



Appendix

LIMITED WARRANTY FOR EQUIPMENT

ATTENTION!



This **Limited Warranty** is a legal document. Keep it in a safe place. This refers to the limited warranty offered by EchoStar Communications Corporation for your ExpressVu™ - compatible system only. For warranties related to the ExpressVu™ Service, please see your Residential Customer Service Agreement.

WHAT YOUR WARRANTY COVERS

This warranty extends only to the original user of the equipment ("you," "your") and is limited to the purchase price of each part. EchoStar Communications Corporation and its affiliated companies ("we," "our," "us") warrant this ExpressVu™- compatible system against defects in materials or workmanship as follows.

- **LABOUR:** For a period of ninety (90) days from the original date of purchase, if we determine that the equipment is defective subject to the limitations of this warranty, we will replace it at no charge for labour. We warrant any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.
- **PARTS:** For a period of one (1) year from the original date of purchase, we will supply, at no charge, new or rebuilt replacement parts in exchange for parts we determine are defective subject to the limitations of this warranty. We warrant any such replacement parts against defects in materials or workmanship for the remaining portion of the original warranty period. **Note:** "Parts" means items included in this package, which may include the antenna assembly, receiver, LNBF, remote control, or antenna mounting hardware. It does not include other parts purchased separately.

WHAT YOUR WARRANTY DOES NOT COVER

This warranty *does not cover* replacement of Smart Cards that you lose or damage. This warranty *does not cover* installation of the ExpressVu™ system. If applicable, such installation will be warranted under a separate installation agreement. This warranty *does not cover* consumer instruction, physical setup or adjustment of any consumer electronic equipment, remote control batteries, signal reception problems, loss of use of the equipment, or unused programming charges due to equipment malfunction. This warranty *does not cover* cosmetic damage, damage due to lightning, electrical surges, fire, flood, or other acts of God, accident, misuse, abuse, repair or alteration by

User and Installation Guide

other than authorized factory service, use of accessories not recommended by the manufacturer, negligence, commercial or institutional use, or improper or neglected maintenance.

This warranty *does not cover* equipment sold AS IS or WITH ALL FAULTS, equipment removal or reinstallation, shipping damage if the equipment was not packed and shipped in the manner prescribed, nor equipment purchased, serviced, or operated outside Canada.

LEGAL LIMITATIONS

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS EQUIPMENT, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS EQUIPMENT. UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS EQUIPMENT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS EQUIPMENT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. WE RESERVE THE RIGHT TO REFUSE TO HONOUR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS EQUIPMENT NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL OR CONDITIONAL ACCESS NUMBERS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE RECEIVER HAS BEEN OPENED BY AN UNAUTHORIZED PERSON (with the exception of opening the Smart Card access door on the receiver front panel).

This warranty gives you specific legal rights which may vary from province to province. Some provinces do not allow the exclusion or limitations of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.

IF YOU NEED ASSISTANCE

1. Call the Service Centre at 1-888-SKY-DISH. Have the date of purchase and either your customer account number, the receiver conditional access number, or the receiver model number ready. See "Order Your ExpressVu™ Programming" on page 4-40 for the procedure to find out these numbers.
2. A Service Centre Representative will assist you. The Representative will attempt to troubleshoot any problem you may be having. The Representative will also determine whether your equipment is covered under this warranty.
3. If the Representative determines that you should return your equipment, you will be given a Return Authorization (RA) number. *Before shipping* any equipment, you must obtain a Return Authorization (RA) number from the ExpressVu™ Customer Service Centre.
4. Returned equipment must be packaged properly, using either the original shipping materials or the packaging in which the replacement equipment is shipped. Follow the instructions given to you by the ExpressVu™ Customer Service Representative.
5. Write the RA number in large, clearly visible characters on the outside of the shipping box that you use to return the equipment. *To avoid confusion and misunderstandings, shipments without an RA number clearly visible on the outside of the box will be returned to you at your expense.*
6. If you return the receiver, you must return the Smart Card with the receiver. *If you do not return the Smart Card with the receiver, a fee will be assessed against your account.*

WHAT WE WILL DO

- We will evaluate the equipment you return, and verify whether the equipment is covered under this warranty.
- We will replace equipment that we determine is defective with new or refurbished equipment, if the defective equipment is covered under this warranty. This replacement equipment will be shipped at our expense.
- If the defective equipment is not covered under this warranty, we will notify you. We may assess you a flat rate charge for replacement equipment, including shipping and insurance.

STAY LEGAL

It is against the law to receive subscription TV programming without paying for it. Remember – everyone pays more to support someone who pirates the signal.

Section 10 of the *Radiocommunication Act*, R.S.C. 1985, c. R-2 as amended, makes it a federal offence to modify this receiver to enable it to receive encrypted (scrambled) television programming without payment of required subscriptions. Conviction can result in a fine of up to \$25,000 and imprisonment for up to one year. Section 9⁽¹⁾(c) and (d) of that Act make it a separate offence to decode an encrypted subscription programming signal or network feed without the authorization of the lawful distributor and a further offence to operate this receiver so as to receive unlawfully decoded signals or feeds. Conviction for either of these offences can result in a fine of up to \$25,000 and/or imprisonment for up to six months.

Where any of these offences is committed on more than one day, the person who committed the offence can be convicted of a separate offence for each day on which the offence is committed.

In addition, section 18 of the *Radiocommunication Act* gives ExpressVu Inc. an independent right to sue for damages for any losses it sustains because of the above illegal conduct.

RESIDENTIAL CUSTOMER SERVICE AGREEMENT

Welcome as a Subscriber to the ExpressVu™ Service. This document contains the terms and conditions under which ExpressVu Inc. is willing to provide its direct-to-home (“DTH”) television and audio broadcasting services to each of its residential customers through the ExpressVu™ broadcast service. If this document is difficult for you to read, a large print version is available upon request.

1. Introduction

Whenever we refer to “you” or the “Subscriber”, we are referring to you, as a subscriber of ExpressVu’s Services. By requesting, or by paying for, any Services offered by ExpressVu™, you will be deemed to have agreed to these terms and conditions. If you do not agree with any of the terms and conditions that are contained in this document, please contact the ExpressVu™ Customer Service Centre, as described below.

