V883

8 x 8 COMPONENT VIDEO CONTROLLER

INSTALLATION MANUAL

V
SERIES
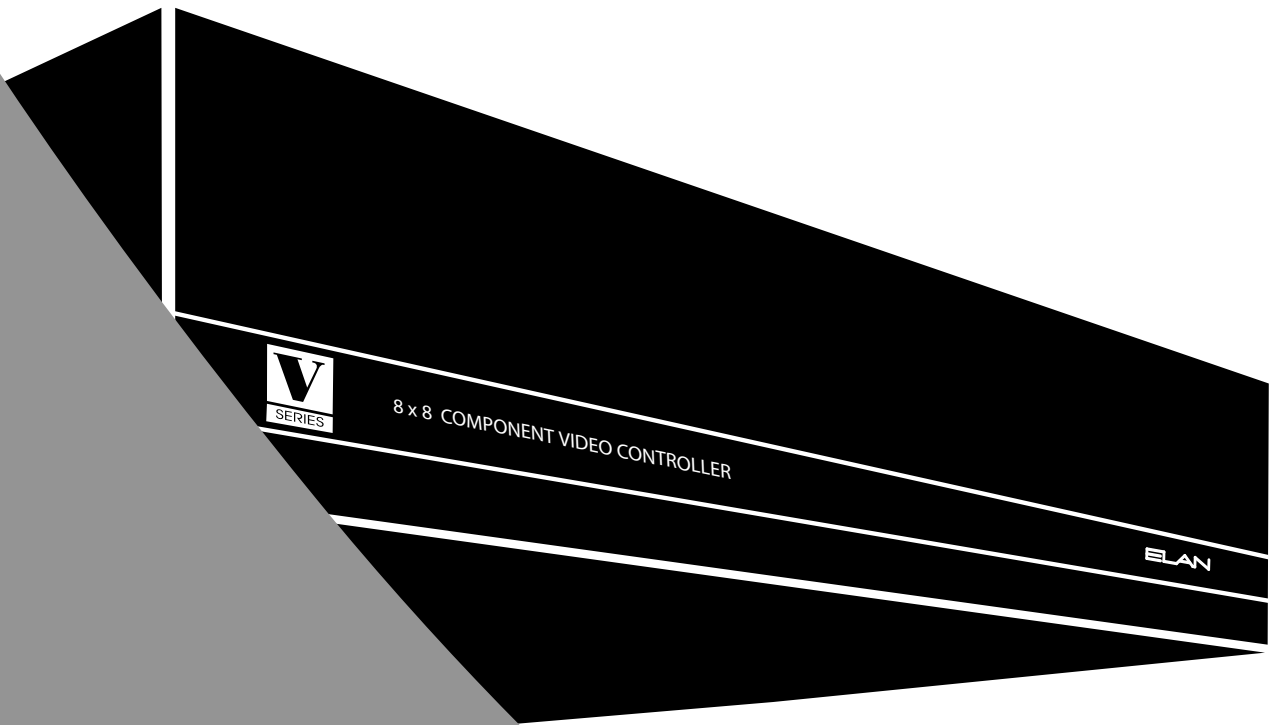
ELAN®

⚠ WARNING ⚠

RISK OF ELECTRIC SHOCK
DO NOT OPEN!

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

⚠ CAUTION ⚠

SOME DETACHABLE POWER CORD SOCKETS HAVE THIS FUSE SYMBOL WHICH INDICATES THERE IS A REPLACEABLE FUSE WITHIN THE SOCKET. FOR SAFETY PURPOSES REPLACE ONLY WITH SPECIFIED FUSE.

IMPORTANT SAFETY INFORMATION

Read Information—All the safety and operating information should be read before the appliance is operated.

Follow Information—All operating and use information should be followed.

Retain Information—The safety and operating information should be retained for future reference.

Heed Warnings—All warnings on the appliance and in the operating instructions should be heeded.

Wall Mounting—Mounting of this appliance should be done only by an authorized installer.

Ventilation—The appliances should be situated so that their location or position does not interfere with their proper ventilation. These appliances should never be placed near or over a radiator or heat register. These appliances should not be placed in a built-in installation such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

Non-Use Periods—Appliances that are left unattended and unused for long periods of time should be de-energized.

Power Sources—The appliances should be connected to a power supply only of the type described in the operating instructions or as marked on each appliance. If you are not sure of the type of power supply to your home, consult your authorized ELAN dealer or local power company.

Grounding or Polarization—Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one blade wider than the other blade. A grounding type plug has two blades and a third grounding prong. The polarized wide blade and the third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.

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┌─────────────────────────────────────┐
│   ⚠  WARNING  ⚠                      │
│   RISK OF ELECTRIC SHOCK             │
│      DO NOT OPEN                     │
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Water and Moisture—To reduce the risk of electric shock or fire, these appliances should not be used near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

Power Cord Protection—Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.

Telephones—Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning. Do not use a telephone to report a gas leak if the leak is in the vicinity of the ELAN electronic equipment because of risk of fire or explosion.

Cleaning—Unplug the apparatus from the power outlet before cleaning. Use only a dry cloth to clean the apparatus.

Power Lines—An outdoor antenna should be located away from power lines. When installing an outside antenna system, extreme care should be taken to avoid touching power lines or circuits, as contact with them may be fatal.

Outdoor Antenna Grounding—If an outside antenna or cable system is connected to these audio products, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the U.S. National Electrical Code, and Section 54 of the Canadian Electrical Code, provide information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See the grounding diagram (right).

Overloading—Do not overload wall outlets and extension cords, as this could result in fire or electric shock.

Object and Liquid Entry—Never insert objects of any kind through the openings of these appliances, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Care should be taken so that objects do not fall and liquids are not spilled into the appliance through openings in the enclosure.

Servicing—Do not attempt to service these appliances yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Service—These appliances should be serviced by qualified service personnel when:
   • A power supply connection or a plug has been damaged or
   • If liquid has been spilled into the appliance or objects have fallen into the appliance or
   • The appliance has been exposed to water or moisture or
   • The appliance does not appear to operate normally or exhibits a marked change in performance or
   • The appliance has been dropped or the enclosure damaged.

Replacement Parts—When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards. The Master Control Unit battery should be replaced only after turning the power off and only by an authorized installer.
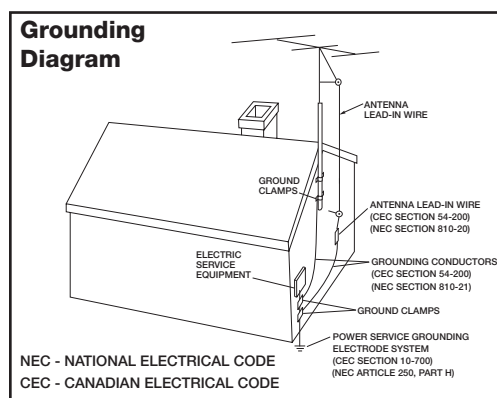
Safety Check—Upon completion of any service or repairs to this audio product, ask the service technician to perform safety checks to determine that the audio product is in proper operating condition.

Lightning Storms—Unplug this apparatus during lightning storms or when unused for long periods of time.

Attachments and Accessories—Use only attachments/accessories specified by the manufacturer.

Cart, Stand, Tripod, Bracket or Table—Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip over.

Disconnect Device—Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain operable.

Contents

ELAN®

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1. Introduction

ELAN's innovative V883 Component Video Controller is the most versatile, feature-laden component video switching solution on the market; combining ease-of-use, intuitive operation, high-quality, reliability, and exceptional value into a package ideally suited for multi-room applications. The V883 switches up to eight component video signals to any of eight outputs and can be expanded to send signals to up to thirty-two outputs by connecting additional units.

Flexible control options include IR from keypads, hand-held remotes, or VIA! Touch Panels; RS-232 from VIA! Touch Panels or third-party controllers; and VIA!NET from ELAN devices like the VIA!2-SS1. Intuitive VIA!®TOOLS programming options make quick work out of configuring video switching commands.

Features

- **8 X 8 Component Video Switcher**

- **Expandable to 8 X 32**

- **RS-232 Controllable**

- **IR Controllable**

- **VIA!NET Controllable**

- **Intuitive VIA!TOOLS Programming**

- **Front IR Receiver**

- **Rear IR IN/IR OUT Ports**

- **Rear RS-232 Input and Output Ports**

- **75 Ohm Termination DIP Switches for Sharing Sources**

V883 Front/Rear
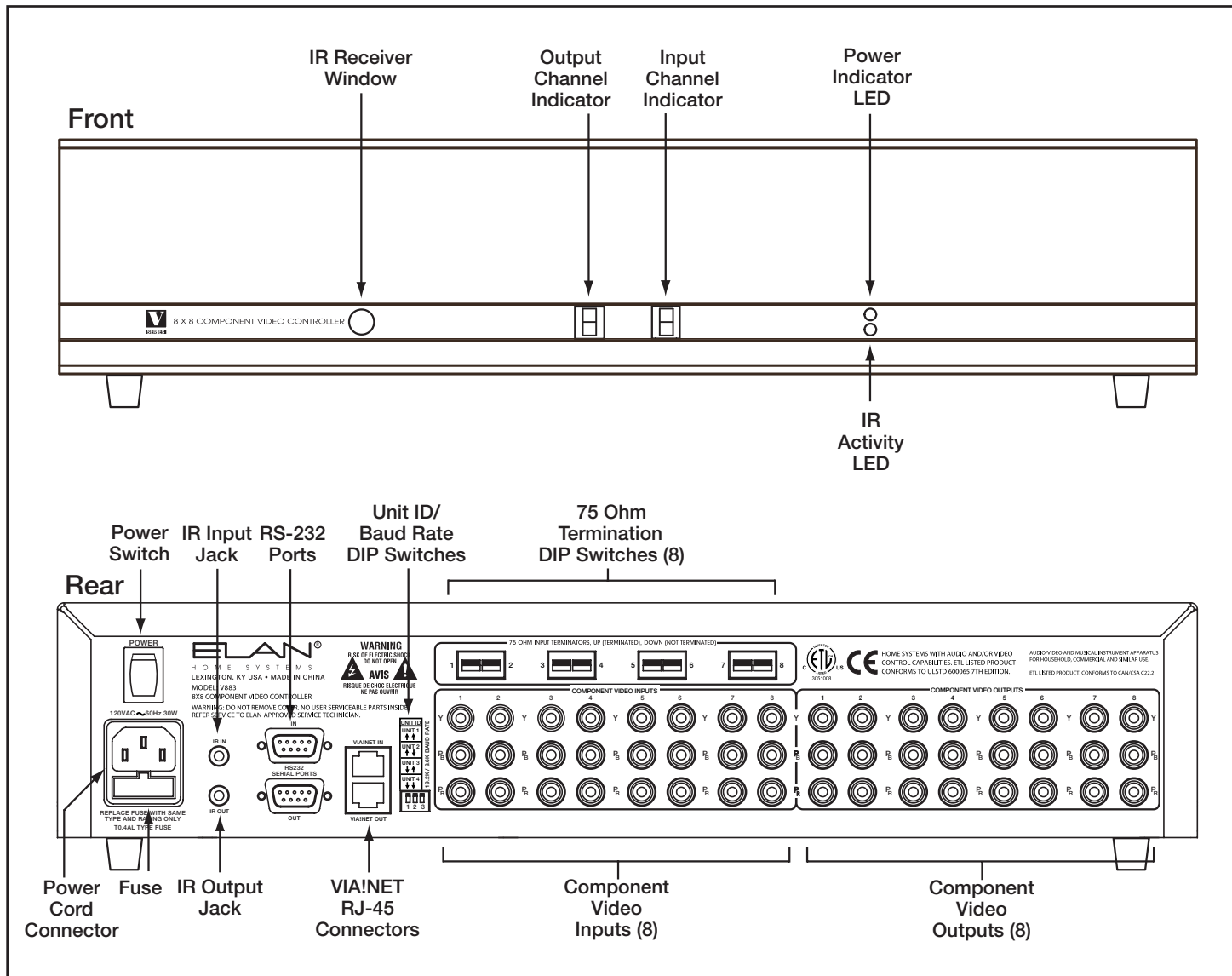
Specifications

Video Inputs

Connectors (8 Sets) . . . . Gold-Plated Component
Video Inputs (Y, Pb, Pr)
Component Video Input . . . 1 V Peak-to-Peak Nominal
Input Impedance . . . . 75 Ohm

Video Outputs

Connectors (8 Sets) . . . . Gold-Plated Component
Video Outputs (Y, Pb, Pr)
Output Impedance . . . . 75 Ohm
Video Gain . . . . Unity
Bandwidth (-3dB) . . . . .DC to 125MHZ Minimum
Gain Flatness . . . . 50 MHz
Differential Phase . . . . 0.02 Deg Typical
Differential Gain . . . . 0.02% Typical
Crosstalk . . . . > 85 dB @ 5MHz; > 83 dB @ 10MHz

Control Interfaces

IR Input-Rear . . . . 3.5mm Jack
IR Output-Rear . . . . 3.5mm Jack
IR Input-Front . . . . Integrated IR Receiver
RS-232 Serial Ports (2) . . . . DB-9 Connectors
VIA!NET Interface . . . . RJ-45 Jack

General

Power Requirements 120VAC, 12W
Dimensions . . . . (in.) 17W x 3½H x 12½ D
(mm) 432W x 89H x 318D
Weight . . . . 12.25 lbs/5.5 kgs

2. Control Connections & Settings

Control Connections - IR

There are two IR pathways into the V883 - the 3.5mm IR IN port on the rear and the IR Receiver on the front. The IR OUT port passes out any IR signal that is sent to the V883's rear IR IN port or the front IR Receiver.

