

INSTALLATION INSTRUCTIONS

HD44CC5

High Definition Video Matrix Switcher,
Coaxial and CAT5

HD44C

High Definition Video Matrix Switcher,
Coaxial Only

DESCRIPTION

The HD44CC5 four-source, four-zone high-definition matrix switcher has component video and S/PDIF digital audio inputs for each source. All four zone outputs have component video output and S/PDIF audio output for economical local distribution up to 250', as well as a RJ45 output for transmission of the video and digital audio signal up to 1000' to the HDRXSG01 receiver located in the zone. Both coaxial component video output and CAT5 output are active simultaneously, making it possible to distribute four sources to eight outputs at the same time.

The HD44C has the same great features as the HD44CC5 without the CAT5 output. The HD44C is ideal for installations requiring local switching and distribution up to 250'.

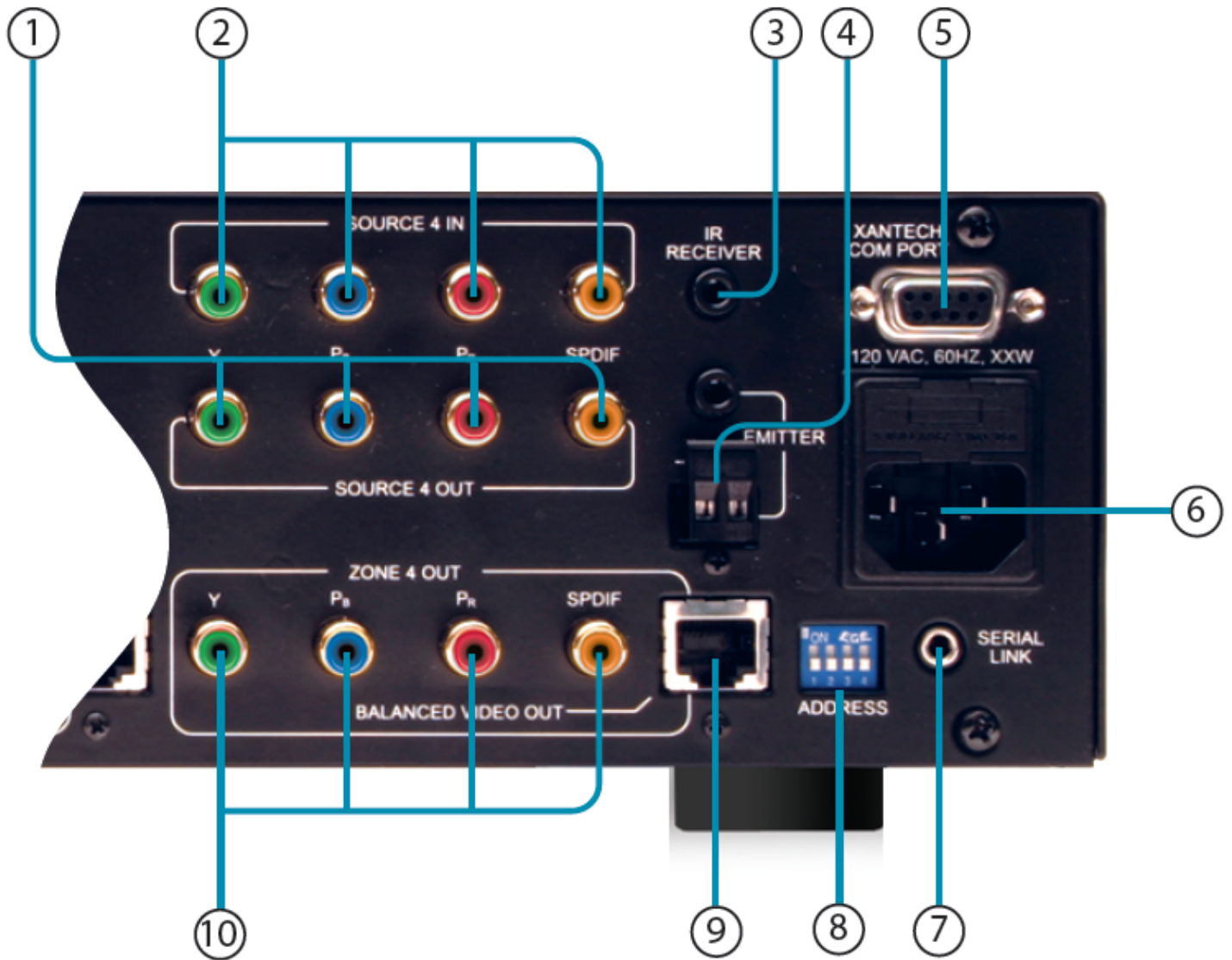
The HD44CC5 and HD44C unit is expandable up to 16 zones.