2. Definitions

Defined terms are useful in keeping documents as brief and understandable as possible. Therefore, in this document the following defined terms will be used:

“**Customer Service Centre**” means the ExpressVu™ Customer Service Centre, which may be contacted by telephone at: 1-888-SKYDISH (759-3474); by E-Mail to: “customerservice @expressvu.com”; or mail to: “Customer Service, ExpressVu Inc., 115 Scarsdale Road, North York, Ont., M3B 2R2”;

“**DTH Equipment**” means the equipment (i.e., a receiver, satellite antenna and remote control) that you used to receive ExpressVu™ programming services;

“**Receiver**” means the integrated receiver and decoder: this is the television set-top box which decodes the programming as it comes into your television from the dish antenna;

“**Service(s)**” means, as the context requires, any or all of the ExpressVu™ programming, subscription program programming packages, pay-per-view services, any applicable fees and any other services that we or our affiliates provide to you from time to time;

“**Smart Card**” means the conditional access card inserted into the receiver. The Smart Card is used by ExpressVu™ to authorize reception of programming;

“**Statement**” means the printed statement of your account that we send to you each month; and

“**ExpressVu™**” “**we**” “**us**” or “**our**” means ExpressVu Inc., and where the context requires, any successor company or entity, and their respective officers, directors, employees or authorized agents.

User and Installation Guide

3. General information about our Terms and Conditions

The policies and practices reflected in this document are used when providing you with Services. We will continue to review our policies and practices as part of our commitment to improve the quality of services we provide. As a result, we may change the terms and conditions in this Agreement, but we will send you a notice informing you of any material change, and the effective date of that change so that you may cancel your subscription if you don't agree. The notice may be provided to you with your Statement, by separate written notice, or by E-mail.

We reserve the right to change the Services that we offer, and our rates, charges or fees at any time. In the event of a change in the contents of any programming, programming packages or other Services, you agree that we have no obligation to replace or supplement this programming, the programming packages or other Services previously offered that have been deleted, rearranged or otherwise changed. You understand and agree that you will not be entitled to any refund because of our change in the contents of any programming, programming packages, or other Services. The provisions of this Agreement will continue to apply to any issue related to this relationship after termination of this Agreement.

4. About your use of the DTH Equipment

(a) The Receiver/Decoder Unit

You can receive the ExpressVu™ programming package only through a receiver that has been authorized by ExpressVu™ to receive the Services. Your receiver will not operate without a Smart Card. The Smart Card contains a special code which allows this authorization to occur electronically. Each receiver is assigned a service address by ExpressVu™, which represents the geographical location of the receiver. ExpressVu™ reserves the right to verify that the service address is in compliance with ExpressVu™ policies, which currently require the address to be in Canada. If any Subscriber is found to be in violation of these policies ExpressVu™ may disconnect the Services immediately without notice to you. As the Subscriber, you are responsible for all Services that are ordered for your receiver. If you have concerns about other persons ordering Services for your receiver without your authorization, request a personal identification number (PIN) for your account, which will be used by our Customer Service Centre to help prevent unauthorized Service orders.

(b) Programming requires telephone connection

ExpressVu™ requires that all receiver units be directly and continuously connected to an operating telephone line in Canada. Any exception to this rule must be approved by ExpressVu™ prior to activation. Connection to an operating telephone line is a condition of our provision of Services to you, and we may, in our discretion, disconnect some or all Services if we determine that the receiver is not connected.

Residential Customer Service Agreement

(c) Minimum level of Service required

As a condition of our furnishing Services to you including, without limitation, pay-per-view and “a la carte” programming, we may require that you purchase and maintain a minimum level of Services.

Currently, in order to maintain an active account, every Subscriber must subscribe to either one of the “Starters” or the “L’entrée à la française” package. In addition, there is a minimum period of subscribing to any Service: if you activate any Service option, you must continue to subscribe to that Service (and pay for it) for a minimum period of one month.

(d) Smart Cards

Smart Cards are nontransferable. Your Smart Card will work only in the receiver unit that it came packaged with. Notwithstanding that the Smart Card was packaged with your receiver when you purchased it, all Smart Cards remain our property and any tampering or other unauthorized modification to the Smart Cards may result in, and subject you to, legal action. If you attempt to use that Smart Card with any other receiver without our authorization, we may terminate your Service. We may request that you return the Smart Card to us if it is defective or damaged, prior to providing a replacement Smart Card to you. In addition, we may request that you return the Smart Card to us if you terminate your Service.

If your Smart Card is lost, stolen, damaged or defective, and our investigation does not reveal unauthorized tampering, then we will replace the Smart Card. You will be charged a Smart Card replacement charge of \$60.00. However, where the Smart Card was defective or damaged, \$30.00 of this amount will be refunded immediately upon our receipt of the damaged or defective Smart Card from you. You may request overnight delivery of the replacement Smart Card, at your expense. Smart Cards which are defective within the 90 day warranty period are subject to a \$30.00 charge, all of which is refundable upon our receipt of the defective Smart Card.

(e) Liability for unauthorized use

If either of your receiver or Smart Card is destroyed, lost, stolen or otherwise removed from your premises without your authorization, you must notify our Customer Service Centre immediately in order to avoid liability for payment for any unauthorized use. You will not be liable for unauthorized use after we have received your timely notification.

(f) Additional receiver in the same household

We do not charge a monthly fee for any additional receiver/Smart Card combination you purchase and activate to receive the same programming as your initial receiver/Smart Card. However, it is a condition of this exemption that your initial receiver and all additional receiver must be located at your residence and must be continuously connected to the same telephone number. We may, in our discretion, disconnect the Service of any Subscriber that activated one or more additional receiver in breach of this rule.

User and Installation Guide

5. Rates, Fees and Charges

(a) Introduction

Rates, fees and charges are charged according to this Agreement. These rates, fees and charges are subject to change, but we will provide you with notice of any change. Our rates for subscription and pay-per-view programming are available upon request from the ExpressVu™ Customer Service Centre. If you have any concerns about our rates, we would ask you to contact our ExpressVu™ Customer Service Centre. You may also contact the governing body for broadcasters in Canada, the CRTC, by writing to it (with a copy to ExpressVu™) at the following address: CRTC, Ottawa, Ontario, K1A 0N2.