IR IN Port

Most ELAN multi-room applications will utilize the rear IR IN port for IR control. Use a 3.5mm mono interconnect cable to connect between an IR OUT port (typically an 'ALL' port) of an ELAN multi-room controller and the IR IN port of the V883. In this configuration, any IR signal sent from any zone of the multi-room system will be sent to the V883.
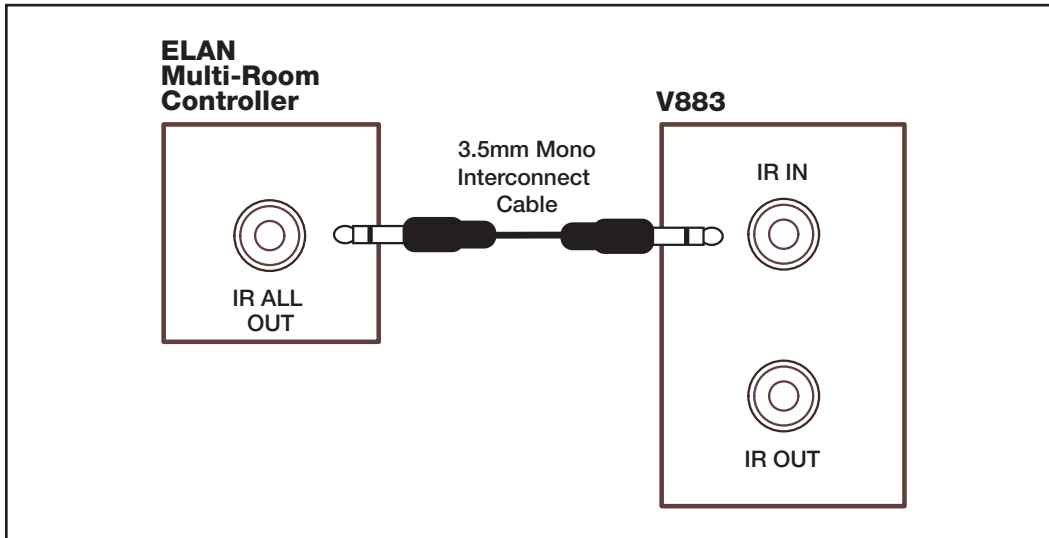
IR Receiver

Use the built-in IR Receiver located on the front of the unit when utilizing hand-held IR remotes, IR distribution systems, or when it is otherwise not possible to connect to the IR IN port. IR commands can be sent from a distance using a hand-held IR remote or IR "blaster". Use a standard IR mini-emitter placed directly over the V883's IR receiver when used in conjunction with most IR distribution networks.
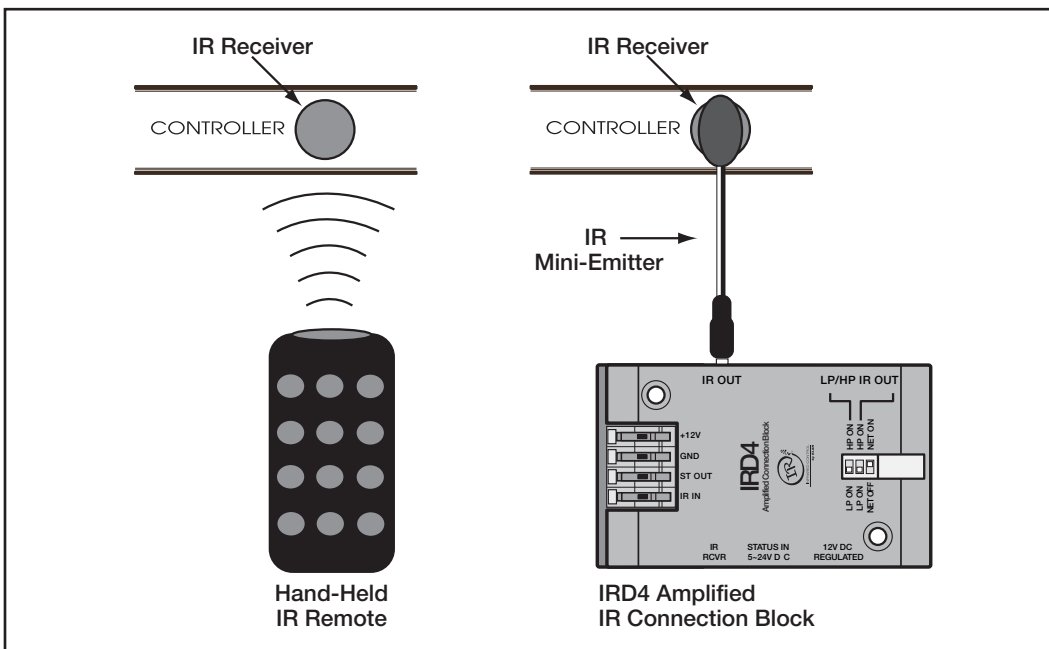
IR OUT Port

Any IR signal that is sent into the V883 through the IR IN port or IR Receiver is passed out of the IR OUT port. Use the I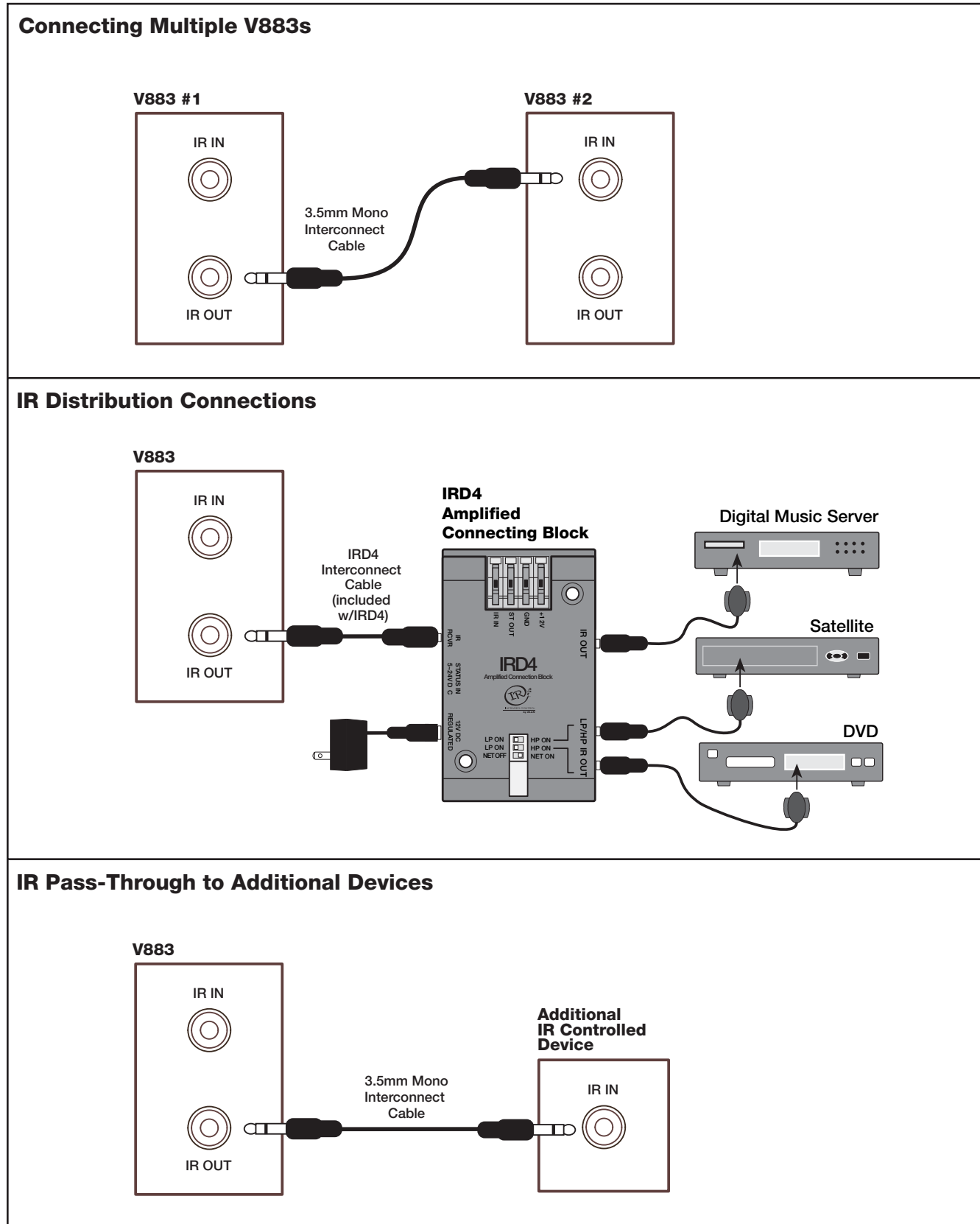R OUT port to link multiple V883s or as a convenient way to send signals to additional IR controlled devices, or to IR distribution products such as ELAN's IRD4 Amplified IR Connection Block, as shown below.

Connecting Multiple V883s

V883 #1

IR IN

3.5mm Mono
Interconnect
Cable

IR OUT

V883 #2

IR IN

IR OUT

IR Distribution Connections

V883

IR IN

IRD4
Interconnect
Cable
(included
w/IRD4)

IR OUT

**IRD4
Amplified
Connecting Block**

IR IN   ST OUT   GND   +12V

IR
RCVR

STATUS IN
5-24V D C

12V DC
REGULATED

IR OUT

LP/HP IR OUT

LP ON   HP ON
LP ON   HP ON
NET OFF   NET ON

IRD4
Amplified Connection Block

Digital Music Server

Satellite

DVD

IR Pass-Through to Additional Devices

V883

IR IN

3.5mm Mono
Interconnect
Cable

IR OUT

**Additional
IR Controlled
Device**

IR IN

Control Connections - RS-232

Use the SERIAL PORTS when a computer or third-party RS-232 controller will be used to control the V883. When using ELAN devices like the VIA!2-SS1, VIA!SC-4, or VIA! Touch Panels, it is best to use VIA!NET to control the V883.
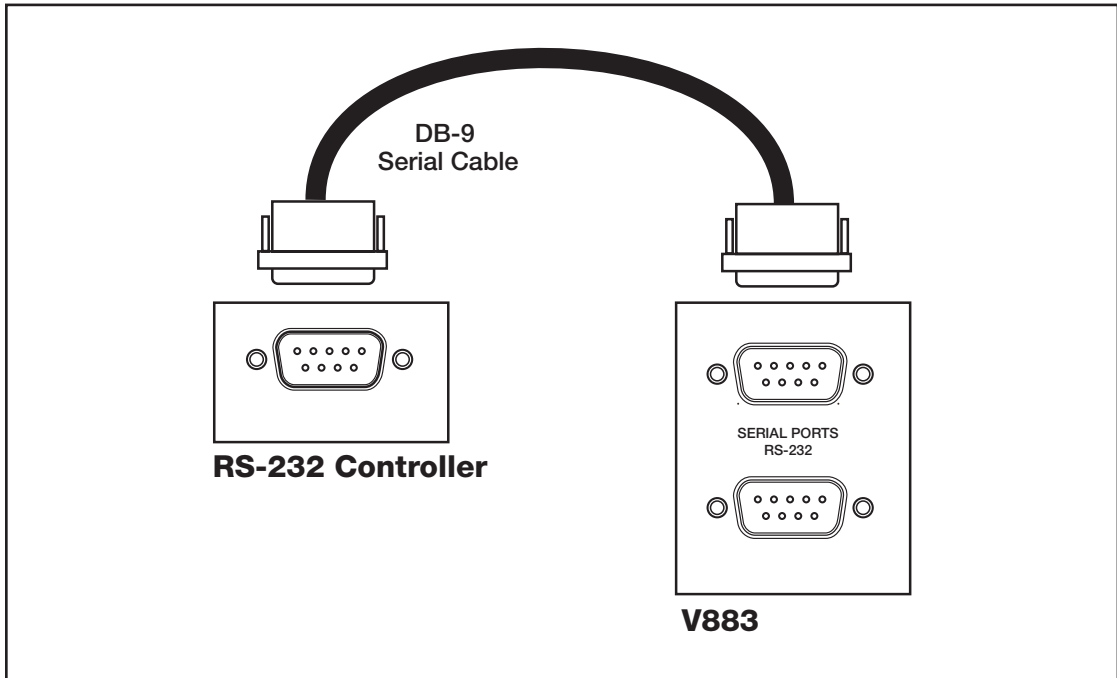
Multi-Chassis Connections - RS-232

