2400E Controller

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NOTICE: THIS MANUAL ONLY COVERS 2400E CONTROLLERS WITH V2.0 OR LATER SOFTWARE INSTALLED.

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2400E Controller

Section 1. INTRODUCTION

Section 2. INSTALLATION

Section 3. OPERATION

Section 4. FUNCTIONAL DESCRIPTION

Section 5. MAINTENANCE

2400E Controller

1.1 Manual Overview

This manual provides detailed instructions for installing and operating the 2400E Controller. This manual is divided into five sections as shown.

Section 1, **INTRODUCTION**, summarizes the manual, describes the product, presents a list of terms, and provides the panel specifications.

Section 2, **INSTALLATION**, provides installation and setup instructions.

Section 3, **OPERATION**, describes system operation procedures.

Section 4, **FUNCTIONAL DESCRIPTIONS**, presents an in-depth description of each component.

Section 5, **MAINTENANCE**, explains procedures for maintenance.

1.2 General Description

The 2400E routing matrix controller is a microprocessor-based unit designed to interface with various configurations of the Pesa Lynx II 24X16 Audio and 24X16 Video routing switchers. The 2400E is a PCB style plug-in unit that installs on the 24X16 matrix video card and can also be installed on the 24X16 matrix audio card with an optional connector kit. The 2400E can operate with a wide range of PESA control panels.

The 2400E Controller utilizes the Motorola 68332 embedded processor. In addition, the system is equipped with 128K of both RAM and EPROM making the 2400E a high-powered control platform for its size.

The 2400E can interface with up to 63 panels at any one time with multiple panel configurations to choose from. These panel configurations are determined by the address of the panel. The determination as to which panels are configured comes on a first come, first served basis. Once you put a panel on-line, that panel remains active in the configuration (and occupying one of the 63 panel positions) as long as the controller and panel are active. Failure of the panel to positively acknowledge consecutive communications messages for an extended period causes removal of the panel from the configuration.

The controller features include a periodic update function that reads all configured outputs for status, and both a lock and protect mechanism. The lock prevents any user from taking a switch to an output. Protect prevents anyone but the owner from taking a switch to an output. Locks and Protects are owned by individual panels and are only cleared by the owner or through the CPU link.

Router configuration is maintained over power cycling of the controller. The router is restored to its saved status at the time of shutdown. The system maintains all panel locks and protects over the reset (except when a reload of configuration is requested).

This system is based on numeric configuration only. There are no name assignments to any sources or destinations. All destinations and follow switches are grouped on an input/output numeric basis. Destination #1 corresponds to output 1 on all levels of control where output #1 is defined. Source #3 corresponds to input #3 on all levels on which it is defined.

1.2 General Description Continued:

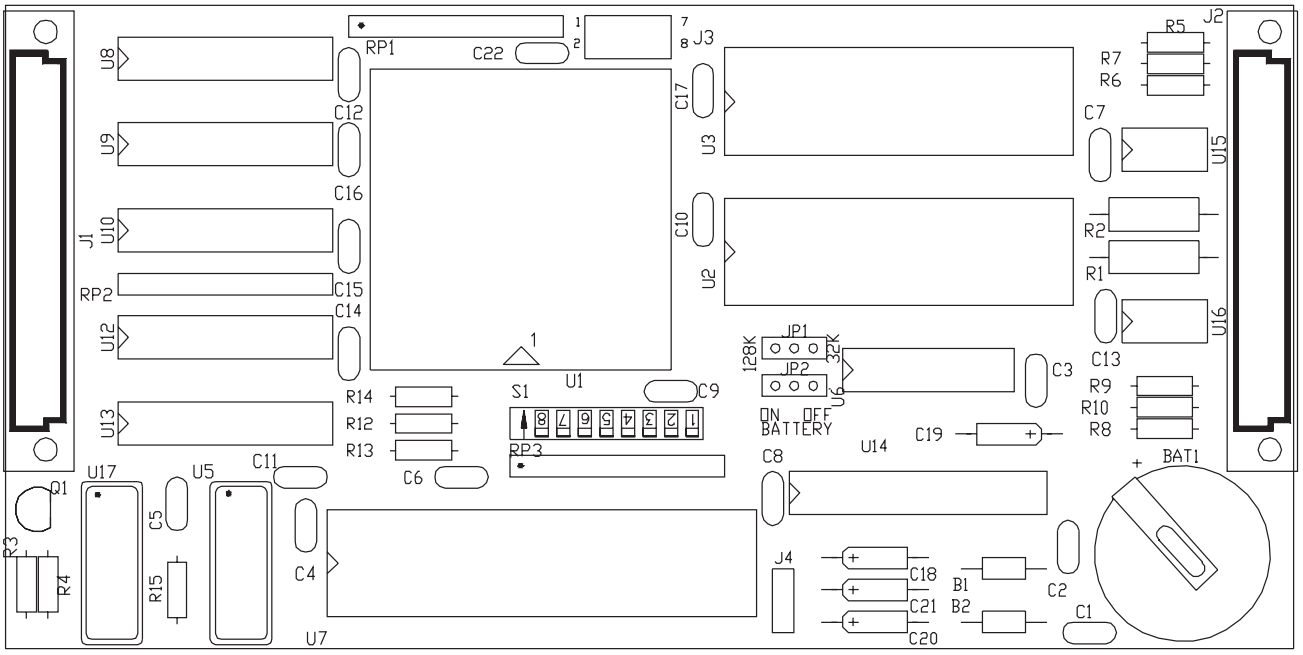

Figure 1–1 2400E Controller

2.1 Introduction

Receipt Inspection

The 2400E Controller was inspected and tested prior to leaving PESA's Factory. Upon receipt, inspect the unit for shipping damage. If damage is detected, notify the carrier immediately and hold all packing material for inspection. After unpacking, compare all parts received against the packing document. If the unit is undamaged, proceed with installation of the 2400E Controller.

2.2 Installation

To install the 2400E Controller, follow these steps and refer to Figure 2-1:

1. Ensure that Jumper **JP1** is set for 128K EPROMs.

2. Ensure that Jumper **JP2** is set for the Controller battery to be active.

3. Set the DIP switch to the correct setting for the matrix frame configuration you are using. Insure that all matrix frames are configured for addressing and strobes according to the frame configuration you have selected. The DIP switch positions are defined in Section 2.3. Refer to Section 2.4 for configuration information. Extensive system customizing is not allowed.

4. Plug the 2400E Controller into the host matrix card using the appropriate connectors:

   J6 and J7 for the 24X16 Video
   J5 and J6 for the 24X16 Audio.

5. Power up the system. (Refer to matrix manuals for power up procedures.)

2.3 DIP Switch - S1

Dip Switch, S1, allows you to configure the controller for the configuration of routing frames in your system.

DIP Switch Position 8 - Reload

In the event that you would like to force a clean configuration to be loaded into memory, toggling the reload switch causes all battery backed status to be cleared and the configuration to be reloaded. This deletes all system locks and protects. Upon re-boot, the controller reads the routing matrices to set up controller status tables.

Example:
Dip Switch Position 8 = 1, Remove Power
Set Position 8 to 0, Apply Power
Configuration is Reloaded

DIP Switch Positions 1-7 - Component/Level Configuration

Setting switches 1-7 determines what routing switch frames the controller will interface. (Refer to Section 2.4 to set DIP switches and matrices addressing.)

NOTE: Though the system is configured for use of Video and Audio frames, any RM5000 bus matrix frame may be connected to the 2400E for control. Frame types are not verified during operation.