SPECIFICATIONS

- Size: 17" W x 7 3/8" D x 3 15/16" H
- Weight: 9.25 lbs (4.2 kilos)
- Controllable through IR and RS232 commands
- Bandwidth supports resolutions of 1080p, 1080i, 720p, 480p and 480i.
- Optional Rack Mount kit available (RM2UKIT)
- Power supply (120VAC, 0.25A, 50-60Hz)
- Operates in temperatures up to 55 degrees Celsius.



DETAIL OVERVIEW



[1] SOURCE LOOP-THROUGH CONNECTION

The source inputs are buffered to provide an output at the same levels, assuming a 75-ohm termination is on the output. Use these connections for HD44 expansion systems. The buffers are an active circuit. The HD44 must be powered on for an active connection.

[2] SOURCE INPUTS

Gold-plated RCA jacks for connection from the output of the source. Color coordinated to match all HD source components.

[3] IR RECEIVER

The rear panel IR receiver is a 3.5mm Stereo jack that is compatible with all Xantech IR receivers, such as the 291-10. Switch 4 must be in the OFF position to use this jack.

PLUG	CIRCUIT
TIP	IR SIGNAL
RING	GROUND
SLEEVE	+12VDC, 25mA

[4] IR BUS, EMITTER PORT

The 3.5mm Mono jack is an emitter port. The IR signal is connected to the IR Receiver. A Xantech 283M emitter can be connected to this port.

PLUG	CIRCUIT
TIP	IR SIGNAL
SLEEVE	GROUND

The 2-Pin WECO screw terminal is an IR port. The IR signal is connected to the IR Receiver. The WECO screw terminal allows easy installation to a typical Xantech IR connecting block.

[5] RS232 (SERIAL) COMMANDS

The RS232 Port is bi-directional. The communication is set to 9600 Baud 8-N-1.

DB9 CONNECTOR

CIRCUIT	PIN
TX	2
RX	3
GND	5

RS232 COMMAND STRUCTURE

Where:

{z#} - Zone Number. Range is 1..4 (1..16 if expanded)

{s#} - Source Input Number. Range is 1..4

{0/1} - Either 0 (zero) or 1 (one). 0 - Off, 1 - On.

NAME	COMMAND	REMARKS
Zone Power	!{z#}PR{0/1}+	To turn on Zone 2: !2PR1+
		To turn off Zone 1: !1PR0+
Zone Power Toggle	!{z#}PT+	
All Zones Off	!AO+	
Zone Restore All	!RF+	Restore all the Zone-to-Source routing: !RF+
Input (Source) Select	!{z#}SS{s#}+	To set Zone 1 to Source Input 5: !1SS5+

RS232 QUERIES

NAME	QUERY	RESPONSE	EXAMPLE	EXPLANATION
Zone Power	?{z#}PR+	?{z#}PR{0/1}+	?7PR0+	Power in zone 7 is OFF.
Input Select	?{z#}SS+	?{z#}SS{s#}+	?5SS3+	Zone 5 is Source 3.

[6] AC POWER INPUT

Standard IEC 3-Conductor AC Line Cord Receptacle for plug-in of a 3-conductor power line cord. Be sure to note if the power receptacle is domestic (120VAC type) or international (240VAC type).

[7] RS232 EXPANSION

The HD44C and HD44CC5 can be expanded into a larger system. By using any combination of the HD44C and HD44CC5 (up to 8 systems), a larger High-Definition distribution system can be created.

For instance, two HD44C systems can be combined to create a much larger 4 source input to 8 zone output. The two HD44C systems must have its own unique address (see ADDRESS (DIP SWITCH) section). The included RS232 expansion cable allows a single RS232 control port to be used to command the entire system. The expansion cable is connected between the DB9 (5) and 3.5mm stereo mini jack (7).