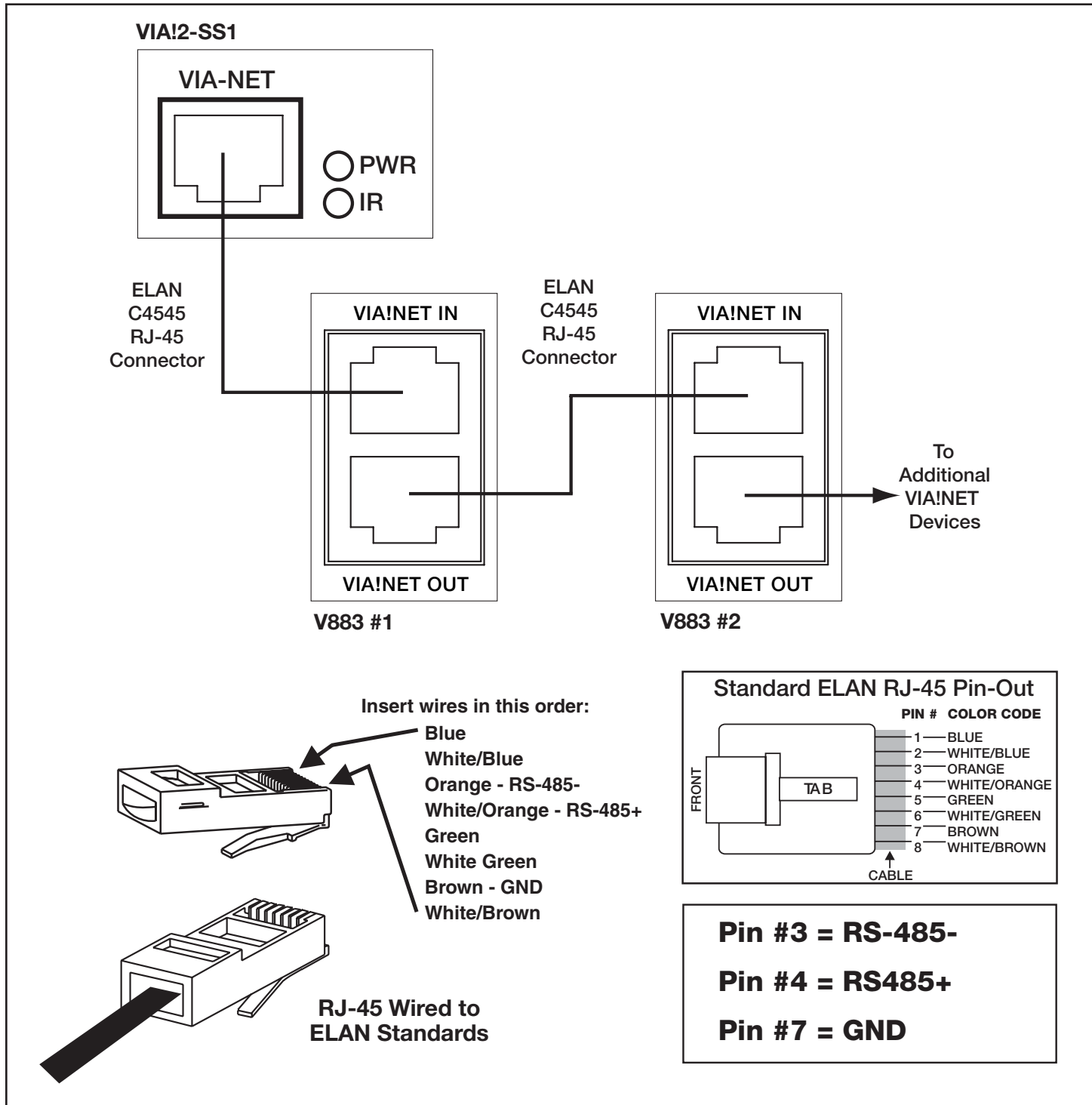Connect a DB-9 serial cable between two (or more) V883 chassis as shown when controlling multiple units using RS-232 serial communications.
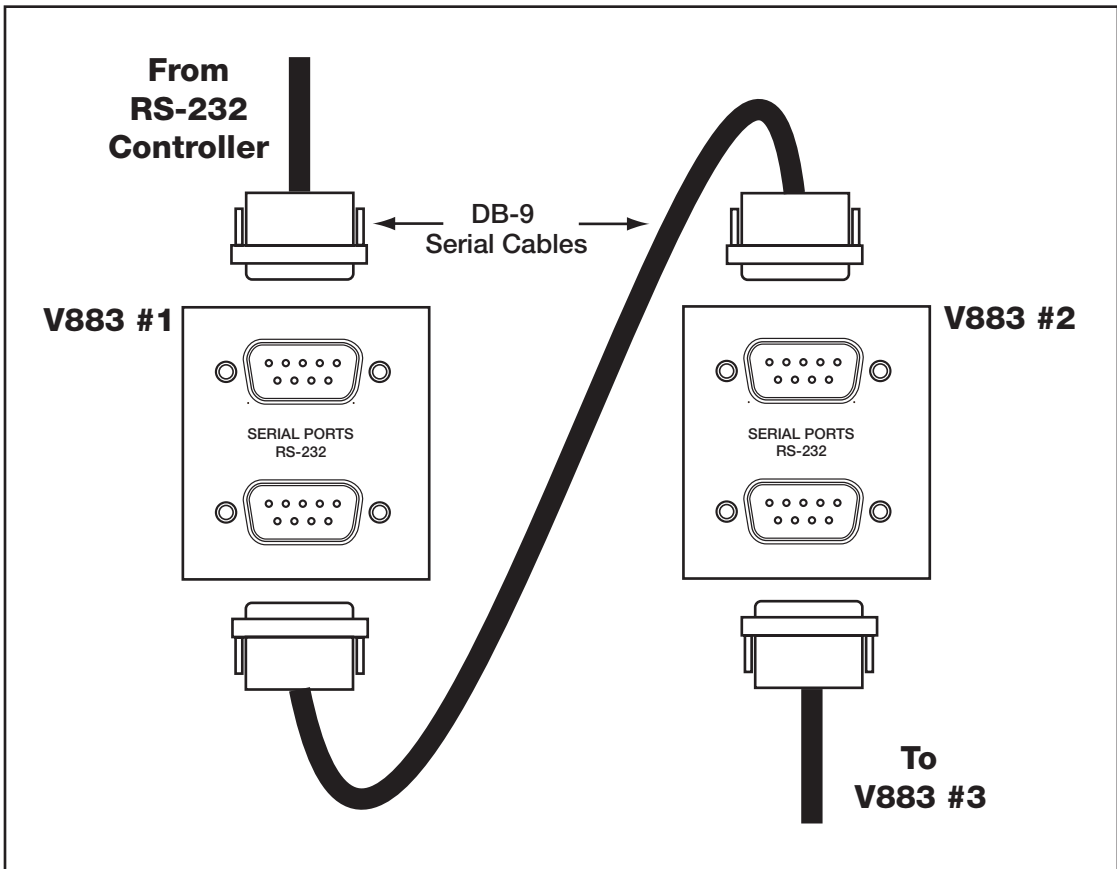
Control Connections - VIA!NET

Use the VIA!NET ports when controlling the V883 with ELAN VIA! Touch Panels, VIA!SC-4 Serial Controller, VIA!2-SS1 System Station and other VIA!NET devices. Use of this method ensures highly reliable control signal integrity and removes the possibility of IR signal "collision" whereby simultaneous IR commands cancel each other. The VIA!NET ports on the V883 can be daisy-chained between chassis and other VIA!NET devices.

Use an ELAN C4545 RJ-45 to RJ-45 interconnect cable to make all VIA!NET connections. If the cable assembly is to be custom made, refer to the pin-out diagram below.

VIA!2-SS1

VIA-NET

○ PWR
○ IR

ELAN C4545 RJ-45 Connector

VIA!NET IN

VIA!NET OUT

V883 #1

ELAN C4545 RJ-45 Connector

VIA!NET IN

VIA!NET OUT

V883 #2

To Additional VIA!NET Devices

Insert wires in this order:

Blue
White/Blue
Orange - RS-485-
White/Orange - RS-485+
Green
White Green
Brown - GND
White/Brown

RJ-45 Wired to ELAN Standards

Standard ELAN RJ-45 Pin-Out

PIN #	COLOR CODE
1	BLUE
2	WHITE/BLUE
3	ORANGE
4	WHITE/ORANGE
5	GREEN
6	WHITE/GREEN
7	BROWN
8	WHITE/BROWN

FRONT   TAB   CABLE

Pin #3 = RS-485-

Pin #4 = RS485+

Pin #7 = GND

DIP Switch Settings - UNIT ID

Consult the chart below to determine the correct UNIT ID DIP switch settings. These settings determine which output commands a particular unit responds to. V883s set to UNIT ID 1 will respond to commands specifying Outputs 1-8, UNIT ID 2 responds to commands specifying Outputs 9-16, etc.