Example	Acceptable DIP Switch Settings
Composite 24X16 Video Only (Configuration 16)	0010000

2.3 DIP Switch - S1 Continued:

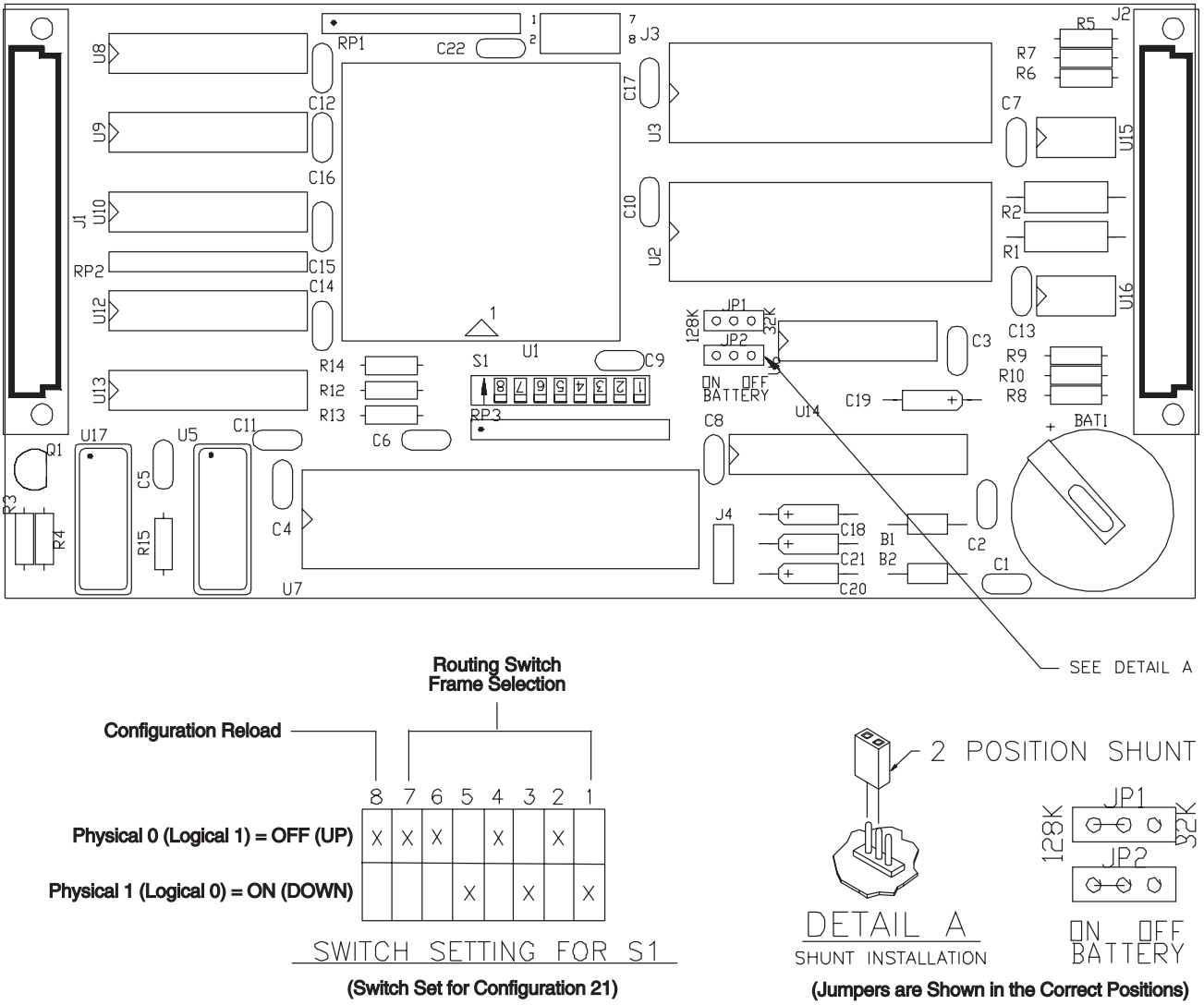

Figure 2–1 Dip Switch and Jumper Location

2.4 2400E Configuration

The following table illustrates the 2400E Controller's configuration matrixes. These configuration matrixes are discussed in detail in this section. Please refer to the following table during configuration to determine which configuration number you should use.

VIDEO / AUDIO	NO VIDEO	24X16 COMP	12X8 Y/C	24X16 Y/C	24X16 DUAL COMP	8X5 RGB	12X8 RGB	24X16 RGB	6X4 RGBS	12X8 RGBS	24X16 RGBS	24X32 COMP
NO AUDIO		16	26	39	49	59	65	73	83	89	97	112
24X16 MONO	1	17	27	40	50			74			98	113
24X32 MONO	2										99	114
12X8 DUAL MONO	3	18	28	41	51	60	66	75	84	90	100	
24X16 DUAL MONO	4	19	29	42	52			76			101	115
24X32 DUAL MONO	5										102	116
6X4 DUAL STEREO							67			91		
12X8 DUAL STEREO							68			92		
8X5 STEREO MONO	6		30			61	69		85	93		
16X16 STEREO MONO		20	31	43	53			77			103	
24X16 STEREO MONO	7	21	32	44	54			78			104	
24X32 STEREO MONO	8										105	
8X5 TRIPLE MONO	9		33			62	70		86	94		
16X16 TRIPLE MONO		22	34	45	55			79			106	
24X16 TRIPLE MONO	10	23	35	46	56			80			107	117
24X32 TRIPLE MONO	11										108	118
6X4 QUAD MONO	12		36			63	71		87	95		
12X8 QUAD MONO	13	24	37	47	57	64	72	81	88	96	109	
24X16 QUAD MONO	14	25	38	48	58			82			110	119
24X32 QUAD MONO	15										111	120

2.4 2400E Configuration Continued:

NOTE: A **Component** is a physical matrix block containing the same type of signal that is defined by the number of inputs and outputs. A **Level** is the lowest usable unit and consists of a collection of components.
Example: RGB video consists of 3 components assigned to R, G, and B respectively. Together, the 3 components make up 1 level.

Configuration 0

Controller Diagnostics

Configuration 1 - Audio 24X16 Mono - No Video

Level 1 is 24x16 and has Components: 1
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-16

Configuration 2 - Audio 24X32 Mono - No Video

Level 1 is 24x32 and has Components: 1
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-32

Configuration 3 - Audio 12X8 Dual Mono - No Video

Level 1 is 12x8 and has Components: 1
Level 2 is 12x8 and has Components: 2
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-AUDIO Component 2 has Inputs 13-24, Outputs 9-16

Configuration 4 - Audio 24X16 Dual Mono - No Video

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16

Configuration 5 - Audio 24X32 Dual Mono - No Video

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32

2.4 2400E Configuration Continued:

Configuration 6 - Audio 8X5 Stereo Mono - No Video

Level 1 is 8x5 and has Components: 1, 2
Level 2 is 8x5 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 3 = RM5-AUDIO Component 3 has Inputs 17-24, Outputs 11-15

Configuration 7 - Audio 24X16 Stereo Mono - No Video

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

Configuration 8 - Audio 24X32 Stereo Mono - No Video

Level 1 is 24x32 and has Components: 1, 2
Level 2 is 24x32 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32

Configuration 9 - Audio 8X5 Triple Mono - No Video

Level 1 is 8x5 and has Components: 1
Level 2 is 8x5 and has Components: 2
Level 3 is 8x5 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-AUDIO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-AUDIO Component 3 has Inputs 17-24, Outputs 11-15

Configuration 10 - Audio 24X16 Triple Mono - No Video

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 11 - Audio 24X32 Triple Mono - No Video

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Level 3 is 24x32 and has Components: 3
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32

Configuration 12 - Audio 6X4 Quad Mono - No Video

Level 1 is 6x4 and has Components: 1
Level 2 is 6x4 and has Components: 2
Level 3 is 6x4 and has Components: 3
Level 4 is 6x4 and has Components: 4
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-AUDIO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-AUDIO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-AUDIO Component 4 has Inputs 19-24, Outputs 13-16

Configuration 13 - Audio 12X8 Quad Mono - No Video

Level 1 is 12x8 and has Components: 1
Level 2 is 12x8 and has Components: 2
Level 3 is 12x8 and has Components: 3
Level 4 is 12x8 and has Components: 4
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-AUDIO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-AUDIO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-AUDIO Component 4 has Inputs 37-48, Outputs 25-32

Configuration 14 - Audio 24X16 Quad Mono - No Video

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 15 - Audio 24X32 Quad Mono - No Video

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Level 3 is 24x32 and has Components: 3
Level 4 is 24x32 and has Components: 4
Strobe 1 = RM5-AUDIO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-32

Configuration 16 - Video 24X16 Comp - No Audio

Level 1 is 24x16 and has Components: 1
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16

Configuration 17 - Video 24X16 Comp, Audio 24x16 Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16

Configuration 18 - Video 24X16 Comp, Audio 12X8 Dual Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 12x8 and has Components: 2
Level 3 is 12x8 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 3 has Inputs 13-24, Outputs 9-16

Configuration 19 - Video 24X16 Comp, Audio 24X16 Dual Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 20 - Video 24x16 Comp, Audio 16X16 Stereo Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 16x16 and has Components: 2, 3
Level 3 is 16x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 4 has Inputs 33-48, Outputs 33-48

Configuration 21 - Video 24X16 Comp, Audio 24X16 Stereo Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2, 3
Level 3 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

Configuration 22 - Video 24X16 Comp, Audio 16X16 Triple Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 16x16 and has Components: 2
Level 3 is 16x16 and has Components: 3
Level 4 is 16x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 4 has Inputs 33-48, Outputs 33-48