(b) Billing policies, Statements and payments

You agree to pay, in full, all amounts billed for Services and to pay all taxes, fees and other charges, if any, which are now or may in the future be assessed on the Services you receive from us. We will bill you each month in advance for your Services. The Statements you receive will show the total amount due, together with other changes since your last Statement, such as applied payments, credits, purchases and other charges to your account. It will also show any other fees assessed. Unless otherwise stated in the Statement, the total amount due is payable upon receipt.

If there are billing errors or other requests for credit, you should contact our Customer Service Centre. You should contact us within forty-five (45) days of the date you receive the Statement which contained the error, in order to avoid service disruptions.

Undisputed portions of the Statement must be paid before the next Statement is issued to avoid an administrative fee for late payment. Additional copies of your Statement can be requested from the Customer Service Centre, subject to payment of the appropriate Additional Statement Fee.

(c) paying your bill late, or with insufficient funds

You agree to pay us in full by the payment due date for the Services and for any other fees or charges due to us. Payment of your bill after the due date will result in us assessing you a “Late Payment Fee” of \$3.00 per occurrence. Other fees and charges may also be assessed. For example, cheques which are dishonored or returned for insufficient funds, or a refused bank account/credit card pre-authorized debit, will be subject to an “NSF Fee” of \$20.00 per occurrence. If partial payments are made, they will be applied first to the oldest outstanding bill. If you send cheques or money orders marked “payment in full,” we can accept them without losing any of our rights to collect any other amounts owed by you, notwithstanding your characterization of the payment. We do not extend credit to our customers, and the Late Payment Fee is not interest, a credit service charge or a finance charge, but purely an administrative charge related to additional processing costs. You understand and agree that in the case of late payment or nonpayment for any Services ordered by you or for any of the charges stated below, we may report such late payment or nonpayment to credit reporting agencies.

Residential Customer Service Agreement

(d) Termination of Service by ExpressVu™

If you do not pay your bill within 30 days after the date when payment is required, or if you fail to comply with any of your obligations under this Agreement at any time, we have the right to disconnect your Services, in our sole discretion, and without notice or demand to you. When we disconnect your Services, we have the right to charge you a Deactivation Fee of \$50.00. If we are required to use a collection agency or lawyer to collect money that you owe us or to assert any other right that we may have against you, you agree to pay the reasonable costs of collection or other action. These costs might include, but are not limited to, the costs of a collection agency, reasonable legal fees and court costs. We will require you to pay all past due charges, and the Deactivation Fee, and any costs which are reasonably incurred by ExpressVu™ as a result of the collection efforts on outstanding amounts, before we reconnect your Services.

(e) Authorization to check credit history

You authorize us to make inquiries into your credit history at any time in our sole discretion, and to record the results of those credit inquiries on your account file at ExpressVu™.

(f) Additional fees and charges

ExpressVu™ has a policy of minimizing all additional fees and charges. However, there are instances where a Subscriber has failed to comply with these terms and conditions, and ExpressVu™ has incurred significant costs as a result. We believe that the ExpressVu customer who is in default ought to be responsible for those costs. Accordingly, at ExpressVu™ we impose a fee in only 3 situations: late payments; insufficient funds cheques or refused bank account/credit card pre-authorized debit; and where service is deactivated by ExpressVu™ because of a Subscriber's failure to pay. These situations are described above. In addition to the amounts due for Services, you agree to pay the fees assessed in these circumstances. The amount of these fees are subject to change at any time.

6. Your termination, or suspension, of Services

(a) If you want to permanently terminate Services

You have the right to terminate any part or all of your Services for any reason at any time by notifying our Customer Service Centre. However, any continuing Services are subject to the minimum Service requirements mentioned in Section 4(c) above. Secondly, your account must be in good standing with all payments up to date. You are responsible for ensuring that these two conditions are satisfied. ExpressVu™ will deactivate the Services within 2 business days of receiving your notice. No deactivation fee will be payable. If you are entitled to a credit for any amount in excess of \$10.00, ExpressVu™ will send you a cheque for that refund amount, but will not be obligated to offer any refund for an amount of less than \$10.00. If you cancel your Services, you are still responsible for payment of all outstanding balances accrued (including any financed purchases) up to the date of termination.

User and Installation Guide

(b) If you want to temporarily suspend your service

You have the right to temporarily suspend your Services at any time simply by contacting the Customer Service Centre, provided that your Services are suspended for a minimum period of 2 weeks, and not greater than six months. There is no charge for this service. However, upon reactivation, the minimum one month service requirement set out in Section 4(c) will apply.

(c) Your transfer of account or equipment

You may not assign or transfer the Services without our written consent. If you do, we may deactivate your Services. You agree to notify us immediately, but in any event not more than five (5) days, after you move, sell, give away or otherwise transfer your DTH Equipment to anyone else. You are considered to be the registered owner of your DTH Equipment and recipient of the Services until we receive such notice, and you may be liable for any charges or fees incurred by the use of your DTH Equipment by anyone else up to the time that we receive your notice.

7. Furnishing of Services by ExpressVu™

(a) Exclusion of Liability

EXPRESSVU™, OR ANY OF ITS SUPPLIERS (INCLUDING WITHOUT LIMITATION TELESAT CANADA) WILL NOT BE LIABLE FOR ANY INTERRUPTIONS IN SERVICE OR LIABLE FOR ANY DELAY OR FAILURE TO PERFORM, IF SUCH DELAY OR NONPERFORMANCE ARISES IN CONNECTION WITH ANY ACTS OF GOD, FIRES, EARTHQUAKES, FLOODS, POWER FAILURE, SATELLITE FAILURE OR MALFUNCTION, FAILURE TO REPLACE EXISTING TECHNOLOGY, ACTS OF ANY GOVERNMENTAL BODY OR ANY OTHER CAUSE BEYOND OUR REASONABLE CONTROL. WE MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, REGARDING THE SERVICES PROVIDED TO YOU. ALL SUCH WARRANTIES ARE EXPRESSLY EXCLUDED. IN NO EVENT SHALL WE HAVE ANY LIABILITY FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATING TO THE DTH EQUIPMENT OR RESULTING FROM OUR FURNISHING OR FAILURE TO FURNISH ANY SERVICES TO YOU OR FROM ANY FAULT, FAILURE, DEFICIENCY OR DEFECT IN SERVICES FURNISHED TO YOU. IN NO EVENT SHALL EXPRESSVU'S LIABILITY TO THE SUBSCRIBER EXCEED THE TOTAL VALUE PAID TO EXPRESSVU™ BY SUBSCRIBER FOR SERVICES. It is your responsibility to impose any restrictions on viewing by you, other members of your household, or your or their invitees, and we shall have no liability to anyone due to or based on the content of any of the Services furnished to you.

