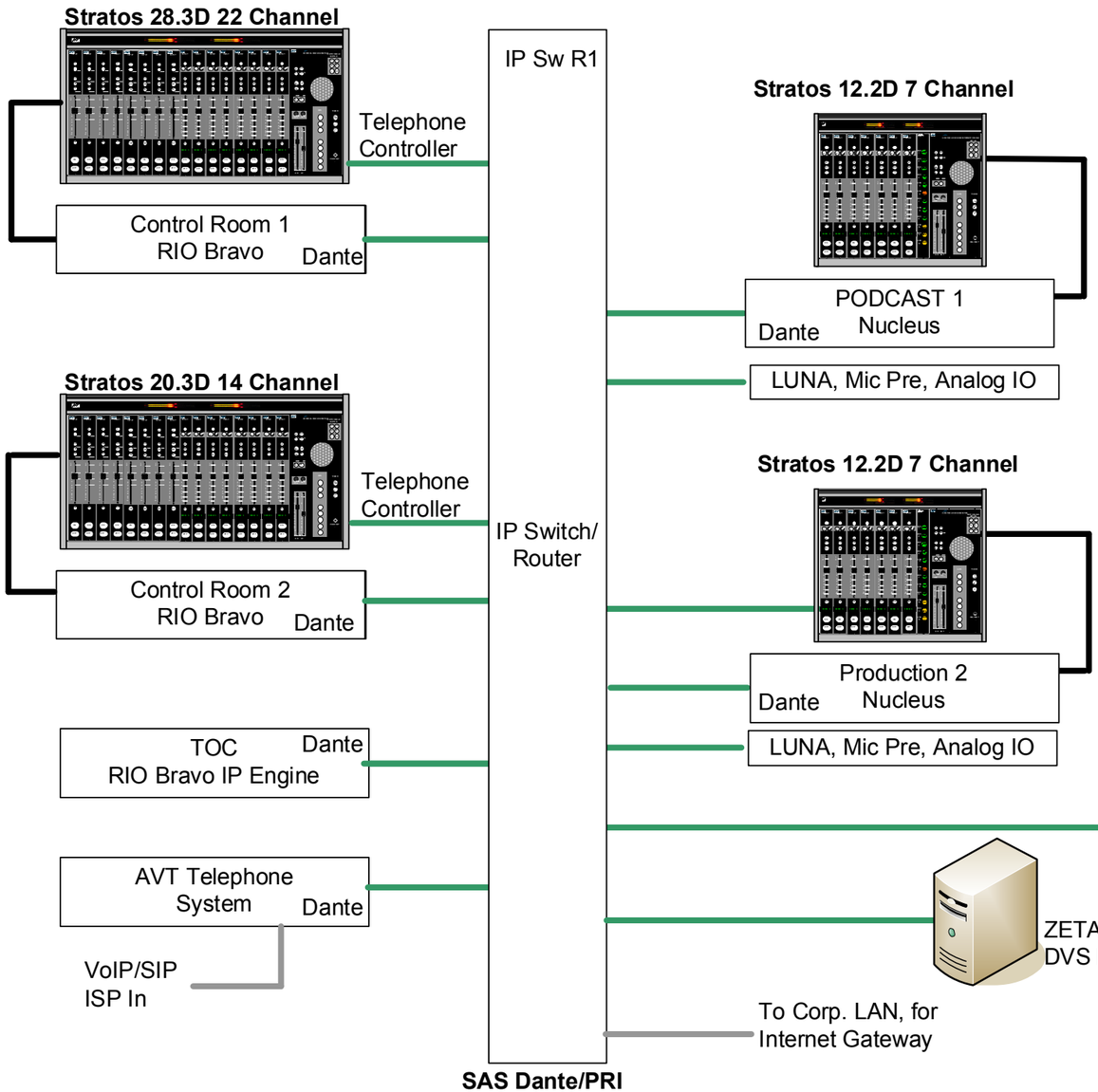
SIERRA AUTOMATED SYSTEMS
1.818.840.6749 www.sasaudio.com

