

JBM Electronics

Gateway Model C252

Thank you for purchasing The Gateway C252. The C252 connects an asynchronous, bisynchronous, SNA, or Ethernet device to a GSM cell network.

UNPACKING INSTRUCTIONS

1. Unpack the C252
2. Verify the following components are enclosed (*Figure A*)

Figure A Package Contents



or



(Front)



(Back)

Note: Non-US power supplies require customer-supplied power cord to connect power supply to AC power outlet.

3. If any items are missing, please contact **JBM** at **1-800-489-7781**.

CABLING

9-Pin Female DCE Console (LMI) Port (*Table A*)

Table A lists the required RS-232C pin descriptions used in cable connection from the 9-Pin Female Console Port (ttyS0) located on the back of the C252. A standard straight-wired 9 to 9 Pin male to female cable is used for console connection.

25-Pin Female DCE RS-232C Port (*Table B*)

Table B lists the required RS-232C pin descriptions used in cable connection from the 25-Pin Female RS-232C Port (*Port 1*) located on the front of the C252. A standard straight-wired cable without transpositions or other wiring changes is needed. (DTE with G50 Adapter)

TABLE A 9-Pin Female DCE Console (LMI) Port			
PIN	INBOUND	OUTBOUND	DESCRIPTION
1		*	Data Carrier Detect
2		*	Receive Data
3	*		Transmit Data
4	*		Data Terminal Ready
5			Signal Ground
6		*	Data Set Ready
7	*		Request To Send
8		*	Clear To Send
9		*	Ring Indicator
Console connection to PC (Back)			

TABLE B 25-PIN RS-232C DCE PORT			
PIN	INBOUND	OUTBOUND	DESCRIPTION
1			Frame Ground
2	*		Transmit Data
3		*	Receive Data
4	*		Request to Send
5		*	Clear to Send
6		*	Data Set Ready
7			Signal Ground
8		*	Data Carrier Detect
15		*	Transmit Clock
17		*	Receive Clock
20	*		Data Terminal Ready
Multi-Protocol Port (Front)			

G50 Adapter (Table C)

Table C lists the required RS-232C pin assignment used in the G50 Adapter to convert the C252’s RS-232C port to DTE.

Ethernet Cables (Tables D&E)

Tables D&E list the required pins used in the Straight (Table D) and Crossed-wired (Table E) 10/100BaseT cable.

TABLE C GW50 ADAPTER DTE		
MALE PIN	DIRECTION	FEMALE PIN
1	Ground	1
2	←	3
3	→	2
4	←	8
5	→	20
7	Ground	7
8	→	4
9	Not applicable	9
10	Not applicable	10
12	Not applicable	12
13	Not applicable	13
18	←	6
19	Not applicable	19
20	←	5
21	Not applicable	21
22	←	15
23	←	17
24	Not applicable	24
25	Not applicable	25
To achieve DTE Multi-Protocol Port		

TABLE D STRAIGHT 10/100BASET	
PIN	DESCRIPTION
1	TD+
2	TD-
3	RD+
4	-
5	-
6	RD-
7	-
8	-
Used for HUB or Switch	

TABLE E CROSSED 10/00BASET	
CONNECTOR A	CONNECTOR B
1	3
2	6
3	1
-	-
-	-
6	2
-	-
-	-
Used for direct PC connection	

CONFIGURATION

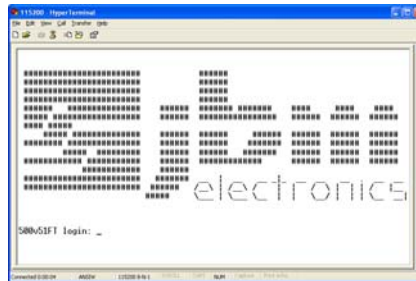
1. Collect information about the configuration setup.
2. Complete Configuration Setup Worksheets. Worksheets located at: <http://jbmelectronics.com/tech/workdir.htm>
3. Attach the power supply connector to C252 and connect power supply plug to an AC power outlet.