Residential Customer Service Agreement

(b) Acknowledgement re: DTH Equipment

YOU ACKNOWLEDGE YOUR DTH EQUIPMENT HAS BEEN ACQUIRED SEPARATELY AND APART FROM THIS AGREEMENT FOR THE PROVISION OF SERVICES. YOU ALSO ACKNOWLEDGE THAT EXPRESSVU™ IS NOT THE MANUFACTURER, DISTRIBUTOR, INSTALLER OR RETAILER OF YOUR DTH EQUIPMENT, AND THEREFORE HAS NO LIABILITY WHATSOEVER FOR SUCH EQUIPMENT. ANY RIGHTS AND REMEDIES WITH RESPECT TO THE DTH EQUIPMENT MUST BE HANDLED DIRECTLY WITH THE MANUFACTURER, INSTALLER OR SUPPLIER OF SUCH EQUIPMENT.

(c) Programming availability

Certain Services transmitted by us, including but not limited to sports events, may be “blacked out” in your area of reception from time to time at the request of the Programmer for copyright or other reasons. If you circumvent or attempt to circumvent any of these blackouts, you may be subject to legal action. Programming may also be subject to temporary interruption due to natural phenomena such as thunderstorms. ExpressVu™ will not refund charges for the black-out period or temporary interruptions. In addition, EXPRESSVU™ WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHICH YOU SUFFER AS A RESULT OF ANY SUCH BLACK OUT OR TEMPORARY INTERRUPTION. However, if ExpressVu™ causes a material interruption of Services which is not related to natural phenomena or causes outside of its control, ExpressVu™ will provide a credit or refund, at the request of the Subscriber, for the Service interruption period.

(d) Private viewing

We provide Services to you for your private home viewing, use and enjoyment. You agree that the Services provided will not be viewed outside of your private residence. You are permitted to exhibit the Services solely in your private residence and not in any other areas. The Services may not be rebroadcast, transmitted or performed in any form, and no admission charged, or any other consideration received, by or for the benefit of Subscriber from any third party in return for allowing such third party to listen to or view any Services provided by us.

(e) Warning against piracy

It is against the law to receive the Services, or any portion of the Services, without paying for them (unless permitted to do so by ExpressVu™). Section 9 of The Radiocommunication Act states: “No Person shall ...(c) decode an encrypted subscription programming signal or encrypted network feed, otherwise than under and in accordance with authorization from the lawful distributor of the signal or feed.”. The manufacture, importation, distribution, lease, sale, installation, operation or possession of any equipment or device for that purpose may result, upon conviction, in the imposition of a fine of not more than \$5,000.00, and imprisonment of up to one year. It may also result in civil liability.

User and Installation Guide

8. Miscellaneous Provisions

(a) Applicable law

This Agreement, including all matters relating to its validity, construction, performance and enforcement, shall be governed by applicable federal law, and the laws and regulations of the province where Service is provided. These terms and conditions are subject to amendment, modification or termination if required by such laws or regulations. If any provision in this Agreement is declared to be illegal or in conflict with any such law or regulation, that provision may be deleted or modified, without affecting the validity of the other provisions.

(b) Change of name, address or telephone number

You agree to give us prompt notice of your change of name, mailing address, residency address or telephone number. You may do this by notifying our Customer Service Center. Notices are deemed to have been received when they arrive at our Customer Service Centre.

© Copyright 1997, ExpressVu Inc. all rights reserved.
“ExpressVu” is a registered trade mark of ExpressVu Inc..

WIRE YOUR SYSTEM TOGETHER

MULTIPLE RECEIVERS

Each output on the LNBF can support a single receiver. You cannot connect two receivers to the same output (for example, by using a line splitter), because the two receivers would interfere with each other during channel selection. This is a characteristic of satellite television in general, and is not a limitation that is specific to this ExpressVu™ system.

If you want to connect two receivers to the same ExpressVu™ satellite antenna and be able to watch different channels on each, you must use a dual-output LNBF. This allows you to connect each receiver to a different output, preventing interference between the receivers. In this case, during installation you must run a separate coaxial cable from each output on the LNBF to each receiver.

If you want to purchase an LNBF different from the one that you originally purchased, contact your local ExpressVu™ Authorized Agent or call the Customer Service Centre at 1-888-SKY-DISH.

The following wiring setups assume installation of a single receiver. If you are installing multiple receivers, modify your wiring accordingly.

ABOUT CABLING AND CONNECTIONS

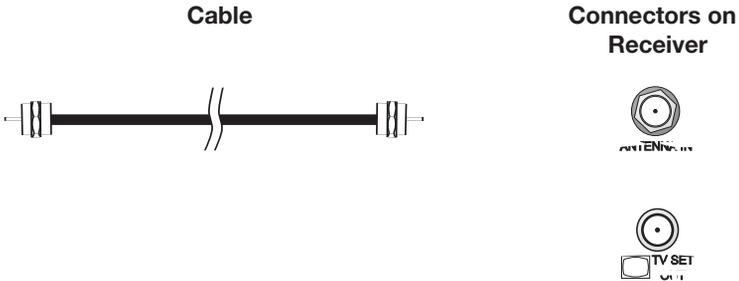
The way in which you wire your system and the kinds of cabling you choose can make a noticeable difference in the quality of the picture and sound. We recommend that you wire your system to take advantage of the highest quality supported by your equipment. You will need to examine your electronic equipment to determine what type of connectors and cables, and which wiring setup to use.