DB9 MALE

CIRCUIT	PIN
TX	2
RX	3
GND	5

3.5MM PLUG

PLUG	CIRCUIT
TIP	TX
RING	RX
SLEEVE	GND

[8] ADDRESS (DIP SWITCH)

Switch 1 & 2: Unit Address (for Expansion mode)

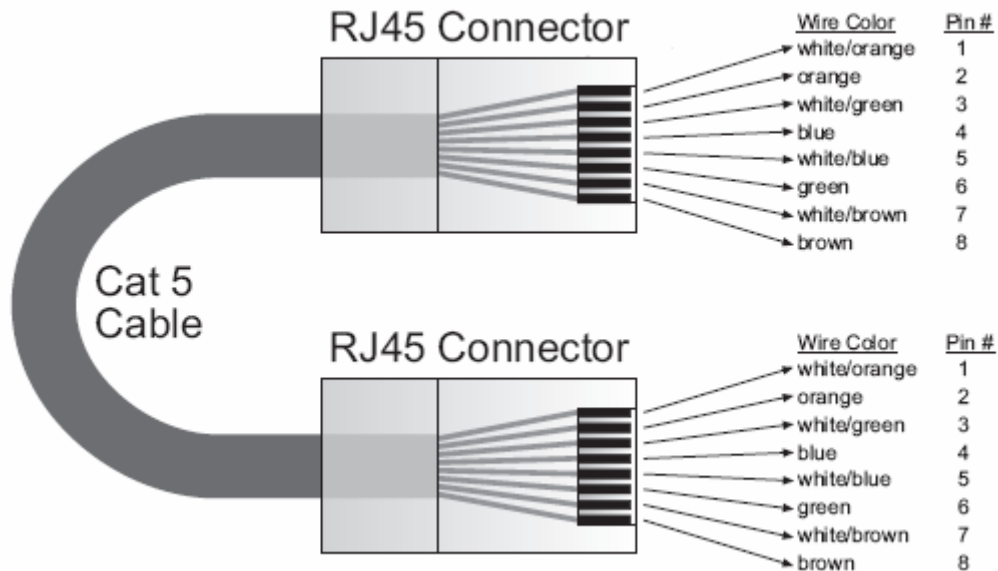
ADDR	SW 1	SW 2
UNIT 1	ON	ON
UNIT 2	ON	OFF
UNIT 3	OFF	ON
UNIT 4	OFF	OFF

Switch 3: ON for firmware write protect

Switch 4: ON for front panel IR receiver / OFF for rear panel IR receiver

[9] CAT5 ZONE OUTPUT

Output connection to the HDRXSG01 receiver module. Uses standard CAT5 cable. Be sure to verify CAT5 wiring connection is correct before installation.



[10] COAXIAL ZONE OUTPUT

Gold-plated RCA jacks for connection to an HD monitor. Color coordinated to match all HD type products.

The CAT5 and coaxial output can be used at the same time.

IMPORTANT NOTICE

After connecting the CAT5 cable to the receiver (HDRXSG01), the power supply to the receiver should be unplugged for a few seconds and then reconnected. This allows the receiver to go through the full process of line length and line quality self-calibration.

As an alternate process to this procedure, the power may be cycled off for a few seconds and reapplied to accomplish the same full self-calibration process.

If for some reason the system losses power at the receiving end (HDRXSG01), the transmitting end (HD44CC5), or both ends, the full self-calibration process will automatically occur.