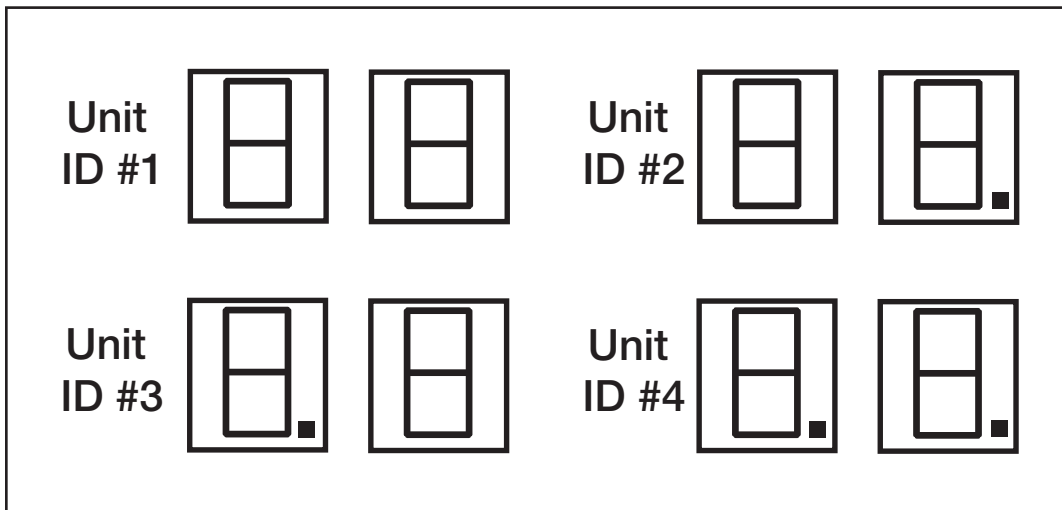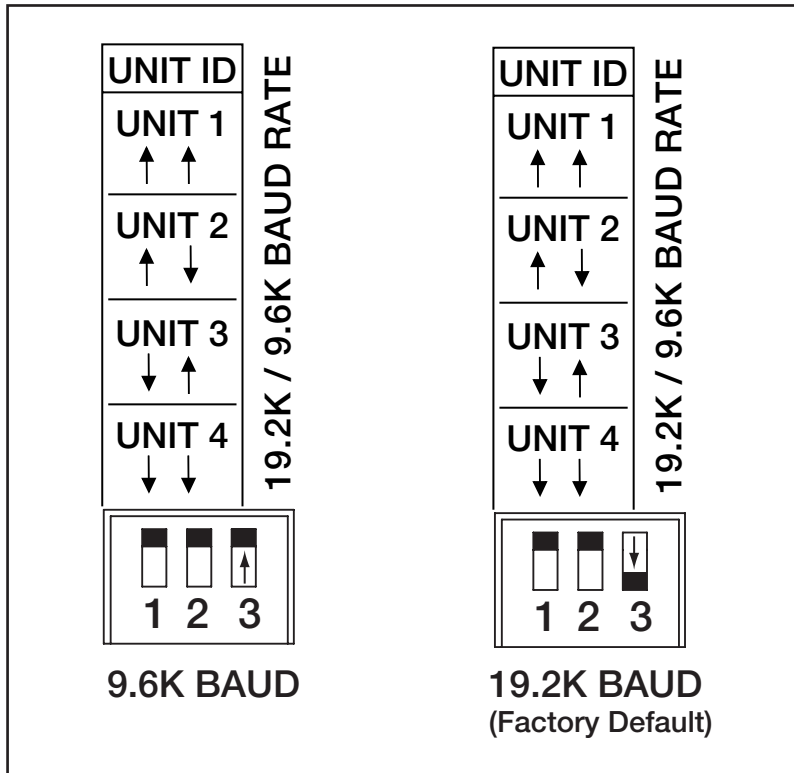| Unit ID	Zones	Switch #1 (left)	Switch #2 (center)
1 (Factory Default)	1-8	OFF/UP	OFF/UP
2	9-16	OFF/UP	ON/DOWN
3	17-24	ON/DOWN	OFF/UP
4	25-32	ON/DOWN	ON/DOWN
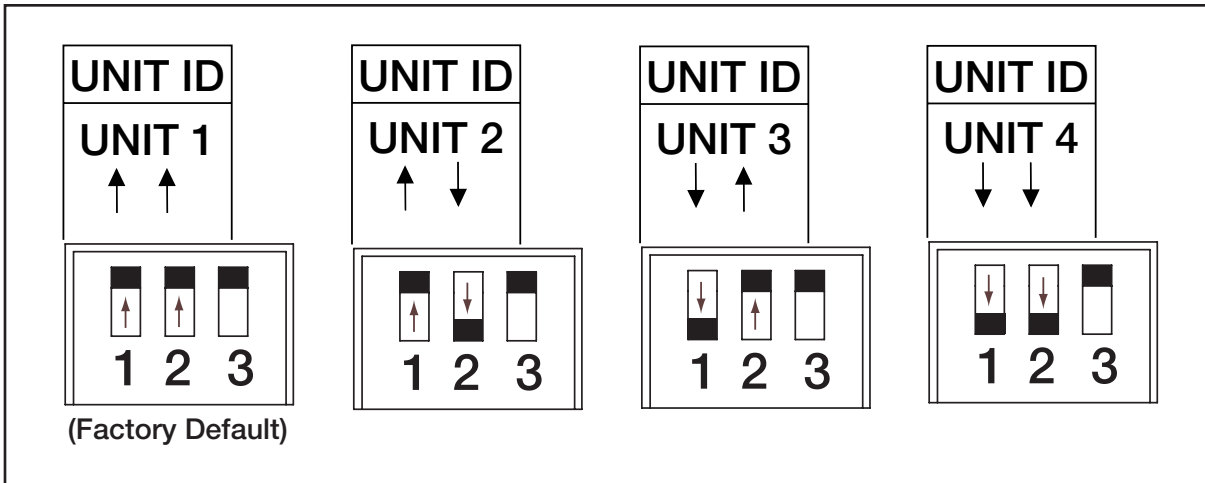
Front Panel Unit ID Designations

The Output/Input LED indicators on the front panel display the V883's Unit ID designation. A decimal point located in the display window indicates the Unit ID for each chassis as shown below.

DIP Switch Settings - BAUD RATE

Set the BAUD RATE DIP switch to the 9600 position (Up) when utilizing RS-232 controllers that require this baud rate. Use the 19.2k (Down) position for ELAN RS-232 applications and third party controllers that operate at 19.2k.

UNIT ID	19.2K / 9.6K BAUD RATE
UNIT 1 ↑ ↑	
UNIT 2 ↑ ↓	
UNIT 3 ↓ ↑	
UNIT 4 ↓ ↓	

9.6K BAUD

UNIT ID	19.2K / 9.6K BAUD RATE
UNIT 1 ↑ ↑	
UNIT 2 ↑ ↓	
UNIT 3 ↓ ↑	
UNIT 4 ↓ ↓	

19.2K BAUD
(Factory Default)

75 Ohm Termination DIP Switch Settings

There are eight 75 Ohm Termination DIP Switches used to optimize video signals when sharing sources with other devices or using multiple V883s. For each input that is shared using a 'Y' cable, place the corresponding DIP switch in the OFF/DOWN position. When not sharing a source, the DIP switch should remain in the factory default ON/UP position.

Not Shared
Source

ON/UP
(Factory Default)

Shared
Source

OFF/DOWN

75 OHM
INPUT
TERM
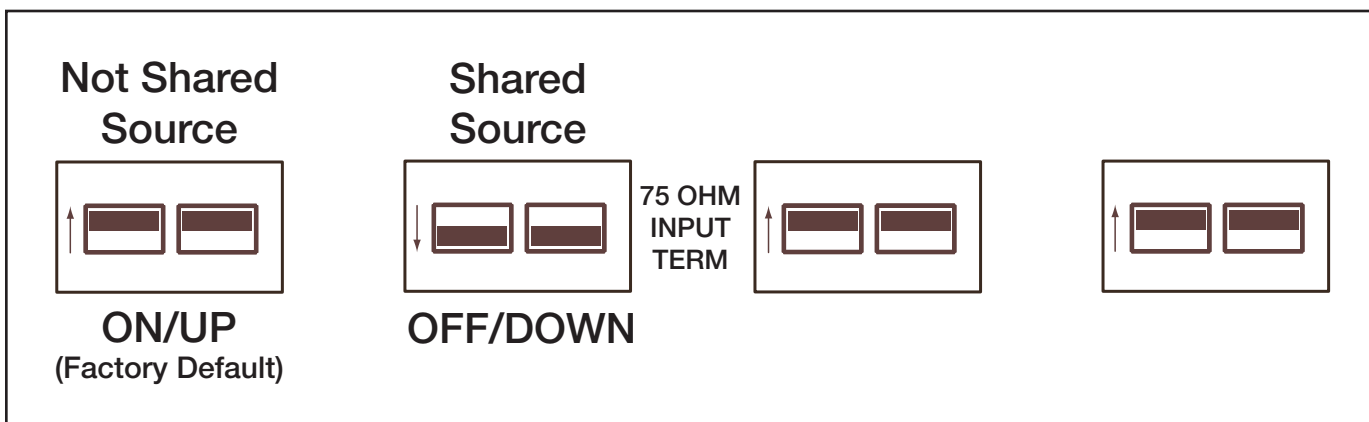
3. Video Connections

Wiring

Use high-quality component video cables to make connections between sources and the V883's inputs. Sources will typically be located near the V883 at the head-end of the system. Component video outputs will typically be sent via RG-6 coaxial cable from the head-end to televisions and/or monitors located throughout the house. Use F-to-RCA adaptors to connect high quality component video cables to each TV or monitor, as shown below. **Maximum coaxial wire run is 300 feet.**
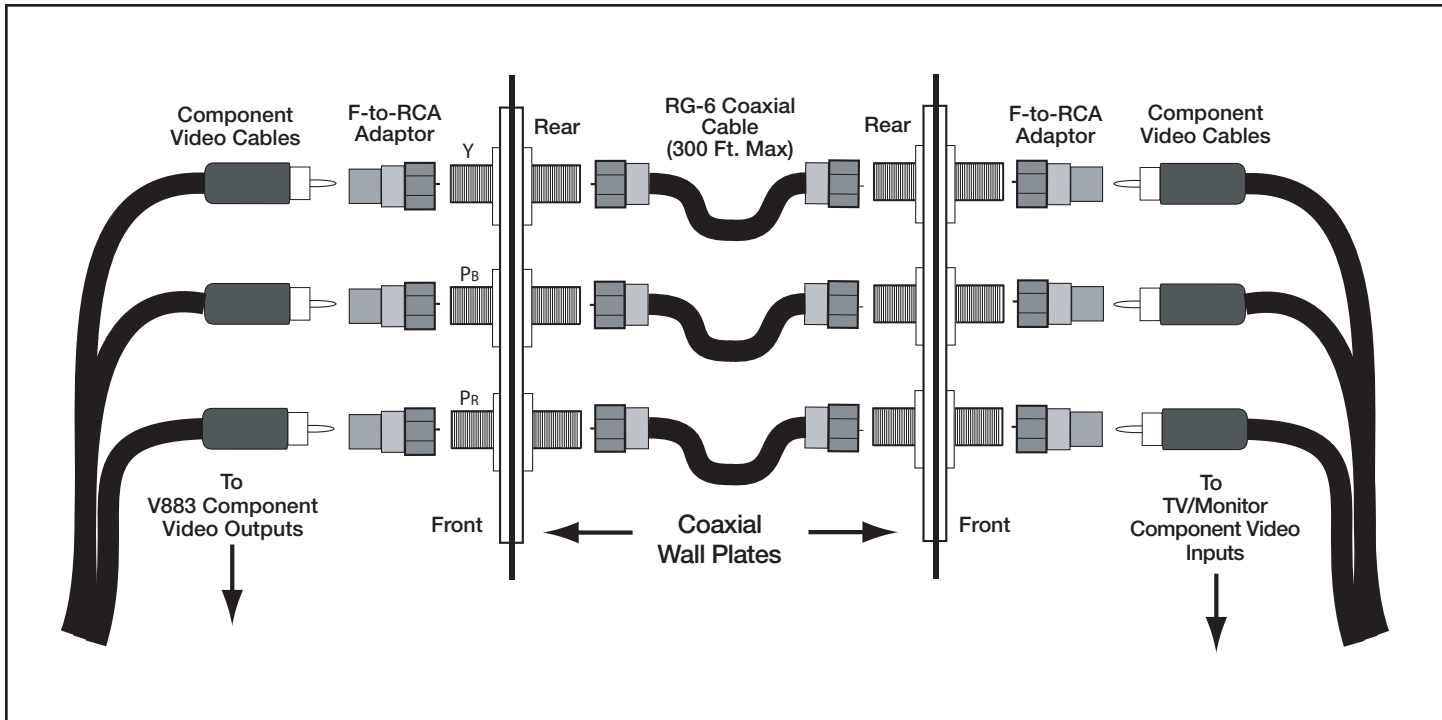
CVWP Component Video Wall Plate Kit

ELAN's CVWP Component Video Wall Plate Kit makes an ideal companion accessory to the V883 when long video wiring runs are necessary. The CVWP converts component video cable runs to Cat-5 and allows them to travel up to 500 feet with no image quality degradation.

