQUIPMENT

### Accessories

#### **VC4OR-4 4 POSITION BACK PLANE CABLE**

- Connects up to 4 feature cards
- Provides all audio and data information to feature cards



#### **VC4OR-8T 8 POSITION BACK PLANE CABLE**

- Connects up to 8 feature cards
- Provides all audio and data information to feature cards
- Includes backplane terminator



#### **VC4OR-9T 9 POSITION BACK PLANE CABLE**

- Connects up to 9 feature cards
- Provides all audio and data information to feature cards
- Includes backplane terminator



#### **VC4OR-16T 16 POSITION BACK PLANE CABLE**

- Connects up to 16 feature cards
- Provides all audio and data information to feature cards
- Includes backplane terminator



#### **VCWRK 4 POSITION WALL RACK AND POWER HARNESS**

- Mounts easily to wall
- Provides card slots for up to 4 feature cards/V-CPU4
- Power harness included

**SPECIFICATIONS:**

**Dimensions:** 10.5" (26.67 cm) H x 14.25" (26.20 cm) L x 10.5" (26.67 cm) D

**Weight:** 7.3 lbs (3.29 kg)



#### **VCCRK 9 POSITION RACK MOUNT AND POWER HARNESS**

- Fits into standard 19" rack
- Provides card slots for up to 9 feature cards/V-CPU4
- Power harness included

**SPECIFICATIONS:**

**Dimensions:** 11.76" (29.87 cm) H x 19.12" (48.56 cm) L x 14.0" (35.56 cm) D

**Weight:** 23.0 lbs (10.35 kg)



## MAIN EQUIPMENT

### Accessories

#### **V-C6124P**                      **6 AMP WALL MOUNT POWER SUPPLY**

- Powers up to 3 feature cards/V-CPU4
- 6 amp, 24 Vdc
- Filtered, regulated
- Wall mount

**SPECIFICATIONS: DC Output:** -24 Vdc, 6A; **Power Requirements:** 120 Vac/1.7A, 165 W.

**Dimensions:** 10.3" (26.16 cm) H x 5.92" (15.03 cm) W x 2.5" (6.35 cm) D.

**Weight:** 7.1 lbs (3.22 kg).



#### **VP-6124-UPS**                      **BATTERY BACK-UP CHARGER**

**Give your VP-6124-P the advantage of UPS!**

- Cables included for connection to the V-C6124P and VBB-1424 (Battery Box)
- Wall Mount

**Specifications:** Charging Voltage 27.6

**Volts Current:** 900 mA

**Dimensions:** 10.3" H x 3.5" W x 2.25" D (26.16 cm x 8.89 cm x 5.71 cm)

**Shipping Weight:** 4.0 lbs (1.82 kg)



#### **VBB-1424**                      **BATTERY BOX WITH BATTERIES**

**Complete you UPS system with battery support!** (For use with V-C6124P/VP-6124-UPS)

- Provides 14 AH/-24V gel cell storage when used with the VP-6124-UPS power system
- Wall Mount

**Specifications:** 14 AH @ -24 Vdc

**Dimensions:** 5.52" H x 8.03" W x 10.82" L (14.02 cm x 20.4 cm x 27.48 cm)

**Shipping Weight:** 40 lbs (18.2 kg)

#### **VCMDM**                      **MODEM KIT AND CABLES**

**Allows user to program and change system database information from an off-premise location and also allows user to remotely monitor SMDR activity.**

- Modem 33.6k external
- Telephone cable (silver satin with RJ11)
- Interface cable
- Serial interface adapter



## MAIN EQUIPMENT

### Accessories

#### V-DSP *LARGE LED DISPLAY PACKAGE*

This large LED display can be mounted in an office area to display all intercom information. Includes a VCROM Display Driver Card and a VCLED large Display.

- Includes brackets for wall or ceiling mounting
- Green displays normal calls
- Red displays emergency calls



**SPECIFICATIONS:** Character Height: 2". # of Characters Displayed: 27.

**Power:** Utilizes 40 Watt transformer, 115 Vac  $\pm$  10%, UL listed power supply.

**Dimensions:** 4.5" (11.43 cm) H x 28.9" (73.41 cm) L x 2.2" (5.59 cm) D.

**Weight:** 6 lbs. (2.7 kg)

#### VCLED *LARGE LED DISPLAY*

This large LED display can be mounted in an office area to display all intercom information.