Configuration 23 - Video 24X16 Comp, Audio 24X16 Triple Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 24 - Video 24X16 Comp, Audio 12X8 Quad Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 12x8 and has Components: 2
Level 3 is 12x8 and has Components: 3
Level 4 is 12x8 and has Components: 4
Level 5 is 12x8 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 3 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 4 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 5 has Inputs 37-48, Outputs 25-32

Configuration 25 - Video 24X16 Comp, Audio 24X16 Quad Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Level 5 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 26 - Video 12X8 Y/C - No Audio

Level 1 is 12x8 and has Components: 1, 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16

Configuration 27 - Video 12X8 Y/C, Audio 24X16 Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 28 - Video 12X8 Y/C, Audio 12X8 Dual Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 12x8 and has Components: 3
Level 3 is 12x8 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16

Configuration 29 - Video 12X8 Y/C, Audio 24X16 Dual Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

Configuration 30 - Video 12X8 Y/C, Audio 8X5 Stereo Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 8x5 and has Components: 3, 4
Level 3 is 8x5 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 4 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 5 has Inputs 17-24, Outputs 11-15

Configuration 31 - Video 12X8 Y/C, Audio 16X16 Stereo Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 16x16 and has Components: 3, 4
Level 3 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 33-48, Outputs 33-48

2.4 2400E Configuration Continued:

Configuration 32 - Video 12X8 Y/C, Audio 24X16 Stereo Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3, 4
Level 3 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 33 - Video 12X8 Y/C, Audio 8X5 Triple Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 8x5 and has Components: 3
Level 3 is 8x5 and has Components: 4
Level 4 is 8x5 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 4 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 5 has Inputs 17-24, Outputs 11-15

Configuration 34 - Video 12X8 Y/C, Audio 16X16 Triple Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 16x16 and has Components: 3
Level 3 is 16x16 and has Components: 4
Level 4 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 33-48, Outputs 33-48

2.4 2400E Configuration Continued:

Configuration 35 - Video 12X8 Y/C, Audio 24X16 Triple Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Level 4 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 36 - Video 12X8 Y/C, Audio 6X4 Quad Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 6x4 and has Components: 3
Level 3 is 6x4 and has Components: 4
Level 4 is 6x4 and has Components: 5
Level 5 is 6x4 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 4 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 6 has Inputs 19-24, Outputs 13-16

Configuration 37 - Video 12X8 Y/C, Audio 12X8 Quad Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 12x8 and has Components: 3
Level 3 is 12x8 and has Components: 4
Level 4 is 12x8 and has Components: 5
Level 5 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 6 has Inputs 37-48, Outputs 25-32

2.4 2400E Configuration Continued:

Configuration 38 - Video 12X8 Y/C, Audio 24X16 Quad Mono

Level 1 is 12x8 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Level 4 is 24x16 and has Components: 5
Level 5 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16

Configuration 39 - Video 24X16 Y/C - No Audio

Level 1 is 24x16 and has Components: 1, 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16

Configuration 40 - Video 24X16 Y/C, Audio 23X16 Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

Configuration 41 - Video 24X16 Y/C, Audio 12X8 Dual Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 12x8 and has Components: 3
Level 3 is 12x8 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 3 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16

2.4 2400E Configuration Continued:

Configuration 42 - Video 24X16 Y/C, Audio 24X16 Dual Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

Configuration 43 - Video 24X16 Y/C, Audio 16X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 16x16 and has Components: 3, 4
Level 3 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 3 = RM5-AUDIO Component 5 has Inputs 32-48, Outputs 33-48

Configuration 44 - Video 24X16 Y/C, Audio 24X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3, 4
Level 3 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 45 - Video 24X16 Y/C, Audio 16X16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 16x16 and has Components: 3
Level 3 is 16x16 and has Components: 4
Level 4 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 3 = RM5-AUDIO Component 5 has Inputs 33- 48, Outputs 33-48

2.4 Configuration Continued:

Configuration 46 - Video 24X16 Y/C, Audio 24x16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Level 4 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 47 - Video 24X16 Y/C, Audio 12X8 Quad Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 12x8 and has Components: 3
Level 3 is 12x8 and has Components: 4
Level 4 is 12x8 and has Components: 5
Level 5 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 3 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 25-36, Outputs 17-24
Strobe 3 = RM5-AUDIO Component 6 has Inputs 37-48, Outputs 25-32

Configuration 48 - Video 24X16 Y/C, Audio 24X16 Quad Mono

Level 1 is 24x16 and has Components: 1, 2
Level 2 is 24x16 and has Components: 3
Level 3 is 24x16 and has Components: 4
Level 4 is 24x16 and has Components: 5
Level 5 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-AUDIO Component 6 has Inputs 25-48, Outputs 17-32
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

2.4 Configuration Continued:

Configuration 49 - Video 24X16 Dual Comp - No Audio

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16

Configuration 50 - Video 24X16 Dual Comp, Audio 24x16 Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

Configuration 51 - Video 24X16 Dual Comp, Audio 12x8 Dual Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 12x8 and has Components: 3
Level 4 is 12x8 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 3 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16

Configuration 52 - Video 24X16 Dual Comp, Audio 24x16 Dual Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 53 - Video 24X16 Dual Comp, Audio 16X16 Stereo Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 16x16 and has Components: 3, 4
Level 4 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 3 = RM5-AUDIO Component 5 has Inputs 33-48, Outputs 33-48

Configuration 54 - Video 24X16 Dual Comp, Audio 24X16 Stereo Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3, 4
Level 4 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 55 - Video 24X16 Dual Comp, Audio 16X16 Triple Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 16x16 and has Components: 3
Level 4 is 16x16 and has Components: 4
Level 5 is 16x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-16, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 4 has Inputs 17-32, Outputs 17-32
Strobe 3 = RM5-AUDIO Component 5 has Inputs 33-48, Outputs 33-48

2.4 2400E Configuration Continued:

Configuration 56 - Video 24X16 Dual Comp, Audio 24X16 Triple Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Level 5 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 57 - Video 24X16 Dual Comp, Audio 12X8 Quad Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 12x8 and has Components: 3
Level 4 is 12x8 and has Components: 4
Level 5 is 12x8 and has Components: 5
Level 6 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-12, Outputs 1-8
Strobe 3 = RM5-AUDIO Component 4 has Inputs 13-24, Outputs 9-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 25-36, Outputs 17-24
Strobe 3 = RM5-AUDIO Component 6 has Inputs 37-48, Outputs 25-32

Configuration 58 - Video 24X16 Dual Comp, Audio 24X16 Quad Mono

Level 1 is 24x16 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Level 5 is 24x16 and has Components: 5
Level 6 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-AUDIO Component 6 has Inputs 25-48, Outputs 17, 32
Strobe 2 = RM5-VIDEO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 59 - Video 8X5 RGB - No Video

Level 1 is 8x5 and has Components: 1, 2, 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15

Configuration 60 - Video 8X5 RGB, Audio 12X8 Dual Mono

Level 1 is 8x5 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16

Configuration 61 - Video 8X5 RGB, Audio 8X5 Stereo Mono

Level 1 is 8x5 and has Components: 1, 2, 3
Level 2 is 8x5 and has Components: 4, 5
Level 3 is 8x5 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 5 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-24, Outputs 11-15

Configuration 62 - Video 8X5 RGB, Audio 8X5 Triple Mono

Level 1 is 8x5 and has Components: 1, 2, 3
Level 2 is 8x5 and has Components: 4
Level 3 is 8x5 and has Components: 5
Level 4 is 8x5 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 5 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-24, Outputs 11-15

2.4 2400E Configuration Continued:

Configuration 63 - Video 8X5 RGB, Audio 6X4 Quad Mono

Level 1 is 8x5 and has Components: 1, 2, 3
Level 2 is 6x4 and has Components: 4
Level 3 is 6x4 and has Components: 5
Level 4 is 6x4 and has Components: 6
Level 5 is 6x4 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 5 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 7 has Inputs 19-24, Outputs 13-16

Configuration 64 - Video 8X5 RGB, Audio 12X8 Quad Mono

Level 1 is 8x5 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Level 4 is 12x8 and has Components: 6
Level 5 is 12x8 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-8, Outputs 1-5
Strobe 1 = RM5-VIDEO Component 2 has Inputs 9-16, Outputs 6-10
Strobe 1 = RM5-VIDEO Component 3 has Inputs 17-24, Outputs 11-15
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 7 has Inputs 37-48, Outputs 25-32

Configuration 65 - Video 12X8 RGB - No Audio

Level 1 is 12x8 and has Components: 1, 2, 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24

2.4 2400E Configuration Continued:

Configuration 66 - Video 12X8 RGB, Audio 12X8 Dual Mono

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16

Configuration 67 - Video 12X8 RGB, Audio 6X4 Dual Stereo

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 6x4 and has Components: 4, 5
Level 3 is 6x4 and has Components: 6, 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 5 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 7 has Inputs 19-24, Outputs 13-16

Configuration 68 - Video 12X8 RGB, Audio 12X8 Dual Stereo

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4, 5
Level 3 is 12x8 and has Components: 6, 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 7 has Inputs 37-48, Outputs 25-32

2.4 2400E Configuration Continued:

Configuration 69 - Video 12X8 RGB, Audio 8X5 Stereo Mono

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 8x5 and has Components: 4, 5
Level 3 is 8x5 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 5 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-24, Outputs 11-15

Configuration 70 - Video 12X8 RGB, Audio 8X5 Triple Mono

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 8x5 and has Components: 4
Level 3 is 8x5 and has Components: 5
Level 4 is 8x5 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 5 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-24, Outputs 11-15

Configuration 71 - Video 12X8 RGB, Audio 6X4 Quad Mono

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 6x4 and has Components: 4
Level 3 is 6x4 and has Components: 5
Level 4 is 6x4 and has Components: 6
Level 5 is 6x4 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 5 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 7 has Inputs 19-24, Outputs 13-16

2.4 2400E Configuration Continued:

Configuration 72 - Video 12X8 RGB, Audio 12X8 Quad Mono

Level 1 is 12x8 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Level 4 is 12x8 and has Components: 6
Level 5 is 12x8 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 7 has Inputs 37-48, Outputs 25-32

Configuration 73 - Video 24X16 RGB - No Audio

Level 1 is 24x16 and has Components: 1, 2, 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48

Configuration 74 - Video 24X16 RGB, Audio 24X16 Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

Configuration 75 - Video 24X16 RGB, Audio 12X8 Dual Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-VIDEO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-VIDEO Component 5 has Inputs 13-24, Outputs 9-16

2.4 2400E Configuration Continued:

Configuration 76 - Video 24X16 RGB, Audio 24X16 Dual Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 24x16 and has Components: 4
Level 3 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 77 - Video 24X16 RGB, Audio 16X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 16x16 and has Components: 4, 5
Level 3 is 16x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 6 has Inputs 33-48, Outputs 33-48

Configuration 78 - Video 24X16 RGB, Audio 24X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 24x16 and has Components: 4, 5
Level 3 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 79 - Video 24X16 RGB, Audio 16X16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 16x16 and has Components: 4
Level 3 is 16x16 and has Components: 5
Level 4 is 16x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-VIDEO Component 4 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-VIDEO Component 5 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-VIDEO Component 6 has Inputs 33-48, Outputs 33-48

Configuration 80 - Video 24X16 RGB, Audio 24X16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 24x16 and has Components: 4
Level 3 is 24x16 and has Components: 5
Level 4 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16

Configuration 81 - Video 24X16 RGB, Audio 12X8 Quad Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 12x8 and has Components: 4
Level 3 is 12x8 and has Components: 5
Level 4 is 12x8 and has Components: 6
Level 5 is 12x8 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 5 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 7 has Inputs 37-48, Outputs 25-32

2.4 2400E Configuration Continued:

Configuration 82 - Video 24X16 RGB, Audio 24X16 Quad Mono

Level 1 is 24x16 and has Components: 1, 2, 3
Level 2 is 24x16 and has Components: 4
Level 3 is 24x16 and has Components: 5
Level 4 is 24x16 and has Components: 6
Level 5 is 24x16 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 2 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-16

Configuration 83 - Video 6X4 RGBS - No Audio

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16

Configuration 84 - Video 6X4 RGBS, Audio 12X8 Dual Mono

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16

2.4 2400E Configuration Continued:

Configuration 85 - Video 6X4 RGBS, Audio 8X5 Stereo Mono

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Level 2 is 8x5 and has Components: 5, 6
Level 3 is 8x5 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 6 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 7 has Inputs 17-24, Outputs 11-15

Configuration 86 - Video 6X4 RGBS, Audio 8X5 Triple Mono

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Level 2 is 8x5 and has Components: 5
Level 3 is 8x5 and has Components: 6
Level 4 is 8x5 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 6 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 7 has Inputs 17-24, Outputs 11-15

Configuration 87 - Video 6X4 RGBS, Audio 6X4 Quad Mono

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Level 2 is 6x4 and has Components: 5
Level 3 is 6x4 and has Components: 6
Level 4 is 6x4 and has Components: 7
Level 5 is 6x4 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 6 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 7 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 8 has Inputs 19-24, Outputs 13-16

2.4 2400E Configuration Continued:

Configuration 88 - Video 6X4 RGBS, Audio 12X8 Quad Mono

Level 1 is 6x4 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Level 4 is 12x8 and has Components: 7
Level 5 is 12x8 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-6, Outputs 1-4
Strobe 1 = RM5-VIDEO Component 2 has Inputs 7-12, Outputs 5-8
Strobe 1 = RM5-VIDEO Component 3 has Inputs 13-18, Outputs 9-12
Strobe 1 = RM5-VIDEO Component 4 has Inputs 19-24, Outputs 13-16
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 7 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 8 has Inputs 37-48, Outputs 25-32

Configuration 89 - Video 12X8 RGBS - No Audio

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32

Configuration 90 - Video 12X8 RGBS, Audio 12X8 Dual Mono

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16

2.4 2400E Configuration Continued:

Configuration 91 - Video 12X8 RGBS, Audio 6X4 Dual Stereo

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 6x4 and has Components: 5, 6
Level 3 is 6x4 and has Components: 7, 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 6 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 7 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 8 has Inputs 19-24, Outputs 13-16

Configuration 92 - Video 12X8 RGBS, Audio 12X8 Dual Stereo

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5, 6
Level 3 is 12x8 and has Components: 7, 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 7 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 8 has Inputs 37-48, Outputs 25-32

Configuration 93 - Video 12X8 RGBS, Audio 8X5 Stereo Mono

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 8x5 and has Components: 5, 6
Level 3 is 8x5 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 6 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 7 has Inputs 17-24, Outputs 11-15

2.4 2400E Configuration Continued:

Configuration 94 - Video 12X8 RGBS, Audio 8X5 Triple Mono

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 8x5 and has Components: 5
Level 3 is 8x5 and has Components: 6
Level 4 is 8x5 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-8, Outputs 1-5
Strobe 2 = RM5-AUDIO Component 6 has Inputs 9-16, Outputs 6-10
Strobe 2 = RM5-AUDIO Component 7 has Inputs 17-24, Outputs 11-15

Configuration 95 - Video 12X8 RGBS, Audio 6X4 Quad Mono

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 6x4 and has Components: 5
Level 3 is 6x4 and has Components: 6
Level 4 is 6x4 and has Components: 7
Level 5 is 6x4 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-6, Outputs 1-4
Strobe 2 = RM5-AUDIO Component 6 has Inputs 7-12, Outputs 5-8
Strobe 2 = RM5-AUDIO Component 7 has Inputs 13-18, Outputs 9-12
Strobe 2 = RM5-AUDIO Component 8 has Inputs 19-24, Outputs 13-16

Configuration 96 - Video 12X8 RGBS, Audio 12X8 Quad Mono

Level 1 is 12x8 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Level 4 is 12x8 and has Components: 7
Level 5 is 12x8 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-12, Outputs 1-8
Strobe 1 = RM5-VIDEO Component 2 has Inputs 13-24, Outputs 9-16
Strobe 1 = RM5-VIDEO Component 3 has Inputs 25-36, Outputs 17-24
Strobe 1 = RM5-VIDEO Component 4 has Inputs 37-48, Outputs 25-32
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 7 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 8 has Inputs 37-48, Outputs 25-32

2.4 2400E Configuration Continued:

Configuration 97 - Video 24X16 RGBS - No Audio

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64

Configuration 98 - Video 24X16 RGBS, Audio 24X16 Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 99 - Video 24X16 RGBS, Audio 24X32 Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x32 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32

Configuration 100 - Video 24X16 RGBS, Audio 12X8 Dual Stereo

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16

2.4 2400E Configuration Continued:

Configuration 101 - Video 24X16 RGBS, Audio 24X16 Dual Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x16 and has Components: 5
Level 3 is 24x16 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16

Configuration 102 - Video 24X16 RGBS, Audio 24X32 Dual Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x32 and has Components: 5
Level 3 is 24x32 and has Components: 6
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-32

Configuration 103 - Video 24X16 RGBS, Audio 16X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 16x16 and has Components: 5, 6
Level 3 is 16x16 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 7 has Inputs 33-48, Outputs 33-48