Run Cat-5 cable between the head-end location (where the V883 is located) and the destination location (a TV or monitor). CVWPs can also be used to send signals between remotely located sources and the V883. The drawing below shows examples of the use of CVWPs to route component video to and from the V883.
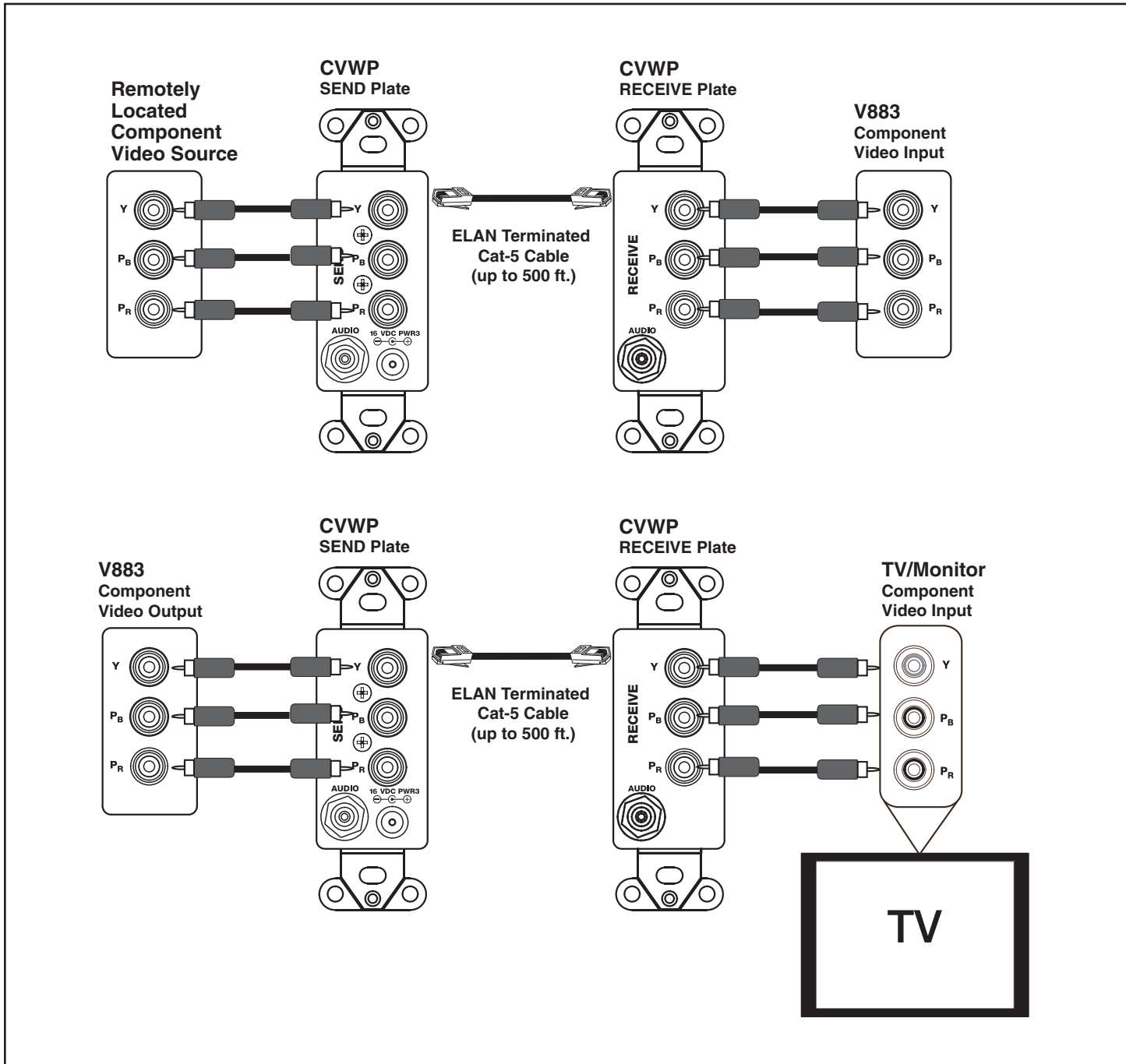
4. Applications

The following pages contain examples of various system types and configurations. These examples can be modified, combined, or adapted to meet specific requirements of individual systems.

Stand-Alone Systems

Basic Stand-Alone System - Component Video

The diagram below shows a basic stand-alone system that utilizes the V883 to switch component video sources to televisions located throughout the home. A stand-alone system is one in which an ELAN multi-room preamp controller is *not* used.
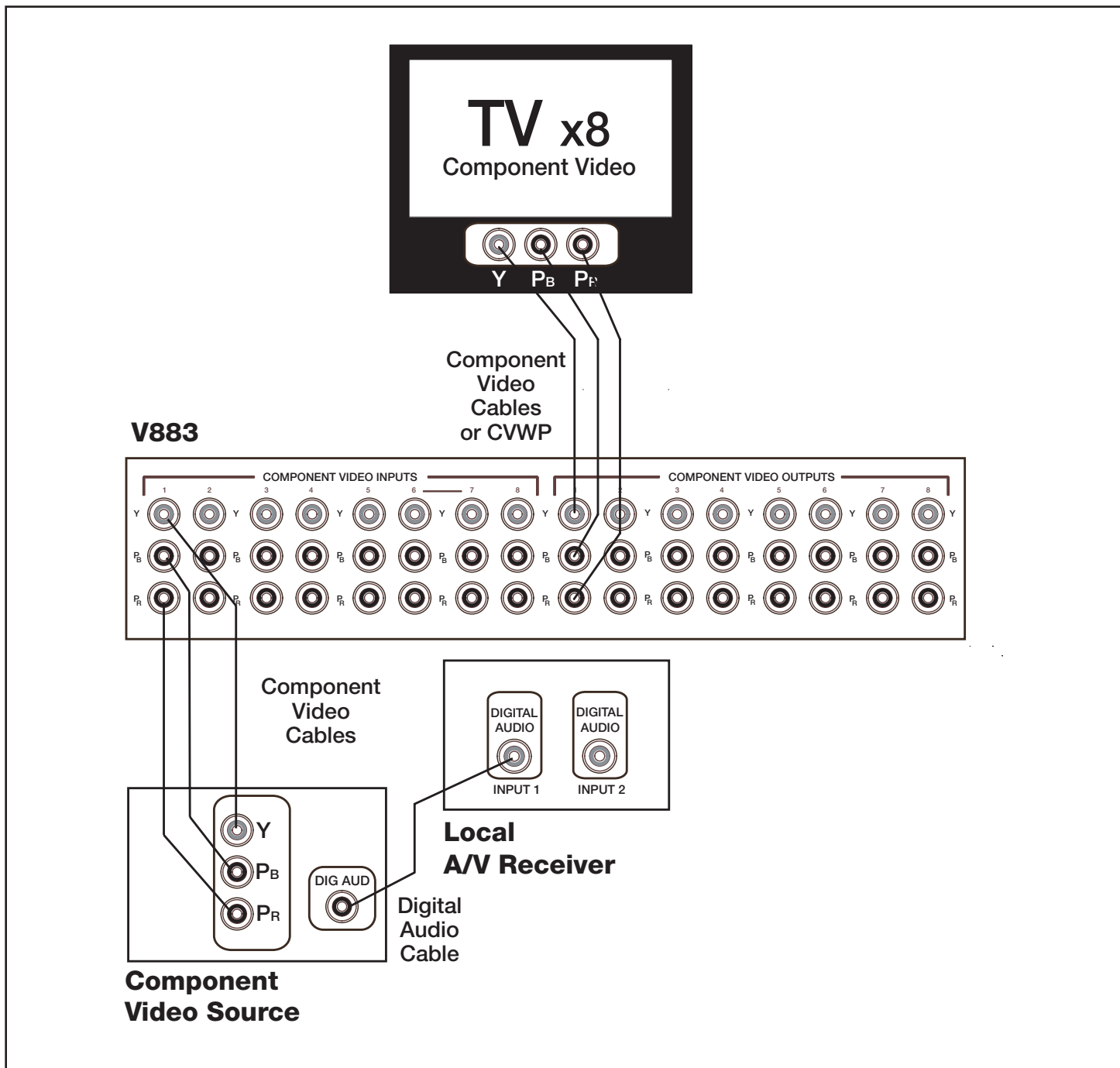
Stand-Alone System - Component & Composite Video

The V883 is capable of switching a combination of composite and component video signals in systems that use both types of video sources. The drawing below shows a more advanced stand-alone system switching component video sources and composite video sources simultaneously to a combination of TVs that use each type of video.

Important Note: *When using the V883 as a composite video switcher, please be aware that the same input type (**Y**, **P**$_B$**, or **P**$_R$**) must be chosen and consistently used for each input (source) and each output (TV/VIA!). In the example below, the **Y** inputs/outputs have been chosen for composite video.*
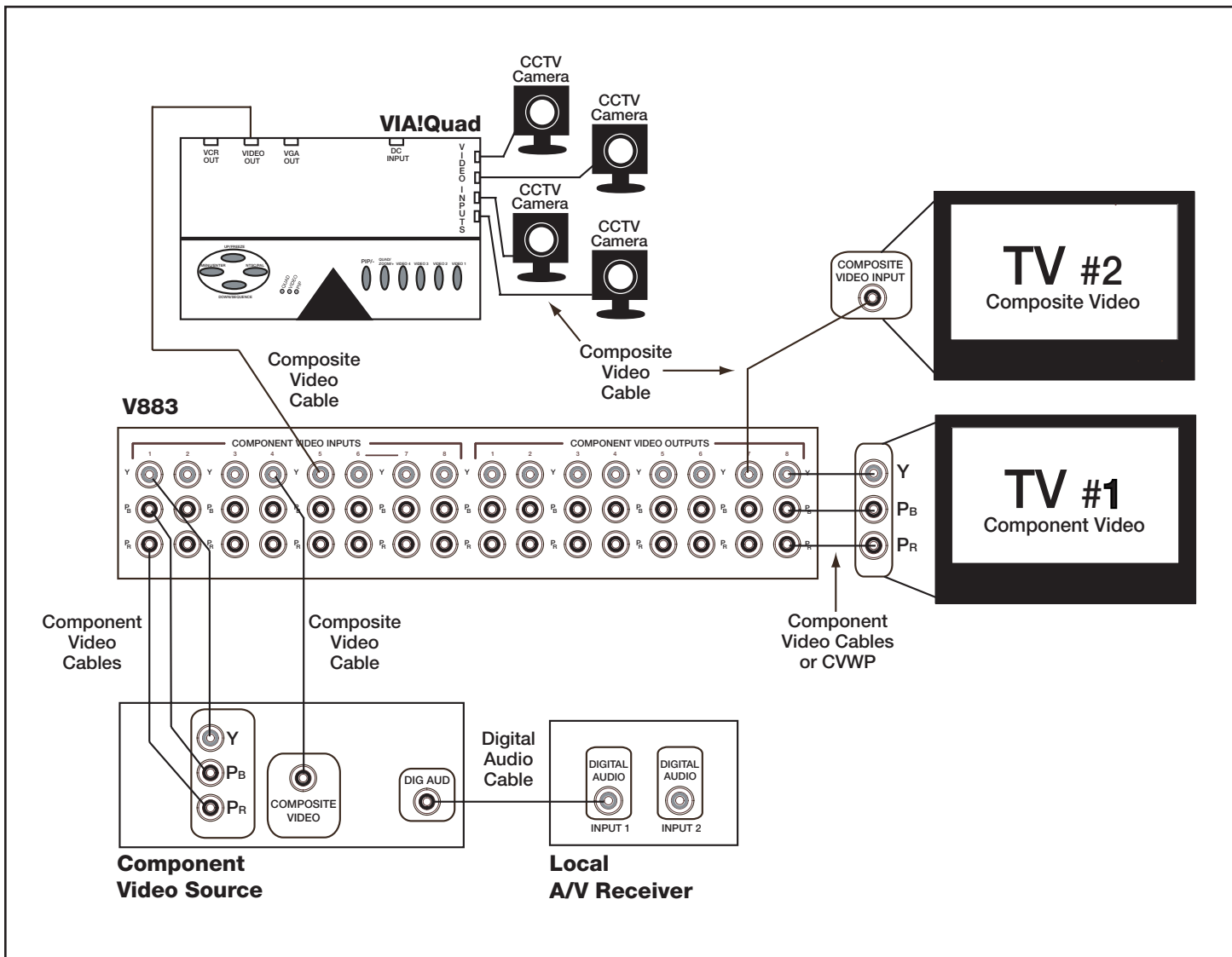
Multi-Chassis Stand-Alone System

