

Appendix A

RJ-21 telephony connector wiring chart

You can connect 4 analog telephone lines, 4 analog telephony devices, and 12 digital telephones to the RJ-21 telephony connector.

Figure 20 shows the RJ-21 telephony connector on a BCM50.

Figure 20 RJ-21 telephony connector on a BCM50

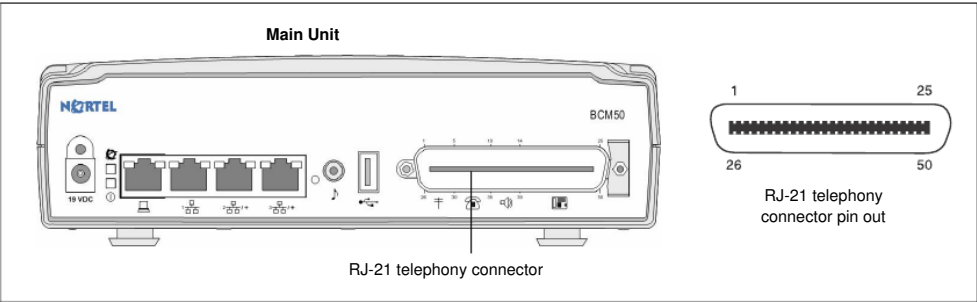


Table 18 lists the wiring details for the RJ-21 telephony connector.

Table 18 RJ-21 telephony connector wiring (Sheet 1 of 2)

Device	Pin	Connection	Wire color	Type of device	Default DN	Default line number
1	26	Tip	White-Blue	Analog line	—	061
	1	Ring	Blue-White			
2	27	Tip	White-Orange	Analog line	—	062
	2	Ring	Orange-White			
3	28	Tip	White-Green	Analog line	—	063
	3	Ring	Green-White			
4	29	Tip	White-Brown	Analog line	—	064
	4	Ring	Brown-White			
5	30	Tip	White-Slate	Analog telephone	233	—
	5	Ring	Slate-White			
6	31	Tip	Red-Blue	Analog telephone	234	—
	6	Ring	Blue-Red			
7	32	Tip	Red-Orange	Analog telephone	235	—
	7	Ring	Orange-Red			
8	33	Tip	Red-Green	Analog telephone	236	—
	8	Ring	Green-Red			

Table 18 RJ-21 telephony connector wiring (Sheet 2 of 2)

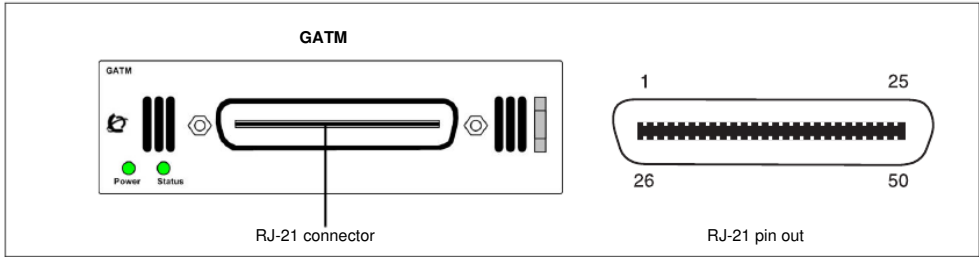
Device	Pin	Connection	Wire color	Type of device	Default DN	Default line number
9	34	No connection	Red-Brown	No connection	—	—
	9	No connection	Brown-Red			
10	35	Tip	Red-Slate	Auxiliary Ringer	—	—
	10	Ring	Slate-Red			
11	36	Tip	Black-Blue	Page Relay	—	—
	11	Ring	Blue-Black			
12	37	Tip	Black-Orange	Page Output	—	—
	12	Ring	Orange-Black			
13	38	Tip	Black-Green	Music Source	—	—
	13	Ring	Green-Black			
14	39	Tip	Black-Brown	Digital telephone	232	—
	14	Ring	Brown-Black			
15	40	Tip	Black-Slate	Digital telephone	231	—
	15	Ring	Slate-Black			
16	41	Tip	Yellow-Blue	Digital telephone	230	—
	16	Ring	Blue-Yellow			
17	42	Tip	Yellow-Orange	Digital telephone	229	—
	17	Ring	Orange-Yellow			
18	43	Tip	Yellow-Green	Digital telephone	228	—
	18	Ring	Green-Yellow			
19	44	Tip	Yellow-Brown	Digital telephone	227	—
	19	Ring	Brown-Yellow			
20	45	Tip	Yellow-Slate	Digital telephone	226	—
	20	Ring	Slate-Yellow			
21	46	Tip	Violet-Blue	Digital telephone	225	—
	21	Ring	Blue-Violet			
22	47	Tip	Violet-Orange	Digital telephone	224	—
	22	Ring	Orange-Violet			
23	48	Tip	Violet-Green	Digital telephone	223	—
	23	Ring	Green-Violet			
24	49	Tip	Violet-Brown	Digital telephone	222	—
	24	Ring	Brown-Violet			
25	50	Tip	Violet-Slate	Digital telephone	221	—
	25	Ring	Slate-Violet			