Do the following:

1. Look on the back of each piece of equipment that you are planning to install with the ExpressVu™ receiver and note the type of connectors on the equipment.
2. Starting from the connectors that support the highest quality, determine which pieces of equipment can be connected together using the designated type of cable.
3. Use that setup as the basic plan to wire your system together. If you have additional components, or do not have all of the components that are in the setup, adjust the wiring accordingly.

User and Installation Guide

RF OR VHF CONNECTIONS (GOOD PICTURE AND SOUND)



The RF or VHF connections (also called the modulator connections) provide good picture and good mono ("non-stereo") sound quality. Be aware that even if you have a TV and other equipment that support stereo sound, this type of connection will give you only non-stereo sound.

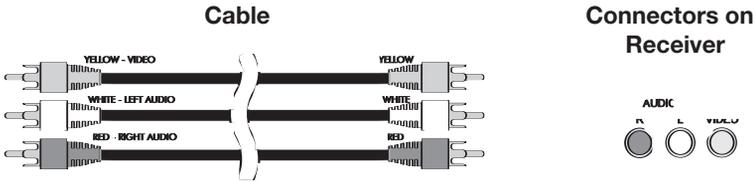
If you connect a cable TV box or broadcast TV antenna to the receiver, you must use the RF or VHF connections for the local cable or broadcast television signal input and output. This is true even if you use the phono (RCA) or S-VIDEO connections from the receiver to gain quality for picture and sound. The following wiring setups include the RF or VHF connections based on the assumption that you will also have cable TV or a broadcast TV antenna.

This is the simplest wiring setup, and many people prefer it because it is easy to install and use. The RF or VHF connections require that you keep the TV tuned to either channel 3 or 4 to view satellite channels. You must also set the **Channel 3/4 Switch** on the receiver back panel (and a similar switch on the VCR, if used) to match this channel.

Using the RF or VHF connections allows you to quickly switch from satellite programming to local or cable programming using one of the following methods:

- Press the TV/Video button on the remote, or
- Turn OFF the receiver

**PHONO (RCA) AUDIO/VIDEO CONNECTIONS
(BETTER PICTURE, BEST SOUND)**



The phono (RCA) connections provide better picture quality and the best stereo sound. You should use this type of connection for audio, if possible, and for the video if your equipment does not support S-VIDEO (see following).

The phono (RCA) cable is available as a single cable with three connectors on either end, or as three separate cables. The connectors are colour-coded according to the type of signal they carry.

- The yellow connector carries the video signal.
- The white connector carries the left audio signal.
- The red connector carries the right audio signal.

If your TV only has one input connection for this type of audio, connect it to the right **(R)** audio connection on the receiver.

If you use the phono (RCA) connections to connect the receiver with the other equipment, connect the cable from your cable TV box or broadcast TV antenna directly to the RF or VHF connection on your TV or VCR. You may leave the receiver back panel **Channel 3/4 Switch** set to either channel.

You cannot use the methods described for the RF or VHF connections to switch between local and satellite TV programming. Depending on the type of equipment that you connect to the receiver, you may need to use the menus displayed by each piece of equipment to change the input from local to satellite TV. See the product documentation that came with your other electronic equipment for more information.



Your ExpressVu™ receiver must be connected to a phone line at all times to order DISH-On-Demand™ PPV programs using the receiver.

NATURAL INTERFERENCE WITH PROGRAMMING

RAIN AND SNOW FADE

Heavy rain or snow can affect the satellite signal. This can interrupt your programming service. If you are in an area that may be subject to this problem, you have several remedies available.

- By aiming the ExpressVu™ satellite antenna to get the strongest signal, you can help prevent moderate rain and snow from interrupting the service.
- If you find that your service is still interrupted, you can purchase a larger diameter dish for your satellite antenna. The larger dish gathers more of the satellite signal, which creates a stronger signal being sent to the receiver. This will reduce, but may not eliminate, the interruptions. Call your local ExpressVu™ authorized agent.

SOLAR INTERFERENCE

Twice a year, the sun moves to a position behind the ExpressVu™ satellite, which is in orbit around the Earth. The exact time of the year that this occurs for you will vary, depending on your location, but it will be around the middle of April and the middle of October, and lasts 3 to 4 days. When the sun is directly behind the satellite, solar energy overpowers the satellite signal for approximately 5 to 10 minutes each day of this phenomenon. This is an unavoidable natural event for all satellite television program providers.

During this period, you will not be able to see your programs. Once the sun has moved from behind the satellite, your programs will reappear.

GLOSSARY

| | |
|----------------------|--|
| À La Carte Services | Channels that are not part of a program or package, but that you order to be added. A monthly fee is added to your invoice during the period that you subscribe to the à la carte channel. |
| Azimuth | See Direction . |
| Blacked Out Program | A program that cannot be viewed in specific locations (for example, a sports event). |
| Channel Surf | See Channeling Up or Down . |
| Channeling Up/Down | While viewing a program, rapidly selecting channels using the Up or Down arrow buttons on the remote or receiver. |
| Composite Video | See Phono (RCA) Video . |
| Direction | Also called "azimuth." Refers to the left or right positioning of your satellite antenna. Direction is noted on the compass in the form of numbers indicating degrees. The up/down positioning of the satellite antenna. By referring to "Satellite Location Reference Chart" you can identify the approximate direction for your antenna. |
| DVB | Digital Video Broadcast. The international standard for complete DVC systems includes MPEG II video and audio. |
| Elevation | The up/down positioning of the satellite antenna. By referring to "Satellite Location Reference Chart" you can identify the approximate elevation for your antenna. |
| Event | See Program . |
| Geosynchronous Orbit | An orbit around the Earth, over the equator, at a distance of approximately 40,000 kilometres. A satellite in such an orbit stays aligned over one place on the surface of the Earth. |
| IR (Infra-Red) | Some ExpressVu™ remotes use infra-red light to transmit signals to the receiver. The ExpressVu™ remote also uses IR to control other equipment. |
| LNBF | Low-Noise Block amplifier with integrated Feed. This is the component that receives the signals reflected from the dish surface and transmits them to the receiver. |