This application shows four V883s linked together to form an 8 x 32 composite video matrix. Note the use of RCA 'Y' cables to split each source's signal to each input of the V883's. Set the 75 OHM INPUT TERM jumpers as shown for each unit in order to retain signal integrity. Verify that the UNIT ID DIP switches are correctly set for each unit to ensure proper switching.
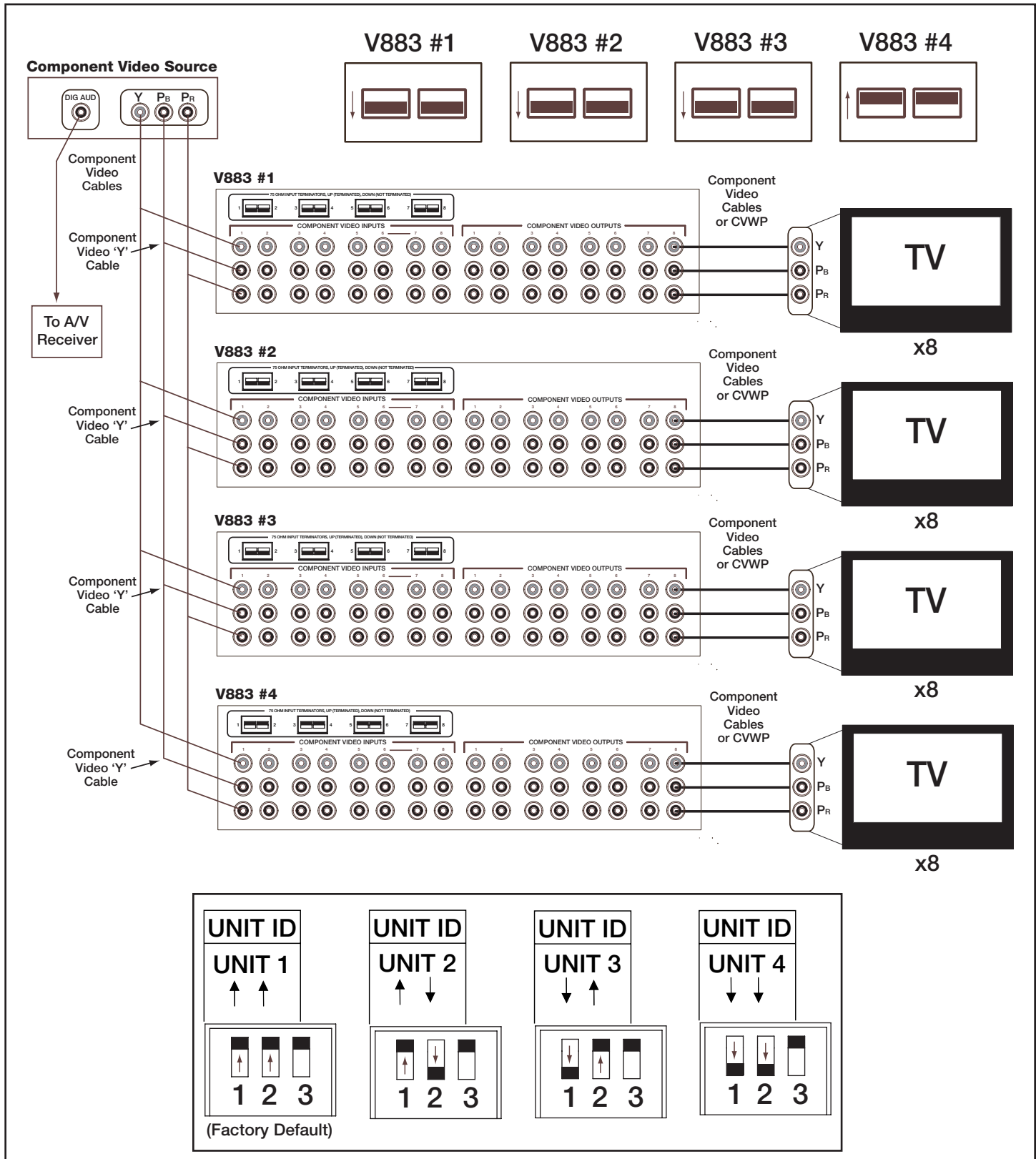
ELAN Multi-Room Controller-Based Systems

There are many possible applications when using the V883 in ELAN Multi-Room Controller-based systems. This section shows basic concepts that can be combined or arranged according to the needs of the exact system being installed.

V883/System6

When utilizing a System6 Integrated Multi-Room Controller (S6), the V883 can be an economical and versatile video switching solution. In this application, the S6 routes analog audio and performs IR distribution and amplification functions. The V883 routes component video (DVD and HDTV) sources to TVs with component video inputs and routes composite video (VIA!Quad w/ cameras) to TVs without component video inputs and to VIA! Touch Panels. The system below shares sources between the S6 and a local Home Theater. A local A/V receiver in the Home Theater is used to play digital audio from the shared DVD and HDTV sources.

Important Note: When using the V883 as a composite video switcher, please be aware that the same input type (Y, P$_B$, or P$_R$) must be chosen and consistently used for each input (source) and each output (TV/VIA!). In the example below, the Y inputs/outputs have been chosen for composite video.
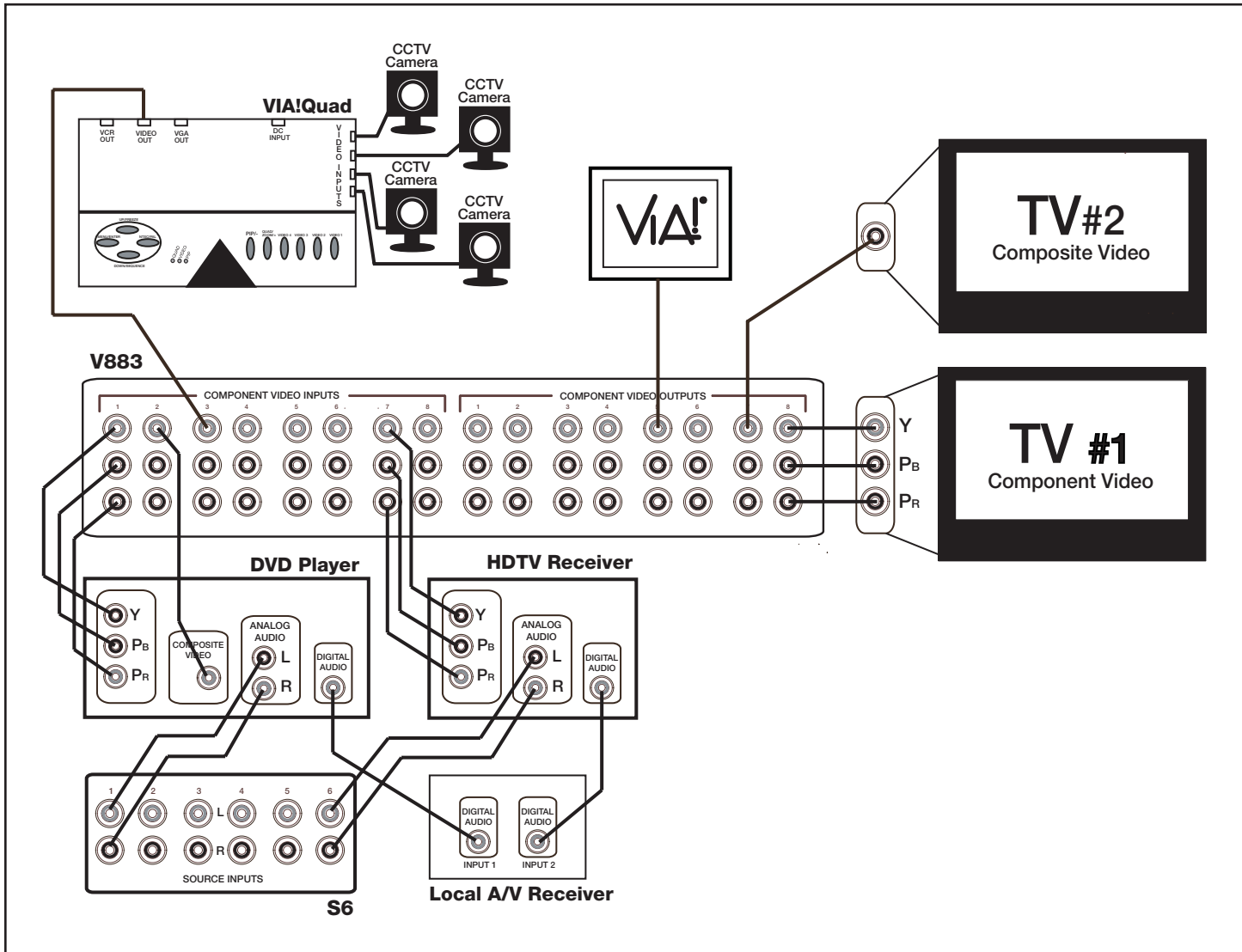
V883/System12

This application shows a System12 Multi-Room A/V Controller (S12) performing audio distribution functions as well as composite video switching. A V883 is used to distribute component video. Although the S12 has component video capabilities, the use of the V883 frees up inputs and outputs so that more composite video sources may be used and more composite video outputs can be sent to more VIA!s.

　　　　　　　　　　　　© ELAN Home Systems 2006 • All rights reserved.
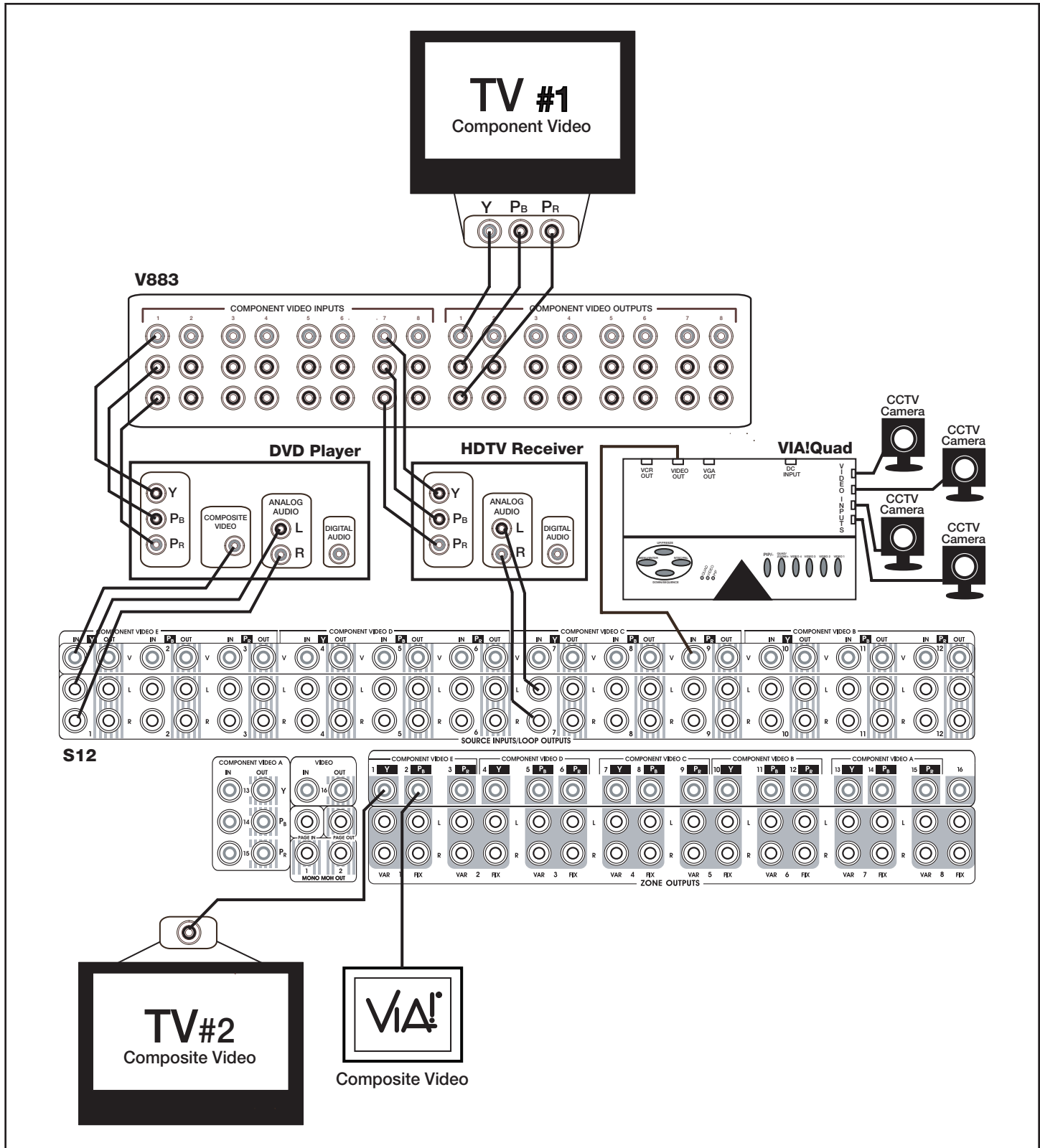
ELAN Multi-Room Controller Multi-Chassis System