2.4 2400E Configuration Continued:

Configuration 104 - Video 24X16 RGBS, Audio 24X16 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x16 and has Components: 5, 6
Level 3 is 24x16 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 7 has inputs 1-24, Outputs 1-16

Configuration 105 - Video 24X16 RGBS, Audio 24X32 Stereo Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x32 and has Components: 5, 6
Level 3 is 24x32 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-32

Configuration 106 - Video 24X16 RGBS, Audio 16X16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 16x16 and has Components: 5
Level 3 is 16x16 and has Components: 6
Level 4 is 16x16 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-16, Outputs 1-16
Strobe 2 = RM5-AUDIO Component 6 has Inputs 17-32, Outputs 17-32
Strobe 2 = RM5-AUDIO Component 7 has Inputs 33-48, Outputs 33-48

2.4 2400E Configuration Continued:

Configuration 107 - Video 24X16 RGBS, Audio 24X16 Triple Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x16 and has Components: 5
Level 3 is 24x16 and has Components: 6
Level 4 is 24x16 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-16

Configuration 108 - Video 24X16 RGBS, Audio 24X32 Triple Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x32 and has Components: 5
Level 3 is 24x32 and has Components: 6
Level 4 is 24x32 and has Components: 7
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-32

Configuration 109 - Video 24X16 RGBS, Audio 12X8 Quad Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 12x8 and has Components: 5
Level 3 is 12x8 and has Components: 6
Level 4 is 12x8 and has Components: 7
Level 5 is 12x8 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-12, Outputs 1-8
Strobe 2 = RM5-AUDIO Component 6 has Inputs 13-24, Outputs 9-16
Strobe 2 = RM5-AUDIO Component 7 has Inputs 25-36, Outputs 17-24
Strobe 2 = RM5-AUDIO Component 8 has Inputs 37-48, Outputs 25-32

2.4 2400E Configuration Continued:

Configuration 110 - Video 24X16 RGBS, Audio 24X16 Quad Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x16 and has Components: 5
Level 3 is 24x16 and has Components: 6
Level 4 is 24x16 and has Components: 7
Level 5 is 24x16 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 8 has Inputs 1-24, Outputs 1-16

Configuration 111 - Video 24X16 RGBS, Audio 24X32 Quad Mono

Level 1 is 24x16 and has Components: 1, 2, 3, 4
Level 2 is 24x32 and has Components: 5
Level 3 is 24x32 and has Components: 6
Level 4 is 24x32 and has Components: 7
Level 5 is 24x32 and has Components: 8
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-16
Strobe 1 = RM5-VIDEO Component 2 has Inputs 25-48, Outputs 17-32
Strobe 1 = RM5-VIDEO Component 3 has Inputs 49-72, Outputs 33-48
Strobe 1 = RM5-VIDEO Component 4 has Inputs 73-96, Outputs 49-64
Strobe 2 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 6 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 7 has Inputs 1-24, Outputs 1-32
Strobe 5 = RM5-AUDIO Component 8 has Inputs 1-24, Outputs 1-32

Configuration 112 - Video 24X32 Comp - No Audio

Level 1 is 24x32 and has Components: 1
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32

Configuration 113 - Video 24X32 Comp, Audio 24X16 Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x16 and has Components: 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 114 - Video 24X32 Comp, Audio 24X32 Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32

Configuration 115 - Video 24X32 Comp, Audio 24X16 Dual Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16

Configuration 116 - Video 24X32 Comp, Audio 24X32 Dual Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Level 3 is 24x32 and has Components: 3
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32

Configuration 117 - Video 24X32 Comp, Audio 24X16 Triple Mono

Level I is 24x32 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16

2.4 2400E Configuration Continued:

Configuration 118 - Video 24X32 Comp, Audio 24X32 Triple Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Level 3 is 24x32 and has Components: 3
Level 4 is 24x32 and has Components: 4
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-32

Configuration 119 - Video 24X32 Comp, Audio 24X16 Quad Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x16 and has Components: 2
Level 3 is 24x16 and has Components: 3
Level 4 is 24x16 and has Components: 4
Level 5 is 24x16 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-16
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-16
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-16
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-16

Configuration 120 - Video 24X32 Comp, Audio 24X32 Quad Mono

Level 1 is 24x32 and has Components: 1
Level 2 is 24x32 and has Components: 2
Level 3 is 24x32 and has Components: 3
Level 4 is 24x32 and has Components: 4
Level 5 is 24x32 and has Components: 5
Strobe 1 = RM5-VIDEO Component 1 has Inputs 1-24, Outputs 1-32
Strobe 2 = RM5-AUDIO Component 2 has Inputs 1-24, Outputs 1-32
Strobe 3 = RM5-AUDIO Component 3 has Inputs 1-24, Outputs 1-32
Strobe 4 = RM5-AUDIO Component 4 has Inputs 1-24, Outputs 1-32
Strobe 5 = RM5-AUDIO Component 5 has Inputs 1-24, Outputs 1-32

2.5 Control Panel Configuration

The 2400E has a number of preconfigured panel options. The panel options selected are determined by the panel's assigned address.

Panels are connected to the 2400E Controller through a differentially driven, multidrop RS-485 data link. The 2400E provides two of these links to connect panels. These links are connected in a loop mechanism with a 120 Ohm connector terminating the RS-485 pair at the end of the loop. (The RS-485 connections are already preterminated on the 2400E.)

Control Panels must be set up to interface with the 2400E configurations as follows:

NOTE: Choose only the options defined for your system.

2.5 Control Panel Configuration Continued:

RCP-241 - Panel Configuration

Controls a single output, connecting up to 24 sources. The pushbutton panel has single level breakaway capability along with lock/protect features.

Address		Address	
1	Output 1, Inputs 1-24	2	Output 1, Inputs 1-24
3	Output 2, Inputs 1-24	4	Output 2, Inputs 1-24
5	Output 3, Inputs 1-24	6	Output 3, Inputs 1-24
7	Output 4, Inputs 1-24	8	Output 4, Inputs 1-24
9	Output 5, Inputs 1-24	10	Output 5, Inputs 1-24
11	Output 6, Inputs 1-24	12	Output 6, Inputs 1-24
13	Output 7, Inputs 1-24	14	Output 7, Inputs 1-24
15	Output 8, Inputs 1-24	16	Output 8, Inputs 1-24
17	Output 9, Inputs 1-24	18	Output 9, Inputs 1-24
19	Output 10, Inputs 1-24	20	Output 10, Inputs 1-24
21	Output 11, Inputs 1-24	22	Output 11, Inputs 1-24
23	Output 12, Inputs 1-24	24	Output 12, Inputs 1-24
25	Output 13, Inputs 1-24	26	Output 13, Inputs 1-24
27	Output 14, Inputs 1-24	28	Output 14, Inputs 1-24
29	Output 15, Inputs 1-24	30	Output 15, Inputs 1-24
31	Output 16, Inputs 1-24	32	Output 16, Inputs 1-24
33	Output 17, Inputs 1-24	34	Output 17, Inputs 1-24
35	Output 18, Inputs 1-24	36	Output 18, Inputs 1-24
37	Output 19, Inputs 1-24	38	Output 19, Inputs 1-24
39	Output 20, Inputs 1-24	40	Output 20, Inputs 1-24
41	Output 21, Inputs 1-24	42	Output 21, Inputs 1-24
43	Output 22, Inputs 1-24	44	Output 22, Inputs 1-24
45	Output 23, Inputs 1-24	46	Output 23, Inputs 1-24
47	Output 24, Inputs 1-24	48	Output 24, Inputs 1-24
49	Output 25, Inputs 1-24	50	Output 25, Inputs 1-24
51	Output 26, Inputs 1-24	52	Output 26, Inputs 1-24
53	Output 27, Inputs 1-24	54	Output 27, Inputs 1-24
55	Output 28, Inputs 1-24	56	Output 28, Inputs 1-24
57	Output 29, Inputs 1-24	58	Output 29, Inputs 1-24
59	Output 30, Inputs 1-24	60	Output 30, Inputs 1-24
61	Output 31, Inputs 1-24	62	Output 31, Inputs 1-24
63	Output 32, Inputs 1-24	64	Output 32, Inputs 1-24

2.5 Control Panel Configuration Continued:

RCP-248 - Panel Configuration

Controls eight outputs, connecting up to 24 sources. The pushbutton panel has single level breakaway capability along with lock/protect features.