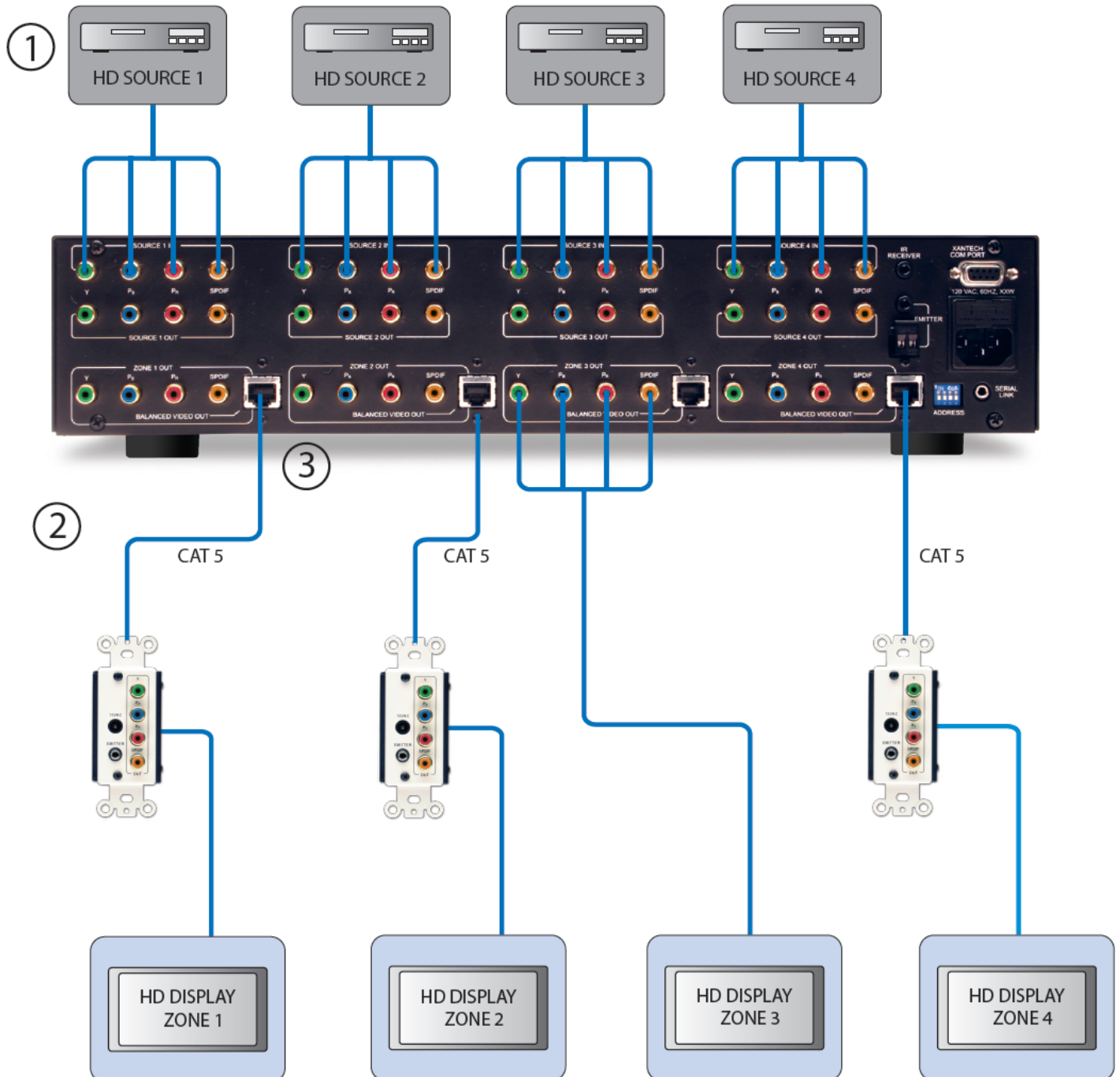
QUICK INSTALLATION: HD44CC5 and HDRXSG01

[1] Connect the High-Definition Source to the HD44CC5 or HDTXSG01. Figure 1 below shows a HD44CC5 (video matrix transmitter) connected to the HDRXSG01 (receiver).

[2] Using CAT5 cable, connect the HD44CC5 zone output or the output from the HDTXSG01 to the HDRXSG01. Connect power to the HD44CC5 first. Then connect power to the HDRXSG01.

[3] On the HD44CC5, set the source to zone to enable the HDRXSG01 from the connected High-Definition source. See HD44CC5 manual on how to use RS232 and IR RC68+ controls.

[4] Installation Complete! No adjustments needed!



RC68+ (IR) COMMANDS

The RC68+ should be set to Group Code "C0".

		ZONE 1	ZONE 2	ZONE 3	ZONE 4
1	Zone Power Toggle	80	48	10	90
		SRC 1	SRC 2	SRC 3	SRC 4
2	Zone 1 Source Select	00	C0	50	D0
	Zone 2 Source Select	40	A0	30	B0
	Zone 3 Source Select	20	E0	70	F0
	Zone 4 Source Select	60	88	18	98
		ZONE 1	ZONE 2	ZONE 3	ZONE 4
3	Zone Power On	08	A8	38	B8
4	Zone Power Off	28	E8	78	F8
5	Zone Power All Off	68			
6	Zone Restore All	C8			



ADVANCE INSTALLATION

FIGURE 2: Below shows a diagram for a sports bar application. With the equipment rack located near or behind the bar area, the coaxial outputs can be used for local HD monitors. The CAT5 outputs can be used to deliver HD content to areas such as outdoor patios and pool table recreational areas.