Multiple V883s used in ELAN Multi-Room Controller-based systems are configured identically to those used in stand-alone systems. This application shows four V883s linked together to form an 8 x 32 composite video matrix. Note the use of RCA 'Y' cables to split each source's signal to each input of the V883's. Set the 75 OHM INPUT TERM jumpers as shown for each unit in order to retain signal integrity. Verify that the UNIT ID DIP switches are correctly set for each unit to ensure proper switching.
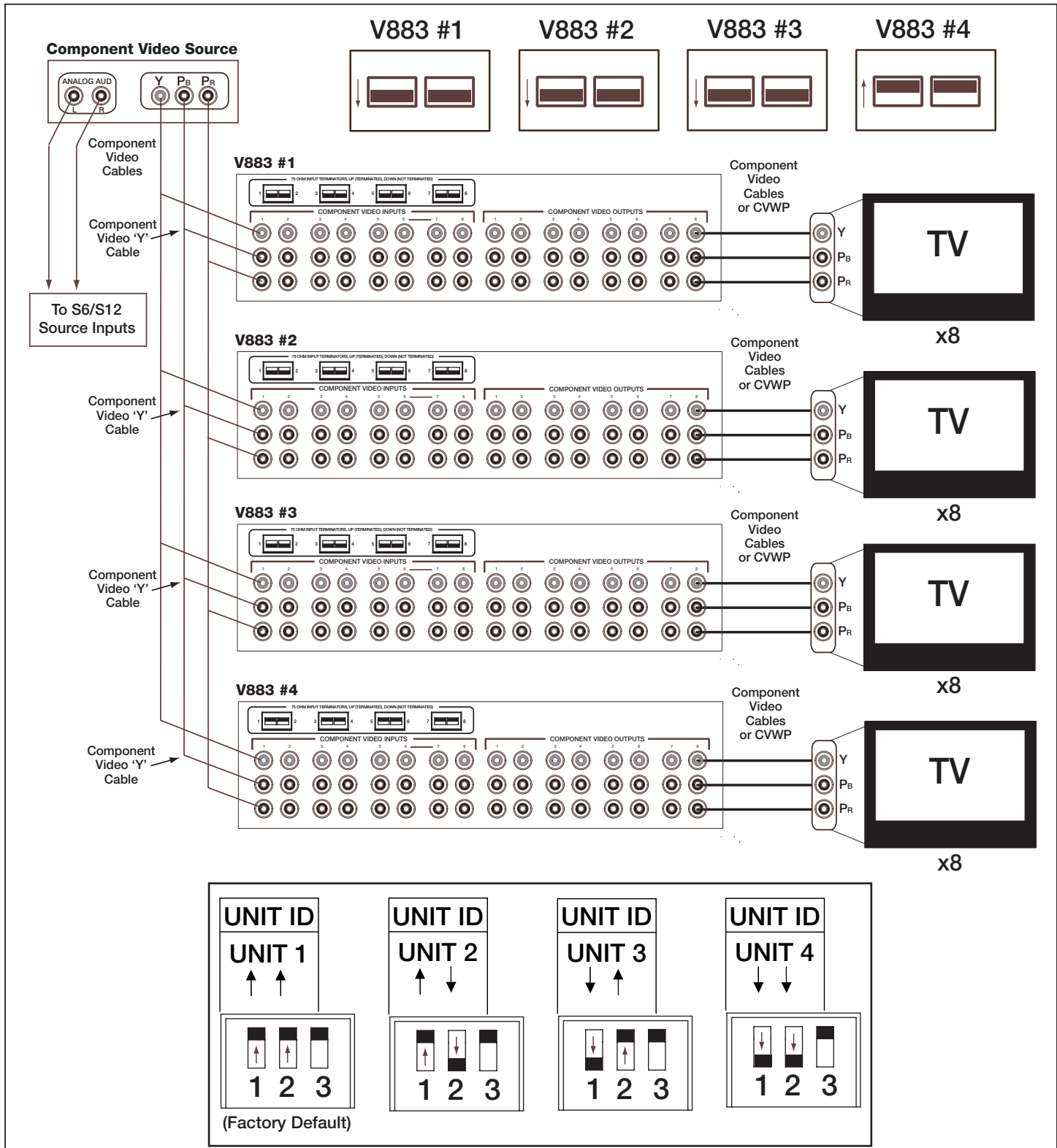
5. Programming

Use VIA!®TOOLS setup software to assign commands to keypads and VIA! Touch Panels. When programming ELAN user interfaces, VIA!TOOLS will automatically configure the video switching commands. Please consult VIA!TOOLS software and the Help file for specific programming steps and full IR, VIA!NET, and RS-232 code sets.

Control Methods

There are three methods of controlling the V883:

- **IR**
- **VIA!NET**
- **RS-232**

Overall system configuration and design goals will determine which programming method should be used.

IR

Use IR commands when controlling the V883 with ELAN keypads or hand-held remote controls.

VIA!NET

Use VIA!NET commands when controlling the V883 with VIA! Touch Panels and VIA!NET devices like the VIA!SC-4 and VIA!2-SS1.

RS-232

Use RS-232 commands when controlling the V883 from third-party RS-232 controllers or when using a computer to test/verify RS-232 functionality.

V883 RS-232 Protocol
The V883 uses the following communications settings:

- **Baud-9.6k or 19.2k** (Default)
- **8 Data Bits**
- **1 Stop Bit**
- **No Parity**
- **Flow Control-None**

Command Structure

- **Prefix:** Must be present for every command string (Required)
- **Command:** See list below for all commands (Required)
- **Parameter:** Decimal value of zone/source command
- **Carriage Return:** 0x0d or Decimal 13 (Required)

&V883, cmd, par <cr>
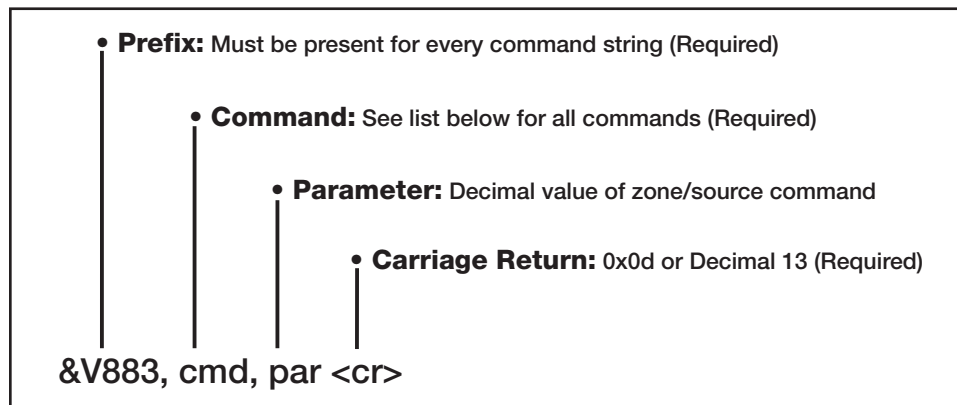
- **&V883,KEY,xxx<CR>**   where **xxx** represents the decimal value of the IR command.
- Unit responds with acknowledgement **&V883,ACK,xxx<CR>**
- Unit will ignore all characters preceding the '**&**'. It will process and **ACK** the command as soon as the carriage return has been received.

Note: The V883 requires at least 50ms between each serial command transmitted to it. However, if the **&V883,ACK,xxx<CR>** is received prior to 50ms, another command can be transmitted immediately.

RS-232 Command List

HEX	DESCRIPTION	DEC	HEX	DESCRIPTION	DEC
00	OUTPUT1 INPUT1	000	40	OUTPUT9 INPUT1	064
01	OUTPUT1 INPUT2	001	41	OUTPUT9 INPUT2	065
02	OUTPUT1 INPUT3	002	42	OUTPUT9 INPUT3	066
03	OUTPUT1 INPUT4	003	43	OUTPUT9 INPUT4	067
04	OUTPUT1 INPUT5	004	44	OUTPUT9 INPUT5	068
05	OUTPUT1 INPUT6	005	45	OUTPUT9 INPUT6	069
06	OUTPUT1 INPUT7	006	46	OUTPUT9 INPUT7	070
07	OUTPUT1 INPUT8	007	47	OUTPUT9 INPUT8	071
08	OUTPUT2 INPUT1	008	48	OUTPUT10 INPUT1	072
09	OUTPUT2 INPUT2	009	49	OUTPUT10 INPUT2	073
0A	OUTPUT2 INPUT3	010	4A	OUTPUT10 INPUT3	074
0B	OUTPUT2 INPUT4	011	4B	OUTPUT10 INPUT4	075
0C	OUTPUT2 INPUT5	012	4C	OUTPUT10 INPUT5	076
0D	OUTPUT2 INPUT6	013	4D	OUTPUT10 INPUT6	077
0E	OUTPUT2 INPUT7	014	4E	OUTPUT10 INPUT7	078
0F	OUTPUT2 INPUT8	015	4F	OUTPUT10 INPUT8	079
10	OUTPUT3 INPUT1	016	50	OUTPUT11 INPUT1	080
11	OUTPUT3 INPUT2	017	51	OUTPUT11 INPUT2	081
12	OUTPUT3 INPUT3	018	52	OUTPUT11 INPUT3	082
13	OUTPUT3 INPUT4	019	53	OUTPUT11 INPUT4	083
14	OUTPUT3 INPUT5	020	54	OUTPUT11 INPUT5	084
15	OUTPUT3 INPUT6	021	55	OUTPUT11 INPUT6	085
16	OUTPUT3 INPUT7	022	56	OUTPUT11 INPUT7	086
17	OUTPUT3 INPUT8	023	57	OUTPUT11 INPUT8	087
18	OUTPUT4 INPUT1	024	58	OUTPUT12 INPUT1	088
19	OUTPUT4 INPUT2	025	59	OUTPUT12 INPUT2	089
1A	OUTPUT4 INPUT3	026	5A	OUTPUT12 INPUT3	090
1B	OUTPUT4 INPUT4	027	5B	OUTPUT12 INPUT4	091
1C	OUTPUT4 INPUT5	028	5C	OUTPUT12 INPUT5	092
1D	OUTPUT4 INPUT6	029	5D	OUTPUT12 INPUT6	093
1E	OUTPUT4 INPUT7	030	5E	OUTPUT12 INPUT7	094
1F	OUTPUT4 INPUT8	031	5F	OUTPUT12 INPUT8	095
20	OUTPUT5 INPUT1	032	60	OUTPUT13 INPUT1	096
21	OUTPUT5 INPUT2	033	61	OUTPUT13 INPUT2	097
22	OUTPUT5 INPUT3	034	62	OUTPUT13 INPUT3	098
23	OUTPUT5 INPUT4	035	63	OUTPUT13 INPUT4	099
24	OUTPUT5 INPUT5	036	64	OUTPUT13 INPUT5	100
25	OUTPUT5 INPUT6	037	65	OUTPUT13 INPUT6	101
26	OUTPUT5 INPUT7	038	66	OUTPUT13 INPUT7	102
27	OUTPUT5 INPUT8	039	67	OUTPUT13 INPUT8	103
28	OUTPUT6 INPUT1	040	68	OUTPUT14 INPUT1	104
29	OUTPUT6 INPUT2	041	69	OUTPUT14 INPUT2	105
2A	OUTPUT6 INPUT3	042	6A	OUTPUT14 INPUT3	106
2B	OUTPUT6 INPUT4	043	6B	OUTPUT14 INPUT4	107
2C	OUTPUT6 INPUT5	044	6C	OUTPUT14 INPUT5	108
2D	OUTPUT6 INPUT6	045	6D	OUTPUT14 INPUT6	109
2E	OUTPUT6 INPUT7	046	6E	OUTPUT14 INPUT7	110
2F	OUTPUT6 INPUT8	047	6F	OUTPUT14 INPUT8	111
30	OUTPUT7 INPUT1	048	70	OUTPUT15 INPUT1	112
31	OUTPUT7 INPUT2	049	71	OUTPUT15 INPUT2	113
32	OUTPUT7 INPUT3	050	72	OUTPUT15 INPUT3	114
33	OUTPUT7 INPUT4	051	73	OUTPUT15 INPUT4	115
34	OUTPUT7 INPUT5	052	74	OUTPUT15 INPUT5	116
35	OUTPUT7 INPUT6	053	75	OUTPUT15 INPUT6	117
36	OUTPUT7 INPUT7	054	76	OUTPUT15 INPUT7	118
37	OUTPUT7 INPUT8	055	77	OUTPUT15 INPUT8	119
38	OUTPUT8 INPUT1	056	78	OUTPUT16 INPUT1	120
39	OUTPUT8 INPUT2	057	79	OUTPUT16 INPUT2	121
3A	OUTPUT8 INPUT3	058	7A	OUTPUT16 INPUT3	122
3B	OUTPUT8 INPUT4	059	7B	OUTPUT16 INPUT4	123
3C	OUTPUT8 INPUT5	060	7C	OUTPUT16 INPUT5	124
3D	OUTPUT8 INPUT6	061	7D	OUTPUT16 INPUT6	125
3E	OUTPUT8 INPUT7	062	7E	OUTPUT16 INPUT7	126
3F	OUTPUT8 INPUT8	063	7F	OUTPUT16 INPUT8	127