User and Installation Guide

| | |
|---|---|
| Modulator Connection | See RF or VHF Connection. |
| MPEG II | Moving Pictures Expert Group II. The worldwide standard for compression and transmission of digital pictures. |
| DISH-On-Demand SM PPV Program | A program that you pay an additional fee to view once. |
| Phono (RCA) Audio | Highest quality audio connection available. Provides excellent stereo sound. Separate connectors are required for left and right audio signals. |
| Phono (RCA) Video | Better quality video connection. Also called composite video. |
| Program | A TV show, movie, or DISH-On-Demand SM PPV event. |
| Program Guide | An on-screen guide to all the programs that are currently being shown, and all the programs that will be shown for the next week. You can select current and future programs, and purchase PPV programs in the Program Guide. |
| Ratings Codes | <p>Codes have been assigned to the program to indicate content and suggested audience. The following codes are used:</p> <p>8+ (PG): Parental Guidance suggested. Some material may not be suitable for children under the age of 8.</p> <p>14+(PG): Not recommended for children under 14. Subject matter warnings. Parental discretion is strongly advised as some material may not be suitable for unsupervised viewing by children.</p> <p>18+(R): Programming which could contain elements that would make it unsuitable for viewers under the age of 18.</p> <p>NC17: Programming which could contain content elements that would make it unsuitable for viewers under the age of 17.</p> <p>NR/AO: Not rated/Adult only. Due to explicit content this programming is intended for adult viewing only.</p> |

Expanded Ratings, locked out by content:

Language: Adult language.

Violence: Graphic Violence.

Sexual Content: Sexual scenes.

Nudity: Nude scenes.

| | |
|----------------------|--|
| Receiver, ExpressVu™ | The piece of equipment that controls your access to all ExpressVu™ network features and programs. |
| RF | Radio Frequency. |
| RF or VHF Connection | Also called modulator connection. A type of connection that supports good picture quality, and good mono ("non-stereo") sound. Usually the easiest and quickest method to wire your system together. |
| Satellite Antenna | The piece of equipment that receives the broadcast signal from the ExpressVu™ satellite, amplifies it, and transmits it to the ExpressVu™ receiver. This refers to the entire antenna assembly, whether it is mounted on the mast, or on a pole. |
| UHF | Ultra-high frequency. Some remote controls use UHF to control receivers. UHF signals can travel longer distances than infra-red (IR), and can penetrate objects, making it possible to control the equipment from other rooms in the building. Some off-air TV channels are UHF (typically 14 through 83). |
| VHF | Very-high frequency. Some off-air TV channels are VHF (2 through 13). |

PROBLEMS AND SOLUTIONS TABLES

Note: For warranty service on your receiver, the call ExpressVu™ at 1-888-SKY-DISH .

Use this section if you encounter problems operating the ExpressVu™ system.

We strongly encourage you to look in this section for a description of your problem before calling the Service Centre. Many problems arise from basic misunderstandings of how the ExpressVu™ system works, especially when you are just becoming familiar with it. This section addresses many situations, usually with a simple solution for each one.

Do the following to solve your particular problem:

1. Review the section in this Guide that relates to your problem.
2. If you cannot find a solution, then find the section of the following chart that relates to your problem. Look down the **What Is Happening** column until you find your problem.
3. If you are interested, read the information in the **Possible Why** column.
4. Try each of the suggested solutions in the **What to Do** column.
5. If this does not solve your problem, or if you cannot find your problem in these tables, call the ExpressVu™ Service Centre at 1-888-SKY-DISH, or see the ExpressVu™ home page at <http://www.expressvu.com> on the World Wide Web.



INSTALLATION SECTION

| What is Happening | Possible Reasons Why | What to Do |
|---|--|---|
| When you enter your Postal Code in the Point Dish and Signal Strength menu, the Zip Code window displays "?????". | The database for the ExpressVu™ receiver is not programmed with Canadian Postal Codes. | Please disregard the zip code field. Refer to "Satellite Location Reference Chart" on page 4-33 to determine the satellite's direction and elevation from your mounting site. |

ASSEMBLE THE SATELLITE ANTENNA

| What is Happening | Possible Reasons Why | What to Do |
|--|--|---|
| The support arm and bracket are separate pieces. | Some models of the support arm/bracket require assembly. | Assemble the support arm and bracket. |
| You want your system to support two receivers, but you have only a single output LNBF. | You <i>must</i> have a dual output LNBF to support two receivers. You must also run a separate coaxial cable from each LNBF output to each receiver. This is a feature of satellite TV in general, not just the ExpressVu™ system. | Contact your dealer to order a dual LNBF. |

User and Installation Guide

FINE-TUNE THE AIM OF THE SATELLITE ANTENNA

| What is Happening | Possible Reasons Why | What to Do |
|---|---|---|
| The Signal Strength bar indicates a signal strength, but is red and displays the word "Unlocked." | The satellite antenna may be aimed at the ExpressVu™ satellite, but without a signal strength sufficient to display a TV picture. | Adjust the aim of the antenna slowly until the Signal Strength bar turns <i>green</i> and displays the word "Locked." |
| The Signal Strength bar is green, but you cannot fine-tune the antenna aim for a 100% signal strength. | The signal strength is not intended to reach 100% | If your system provides you an acceptable picture, you do not need to do anything. You should optimize signal strength (see Chapter 4). If you cannot reach 50% signal strength on transponder 11 you may wish to purchase a larger dish antenna. |
| No matter what you try, you cannot get the Signal Strength bar <i>green</i> . | Cable connectors may have loosened or have moisture inside. There may be blockage with the satellite signal. | Make sure nothing (including your own body) is blocking the signal path from the satellite to the antenna. Confirm that all cable connectors are firmly connected and dry. Double check Chapter 4. Call the ExpressVu™ Customer Service Centre at 1-888-SKY-DISH for assistance. |
| You see the error message, "Attempting to acquire satellite signal." | The receiver may have just been plugged in, and is acquiring the satellite signal. The satellite antenna may have been moved out of alignment with the satellite signal. Connecting cables may have loosened or have moisture inside. There may be interference with the satellite signal. Your dish may be full of snow or debris. | Wait to see if the message is removed. Confirm that the Signal Strength bar is green and displays the word "Locked." If not, re-aim the satellite antenna. Confirm that all cables are firmly connected and dry. Call the ExpressVu™ Customer Service Centre at 1-888-SKY-DISH for assistance. Clean off the dish. |

