Step 2: Modem Configuration

Once you are done with the installation of the dish. we need to proceed with the modem. Make sure you are connected single PC to the modem directly and using DHCP or Obtain IP on your NIC card.

Configuring Windows 7 to use DHCP or Obtain IP automatically

1. From the Windows desktop, select Start \rightarrow Control Panel \rightarrow Network and Sharing Center.

2. Look for the Local Area Connection link indicated by the arrow.

Control Panel Home	View your basic network in	nformation and	l set up conne	tions	
Change adapter settings	A	-			See full m
Change advanced sharing settings	NPSRT-PC (This computer)	Network 2		Internet	
	View your active networks			Conne	ect or disconn
	Network 2		Access type:	Internet	
	Top Public network		Connections:	Local Area Co	nnection

3. Click the Local Area Connection icon, which represents the satellite modem network

connection.

The Local Area Connection Status window opens.

4. Click Properties.

The Local Area Connection Properties dialog appears, as shown below.

-ouro	rking
Conr	ect using:
£	Intel(R) 82562V 10/100 Network Connection
-	Configure
This	connection uses the following items:
	Client for Microsoft Networks
•	Boos Packet Scheduler
	File and Printer Sharing for Microsoft Networks
	- Internet Protocol Version 6 (TCP/IPv6)
	Internet Protocol Version 4 (TCP/IPv4)
	- Link-Layer Topology Discovery Mapper I/O Driver
	+ Link-Laver Topology Discovery Responder
	and the same start of the same start and a same start at the same start at the

5. Ensure that both Client for Microsoft Networks and Internet Protocol (TCP/IP) are installed and checked as shown.

6. If NetBEUI is installed and checked, uncheck it or uninstall it.

7. Highlight the appropriate TCP/IP connection (usually Internet Protocol Version 4). Be careful not to uncheck the checkbox.

8. Click Properties.

The Internet Protocol Properties dialog appears as shown below.

eneral	Alternate Configuration				
You car this cap for the	n get IP settings assigned a ability. Otherwise, you ne appropriate IP settings.	automatically i ed to ask your	your n netwo	etwork : rk admin	supports istrator
() O	otain an IP address automa	atically			
-O Us	e the following IP address				
IP as	(dress)	a l	al.	1	
Subr	net maski	6	- 65	e.)	
Defa	ult gateway:				
0 0	otain DNS server address a	automatically			
OU	se the following DNS server	r addresses:			
Prefi	erred DNS server:	н. 1	1.1	10 C	
Alter	nate DNS server:				
				_	
				Adv	anced

9. Ensure that both the Obtain an IP address automatically and Obtain DNS server address automatically options are selected.

10. Click OK.

- 11. Click Close to close the Local Area Connection Properties dialog.
- 12. Click Close to close the Local Area Connection status dialog.

Configuring Windows XP to use DHCP or Obtain IP automatically

1. From the Windows desktop, select Start \rightarrow Settings \rightarrow Control Panel.

2. Double-click the Network and Dialup Connections icon.

Note: If Control Panel is in category view, select Network and Internet Connections;

then select Network Connections.

A list of network adapters appears as shown below. A Local Area Connection icon must appear under the LAN or High-Speed Internet heading. If it does not, the network is not installed correctly.



3. Right-click the Local Area Connection icon that represents the network adapter connecting the computer to the Satellite Gateway, and select Properties.

The Local Area Connection Properties dialog appears as shown below.

ieneral Advanced	
Connect using:	
Intel(R) PRO/100) VM Network Conn Configure
 ✓ ■ File and Printer ✓ ■ QoS Packet So ✓ ■ Internet Protoc 	r Sharing for Microsoft Networks cheduler tol (TCP/IP)

4. Ensure that both Client for Microsoft Networks and Internet Protocol (TCP/IP) are installed and checked as shown.

- 5. If NetBEUI is installed and checked, uncheck it or uninstall it.
- 6. Highlight Internet Protocol (TCP/IP). Be careful not to uncheck the checkbox.
- 7. Click Properties. The Internet Protocol Properties dialog appears as shown

Interne	et Protocol (TCP/IP) Properties
General	Alternate Configuration
You car this cap the app	in get IP settings assigned automatically if your network supports pability. Otherwise, you need to ask your network administrator for propriate IP settings.
⊙ Oł	btain an IP address automatically
OU	se the following IP address:
IP ad	ddress:
Subr	net mask:
Defa	ault gateway:
⊙ Oł	btain DNS server address automatically
OU	se the following DNS server addresses:
Prefe	erred DNS server:
Alter	mate DNS server:
	Advanced
	OK Cancel

8. On the General tab, ensure that both the Obtain an IP address automatically and Obtain DNS server address automatically options are selected. If not, select them.9. Click OK.

Configuring a Mac computer to use DHCP

1. From the Mac interface, select System Preferences.

The System Preferences menu appears.

2. Under Internet & Network, click the Network icon.

The Network screen appears as shown below.

k	C
;	
leTalk Proxies	_
÷	
DNS Servers (Optional)	
Search Domains (Optional)	
DIRECPC.COM	
Example: apple.com earthlink.net	
	k leTalk Proxies DNS Servers (Optional) Search Domains (Optional) DIRECPC.COM Example: apple.com earthlink.net

3. Ensure that the TCP/IP tab is selected.

4. Select Using DHCP from the Configure drop-down list as shown below. The IP Address field becomes disabled.

000	Network	0
Show All Displays	Sound Network Startup Disk	
	Location: Automatic	
Show: Built-in Et	hernet	
,	Manually	
	Using DHCP with manual IP address	
Configu	re ✓ Using DHCP	
	Using BootP	
	DIND DELVELS	(Optional)
IP Addre	ss [.] 139 85 158 186	

5. Click Apply Now to close the screen.

Once the DHCP has been set up. Please proceed on loading SBC file and RPR.