Appendix I

GATM wiring chart

Analog telephone lines connect to the GATM4 or GATM8 through the RJ-21 connector on the front of the media bay module (MBM). See the figure [GATM RJ-21 connector](#) on page 221.

Figure 95 GATM RJ-21 connector



The table [GATM4 RJ-21 connector wiring](#) on page 221 lists the wiring details for the RJ-21 connector on the GATM4.

Table 46 GATM4 RJ-21 connector wiring (Sheet 1 of 2)

Line	Pin	Connection	Wire color	Default line numbers on Expansion port 1	Default line numbers on Expansion port 2
1	26	Tip	White-Blue	065	095
	1	Ring	Blue-White		
2	27	Tip	White-Orange	066	096
	2	Ring	Orange-White		
—	28	No connection	White-Green	—	—
	3	No connection	Green-White		
—	29	No connection	White-Brown	—	—
	4	No connection	Brown-White		
3	30	Tip	White-Slate	067	097
	5	Ring	Slate-White		
4	31	Tip	Red-Blue	068	098
	6	Ring	Blue-Red		
—	32	No connection	Red-Orange	—	—
	7	No connection	Orange-Red		
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.	.	.	.	.	.

Table 46 GATM4 RJ-21 connector wiring (Sheet 2 of 2)

Line	Pin	Connection	Wire color	Default line numbers on Expansion port 1	Default line numbers on Expansion port 2
—	49	No connection	Violet-Brown	—	—
	24	No connection	Brown-Violet		
Aux	50	Tip	Violet-Slate	—	—
	25	Ring	Slate-Violet		
Note: The AUX port supports full data speeds. When the line is in use by an analog device, the icon is lit on the phone to indicate it is in use. If you try to seize the line using the phone, the display shows “in use”. Also, if a power failure occurs, an analog set on line 1 activates (powered by the CO).					

The table [GATM8 RJ-21 connector wiring](#) on page 222 lists the wiring details for the RJ-21 connector on the GATM8.

Table 47 GATM8 RJ-21 connector wiring (Sheet 1 of 2)

Line	Pin	Connection	Wire color	Default line numbers on Expansion port 1	Default line numbers on Expansion port 2
1	26	Tip	White-Blue	065	095
	1	Ring	Blue-White		
2	27	Tip	White-Orange	066	096
	2	Ring	Orange-White		
—	28	No connection	White-Green	—	—
	3	No connection	Green-White		
—	29	No connection	White-Brown	—	—
	4	No connection	Brown-White		
3	30	Tip	White-Slate	067	097
	5	Ring	Slate-White		
4	31	Tip	Red-Blue	068	098
	6	Ring	Blue-Red		
—	32	No connection	Red-Orange	—	—
	7	No connection	Orange-Red		
—	33	No connection	Red-Green	—	—
	8	No connection	Green-Red		
5	34	Tip	Red-Brown	073	103
	9	Ring	Brown-Red		
6	35	Tip	Red-Slate	074	104
	10	Ring	Slate-Red		
—	36	No connection	Black-Blue	—	—
	11	No connection	Blue-Black		
—	37	No connection	Black-Orange	—	—
	12	No connection	Orange-Black		

Table 47 GATM8 RJ-21 connector wiring (Sheet 2 of 2)

Line	Pin	Connection	Wire color	Default line numbers on Expansion port 1	Default line numbers on Expansion port 2
7	38	Tip	Black-Green	075	105
	13	Ring	Green-Black		
8	39	Tip	Black-Brown	076	106
	14	Ring	Brown-Black		
—	40	No connection	Black-Slate	—	—
	15	No connection	Slate-Black		
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
—	49	No connection	Violet-Brown	—	—
	24	No connection	Brown-Violet		
Aux (see Note)	50	Tip	Violet-Slate	—	—
	25	Ring	Slate-Violet		

