Receive Terminal Specification

The receive terminal that will be able to receive the GEONetCast broadcast should have an antenna, LNB, receiver, and a PC running Kencast datacasting client software. The datacasting client software necessary to receive the files is either KenCast Fazzt Standard or Professional Client software. There is also an "Edge Span" version for networks. The software can be purchased from KenCast Incorporated, http://www.kencast.com/ and the products website for GEONETCast users is: http://www.kencast.com/geonetcast.html.

In a minimum configuration, as shown in Figure 1 below, the receiver would be one of several inexpensive DVB-S PCI cards installed in a 5-volt PCI slot in the computer. Other users may prefer separate, standalone USB or network-based DVB-S receiver boxes. These standalone boxes have application where the PCI card slots are not available, as in a laptop computer, or where CPU processing power may be limited on the host computer. Host computers may be limited by obsolescence or use of complex data processing applications.
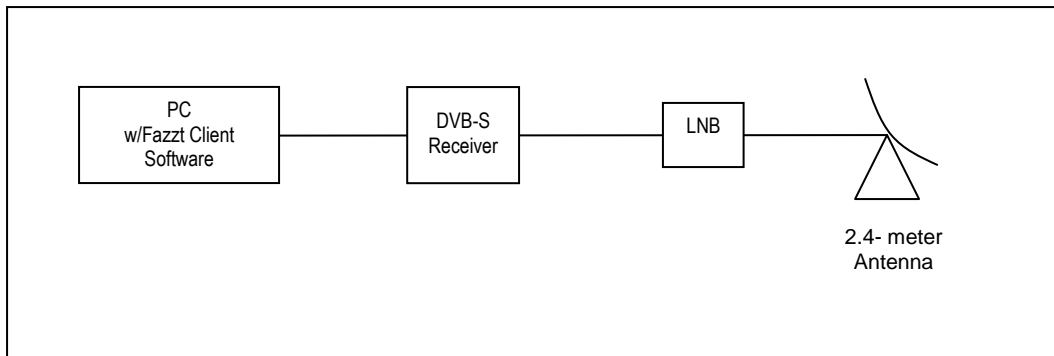

Figure 1. Typical Receive Terminal

The minimum specifications for the required terminal to receive the GEONetCast broadcast are listed in Table 1 along with manufacturers and part numbers that meet the specifications.

Table 1. Receive Terminal Specifications

		SPECIFICATION	TYPICAL MANUFACTURER AND PART NUMBER
Terminal			
	Frequency	C-Band (3.7-4.2 GHz)	
	Polarization	Linear	
	G/T	>18.0 dB/K	
Antenna			General Dynamics/Prodelin 1252, Andrew/Channel Master Type 243
	Frequency	3.625-4.20 GHz	
	Gain	> 37.5 dBi	
	Noise Temperature	< 40 K	
	X-Pol Isolation	> 27 dB, on axis	
LNB			Norsat 8000RF, New Japan Radio NJS8476H
	Type	Data Receive Only (DRO)	
	Noise Temperature	<35 K	
	Gain	> 60 dB	
Receiver			TechniSat Skystar 2, VBOX Satellite Express 2030-21
	Type	DVB-S, IP Data	
	Input Frequency	950-1450 MHz	
	Input Symbol Rate	2-45 Msymbols/s	
	Input Filtering	Digital Nyquist filter with 0.2-.035 roll-off	
	Coding	Viterbi ½, 2/3, ¾, 5/6, 7/8 and R/S 188/204	
	Throughput	> 10 Mbps	
	LNB Power	Supply power to LNB, 13 – 18 Volts DC, 400 mA	
	DVB Data	ETSI EN 301-192	

Datacast Client			Products website for GEONETCast users is: http://kencast.com/geonetcast.html.
			
			To order please contact:
			  Kencast, Inc
			  e-mail: sales@kencast.com
			  phone: (203)-359-6984

	Type	KenCast Fazzt standard or Enterprise Client	
PC		2.0 GHz Pentium™ IV; 1Gb RAM, 36Gb internal disk (or more, depending on storage required); USB port; 5 volt PCI bus (compatible with recommended DVB PCI card); 100/10 base Ethernet card (if required). Microsoft Internet Explorer (web browser) version 5.5, or later version, or Mozilla, or similar, Web browser, including JAVA RTE. The recommended operating systems/DVB PCI card are: • Windows™ 2000 SP4 - with all recommended DVB PCI cards • Windows™ XP SP2 - with all recommended DVB PCI cards • Linux Redhat 9 (Intel) - Pentamedia™ Pent@value and TechniSat SkyStar2	Dell PC