HEX	DESCRIPTION	DEC	HEX	DESCRIPTION	DEC
80	OUTPUT17 INPUT1	128	C0	OUTPUT25 INPUT1	192
81	OUTPUT17 INPUT2	129	C1	OUTPUT25 INPUT2	193
82	OUTPUT17 INPUT3	130	C2	OUTPUT25 INPUT3	194
83	OUTPUT17 INPUT4	131	C3	OUTPUT25 INPUT4	195
84	OUTPUT17 INPUT5	132	C4	OUTPUT25 INPUT5	196
85	OUTPUT17 INPUT6	133	C5	OUTPUT25 INPUT6	197
86	OUTPUT17 INPUT7	134	C6	OUTPUT25 INPUT7	198
87	OUTPUT17 INPUT8	135	C7	OUTPUT25 INPUT8	199
88	OUTPUT18 INPUT1	136	C8	OUTPUT26 INPUT1	200
89	OUTPUT18 INPUT2	137	C9	OUTPUT26 INPUT2	201
8A	OUTPUT18 INPUT3	138	CA	OUTPUT26 INPUT3	202
8B	OUTPUT18 INPUT4	139	CB	OUTPUT26 INPUT4	203
8C	OUTPUT18 INPUT5	140	CC	OUTPUT26 INPUT5	204
8D	OUTPUT18 INPUT6	141	CD	OUTPUT26 INPUT6	205
8E	OUTPUT18 INPUT7	142	CE	OUTPUT26 INPUT7	206
8F	OUTPUT18 INPUT8	143	CF	OUTPUT26 INPUT8	207
90	OUTPUT19 INPUT1	144	D0	OUTPUT27 INPUT1	208
91	OUTPUT19 INPUT2	145	D1	OUTPUT27 INPUT2	209
92	OUTPUT19 INPUT3	146	D2	OUTPUT27 INPUT3	210
93	OUTPUT19 INPUT4	147	D3	OUTPUT27 INPUT4	211
94	OUTPUT19 INPUT5	148	D4	OUTPUT27 INPUT5	212
95	OUTPUT19 INPUT6	149	D5	OUTPUT27 INPUT6	213
96	OUTPUT19 INPUT7	150	D6	OUTPUT27 INPUT7	214
97	OUTPUT19 INPUT8	151	D7	OUTPUT27 INPUT8	215
98	OUTPUT20 INPUT1	152	D8	OUTPUT28 INPUT1	216
99	OUTPUT20 INPUT2	153	D9	OUTPUT28 INPUT2	217
9A	OUTPUT20 INPUT3	154	DA	OUTPUT28 INPUT3	218
9B	OUTPUT20 INPUT4	155	DB	OUTPUT28 INPUT4	219
9C	OUTPUT20 INPUT5	156	DC	OUTPUT28 INPUT5	220
9D	OUTPUT20 INPUT6	157	DD	OUTPUT28 INPUT6	221
9E	OUTPUT20 INPUT7	158	DE	OUTPUT28 INPUT7	222
9F	OUTPUT20 INPUT8	159	DF	OUTPUT28 INPUT8	223
A0	OUTPUT21 INPUT1	160	E0	OUTPUT29 INPUT1	224
A1	OUTPUT21 INPUT2	161	E1	OUTPUT29 INPUT2	225
A2	OUTPUT21 INPUT3	162	E2	OUTPUT29 INPUT3	226
A3	OUTPUT21 INPUT4	163	E3	OUTPUT29 INPUT4	227
A4	OUTPUT21 INPUT5	164	E4	OUTPUT29 INPUT5	228
A5	OUTPUT21 INPUT6	165	E5	OUTPUT29 INPUT6	229
A6	OUTPUT21 INPUT7	166	E6	OUTPUT29 INPUT7	230
A7	OUTPUT21 INPUT8	167	E7	OUTPUT29 INPUT8	231
A8	OUTPUT22 INPUT1	168	E8	OUTPUT30 INPUT1	232
A9	OUTPUT22 INPUT2	169	E9	OUTPUT30 INPUT2	233
AA	OUTPUT22 INPUT3	170	EA	OUTPUT30 INPUT3	234
AB	OUTPUT22 INPUT4	171	EB	OUTPUT30 INPUT4	235
AC	OUTPUT22 INPUT5	172	EC	OUTPUT30 INPUT5	236
AD	OUTPUT22 INPUT6	173	ED	OUTPUT30 INPUT6	237
AE	OUTPUT22 INPUT7	174	EE	OUTPUT30 INPUT7	238
AF	OUTPUT22 INPUT8	175	EF	OUTPUT30 INPUT8	239
B0	OUTPUT23 INPUT1	176	F0	OUTPUT31 INPUT1	240
B1	OUTPUT23 INPUT2	177	F1	OUTPUT31 INPUT2	241
B2	OUTPUT23 INPUT3	178	F2	OUTPUT31 INPUT3	242
B3	OUTPUT23 INPUT4	179	F3	OUTPUT31 INPUT4	243
B4	OUTPUT23 INPUT5	180	F4	OUTPUT31 INPUT5	244
B5	OUTPUT23 INPUT6	181	F5	OUTPUT31 INPUT6	245
B6	OUTPUT23 INPUT7	182	F6	OUTPUT31 INPUT7	246
B7	OUTPUT23 INPUT8	183	F7	OUTPUT31 INPUT8	247
B8	OUTPUT24 INPUT1	184	F8	OUTPUT32 INPUT1	248
B9	OUTPUT24 INPUT2	185	F9	OUTPUT32 INPUT2	249
BA	OUTPUT24 INPUT3	186	FA	OUTPUT32 INPUT3	250
BB	OUTPUT24 INPUT4	187	FB	OUTPUT32 INPUT4	251
BC	OUTPUT24 INPUT5	188	FC	OUTPUT32 INPUT5	252
BD	OUTPUT24 INPUT6	189	FD	OUTPUT32 INPUT6	253
BE	OUTPUT24 INPUT7	190	FE	OUTPUT32 INPUT7	254
BF	OUTPUT24 INPUT8	191	FF	OUTPUT32 INPUT8	255

6. Troubleshooting

General

SYMPTOM	CAUSE	SOLUTION
No power up.	1. No AC power.	Connect Power Cord to AC outlet.
		Check AC circuit breaker.
	1. Blown fuse.	Replace fuse w/ T0.4AL type fuse (T0.2AL for 240V version).

IR Control

SYMPTOM	CAUSE	SOLUTION
No source or zone selected from IR controller (keypad, hand-held remote, etc.). IR LED does NOT flash when button pressed.	1. IR controller not programmed.	Program IR controller.
	2. IR signal path wiring bad.	Verify IR signal path wiring. Check keypads, IR sensors, IR distribution blocks, V883 IR Input jack, IR emitters, etc.
No source or zone selected from IR controller (keypad, hand-held remote, etc.). IR LED DOES flash when button pressed.	1. Incorrect IR commands programmed (not V883 commands).	Verify/correct IR programming.
	2. UNIT ID DIP switches incorrect.	Verify/correct DIP switches.
Intermittant or no source or zone control from IR controller (keypad, hand-held remote, etc.). IR LED flickers or is lit constantly.	IR flooding.	Check IR receivers or V883 front IR sensor for ambient light or plasma TV flooding.
Incorrect source and/or zone selected.	Incorrect V883 IR commands programmed.	Verify/correct IR programming.

RS-232 Control

SYMPTOM	CAUSE	SOLUTION
No source or zone selected from RS-232 controller.	1. RS-232 controller incorrectly programmed.	Verify/correct programming.
	2. RS-232 signal path wiring bad.	Verify RS-232 wiring. Check wire integrity an pin-out configuration.
	3. UNIT ID DIP switches incorrect.	Verify/correct DIP switches.
	4. BAUD RATE switches incorrect.	Verify/correct DIP switches.
Incorrect source and/or zone selected.	The V883 RS-232 commands were incorrectly programmed.	Verify/correct programming.
Acknowledgement &V883,ACK,xxx<CR> is not received within 200ms	1. The command was formatted incorrectly.	Verify/correct programming.
	2. An error has occurred in the V883.	Turn unit OFF, then back ON.
	3. Serial cable not connected or defective.	Connect or replace serial cable.
	4. V883 does not have power.	Connect power, check breakers.

VIA!NET Control

SYMPTOM	CAUSE	SOLUTION
No source or zone selected from VIA!NET controller (VIA! Touch Panel, etc.).	1. VIA!NET controller not programmed.	Program VIA!NET controller.
	2. VIA!NET signal path wiring bad.	Verify VIA!NET wiring.
	3. UNIT ID DIP switches incorrect.	Verify/correct DIP switches.
Incorrect source and/or zone selected.	Incorrect V883 VIA!NET commands programmed.	Verify/correct programming.

Video Switching

SYMPTOM	CAUSE	SOLUTION
Video does not appear on desired TV/monitor. Front of V883 displays correct source/zone.	1. V883 output cables incorrectly routed. TV/monitor connected to incorrect output.	Verify/correct video output wiring.
	2. TV/monitor has incorrect input selected.	Select correct video input on TV/monitor.
	3. Video wiring bad/damaged.	Verify/correct video wiring.
	4. Video source not sending video (not connected, playing, or turned on).	Verify/correct video source problem.
Incorrect source displays on TV/monitor. Front of V883 displays correct source/zone.	V883 input cables incorrectly routed. Source connected to incorrect V883 input.	Verify/correct video input wiring.
Incorrect source displays on TV/monitor. Front of V883 displays incorrect source/zone.	Incorrect programming.	Verify/correct IR programming.
Component video sources display correctly, composite source does not display at all.	1. Composite video source not connected to same type (Y, P$_B$, P$_R$) input as TV/monitor.	Ensure same type (Y, P$_B$, P$_R$) input & output used for all composite video sources and TVs/monitors.
	2. TV/monitor has incorrect input selected.	Select correct composite video input on TV/monitor.

Video Quality

SYMPTOM	CAUSE	SOLUTION
Video image is not optimal (i.e., fuzzy, blurry, smeared, ghosted, or dull).	1. In-house video wiring picking up noise from high-voltage lines or other source of interference.	Do not run video wiring near AC lines. If necessary, cross AC lines at 90 degrees.
	2. In-house coax runs have sharp bends or using poor quality cable.	Make gradual bends in coax when running wire. Use high-quality RG-6 coaxial cable.
	3. Video wiring bad/damaged.	Verify/correct video wiring.
	4. Incorrect 75 Ohm DIP switch setting when sharing sources or utilizing multiple chassis.	Verify/correct 75 Ohm DIP switch settings.
Video image colors incorrect, scrambled, jagged lines, etc.	1. Component video cables connected to wrong type (Y, P$_B$, P$_R$) of inputs/outputs at V883 or TV/monitor.	Verify/correct component video input/output wiring.
	2. One or more component video connections (Y, P$_B$, P$_R$) not made.	Verify/correct component video input/output wiring.

Notes:

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Limited Warranty

ELAN HOME SYSTEMS L.L.C. ("ELAN") warrants the V883 Component Video Controller to be free from defects in materials and workmanship for the period of two years (2 years) from date of purchase. If within the applicable warranty period above purchaser discovers that such item was not as warranted above and promptly notifies ELAN in writing, ELAN shall repair or replace the item at the company's option. This warranty shall not apply (a) to equipment not manufactured by ELAN, (b) to equipment which shall have been installed by other than an ELAN authorized installer, (c) to installed equipment which is not installed to ELAN's specifications, (d) to equipment which shall have been repaired or altered by others than ELAN, (e) to equipment which shall have been subjected to negligence, accident, or damage by circumstances beyond ELAN's control, including, but not limited to, lightning, flood, electrical surge, tornado, earthquake, or other catastrophic events beyond ELAN's control, or to improper operation, maintenance or storage, or to other than normal use of service. With respect to equipment sold by, but not manufactured by ELAN, the warranty obligations of ELAN shall in all respects conform to the warranty actually extended to ELAN by its supplier. The foregoing warranties do not cover reimbursement for labor, transportation, removal, installation or other expenses which may be incurred in connection with repair or replacement.

Except as may be expressly provided and authorized in writing by ELAN, ELAN shall not be subject to any other obligations or liabilities whatsoever with respect to equipment manufactured by ELAN or services rendered by ELAN.

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