1.) Loading of SBC file into the modem. (Please find the SBC file on the attached file) .

Note: Please don't open the SBC file as you don't need to open this. Just save it in your folder/desktop.

- 1. Open a browser on the installer laptop/desktop.
- 2. Type http://192.168.0.1/fs/registration/setup.html in the address bar and press ENTER.

If an alternate IP address was assigned to the satellite router at the HX system gateway, enter that IP address instead. The Broadband Satellite Setup screen appears as shown below.

HUGHES	No.	
Automational automation and		

Broadband Satellite Setup

Welcome to Broadband Satellite Setup. Use the links below to register your HX90 terminal or point the outdoor antenna. Please note that certain functions shall be disabled during this process. Make sure that your HX90 terminal is restarted once you complete the Setup process.

Registration - Installer	Use this option if you are an installer and are commissioning a new terminal.
Registration - User	Use this option if you have a Registration Id and your antenna is already pointed.
Registration - Adapter Swap	Use this option if you are replacing your existing terminal with a new terminal and your antenna is already pointed.
Re-registration	Use this option if your terminal is already commissioned and you would like to update your account.
Antenna Pointing	Use this option if you would like to run pointing or ACP on your current setup.
VSAT Manual Commissioning	Use this option if you are an installer and would like to manually commission your terminal as a VSAT.
License Management	Use this option to upload and manage feature licenses.
Config File Upload	Use this option to upload a new registration configuration file.
Zip Code File Upload	Use this option to upload a new Zip Code file.

3. Click "Config File Upload".

Note: Do not click 'Zip Code File Upload'; this link is used to update the ZIP code table in the satellite router.

4. On the Configuration File Upload screen, click Browse and navigate to the location on the installer PC where the SBC.cfg file is saved.

5. Select the file and click Open.

6. Click Upload.

7. Click Close to return to the Setup screen.

2). Loading the RPR into the Modem.

1. Open a browser on the installer laptop/desktop.

2. Type http://192.168.0.1/fs/registration/setup.html in the address bar and press ENTER.

If an alternate IP address was assigned to the satellite router at the HX system gateway, enter that IP address instead. The Broadband Satellite Setup screen appears as shown below.



Broadband Satellite Setup

Welcome to Broadband Satellite Setup. Use the links below to register your HX90 terminal or point the outdoor antenna. Please note that certain functions shall be disabled during this process. Make sure that your HX90 terminal is restarted once you complete the Setup process.

Registration - Installer	Use this option if you are an installer and are commissioning a new terminal.
Registration - User	Use this option if you have a Registration Id and your antenna is already pointed.
Registration - Adapter Swap	Use this option if you are replacing your existing terminal with a new terminal and your antenna is already pointed.
Re-registration	Use this option if your terminal is already commissioned and you would like to update your account.
Antenna Pointing	Use this option if you would like to run pointing or ACP on your current setup.
VSAT Manual Commissioning	Use this option if you are an installer and would like to manually commission your terminal as a VSAT.
License Management	Use this option to upload and manage feature licenses.
Config File Upload	Use this option to upload a new registration configuration file.
Zip Code File Upload	Use this option to upload a new Zip Code file.

3. Click the "VSAT Manual Commissioning"

4. Please enter below configuration for your modem.

Hylas 2 is Right Hand Circular (RHC) Polarisation

Satellite Parameteres

Longtitude [Degrees/Hemisphere]	31 East	Frequency [x 100Khz]	13960
Sysmbol Rate [Sps]	4500000	LNB 22KHz Switch	Off
DVD Mode	DVB-S2-ACM	OTA Frequency [x 100Khz]	0
Receive Polarization	Vertical	Transmit Polarization	Horizontal
Frame Mode	DVB- S2- MPE		

VSAT Parameteres

Longtitude	Degree Minutes Hemisphere		I etitude	Degree Minutes Hemisphere		
	16	34	East	Latitude	31	11

LAN Parameteres

LAN 1IP Address	10.126.87.17	LAN 1 Subnet Mask	255.255.255.240	Validate 🗵
		- I AN 2 Subnet Mask		
LAN 2 IP Address	0.0.0.0	(optional)	255.255.255.0	Validate 🗵
		(optional)		

Management Parameteres

IP Gateway Address	192.168.12.200	SDL Control Channel	224.0.1.6
DVB Program Number	20500	DVB Program Number DNCC	40000
VSAT Management Address	12.15.10.249	Default IP Gateway Address	0.0.0.0
VSAT Return Path	Inroute	Dynamic Routing Enabled	Disabled

Radio Parameteres

Receive LNB Type	Ka_1500825		
	I Watt		
Transmit Dadia	 2 Watt More option		
Transmit Kadio			
	Transmit Radios Part Number		

Save Configuration	Cancel

NOTE: Double check all parameters before selecting "Save Configuration", the modem will reset.

Once you are done. Let's do the alignment of the dish which is the last part of the procedure. Please find the attached file for Sat Locking Procedure (*Step 3: Sat Locking*)