System Overview
Typical System Overview



Drawing Legend:

Signal Flow (Cat5/6 RJ45 Network Cable)

- Grn = Dante AoIP Primary and IP Network LAN CTL
- Vio = Dante AoIP Optional Secondary Network
- Blu = Audio (Analog or Digital)
- Red = SAS RS485 Control, DC Opto/Relay Control
- Gry = Corp IP LAN/ISP Network (VLAN/Gateway)

Notes:

* All SAS IO DSP Engine Connections are RJ45, Orn = Left, Brn = Right, and annotated on the wiring Chart.
* SAS Dongles provide RJ45 breakout to XLR males, Females, and TRS. Blue collar is Left Ch., Red collar is Right Ch.
* Some RJ45 Signal Outputs have PoE on Blu + and Grn – to plug directly into SAS Turret Controllers and HP Amps, annotated (PoE).
* The AVT Telephone System Audio is Dante AoIP in and out. A VoIP/SIP ISP service is fed separately to the AVT Hybrid System.
* SAS Telephone Controllers are serviced thru a PC application, the interface to the AVT telephone system.
* AoIP network is drawn with core switch and edge switches in each room to limit number of home run network cabling to TOC

SAS	File Name: Demo Stratos IP Console System Rev 4.vsd	
	Drawn by: Al Salci	Date: 1/25/2024

SIERRA AUTOMATED SYSTEMS
1.818.840.6749 www.sasaudio.com

Console Layout

Module	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	Mic 1	Mic 2	Mic 3	blank	Zeta 1	Zeta 2	Zeta 3	Zeta 4	blank	Henry		blank	Phone 1	Adobe	IntNet		MONITOR SECTION			
B	Mic1 Proc	Mic2 Proc	Mic3 Proc																	

Output Busses		
	PGM 1	PGM 2
	AUX	OFFLINE

GPB		Mon Select	
		PGM 1	PGM 2
		AUX	OFFLINE
		OTA	

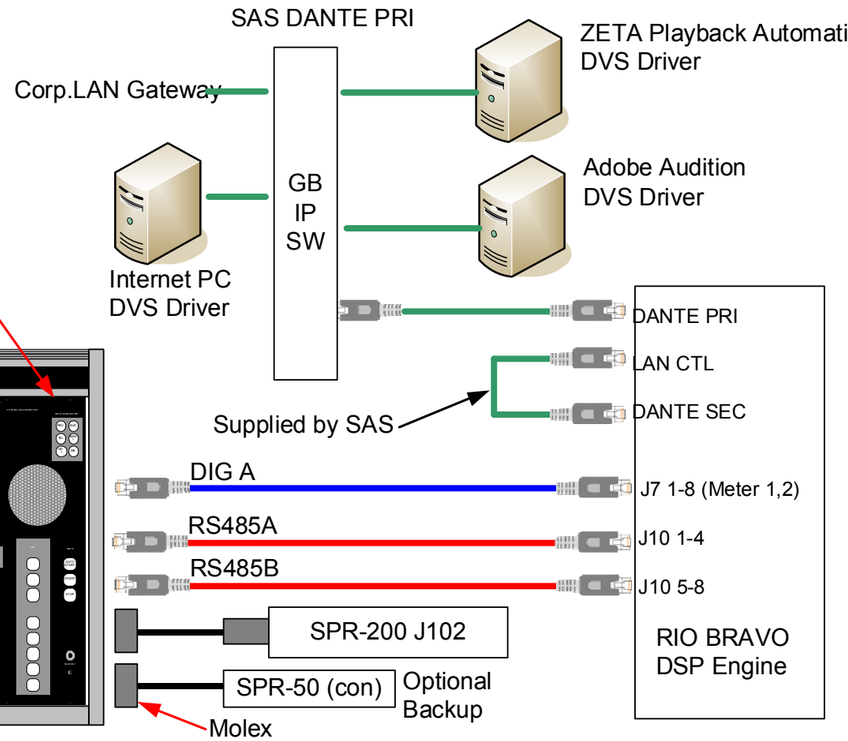
Notes:
* Mic 1,2 and 3 are programmed to the A inputs of Module 1,2 and 3.
* Mic 1,2 and 3 Processed (EQ and Dynamics) are programmed to the B inputs of Module 1,2 and 3.
* EQ and Dynamics include downward expander, EQ, compressor/limiter and AGC. Refer to the Nucleus reference manual for more detail.
* Off Air Confidence can be monitored using the Monitor Source Select button 5. (OTA)