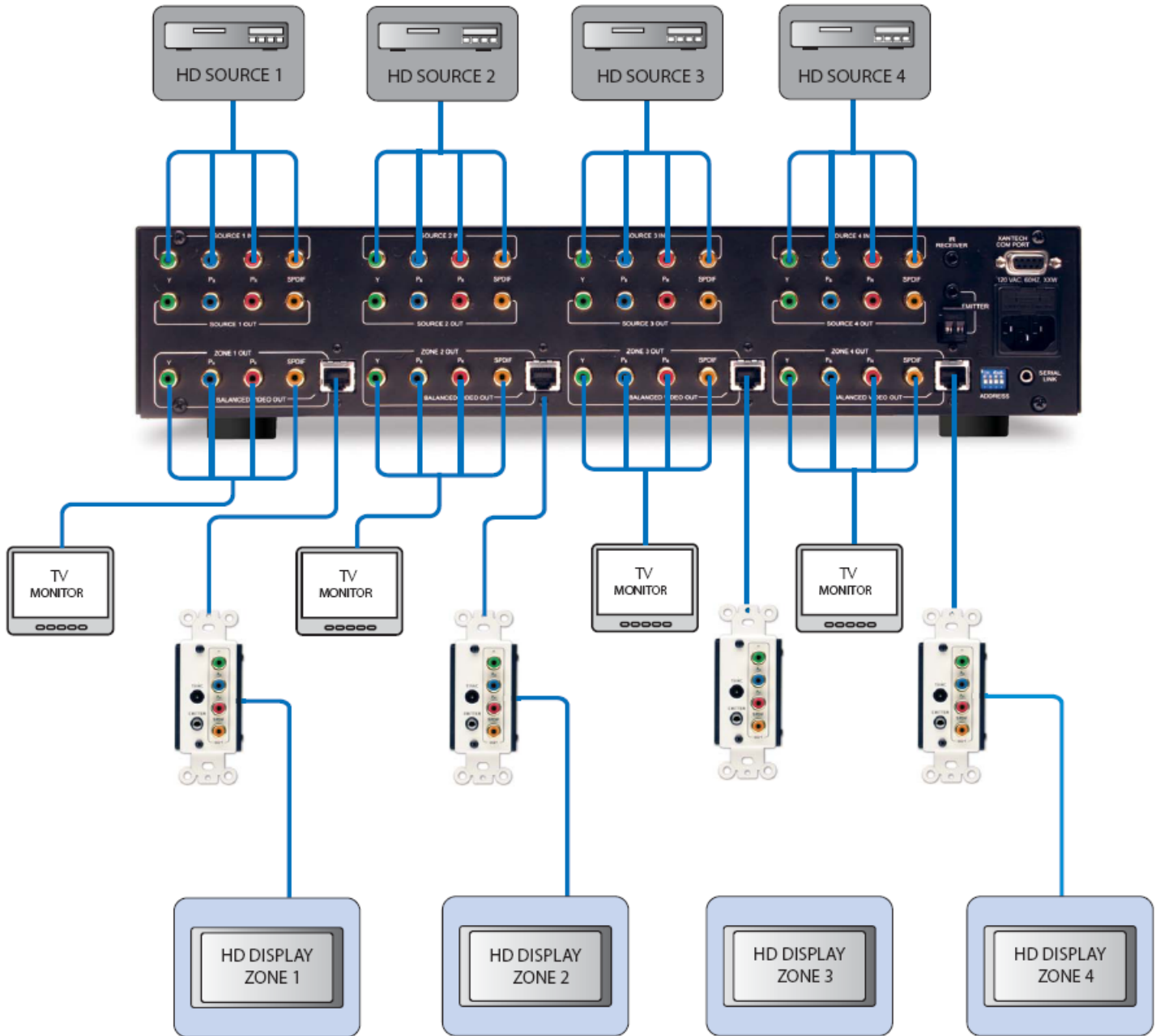


FIGURE 2

FIGURE 3: The figure in the next page shows an expanded HD44CC5 system. With two HD44CC5 devices, HD content can be distributed to 16 displays (8 with CAT5 outputs, 8 with coaxial outputs). The included RS232 expansion cable allows a single RS232 control port to be used to command the entire system.

