

Basic Packages

If you ordered Vanguard SC Fixed number:

- 140-7202-000 Vanguard SC - AT&T HSPA Cellular Router
- 140-7206-000 Vanguard SC - Generic HSPA Cellular Router
- 140-7221-000 Vanguard SC - Verizon EVDO Cellular Router
- 140-7223-000 Vanguard SC - Sprint EVDO Cellular Router

Your package contains:

- 004-7500-100 (1) CalAmp Information Card
- 150-7500-004 (1) 6FT DC 3 Wire Power Cable
- 415-1001-210 (1) 3.5mm 10 Pos I/O Term Socket
- 817-7010-500 (1) Mounting Plate

If you ordered Vanguard SC Mobile part number:

- 140-7202-110 Vanguard SC - AT&T HSPA Cellular Router, GPS & WiFi
- 140-7206-110 Vanguard SC - Generic HSPA Cellular Router, GPS & WiFi
- 140-7221-110 Vanguard SC - Verizon EVDO Cellular Router, GPS & WiFi
- 140-7223-110 Vanguard SC - Sprint EVDO Cellular Router, GPS & WiFi

Your package contains:

- 004-7500-100 (1) CalAmp Information Card
- 150-7001-002 (1) 22FT Fused Power Cable
- 415-1001-210 (1) 3.5mm 10 Pos I/O Term Socket
- 817-2225-900 (1) Mounting Bracket

Accessory Kit

If you ordered Vanguard part number:

- 250-7200-100 Vanguard Fixed Kit

Your package contains:

- 002-7200-100 (1) Startup CD with Quick Start Guide
- 150-7001-005 (1) 110-220VAC 3-Wire Power Supply
- 401-7500-001 (1) Rubber Duck Swivel SMA Antenna
- L2ANT0003 (1) 3W Mag Mount Antenna
- L2CAB0002 (1) DB-9 Male to DB-9 Female Serial Cable
- L2CAB0006 (1) CAT5 100Base 7' Red Ethernet Cable

If you ordered Vanguard part number:

- 250-7200-200 Vanguard Mobile Kit

Your package contains:

- 002-7200-100 (1) Startup CD with Quick Start Guide
- 150-7001-005 (1) 110-220VAC 3-Wire Power Supply
- 401-7500-001 (1) Rubber Duck Swivel SMA Antenna
- 401-7100-003 (1) GPS SMA Mag Mount Antenna
- 401-7100-004 (1) WiFi 9" Mag Mount Antenna
- L2ANT0003 (1) 3W Mag Mount Antenna
- L2CAB0002 (1) DB-9 Male to DB-9 Female Serial Cable
- L2CAB0006 (1) CAT5 100Base 7' Red Ethernet Cable

Minimum Requirements

Interface and configuration of this cellular device requires a user PC with an Ethernet interface, Microsoft Windows 98 or newer, and a web browser.

- Vanguard SC Router
- CalAmp Information Card
- 22FT Fused Power Cable
(6FT DC 3 Wire Power Cable for Fixed model)
- Mounting Bracket
(Mounting Plate for Fixed model)
- 3.5 mm 10 Pos I/O Term Socket
- Startup CD with Quick Start Guide
- 110-220VAC-3 Wire Power Supply
- Rubber Duck Swivel SMA Antenna
- GPS SMA Mag Mount Antenna
- WiFi 9" Mag Mount Antenna
- 3W Mag Mount Antenna
- DB-9 Male to DB-9 Female Serial Cable
- CATS 100Base 7" Red Ethernet Cable

REVISION HISTORY

REV	DATE	REVISION DETAILS
0	June 2011	Initial release with new part number, PN 004-7200-100.
1	January 2012	Fixed the Dial Settings screen shot and package contents list.
A	June 2013	Updated PN 150-7500-004 and Phone Number



Quick Start Guide
Vanguard SC™
3G CELLULAR BROADBAND ROUTER



This quick start guide covers programming software installation and basic setup. For advanced configuration please refer to the user manual.



Quick Start Guide
Vanguard SC™
3G CELLULAR BROADBAND ROUTER

© 2011-2013 CalAmp
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PN 004-7200-100 Rev. A
All specifications are typical and
subject to change without notice.



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Device Connections

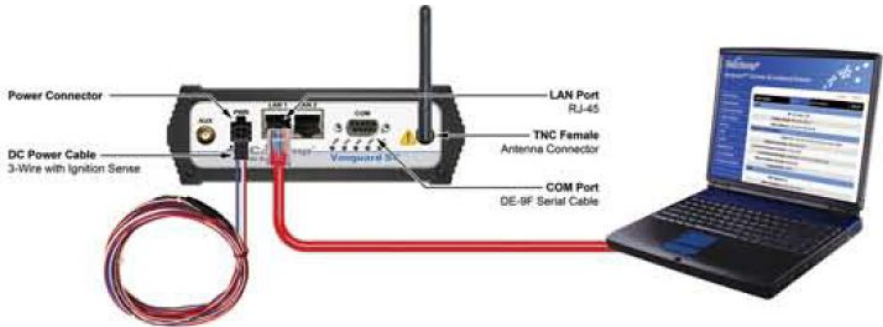
STEP 1 Insert the SIM with the gold side up. Push the card completely into the slot until it clicks in place. (GSM Users Only).



STEP 2 Connect an antenna(s) to the RF connector. Use of dual band cellular antenna is preferred.

STEP 3 Connect the Ethernet cable to the modem’s Ethernet Port and plug the other end into the network port of your PC.

STEP 4 Connect the DC Power Cable (or optional AC Power Adapter) to the modem and plug into a proper power source.