Control Room Console

SIERRA AUTOMATED SYSTEMS
1.818.840.6749 www.sasaudio.com

All Connections to the Console Surface accessible on bottom side of Chassis, upper right. Lift the Chassis from the front bull nose like lifting the hood of a car.

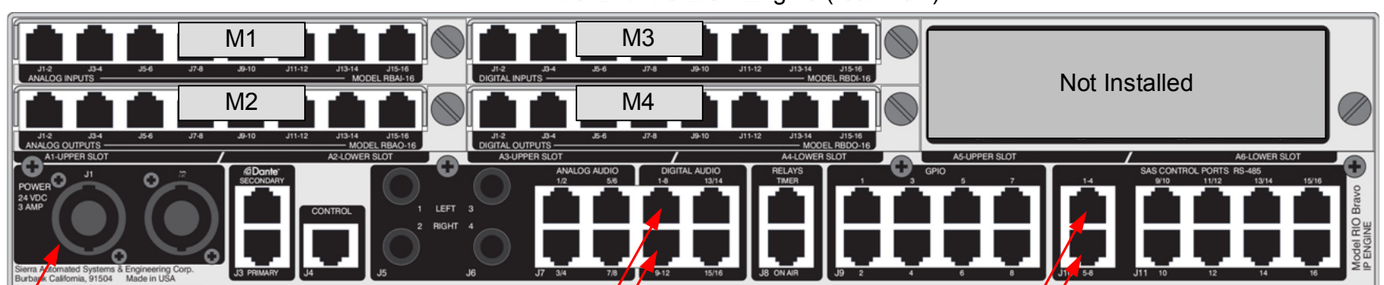
Stratos 20.2 12 Channel



Rear (bottom connectors)

J10 1-4 (RS485) / J10 5-8 (RS485)		RIO Fixed Outputs		J7
J7 1-8	CNSL DIG A	Meter 1,2, Cue, Op HP		1/2
J7 9-12				3/4
J7 13/14				5/6
J7 15/16				7/8
		J 7 Digital	J7 Analog	

RIO BRAVO DSP Engine (rear view)