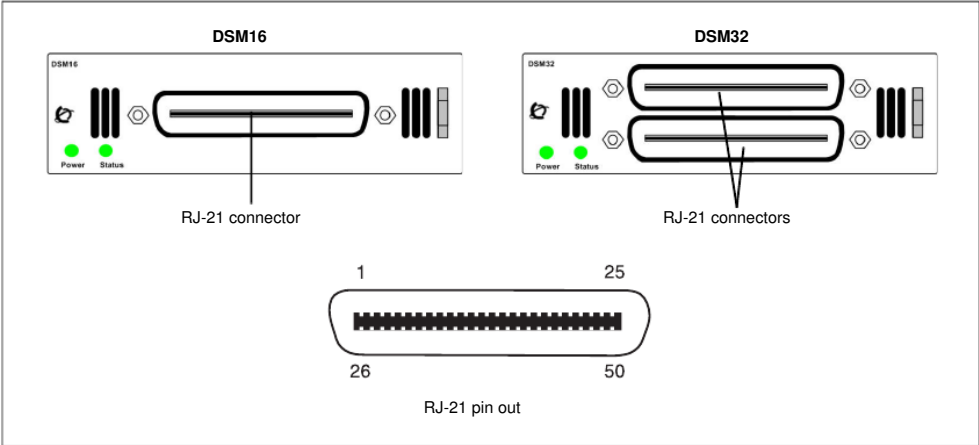
Note: The AUX port supports full data speeds. When the line is in use by an analog device, the icon is lit on the phone to indicate it is in use. If you try to seize the line using the phone, the display shows "in use". Also, if a power failure occurs, an analog set on line 1 activates (powered by the CO).

Appendix L

DSM16 and DSM32 wiring charts

Digital telephones, such as the Business Series Telephones, connect to the Digital Station Module (DSM16 or DSM32) through the RJ-21 connectors on the front of the media bay module. The DSM16 has a single RJ-21 connector and the DSM32 has two RJ-21 connectors. See the figure [DSM16 and DSM32 RJ-21 connectors](#) on page 233.

Figure 98 DSM16 and DSM32 RJ-21 connectors



The table [DSM16 and DSM32 RJ-21 connector wiring](#) on page 233 lists the wiring details for the RJ-21 connectors on the DSM16 and DSM32.

Table 53 DSM16 and DSM32 RJ-21 connector wiring (Sheet 1 of 3)

Set	Pin	Connection	Wire color	Default DN on Expansion port 1				Default DN on Expansion port 2			
				23 6 or 1 DSM16 RJ-21 Lo	501 DSM16 RJ-21 Po	253 DSM32 RJ-21 Upper	601 DSM32 RJ-21 Po	269 DSM32 RJ-21 Lo	701 DSM32 RJ-21 Po	285 DSM32 RJ-21 Upper	801 DSM32 RJ-21 Po
1	26	Tip	White-Blue	237	501	253	601	269	701	285	801
	1	Ring	Blue-White								
2	27	Tip	White-Orange	238	502	254	602	270	702	286	802
	2	Ring	Orange-White								
3	28	Tip	White-Green	239	503	255	603	271	703	287	803
	3	Ring	Green-White								

Table 53 DSM16 and DSM32 RJ-21 connector wiring (Sheet 2 of 3)