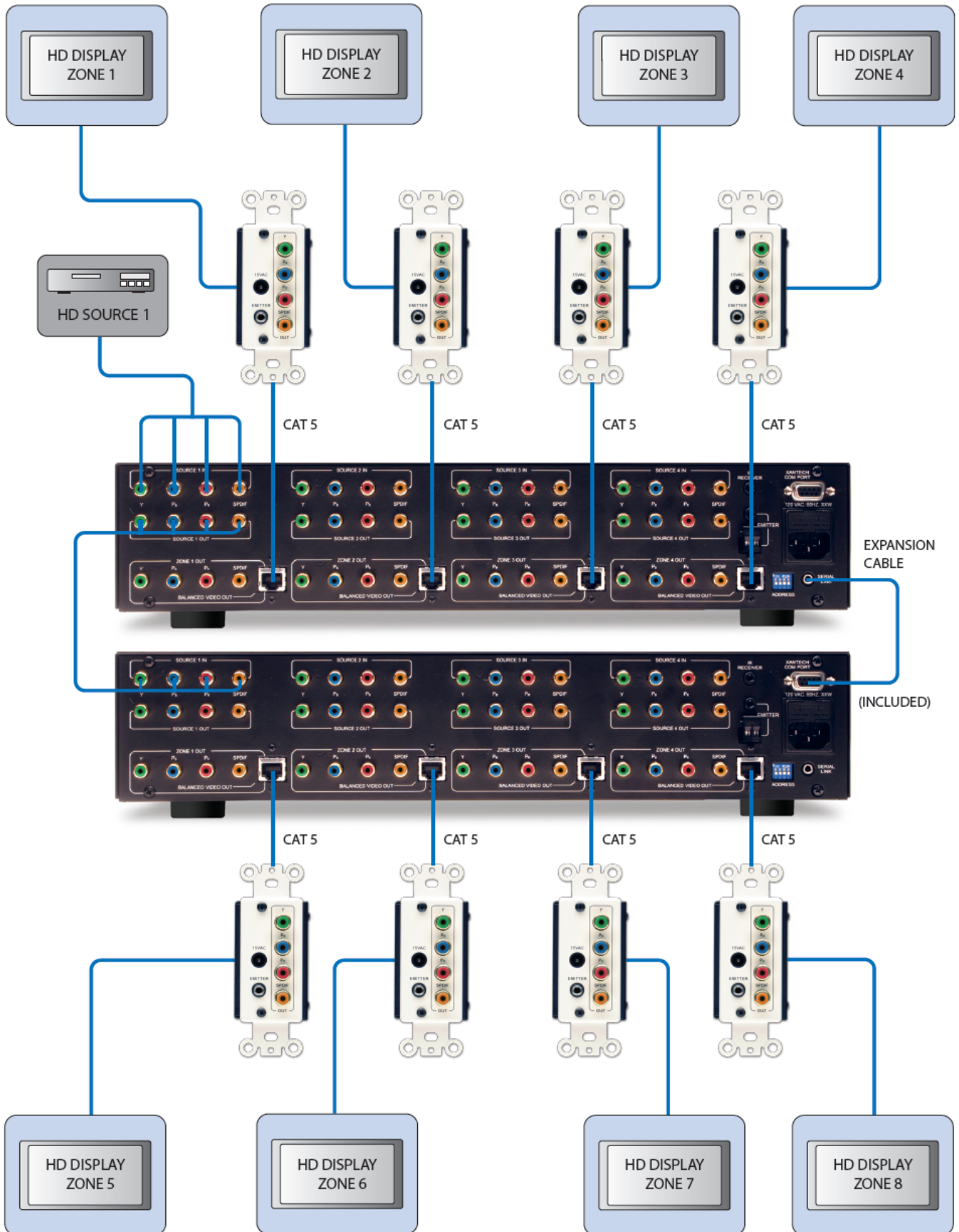


FIGURE 3



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