Address		Address	
65	Outputs 1-8, Inputs 1-24	66	Outputs 1-8, Inputs 1-24
67	Outputs 1-8, Inputs 1-24	68	Outputs 1-8, Inputs 1-24
69	Outputs 9-16, Inputs 1-24	70	Outputs 9-16, Inputs 1-24
71	Outputs 9-16, Inputs 1-24	72	Outputs 9-16, Inputs 1-24
73	Outputs 17-24, Inputs 1-24	74	Outputs 17-24, Inputs 1-24
75	Outputs 17-24, Inputs 1-24	76	Outputs 17-24, Inputs 1-24
77	Outputs 25-32, Inputs 1-24	78	Outputs 25-32, Inputs 1-24
79	Outputs 25-32, Inputs 1-24	80	Outputs 25-32, Inputs 1-24

RCP-2416 - Panel Configuration

Controls 16 outputs, connecting up to 24 sources. The pushbutton panel has single level breakaway capability along with lock/protect features.

Address		Address	
81	Outputs 1-16, Inputs 1-24	82	Outputs 1-16, Inputs 1-24
83	Outputs 1-16, Inputs 1-24	84	Outputs 1-16, Inputs 1-24
85	Outputs 1-16, Inputs 1-24	86	Outputs 1-16, Inputs 1-24
87	Outputs 1-16, Inputs 1-24	88	Outputs 1-16, Inputs 1-24
89	Outputs 1-16, Inputs 1-24	90	Outputs 1-16, Inputs 1-24
91	Outputs 17-32, Inputs 1-24	92	Outputs 17-32, Inputs 1-24
93	Outputs 17-32, Inputs 1-24	94	Outputs 17-32, Inputs 1-24

2.5 Control Panel Configuration Continued:

RCP-TP - Panel Configuration

Allows the user to control any output in the system. The touchpad panel has single level breakaway capability along with lock/protect and chop features.

Address		Address	
95	Outputs 1-32, Inputs 1-24	96	Outputs 1-32, Inputs 1-24
97	Outputs 1-32, Inputs 1-24	98	Outputs 1-32, Inputs 1-24
99	Outputs 1-32, Inputs 1-24	100	Outputs 1-32, Inputs 1-24
101	Outputs 1-32, Inputs 1-24	102	Outputs 1-32, Inputs 1-24
103	Outputs 1-32, Inputs 1-24	104	Outputs 1-32, Inputs 1-24
105	Outputs 1-32, Inputs 1-24	106	Outputs 1-32, Inputs 1-24
107	Outputs 1-32, Inputs 1-24	108	Outputs 1-32, Inputs 1-24
109	Outputs 1-32, Inputs 1-24	110	Outputs 1-32, Inputs 1-24

RCP-LCXY - Panel Configuration

Allows the user to control any output in the system. The touchpad panel has single level breakaway capability along with lock/protect and chop features.

Address		Address	
111	Outputs 1-32, Inputs 1-24	112	Outputs 1-32, Inputs 1-24
113	Outputs 1-32, Inputs 1-24	114	Outputs 1-32, Inputs 1-24
115	Outputs 1-32, Inputs 1-24	116	Outputs 1-32, Inputs 1-24
117	Outputs 1-32, Inputs 1-24	118	Outputs 1-32, Inputs 1-24
119	Outputs 1-32, Inputs 1-24	120	Outputs 1-32, Inputs 1-24
121	Outputs 1-32, Inputs 1-24	122	Outputs 1-32, Inputs 1-24
123	Outputs 1-32, Inputs 1-24	124	Outputs 1-32, Inputs 1-24
125	Outputs 1-32, Inputs 1-24	126	Outputs 1-32, Inputs 1-24

2.5 Control Panel Configuration Continued:

RCP-LCSB - Panel Configuration

Allows the user to control a single output dependent upon the panel's assigned address. The touchpad panel has single level breakaway capability along with lock/protect and chop features.

Address		Address	
127	Output 1, Inputs 1-24	128	Output 1, Inputs 1-24
129	Output 2, Inputs 1-24	130	Output 2, Inputs 1-24
131	Output 3, Inputs 1-24	132	Output 3, Inputs 1-24
133	Output 4, Inputs 1-24	134	Output 4, Inputs 1-24
135	Output 5, Inputs 1-24	136	Output 5, Inputs 1-24
137	Output 6, Inputs 1-24	138	Output 6, Inputs 1-24
139	Output 7, Inputs 1-24	140	Output 7, Inputs 1-24
141	Output 8, Inputs 1-24	142	Output 8, Inputs 1-24
143	Output 9, Inputs 1-24	144	Output 9, Inputs 1-24
145	Output 10, Inputs 1-24	146	Output 10, Inputs 1-24
147	Output 11, Inputs 1-24	148	Output 11, Inputs 1-24
149	Output 12, Inputs 1-24	150	Output 12, Inputs 1-24
151	Output 13, Inputs 1-24	152	Output 13, Inputs 1-24
153	Output 14, Inputs 1-24	154	Output 14, Inputs 1-24
155	Output 15, Inputs 1-24	156	Output 15, Inputs 1-24
157	Output 16, Inputs 1-24	158	Output 16, Inputs 1-24
159	Output 17, Inputs 1-24	160	Output 17, Inputs 1-24
161	Output 18, Inputs 1-24	162	Output 18, Inputs 1-24
163	Output 19, Inputs 1-24	164	Output 19, Inputs 1-24
165	Output 20, Inputs 1-24	166	Output 20, Inputs 1-24
167	Output 21, Inputs 1-24	168	Output 21, Inputs 1-24
169	Output 22, Inputs 1-24	170	Output 22, Inputs 1-24
171	Output 23, Inputs 1-24	172	Output 23, Inputs 1-24
173	Output 24, Inputs 1-24	174	Output 24, Inputs 1-24
175	Output 25, Inputs 1-24	176	Output 25, Inputs 1-24
177	Output 26, Inputs 1-24	178	Output 26, Inputs 1-24
179	Output 27, Inputs 1-24	180	Output 27, Inputs 1-24
181	Output 28, Inputs 1-24	182	Output 28, Inputs 1-24
183	Output 29, Inputs 1-24	184	Output 29, Inputs 1-24
185	Output 30, Inputs 1-24	186	Output 30, Inputs 1-24
187	Output 31, Inputs 1-24	188	Output 31, Inputs 1-24
189	Output 32, Inputs 1-24	190	Output 32, Inputs 1-24

2.6 RS-232 CPU Link Connection

The 2400E Controller provides a CPU Link port that allows the controller to communicate to other controlling devices. The CPU link uses standard RS-232 with RTS-CTS flow control.

The pinout for the 9-pin connector on the controller's matrix frame is as follows:

Pin 1 - Carrier Detect	Input to 2400E
Pin 2 - Rxd	Input to the 2400E
Pin 3 - Txd	Output from the 2400E
Pin 4 - Data Transmit Ready	Output from the 2400E
Pin 5 - Ground	
Pin 6 - Data Set Ready	Input to the 2400E
Pin 7 - Request To Send	Output from the 2400E
Pin 8 - Clear to Send	Input to the 2400E
Pin 9 - Unused	

3.1 Operations of the 2400E Controller

Lock and Protect

The 2400E allows outputs in the system to be locked. While an output is locked, no switch can be taken to the output. Locks are owned by the panel that initates the lock. Only the owner or the CPU link can clear a lock.

The 2400E also allows outputs in the system to be protected. While an output is protected, only the owner of the protect can take switches to the output. All other panels see the output as locked. Protects are owned by the panel that initiates the protect. Only the owner or the CPU link can clear the protect.

3.2 CPU Link Protocols and Commands

Upon power up, the 2400E Controller is configured for CPU link operation. The frame in which the Controller resides is equipped with a 9-pin "D" connector to allow serial RS-232 communication with an external computer. This connection provides the interface to the 2400E CPU Link. This allows an external computer to control and status 2400E operation.

Communications Protocol

Communications originating from the Controller to the external computer are governed by the state of the CTS line. When CTS is asserted, the Controller sends data to the external computer. When CTS is negated, the Controller ceases transmission to the computer. The external computer controls this line. It must provide for receiving at least three characters after CTS is negated.

This line cannot be allowed to float. It must either be ON (asserted) or OFF (negated).

Communications originating from the external computer to the Controller must obey the state of the RTS line. When RTS is asserted the Controller is ready to accept data from the external computer. When RTS is negated the external computer must cease transmission. The CTS and RTS lines operate independently of one another.

The pin-out of the CPU port allows for direct pin-to-pin cabling to a standard RS-232 control port on the external computer.