At power up, all LEDs will light red, then amber, then green. Once the boot sequence is complete, RSSI will light solid green and SVC will be flashing green. Note RSSI flashing green and SVC amber (indicates reduced RSSI and/or 2G cell coverage) is sufficient for normal operation.

Accessing the Modem’s Web Server

STEP 1 Enable a network connection with the following LAN settings. In the Internet Protocol (TCP/IP) Properties Window, select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK** and **Close**.

STEP 2 Open a web browser and enter **192.168.1.50** in the address bar. A login screen should appear, enter the User name: **admin** and the Password: **password** and click **OK**.

STEP 3 On the device Home page, the PPP status will read DOWN until the cellular device is enabled.

Subscriber Activation

In order to use the modem, it must be activated for your specific carrier once the ESN has been provided for the account. Over-The-Air (OTA) activation is supported and each carrier has a different procedure.

Provisioning (CDMA Users)

From the device Home page, select **Cell Connection** from the main navigation panel and then **Provisioning Status**. Follow the carrier instructions below.

Sprint PCS Subscribers

Sprint is capable of automatic OMA-DM provisioning. Auto activation is enabled by default. Apply power and wait 3-4 minutes to verify the Current Status Screen has been populated with the MDN/MTN and MSID/IMSI numbers. If these numbers do not populate, your device did not provision properly. Refer to the user manual for Manual Activation procedures.

Verizon Wireless Subscribers

- Confirm or enter OTASP command: ***22899**.
- Click the **OTASP** button.
- Verify CDMA Connection Status has been populated with the MDN/MTN and MSID/IMSI numbers. If these numbers do not populate, your device did not provision properly. Refer to the user manual for Manual Activation procedures.

Current Status	
ESN	60549564
MDN/MTN	5074615358
MSID/IMSI	5073469066
PRL	30066
SID	1372
NID	1372
Channel	425
Frequency	800 MHz Cellular
Roaming	Not Roaming
Signal Strength (dBm)	-100 (poor)

Modem Network Connection

After the modem has been successfully provisioned, a data connection can be enabled. At the device Home page, select **Cell Connection** from the main navigation panel and select **Dial Settings**. Select **Enable Auto Connect**. Click **Save**.

Dial Settings	
Auto Connect <input checked="" type="radio"/> Enable <input type="radio"/> Disable	
<i>If Auto Connect is enabled and the modem fails to connect, the unit will attempt to reconnect 2 times and then one attempt per the following schedule: 1 minute, 2 minutes, 8 minutes and then every 15 minutes until successful.</i>	
Dial Number	#777
User	
Password	
Authentication	<input checked="" type="radio"/> Auto <input type="radio"/> Only Protocols Selected Below
Authentication Protocols	<input type="checkbox"/> PAP <input type="checkbox"/> CHAP <input type="checkbox"/> MS-CHAP <input type="checkbox"/> MS-CHAP-V2 <input type="checkbox"/> EAP
Dial Status	view

The SVC LED will indicate when the cellular connection has been established. Steady green indicates a 3G connection; steady Amber indicates a 2G connection. Return to the device home page and verify PPP Status is UP. The PPP IP Address shows the current IP address assigned your device.

Your device is ready to browse the web.

SIM Card Acceptance (GSM Users)

From the device Home page, select **Cell Connection** from the main navigation panel and then **SIM Settings**. SIM STATUS should read ACCEPTED.

Current Status	
SIM STATUS: SIM ACCEPTED	
PIN STATUS: PIN DISABLED	
Change PIN Status	
Action: PIN is disabled. To change it, it must be enabled first.	
Disable PIN (Enter Current PIN) <input checked="" type="radio"/> Yes <input type="radio"/> No	
PIN Entry (Enter as directed above)	
Current PIN	<input type="text"/>
<input type="button" value="Cancel"/> <input type="button" value="Save"/>	

Modem Network Connection

Once the SIM card has been accepted, a data connection can be enabled.

From the device Home page, select **Cell Connection** from the main navigation panel and select **Dial Settings**. Verify the Carrier APN and Dial Number are correct for your provider. A user name and password may be required. Select **Enable Auto Connect** and then click **Save**.

Dial Settings	
Auto Connect <input checked="" type="radio"/> Enable <input type="radio"/> Disable	
<i>If Auto Connect is enabled and the modem fails to connect, the unit will attempt to reconnect 2 times and then one attempt per the following schedule: 1 minute, 2 minutes, 8 minutes and then every 15 minutes until successful.</i>	
GSM Band	<input checked="" type="radio"/> ALL (autoband) <input type="radio"/> WCDMA 2100 <input type="radio"/> EGSM <input type="radio"/> ALL GSM <input type="radio"/> ALL WCDMA
Band Selections: <i>All - Scans all bands.</i> <i>WCDMA 2100 - Scan 2100 MHz UMTS/HSDPA.</i> <i>EGSM - Scan 900/1800 MHz GSM.</i> <i>All GSM - Scan 900/1800 MHz GSM and 850/1900 MHz GSM.</i> <i>All WCDMA - Scan 850/1900/2100 MHz UMTS/HSDPA.</i>	
Carrier APN	ISP.CINGULAR
Dial Number	ATD*99***1#
User	
Password	
Authentication	<input checked="" type="radio"/> Auto <input type="radio"/> Only Protocols Selected Below
Authentication Protocols	<input type="checkbox"/> PAP <input type="checkbox"/> CHAP <input type="checkbox"/> MS-CHAP <input type="checkbox"/> MS-CHAP-V2 <input type="checkbox"/> EAP
Dial Status	view

The SVC LED will indicate when the cellular connection has been established. Steady green indicates a 3G connection; steady Amber indicates a 2G connection. Return to the device home page to verify PPP Status is UP. The PPP IP Address shows the current IP address assigned your cellular device.

Your device is ready to browse the web.