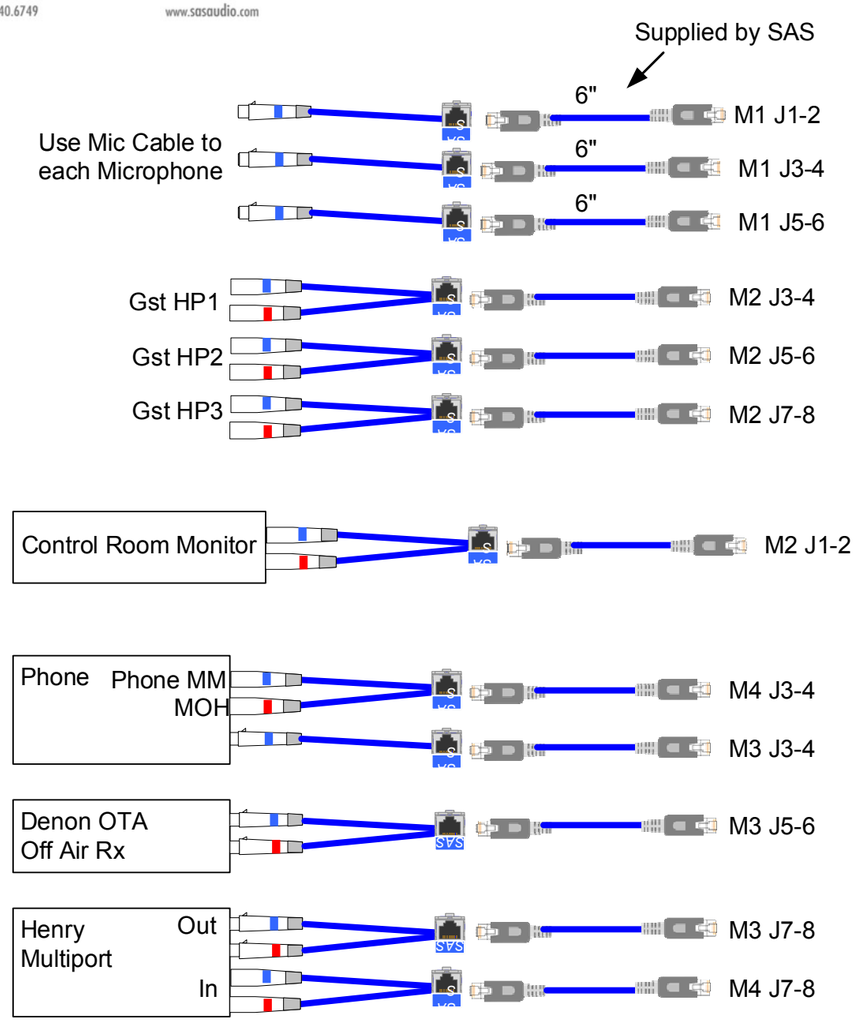
Notes:

* DANTE PRI is set for DCHP.
* Use Dante Controller to change AoIP to Static IP Address, (refer to Eng. Note Dante AoIP Mechanism).
* LAN CTL is default to 10.0.0.161, can be changed on the SD Card accessible from front.
* Refer to Eng. Note Dante AoIP Mechanism for detail on downloading DVS and redeeming DVS Token. (cut and paste token numbers from above.
* SAS recommends keeping the system operating clock at 48K.

File Name: Demo Stratos IP Console System Rev 4.vsd
Control Room Console
Drawn by: Al Salci
Date: 1/25/2024

SIERRA AUTOMATED SYSTEMS
1.818.840.6749 www.sasaudio.com

Control Room Audio



	RJ-45 #	RIO Ch. #	Demo INPUTS	Demo OUTPUTS	
M1 Mic Analog RBMI	J 1-2	1	Mic 1	CR Mon	M2 Analog
	J 1-2	2			
	J 3-4	3	Mic 2	Gst HP 1	
	J 3-4	4			
	J 5-6	5	Mic 3	Gst HP 2	
	J 5-6	6			
	J 7-8	7		Gst HP 3	
	J 7-8	8			
	J 9-10	9			
	J 9-10	10			
	J 11-12	11			
	J 11-12	12			
	J 13-14	13			
	J 13-14	14			
	J 15-16	15			
	J 15-16	16			
M3 Analog	J 1-2	17	EAS		M4 Analog
	J 1-2	18			
	J 3-4	19	Phone	Phone Phone MOH	
	J 3-4	20			
	J 5-6	21	OTA (From Denon Rec)		
	J 5-6	22			
	J 7-8	23	Henry Multiport {right ch.	Henry Multiport {right ch.	
	J 7-8	24			
	J 9-10	25			
	J 9-10	26			
	J 11-12	27			
	J 11-12	28			
	J 13-14	29			
	J 13-14	30			
	J 15-16	31			
	J 15-16	32			
not installed	J 1-2	33			not installed
	J 1-2	34			
	J 3-4	35			
	J 3-4	36			
	J 5-6	37			
	J 5-6	38			
	J 7-8	39			
	J 7-8	40			
	J 9-10	41			
	J 9-10	42			
	J 11-12	43			
	J 11-12	44			
	J 13-14	45			
	J 13-14	46			
	J 15-16	47			
	J 15-16	48			

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