4. Verify the PWR (yellow) LED is lit to indicate that the unit is receiving power.
5. Attach the female end of console cable to PC and male end of console cable to console port on the back of C252.
6. Locate Hyper Terminal instructions at: <http://www.jbmelectronics.com/tech/hyperterm.pdf>

Note: Communications with the console is through an async terminal emulation program. The following instructions are for Hyper Terminal, a standard Windows component. Other emulation programs can also be used.

7. View Figure B to see the Gateway Login Screen.

FIGURE B - GATEWAY LOGIN SCREEN



GATEWAY LOGIN

Log into the Gateway through the 9-Pin Console Port (*back*), using **root** for the user name and the **six-digit serial number of the unit** for the password. Both entries are case sensitive and must be entered in lower case.


*Note: The JBM Gateway comes with two predefined Linux accounts with same default passwords. The first is **root**, which has full Administration rights, and the second is **jbmgatew**, which is a user account. Telnnet by default uses the **jbmgatew** account. After login type "su -" then root password for Admin. Rights.*

For best security practices we recommend the following procedure:

- Change the default **root** user password.
 - a. Type **passwd** and press **Enter**.
 - b. Select a new password by following the onscreen instructions.
- Change the default **jbmgatew** user password.
 - a. Type **passwd jbmgatew** and press **Enter**.
 - b. Select a new password by following the onscreen instructions.

For further information, please refer to the following:

- Ethernet Setup: <http://jbmelectronics.com/tech/niccfig.pdf>
- Lightbar Information: <http://www.jbmelectronics.com/tech/lightbar.htm>
- FCC Information: <http://jbmelectronics.com/general/fcc.htm>
- Warranty Information: <http://jbmelectronics.com/general/warren.htm>

HARDWARE STATUS LEDS		
Power:	Yellow - Power Connection Status (PWR)	
	ON	Power is being received by the C252
	OFF	Power is not being received by the C252
Ethernet:	Green – LAN Connection Status (LINK)	
	ON	C252 is connected to LAN
	OFF	C252 is not connected to the LAN, or the C252 is in the process of being reset
	RED – Data Transmit Activity Status (T)	
	ON-OFF-ON (Flickering)	C252 is transmitting packets
	Green – Data Receive Activity Status (R)	
ON-OFF-ON (Flickering)	C252 is receiving packets	
RS-232C: (Sync)	Green – Data Receive Activity Status (RD)	
	ON-OFF-ON (Flickering)	C252 is receiving packets
	Red – Data Transmit Activity Status (TD)	
ON-OFF-ON (Flickering)	C252 is transmitting packets	
GSM Modem: (Wireless)	Green – Data Carrier Detect Signal (DCD)	
	ON	C252 is on call
	Off	C252 is idle
	RED – Data Transmit Activity Status (TD)	
	ON-OFF-ON (Flickering)	C252 is transmitting packets
	Green – Data Receive Activity Status (RD)	
	ON-OFF-ON (Flickering)	C252 is receiving packets
	Green LED Bar – Signal Strength  The purpose of the light bar is to assist in antenna placement. If the signal is low reposition the antenna.	
1 To 4 LEDs lit	1= fair 2 = good 3 = very good 4 = excellent	

SPECIFICATIONS		
Console Port:	Baud Rate:	110-115,200 bps
	Interface:	One Female DE-9, RS-232C DCE
Ethernet Port:	Mbps:	10/100BaseT
	Interface:	Female RJ-45 connector
RS-232C: (Sync)	Baud Rate:	110-115,200 bps
	Interface:	One Female DB-25 connector, multi-protocol, DCE Mode (DTE Mode with G50 Adapter)
GSM Modem: (Wireless)	Interface:	SMA-Connector, EGSM, GSM
	Band:	EGSM 850: Rx 869 ~ 894 MHz / Tx 824 849 MHz GSM 1900: Rx 1930 ~ 1990 MHz / Tx 1850 ~ 1910
Operating System	Linux 2.4 Kernel	
Management:	Console Port:	CLI Access through async connection
	IP Protocol	SNMP, HTTP/S, Telnet, SSH
Power:	12V DC (External) 120 VAC 60Hz or 120-240 VAC 50/60Hz	
Physical:	Size:	7" W x 2.5" H x 8" L
	Weight:	2 pounds
Processor:	486DX-100	
Memory:	32 MB RAM, 16MB Flash	
Warranty:	1 Year Parts and Labor	