3.2 CPU Link Protocols and Commands Continued:

Message Formats

Data is transmitted bi-directionally at 9600 baud between the computer and the Controller. The format for CPU Link communication is serial RS-232, eight (8) bits per character, 1 start bit and 2 stop bits. Data transfer over the CPU Link is controlled by the state of the Ready to Send (RTS) and Clear to Send (CTS) lines.The characters are standard 7 bit ASCII with the eighth bit (most significant bit) set to 0. Parity checking is not used. The communications between the 2400E Controller and the external computer consist of a variable length buffer of characters containing the desired command (refer to Table 3-1), a string of data bytes, a checksum, and a terminator. The terminator is comprised of an ASCII Carriage Return (CR) (Hex 0D) followed by an ASCII Line Feed (LF) (Hex 0A).

Checksum Computation

The checksum is an arbitrary number derived from each data byte for the purpose of verifying data transmission on both sides of the transmission link. A data stream being transmitted computes a checksum which is sent with the data and the termination characters. The receiving equipment computes a checksum from the received data and compares the two checksums. The checksum is calculated as follows:

1. Cumulatively add the bytes received from the CPU Link in an eight (8) bit register. Ignore any overflow (or carry). The result is an eight bit number. Save this number.

2. Create two ASCII characters for the checksum by dividing the saved number into two fields, the upper four bits and the lower four bits. Add 30 Hex to each 4-bit field. The upper four bits become the “TENS” digit; the lower four bits become the “ONES” digit. The checksum and the terminator characters are not included when adding the incoming data to compute a checksum.

Example: The command take input 5 to output 1 on a 1 level system is:

"H 0 0 1 0 0 5 6 > CR LF" where "6 >" is the checksum.

Checksum Calculation first adds the value of the command characters:

'H' 0x48

3.2 CPU Link Protocols and Commands Continued:

'0' 0x30
'0' 0x30
'1' 0x31
'0' 0x30
'0' 0x30
'5' 0x35
0x16e

The result has the 8 bit overflow masked out and is divided into upper and lower 4 bits. These values are then placed into the ASCII numeric range.

0x6 + 0x30 = 0x36 '6'
0xE + 0x30 = 0x3e '>'

CPU Link Commands: Summary

The following discussion briefly describes each command available to the computer via the CPU Link. Refer to Table 3-1 for all computer commands.

ASCII* General Commands

T	**All Call**
R	**Restore All Call**
H	**Change Switcher**
J	**Display Switcher Status (no error information)**
L	**Change Lock Status**
P	**Change Protect Status**
Y	**Send Switcher Status (one output error info included)**
Z	**Send Switcher Status (entire matrix error info included)**

ASCII* Reply Responses

G	**Good Transmission**
E	**Error in Transmission (Bad Checksum)**
L	**Locked Outputs**
N	**Requested Function Not Allowed or Equipment Malfunction**

*** ASCII Character**

ASCII Characters

Table 3-1 CPU Link Command Summary

3.2 CPU Link Protocols and Commands Continued:

Several abbreviations are used in the following discussions to signify the different portions of the communications buffers. Refer to Table 3-2 for a list of the abbreviations and the length of field for each buffer.

TERM	LENGTH*	DESCRIPTION
lev1	3	level 1 input number
lev2	3	level 2 input number
lev3	3	level 3 input number
lev4	3	level 4 input number
out	3	output number
cS	2	checksum
@	2	termination character (cr/lf)
s	1	denotes switcher function

*Length = Number of ASCII Characters in Buffer.

Table 3-2 Abbreviation and Field Lengths

In the following command examples, the number of levels will depend on the configuration of the Controller. If the Controller is configured for 3 levels, 3 input numbers are included in the buffers; if the Controller is configured for 1 level, only 1 input will be included in the buffer.

ASCII General Commands

"S" is not a general command, although it appears in several general command statements. The "S" denotes a command to change the status of the Switcher.

"T" - All Call

This command is used to switch all outputs on the switching matrix to the inputs designated in the command buffer (all video outputs to the specified video input, all Audio level outputs to the specified level input). The switching matrix remains in the All Call condition until either a change switcher or restore command is sent. The format for the command is:

T LEV1 LEV2 LEV3 LEV4 CS @

3.2 CPU Link Protocols and Commands Continued:

‘R” - Restore System From All Call
This command is used to restore the switching matrix to the last status prior to receiving the All Call command. The format for the command is:
R CS @

‘H”- Change Switcher
This command is used to make a switch in the switching matrix. The format for the command is:

H OUT LEV1 LEV2 LEV3 LEV4 CS @

The length of the buffer is dependent on the number of configured switching levels. **NOTE:** If a breakaway switch is desired, set inputs on unaffected levels to 0 or a value that is out of range of the configuration. This indicates to the 2400E Controller that this level is not to be switched.

“J”- Display Switcher Status (no error information)
This command tells the switcher to send the current Input/Output status of the switching matrix. The format for the command is:

J CS @

The switcher sends the status of the entire switching matrix to the computer in the following format:

LEV1 LEV2 LEV3 LEV4 LEV1 LEV2 LEV3 LEV4 LEV1 LEV2 LEV3 LEV4 ... LEV1 LEV2 LEV3 LEV4 CS @

The first group of video and audio inputs correspond to output 1 of the switcher, the second group to output 2, etc. The length of each group of video/audio combinations depends on the number of switching levels configured in the Controller. The length of the buffer depends on the total number of outputs configured in the routing switcher system. It is the responsibility of the requester to count the bytes and determine which bytes represent each switching level input for each output.

‘P”- Change Protect
This command is used to toggle the protect status of a specified output. If the specified output is already protected by the CPU link, receiving this command clears the existing protect. If the output is unprotected, receiving this command will protect the output. The format used for the command is:

P S OUT CS @

3.2 CPU Link Protocols and Commands Continued:

‘L”- Change Lock
This command is used to toggle the lock status of a specified output. If the specified output is already locked, receiving this command unlocks it. If the output is unlocked or protected, receiving this command will lock the output. The format used for the command is:

L S OUT CS @

Note: The 2400 CPU Link has the ability to clear any locks and protects in the system. (Panels are only able to clear locks and protects that are set by the panel itself. They cannot clear locks and protects created by other panels or the CPU-Link.)

‘W”- Display Lock/Protect Status
This command is used to find out which outputs are locked. The format for the command is:

W CS @

The format for the lock/unlock status of each output of the switch is:

X X X...X CS @

In the lock/unlock status display, “X" denotes either an ASCII zero, 1, or 2. An ASCII 0 denotes an unlocked output. An ASCII 1 denotes a locked output. An ASCII 2 denotes a protected output. The displayed first byte denotes output 1, the second denotes output 2, etc.

‘Y”- Send Switcher Status (Single Output)
This command allows the computer to interrogate the 2400E Controller and obtain the status of an individual output. The format for the command is:

Y OUT CS @

The OUT field is an ASCII encoded BCD representation of the output to be interrogated. The OUT field must be within the range 1 to 255 inclusive (0 is an invalid output).

The Controller responds with the switcher status for the requested output in the following format:
OUT STAT LEV1 LEV2 LEV3 LEV4 CS @

3.2 CPU Link Protocols and Commands Continued:

NOTE: Command will always send at least 2 levels of information (even when only 1 level is configured).

The STAT field contains error information for each VID/AUD crosspoint in the transmission (refer to the section entitled STATUS FIELD for detail of this byte). The VID/AUD fields are ASCII encoded BCD representations of VID/AUD inputs. The VID/AUD fields will be numbered between 1 to 255 inclusively. The number of Audios present in the transmission depends on the number of switching levels configured in the Controller.

"Z" - Send Switcher Status (all)
This command allows the computer to interrogate the Controller to obtain the status of the entire switching matrix. It is identical to the "Display Switcher Status" ("J") command except this command sends status information for each output. The additional information indicates any readback or confidence errors at each crosspoint. The format for the command is:

Z CS @

The Controller responds with the following data:

OUT1 STAT LEV1 LEV2 LEV3 LEV4 OUT2 STAT LEV1 LEV2 LEV3 LEV4 OUT 3 STAT LEV1 LEV2 LEV3 LEV4 ... OUT "N" STAT LEV1 LEV2 LEV3 LEV4 CS @

The data represents the status of the entire switching matrix. The first group of STAT and VID/AUD inputs represent the first output of the switcher. The second group represents the second output of the switcher, etc. The STAT field contains error information for each VID/AUD crosspoint in the transmission (refer to the discussion of STATUS FIELD, below, for details of this byte). The number of levels present on each line depends on the number of switching levels configured in the 2400E Controller.

NOTE: Command will always send at least 2 levels of information (even when only 1 level is configured).