USE THE EXPRESSVU™ REMOTE CONTROL

| What is Happening | Possible Reasons Why | What to Do |
|---|---|--|
| When you press the Power button on the remote control to turn the receiver ON, the Power light on the receiver front panel does not light up. | You may not be able to see that the Power light is on, if other lights in the room are too bright. The remote may not be operating properly or the batteries are weak or dead. | Try other buttons to see if the receiver is responding. Replace the remote batteries with fresh ones. Check that the electrical power is on in your building, and that it has the voltage and current specified for the receiver. Check that the electrical outlet you are using is in good condition and has power (for example, check that a fuse has not blown). Check that the receiver power cord is not damaged, and that the plug is inserted correctly into the outlet. |
| When you try to control the receiver with the remote, the receiver does not respond (this may occur especially after changing the batteries in the remote). | The remote control may be missing batteries, the batteries may be incorrectly placed in the remote, or the batteries may be weak or dead. | If the batteries are missing or dead, insert fresh AAA-size batteries. Make sure all batteries are inserted in the correct direction. |

HEAR PROGRAM SOUND

| What is Happening | Possible Reasons Why | What to Do |
|--|---|---|
| The receiver power light is on and there is a good picture on the TV set, but you do not hear any sound. | You may have muted the sound, or set the volume to be inaudible. The audio connections may not be properly connected. | Turn off the mute using the TV mute button, or by pressing the Mute button on the remote. If necessary, change to the appropriate mode before pressing Mute . Turn up the volume at the TV, or by pressing the Volume (+) button on the remote. Check the audio connectors and cords from the receiver to the TV, or to any other sound system you may be using. Check the TV speakers or other sound system you may be using. |
| A foreign language is used for the audio sound. | The receiver may have been programmed to select an alternate audio language. | Use the Alternate Audio Language menu (within the System Setup menu) to select the language you prefer. |

VIEW A PROGRAM ON THE TELEVISION SCREEN

| What is Happening | Possible Reasons Why | What to Do |
|--|--|--|
| The ExpressVu™ receiver power light is on, but the TV image: is black (no picture), is frozen, has breakups, has "snow," or shows multicolored squares. | The TV set may not be operating properly. If the TV and the ExpressVu™ receiver are operating properly, there may be interference with the ExpressVu™ satellite signal. | Make sure that the TV set is plugged into an electrical outlet, and that the cord, plug and outlet are in good operating condition. Make sure the outlet has electrical power. Make sure that the TV is turned on. If you connected the receiver to the TV using only the RF or VHF connections, make sure that the TV is tuned to channel 3 or 4 (whichever works best in your area) and that the Channel 3/4 Switch on the back panel of the ExpressVu™ receiver is set to the same channel as the TV. Make sure that the TV brightness and contrast are adjusted correctly. Make sure that the TV is connected properly to the receiver. Check that your ExpressVu™ system has been installed correctly. Verify that all required coaxial cables are in place, and check that all cable connectors are firmly connected. Make sure that your satellite antenna is aimed at the ExpressVu™ satellite. Check the strength of the signal in the Point Dish and Signal Strength menu. Re-aim the antenna, if necessary, to obtain maximum signal strength. Note your local weather conditions. Heavy rain, snow, or cloud cover may be interfering with transmission of the ExpressVu™ satellite signal. Remove any snow or other debris which may have collected on the satellite antenna. |

User and Installation Guide

| | | |
|--|---|---|
| <p>The ExpressVu™ receiver power light is on, and there is a picture on the TV screen, but the picture: has sparkles or is grainy, has a herringbone pattern, lacks color or vertical hold, or wobbles, looks "washed out" or fuzzy.</p> | <p>The TV set may not be operating properly. If you connect the receiver to the TV using only the RF or VHF connections, there may be a strong local broadcast on the same or adjacent channel to the one to which the TV is tuned. There may be interference from other nearby electrical equipment (such as cellular telephones, computers, microwave ovens, radios, stereos, or TVs). The satellite antenna may have shifted, losing signal strength</p> | <p>Make sure that the TV brightness and contrast are adjusted correctly, and that the TV is working properly. Make sure that the TV is connected properly to the receiver. Check other nearby electrical equipment as possible sources of interference. Verify that all required coaxial cables are in place. Check for moisture or water leaking in all connections. Dry out if needed, then seal with coaxial cable sealant after reconnection. Check antenna-to-receiver cable run length; if over 100 feet, install a line amplifier. Make sure that the satellite antenna is aimed at the ExpressVu™ satellite. Check the strength of the signal in the Point Dish and Signal Strength menu. Re-aim the antenna if necessary, to obtain maximum signal strength. Check the antenna mount, tightening bolts if needed.</p> |
|--|---|---|

USE THE ExpressVu™ SYSTEM FEATURES

| What is Happening | Possible Reasons Why | What to Do |
|--|---|------------------------------------|
| <p>You were using a menu, and it suddenly closed, taking you back to the program you were viewing.</p> | <p>The menu system has a time-out feature that closes the menu after several minutes of no activity. This will discard any changes you have made.</p> | <p>Start your procedure again.</p> |

USE THE PROGRAM GUIDE OR BROWSE BANNER

| What is Happening | Possible Reasons Why | What to Do |
|---|--|--|
| <p>You try to display future programs in the Program Guide or Browse Banner, but find you cannot display past a limited time.</p> | <p>The Program Guide and Browse Banner can only display programs scheduled for a limited time beyond the present.</p> | <p>Try viewing the Program Guide again later. By that time, it may display programs for the time and date you want.</p> |
| <p>You try to display past programs (programs that have ended) in the Program Guide or Browse Banner, but find you cannot.</p> | <p>The Program Guide and Browse Banner can only display programs that have not yet ended. These features cannot display a time earlier than the present.</p> | |