- Includes brackets for wall or ceiling mounting
- Green displays normal calls
- Red displays emergency calls



**SPECIFICATIONS:** Character Height: 2". # of Characters Displayed: 27.

**Power:** Utilizes 40 Watt transformer, 115 Vac  $\pm$  10%, UL listed power supply.

**Dimensions:** 4.5" (11.43 cm) H x 28.9" (73.41 cm) L x 2.2" (5.59 cm) D.

**Weight:** 6 lbs. (2.7 kg)

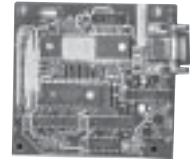
#### VCROM *DISPLAY DRIVER CARD*

- Mounts to the CPU
- Provides a 9 pin RS232 port
- Sends classroom intercom information to the large LED message sign

**SPECIFICATIONS:**

**Dimensions:** 4.0" (10.16 cm) H x 3.6" (9.14 cm) L x 0.6" (1.52 cm) D

**Weight:** 0.18 lbs (0.08 kg)



#### V-PDP *PROGRAM DISTRIBUTION PANEL*

Allows connection of audio source, microphone, and five pushbuttons for various system functions

- Buffers audio signals from radios, cassette players, CD players
- Separate treble, bass and volume controls for 3 audio inputs
- Provides access to the four administration ports
- Provides screw terminals connections to the programmable relays of the CPU
- 25 pair cable provided for connection to CPU
- Speaker included to monitor audio sources
- Front panel XLR connector for microphone input



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#### V-MBS *CAROUSEL SERVER*

The VC-MBS is used to provide visual announcement bulletin board service. The VC-MBS is a server based video device designed to connect to a facility's LAN for administration. The NTSC video output connects to either a single television, or multiple televisions connected to a video distribution system.

The VC-MBS allows users to schedule and display "slides" using an easily administered browser based environment. Slides automatically display, sequence and expire based on user selections. Slide backgrounds are easily added in order to customize the system to the user's needs.

- Provides control and management for the AccessMLS Carousel Visual Bulletin Board System.
- Includes Windows Based Operating System and all required system software.



## SPEAKERS/HORNS

### V-CTL **2' X 2' TALKBACK LAY-IN CEILING SPEAKERS W/BACKBOX**

- Replaces a 2' x 2' tile
- Save time, effort & money -- Get on & off the job quickly
- No cutting, tiles, no broken tiles, no mess
- Excellent music & voice quality
- Volume preset taps
- Durable white acrylic baked enamel finish
- Integral backbox meets or exceeds ASTM E84 flame & smoke test with 3 hour burn rating (UL 181)

**SPECIFICATIONS:** 45 ohm

**Dimensions:** 23.75" (60.32 cm) L x 23.75" (60.32 cm) W x 3.75" (9.52 cm) D.

**Weight:** 5.50 lbs (2.93 kg).



### V-TBAR **Trim T-Bar (packaged in quantities of 10)**

- Optional For 2' x 4' Grids

**SPECIFICATIONS:**

**Dimensions:** 24" L

### V-C806PK **8 INCH TALKBACK CEILING SPEAKER (packaged in quantities of six)**

- Exceptional for voice and music
- Volume preset taps
- White epoxy finish

**SPECIFICATIONS:** 8 inch speaker , 45 ohm.

**Dimensions:** 13.0" (33.0 cm) Dia. x 2.5" (6.35 cm) D.

**Weight:** 3.7 lbs (1.68 kg).



### V-9914M-5 **METAL BRIDGES (packaged in quantities of five)**

### V09915M-5 **METAL BOXBOX (packaged in quantities of five)**

### V-9916M **METAL COMBINATION**

- To be used with the V-C806PK

### V-WTGY **TRADITIONAL TALKBACK WALL SPEAKERS**

- Excellent voice and music quality
- Volume preset taps
- Easy installation

**SPECIFICATIONS:** 8 inch speaker , 45 ohm.

**Dimensions:** 9.6" (24.38 cm) H x 11.5" (29.21cm) H x 4.2" (10.66 cm) D.

**Weight:** 4.5 lbs (2.04 kg).



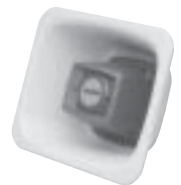
### VC-1090 **TALKBACK FLEXHORN™ THE RUGGED SPEAKER**

- Compact design is perfect solution for schools
- Water-proof
- Beige (BG), Gray (GY), White (W)

**SPECIFICATIONS:**

**Dimensions:** 6.8" (17.3 cm) H x 8.3" (21.1 cm) W x 3.3" (8.4 cm) D..

**Weight:** 2.7 lbs (1.23 kg).



### V-9805 **OPTIONAL VANDAL-RESISTANT ENCLOSURE For Use With The VC-1090**

- Stainless Steel
- Provides a virtually indestructible, recess mounted speaker
- Non-loosening screws

**SPECIFICATIONS:**

**Dimensions:** 7.5" (19.05 cm) H x 9.91" (25.17 cm) W x 3.95" (10.03 cm) D..

**Weight:** 7.5 lbs (3.4 kg).



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