JaRa® 4102

N * 64K/V.35 Convers

User's Manual

(2003/11/15)

JaRa Telecom CO.,LTD BEIJING
Tel:0086-10-82896714/15/16 82896975/76 FAX:0086-10-62969918
www.jaratelecom.com

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JaRa MODEL 4102 User's Manual

1、Summarize

When V.35 conversinon with G.703,some times don't need all of the bandwidth of the E1,only need several channel of 64K,for economize the money.Now,the MODEL4102 can settle for it.It can be used in connect with the Internet,DDN,or Mobile telephone net.

2、Characteristic

- 2 type of E1/G.703 digital connector
- 1 V.35 connector
- Clock can be choosed: inner clock;getback clock
- Use 220V AC

3、Eentironment

Temperature: 0℃～40℃

Humidity: ≤90%（35℃）

4、Parameter of connector

E1 connector:

Connector code:HDB3
Connector impedance: Balanceable （RJ45） 120Ω
Unbalanceable（BNC） 75Ω
Clock: 2.048Mbps±50ppm
Frequency track: ±100ppm

2048Kb/s connector measure up to the ITU-T G.703

V.35 connector:

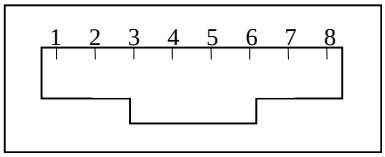
Working:DCE
Data speed: N * 64K（N = 1～31）
Connector:DB25 female.(With Cable DB25 –to-M34)

5、Connector Definition list

120Ω RJ-45

Pin NO.	Definition	Data direction
1	RX+	IN
2	TX+	OUT
3	GND	
4	NC	
5	RX－	IN
6	TX－	OUT
7	GND	
8	NC	

Note: 75Ω connector and 120Ω connector can’t use in same times



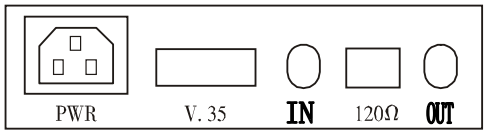
DB25 female

Pin NO	V.35	I/O	Define	Explain
1	A		GND	Chassis Ground
2	P	I	TDA	Send Data A
3	R	O	RDA	Receive Data A
5	D	O	CTS	Clear TO Send
6	E	O	DSR	Data Set Ready
7	B		GND	Signal Ground
8	F	O	DCD	Data Carrier Detect
9	X	O	RCPB	Receice Data B
11	W	I	ETCPB	Terminal Timing B
12	AA	O	TCPB	Send Timing B
14	S	I	TDB	Send data B
15	Y	O	TCPA	Send Timing A
16	T	O	RDB	Receive Data B
17	V	O	RCPA	Receive Timing A
24	U	I	ETCPA	Terminal Timing A

6、(A)Front panel:

SW1： Functional Switch
SW2～SW5：Channel Choose Switch
PWR：Power
TD：V.35 Send Data
RD：V.35 Receive Data
LOS：E1 Data Lose Alarm
LOF：E1Data Unsynchronization
AIS：All E1 Data is 1
ERR：E1Data Error Code

(B)Back panel



7、DIP Switch

The switch of the equipment include the Functional Switch and the channel switch,SW1 is Functional Switch and the SW2～SW5 is channel switch.

Switch NO.	Channel	ON	OFF
SW2:1	Channel 1	ON	OFF
SW2:2	Channel 2	ON	OFF
SW2:3	Channel 3	ON	OFF
SW2:4	Channel 4	ON	OFF
SW2:5	Channel 5	ON	OFF
SW2:6	Channel 6	ON	OFF
SW2:7	Channel 7	ON	OFF
SW2:8	Channel 8	ON	OFF
SW3:1	Channel 9	ON	OFF
SW3:2	Channel 10	ON	OFF
SW3:3	Channel 11	ON	OFF
SW3:4	Channel 12	ON	OFF
SW3:5	Channel 13	ON	OFF
SW3:6	Channel 14	ON	OFF
SW3:7	Channel 15	ON	OFF

SW3:8	Channel 16	ON	OFF
SW4:1	Channel 17	ON	OFF
SW4:2	Channel 18	ON	OFF
SW4:3	Channel 19	ON	OFF
SW4:4	Channel 20	ON	OFF
SW4:5	Channel 21	ON	OFF
SW4:6	Channel 22	ON	OFF
SW4:7	Channel 23	ON	OFF
SW4:8	Channel 24	ON	OFF
SW5:1	Channel 25	ON	OFF
SW5:2	Channel 26	ON	OFF
SW5:3	Channel 27	ON	OFF
SW5:4	Channel 28	ON	OFF
SW5:5	Channel 29	ON	OFF
SW5:6	Channel 30	ON	OFF
SW5:7	Channel 31	ON	OFF
SW5:8	NC	ON	OFF

SW1 Functional Switch：

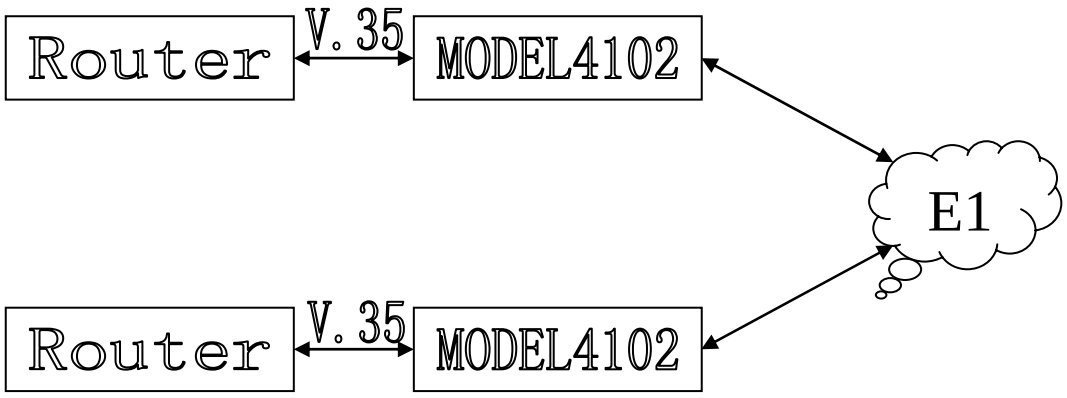
Switch	**ON**	**OFF**
SW1:1	inner clock	OFF
SW1:2	getback clock	OFF
SW1:3	Long-distance	Short-distance
SW1:4	CRC ON	CRC OFF
SW1:5	Default OFF	
SW1:6	V.35 phasic choose default OFF	
SW1:7		
SW1:8	2M	Divided 2M

Note:

SW1:11,SW1:2 is for choose the Data clock of the E1,when use one,and the circuitry offer the clock,the SW1:1 is OFF,SW1:2 is ON;When use two of the Model 4102,and the circultry don't offer the clock,one of it is SW1：1ON；SW2：2OFF ,other is SW1：1OFF；SW1：2ON.If the external equipment have the CRC,the SW1:4 is ON,if the LOF light is ON,,please check the two of the 4102 have choose the same channel; the SW1:6,7 is the for the V.35 phasic choose,when it ON or OFF can choose the V.35 phasic.When want to set the Model 4102 is the Base Band Modem,the SW1:3 is ON.

8、Instance

MODEL4102 can transfers the N*64Kbps data by the G.703,and can be used as the Base Band Modem and can be transfers to 2Km.



9. Package Cheklist

1. **Cable DB25-to-M34**
2. **220V Power line**
3. **BNC connector**
4. **RJ-45connector**
5. **User Manual**