3.2 CPU Link Protocols and Commands Continued:

Status Field

The “Y” (Send Switcher Status, single output) and the “Z” (Send Switcher Status, all) commands contain a STAT field. The STAT field contains the error indicators for each VID/AUD crosspoint in the output group. The STAT field consists of one ASCII character for each two levels configured in the system.

The lower four bits of each character represent information for two levels of the system. The more significant two bits are for the lower number level. The possible values for each level are (in binary):

00 = no error
01 = not defined
10 = not defined
11= Confidence error

Example:

A STAT field of
"0 0 <"= 0x30 0x30 0x3C

Where the 1st character represent level 1 & 2,
Where the 2nd character represent level 3 & 4,
Where the 3rd character represent level 5 & 6,

This breaks down into the following bit fields

Lev1	Lev2	Lev3	Lev4	Lev5	Lev6
00	00	00	00	11	00

All levels except Level 5 are without error. Level 5 shows a Confidence error. The status of level 5 is indeterminate.

Note: To maintain conformance with other Pesa controllers, a response from the 2400E with a STAT field will always return at least 4 levels of information.

3.2 CPU Link Protocols and Commands Continued:

Using Change Commands

The Controller supports a variety of “Change Switcher” commands on the CPU Link. These commands when received by the Controller are acknowledged with a reply. The replies are “G” (good), “E” (error), “L” (locked), and “N” (not allowed). The acknowledgment replies indicate only that the command was correctly or incorrectly received, NOT whether the actual switch was successful.

ASCII Reply Responses

‘G” - Good Transmission
This reply code is sent if the checksum computed for an incoming buffer matches the checksum imbedded in the buffer. The format for the reply is:

G @

‘E” - Error In Transmission
This reply code is sent if the checksum computed for an incoming buffer does not match the checksum imbedded in the buffer. The data transmitted in the buffer is discarded and no action is taken. The format for the reply is:

E @

‘L”- Locked
This reply code is sent if the specified output of a command buffer is locked. The data transmitted in the buffer is discarded and no action is taken. The format for the reply is:

L @

‘N” - Not Allowed
This reply code is sent when the requested function is not allowed or an equipment malfunction prevents the specified function from occurring. The data transmitted in the buffer is discarded and no action is taken. The format for this reply is:

N @

3.2 CPU Link Protocols and Commands Continued:

When the Controller receives a command to change the switcher, it acknowledges the command received from the computer. The Controller then loads the switcher information into the preset registers of the crosspoint chip. The crosspoint chip automatically transfers its preset registers to its on-line registers during the next vertical interval.

The Controller cannot interrogate the switcher during the time between loading the preset registers and the next vertical interval. For this reason, the Controller cannot respond immediately with a current status to the external computer.

Switcher status is sent to the external computer only in response to a switcher status request. To determine if a change switcher command has properly executed, the external computer must wait at least 32 milliseconds before requesting status. Switcher status is obtained directly from the crosspoints.

4.1 Introduction

General

The 2400E is a 68332 microprocessor based controller used in Pesa Lynx II routing switcher systems. The controller is equipped with 128K of EPROM and 128K static RAM. The RAM on the controller is backed up with an on-board 3 volt battery. All system decoding and bus control is performed within the 68332 IC. The system operates at 16MHz clock rate.

The 2400E Controller interfaces to the external world through two RS-485 ports, one RS-232 port, and an RM5000 router interface.

The RS-485 Port Interfaces is:

Port 1	(+)	J2-8	**Port 2**	(+)	J2-10
	(-)	J2-24		(-)	J2-26
	SHIELD	J2-9		SHIELD	J2-25

The RS-232 Port Interface is:

RXD	J2-28	To 2400E
TXD	J2-11	From 2400E
RTS	J2-27	From 2400E
CTS	J2-13	To 2400E
DTR	J2-12	From 2400E
DSR	J2-29	To 2400E
CD	J2-14	To 2400E

The RM5000 Bus Interface is:

Input Address 1	J1-1	Output Address 1	J1-5
Input Address 2	J1-17	Output Address 2	J1-21
Input Address 4	J1-2	Output Address 4	J1-6
Input Address 8	J1-18	Output Address 8	J1-22
Input Address 16	J1-3	Output Address 16	J1-7
Input Address 32	J1-19	Output Address 32	J1-23
Input Address 64	J1-4	Output Address 64	J1-8
Input Address 128	J1-20	Output Address 128	J1-24

Readback Data 1	J1-13
Readback Data 2	J1-29
Readback Data 4	J1-14
Readback Data 8	J1-30
Readback Data 16	J1-15
Readback Data 32	J1-31
Readback Data 64	J1-16
Readback Data 128	J1-32

4.1 Introduction Continued:

Strobe 1	J1-9
Strobe 2	J1-25
Strobe 3	J1-10
Strobe 4	J1-26
Strobe 5	J1-11

Read/*Write	J1-28
*Vertical Trigger Inhibit	J1-12
Primary/*Secondary	J1-27
Confidence	J2-30

Note: Input Address 256, Output Address 256, and Readback Data 256 lines are not implemented on the 2400E Controller.

Power is provided to the controller on: +5V J2-15, 16, 31, 32
Ground J2-1, 2, 17, 18

These ground pins are also used as the signal reference for the RM5000 and RS-232 interfaces.

Note: Connectors J1 and J2 are pinned out in the following manner:

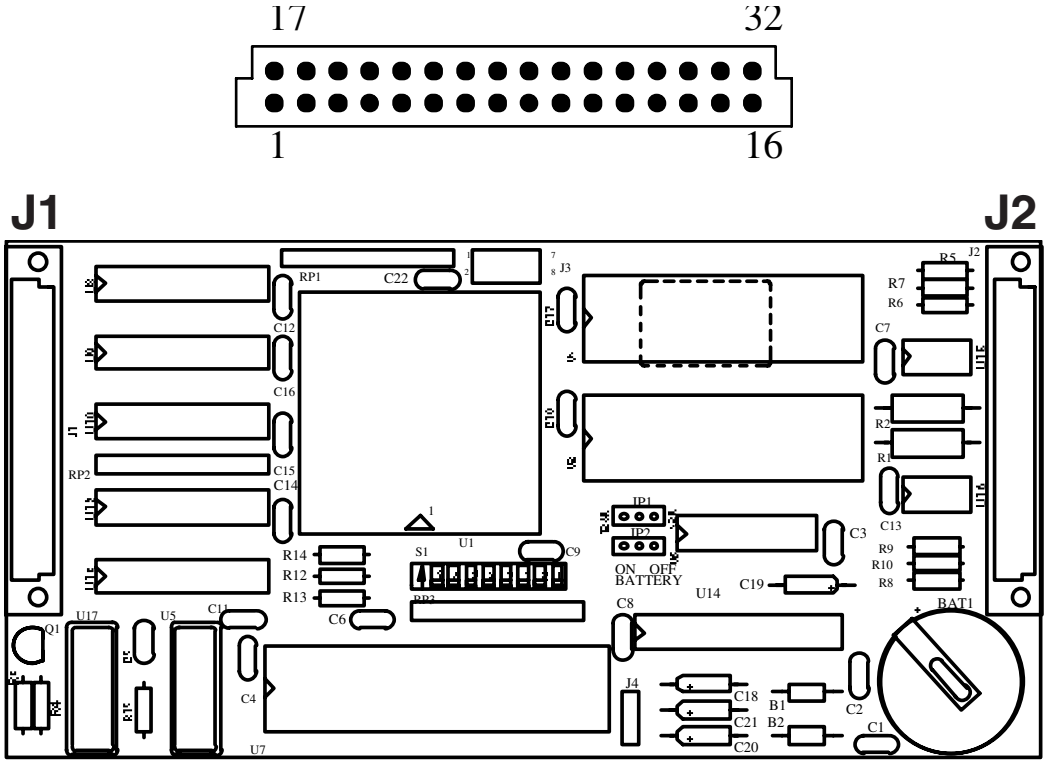

Figure 4-1 Connector Pinout

5.1 Maintenance

General

The 2400E is designed to provide extended, troublefree service with minimum maintenance requirements. No other maintenance other than the normal care which should be given to any advanced solid-state electronic device is required. There are no adjustments to this unit other than the connections and addressing requirements mentioned in the Installation Section 2.

If additional technical assistance is required, please refer to the Ordering Assistance, Service, and Inquiries Sheet in the front of this manual.

5.2 Battery

Battery voltage on the 2400E CPU should be checked periodically. The voltage across the battery should be greater than 2.5V, if not, contact Pesa Service Personnel about a replacement battery #81901702510. Low battery voltage will affect the system by not saving configuration during power off. Normal operation is not affected.