Set	Pin	Connection	Wire color	Default DN on Expansion port 1				Default DN on Expansion port 2			
				DSM16 RJ-21 Lo	DSM32 RJ-21 Po	DSM16 RJ-21 Upper	DSM32 RJ-21 Po	DSM16 RJ-21 Lo	DSM32 RJ-21 Po	DSM16 RJ-21 Upper	DSM32 RJ-21 Po
4	29	Tip	White-Brown	240	504	256	604	272	704	288	804
	4	Ring	Brown-White								
5	30	Tip	White-Slate	241	505	257	605	273	705	289	805
	5	Ring	Slate-White								
6	31	Tip	Red-Blue	242	506	258	606	274	706	290	806
	6	Ring	Blue-Red								
7	32	Tip	Red-Orange	243	507	259	607	275	707	291	807
	7	Ring	Orange-Red								
8	33	Tip	Red-Green	244	508	260	608	276	708	292	808
	8	Ring	Green-Red								
9	34	Tip	Red-Brown	245	509	261	609	277	709	293	809
	9	Ring	Brown-Red								
10	35	Tip	Red-Slate	246	510	262	610	278	710	294	810
	10	Ring	Slate-Red								
11	36	Tip	Black-Blue	247	511	263	611	279	711	295	811
	11	Ring	Blue-Black								
12	37	Tip	Black-Orange	248	512	264	612	280	712	296	812
	12	Ring	Orange-Black								
13	38	Tip	Black-Green	249	513	265	613	281	713	297	813
	13	Ring	Green-Black								
14	39	Tip	Black-Brown	250	514	266	614	282	714	298	814
	14	Ring	Brown-Black								
15	40	Tip	Black-Slate	251	515	267	615	283	715	299	815
	15	Ring	Slate-Black								
16	41	Tip	Yellow-Blue	252	516	268	616	284	716	300	816
	16	Ring	Blue-Yellow								
—	42	No connection	Yellow-Orange	—	—	—	—	—	—	—	—
	17	No connection	Orange-Yellow								
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Table 53 DSM16 and DSM32 RJ-21 connector wiring (Sheet 3 of 3)

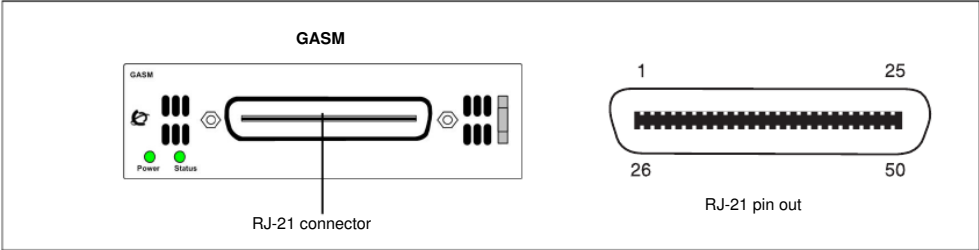
Set	Pin	Connection	Wire color	Default DN on Expansion port 1				Default DN on Expansion port 2			
				DSM16 RJ-21 Lower	DSM32 RJ-21 Upper	DSM16 RJ-21 Lower	DSM32 RJ-21 Upper	DSM16 RJ-21 Lower	DSM32 RJ-21 Upper	DSM16 RJ-21 Lower	DSM32 RJ-21 Upper
—	50	No connection	Violet-Slate	—	—	—	—	—	—	—	—
	25	No connection	Slate-Violet	—	—	—	—	—	—	—	—

Appendix M

ASM8, ASM8+, and GASM wiring chart

Analog telephony devices, such as single line telephones, modems and Fax machines, connect to the Analog Station Module (ASM) through the RJ-21 connector on the front of the media bay module. See the [figure ASM RJ-21 connector](#) on page 237.

Figure 99 ASM RJ-21 connector



The [table ASM RJ-21 connector wiring](#) on page 237 lists the wiring details for the RJ-21 connector on the ASM.

Table 54 ASM RJ-21 connector wiring (Sheet 1 of 2)

Set	Pin	Connection	Wire color	Default DN on Expansion port 1	Default DN on Expansion port 2
1	26	Tip	White-Blue	237	269
	1	Ring	Blue-White		
2	27	Tip	White-Orange	238	270
	2	Ring	Orange-White		
3	28	Tip	White-Green	239	271
	3	Ring	Green-White		
4	29	Tip	White-Brown	240	272
	4	Ring	Brown-White		
5	30	Tip	White-Slate	241	273
	5	Ring	Slate-White		
6	31	Tip	Red-Blue	242	274
	6	Ring	Blue-Red		
7	32	Tip	Red-Orange	243	275
	7	Ring	Orange-Red		
8	33	Tip	Red-Green	244	276
	8	Ring	Green-Red		

Table 54 ASM RJ-21 connector wiring (Sheet 2 of 2)

Set	Pin	Connection	Wire color	Default DN on Expansion port 1	Default DN on Expansion port 2
—	34	No connection	Red-Brown	—	—
	9	No connection	Brown-Red		
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
—	50	No connection	Violet-Slate	—	—
	25	No connection	Slate-Violet		