CHANGE CHANNELS

| What is Happening | Possible Reasons Why | What to Do |
|---|---|---|
| You enter the channel number you want. The channel changes, but the new channel is not exactly the channel you entered. | You may have made a mistake entering the channel number. Or, the channel number you entered may be invalid. If so, the channel displayed is the closest possible to the channel you entered. If you were viewing a program and entered a number to a channel that you have not purchased, the receiver will change to the unpurchased program and allow a purchase or display a message. | Carefully retry entering the channel number you want. |

USE ELECTRONIC MAIL

| What is Happening | Possible Reasons Why | What to Do |
|---|--|--|
| The Power light on the receiver is flashing. | The receiver may have deleted some old messages because it ran out of memory space for new messages. | Delete messages as soon as you have read them, unless they are important enough to save. |
| Previously you read messages which are now missing. | The receiver has received mail. | Read the mail and the light will stop flashing. |

User and Installation Guide

USE SECURITY SYSTEM

| What is Happening | Possible Reasons Why | What to Do |
|--|--|--|
| You set a specific lock (for example, a lock on programs by ratings), but the lock does not seem to prevent viewing. | You have not locked the receiver. | You <i>must</i> lock the receiver for any specific lock to take effect. |
| You have locked a channel and all PPV channels are locked as well. | Systems defaults to PPV lock when any other channel lock is applied. | Unlock all channels to watch PPV channels. |
| You forgot your password, so that you are unable to unlock your receiver. | | Call the ExpressVu™ Customer Service Centre at 1-888-SKY-DISH. You must provide the Customer Service Centre Representative with the following information: (1) your name; (2) your address; (3) your telephone number; (4) your receiver serial identification number; and (5) your Service Centre Personal Identification Number (PIN), if used. Note: Your receiver must be turned OFF to receive the unlock message. |

ERROR MESSAGES IN THE MENU

| What is Happening | Possible Reasons Why | What to Do |
|--|--|---|
| You see an "ERROR" message on your TV screen. | When the ExpressVu™ system encounters a problem, it displays an error message on the TV screen. | In most cases, the ERROR message explains the error. Occasionally, the ERROR message requests that you do something; however, typically all you need to do is select the OK option on the ERROR message to clear the message from your TV screen. |
| ERROR message text: "The number of password entry retries has been exceeded. Please try again later." | You may try to enter your password three times. If you do not enter the correct password any of those times, then you must wait several minutes until you may try again. | Wait until several minutes have passed, and try again. |
| ERROR message text: "Unable to acquire signal." or "Unable to acquire program guide information." | The receiver is not receiving a strong enough signal to maintain an uninterrupted, clean picture. | Check the condition of all the coaxial cables and cable connections in your ExpressVu™ system. Check the condition of the antenna mounting and aiming, and re-aim the antenna if needed. If the system is OK, then there may be a weather-related problem with transmission of the ExpressVu™ satellite signal. |
| ERROR message text: "Please insert your Smart Card." ERROR message text: "Smart Card not inserted correctly." ERROR message text: "The Smart Card currently inserted is not valid for use with this receiver." | You must insert your Smart Card to be able to use your receiver. You must insert your Smart Card correctly. The receiver will work only with the Smart Card that came with it. | Check that your Smart Card is fully inserted into the receiver. Check that the Smart Card is inserted right side up, with the picture on top and the text facing in the correct direction. Insert the proper Smart Card. |

| | | |
|--|--|--|
| <p>ATTENTION: Your Smart Card does not currently have authorization to view or purchase this program. Please wait or channel up or down.</p> | <p>There is a problem with the Program Guide information transmitted to your receiver via the ExpressVu™ satellite.</p> | <p>You cannot watch the selected program, even though it is displayed in the Program Guide. Try a different program or channel.</p> |
| <p>ATTENTION: "Acquiring satellite signal."</p> | <p>The receiver was just plugged in, and is acquiring the satellite signal. The satellite antenna may have moved out of alignment with the satellite signal. Connecting cables may have loosened or have moisture inside. There is interference with the satellite signal.</p> | <p>Wait to see if the message is removed. Confirm that the Signal Strength bar in the Point Dish and Signal Strength menu is green and is displaying the word "Locked." If it is not, re-aim the satellite antenna. Confirm that all the cables are firmly connected and dry. Call the Service Centre at 1-888-SKY-DISH for assistance.</p> |

USE THE TELEPHONE FOR VOICE/DATA/FAX

| What is Happening | Possible Reasons Why | What to Do |
|---|--|---|
| <p>During a telephone call, you hear clicks.</p> | <p>The receiver may have tried to call the Service Centre on the telephone line. When it registered that the telephone was busy, it automatically disconnected.</p> | <p>You do not have to do anything.</p> |
| <p>You pick up the telephone to make a call, but you do not hear a dial tone.</p> | <p>The receiver was in the middle of a call to the Service Centre. When it registered that the telephone was picked up, it automatically disconnected.</p> | <p>Press the telephone receiver button to hang up. Release the button to get a dial tone.</p> |
| <p>Your computer or fax attempts to send a fax or modem call, but fails.</p> | <p>The receiver was in the middle of a call to the Service Centre. When it registered that a call was attempted on the telephone, it automatically disconnected. The fax or modem registered that there is no dial tone, and canceled the send.</p> | <p>Resend the fax or modem call.</p> |
| <p>Your computer or fax was receiving a fax or modem call, but an error occurred.</p> | <p>The receiver may have tried to call the Service Centre on the telephone line during the fax or modem call. When it registered that the telephone was busy, it automatically disconnected. The resulting clicks corrupted the fax or modem call.</p> | <p>Have the sender resend the fax or modem call.</p> |

User and Installation Guide

A

- À La Carte Services A-17
- About Cabling and Connections A-13
- About Satellite Television 1-2
- Address, Remote
 - Aim the Antenna for the Strongest Signal 4-29
 - Alternate Audio Language 2-20
 - Antenna In (RF or VHF Connection) 2-2
- Appendix A-1
- Arrow Buttons 2-6
- Attach the Cable to the Grounding Block 4-38
- Attenuator, UHF 4-38
- Audio
 - Alternate Language 2-20
 - Audio Sound 1-5
 - Authorize Your Services 4-40
 - Available Programming Services 1-6
 - Azimuth 4-11, A-17

B

- Back Panel 2-1
 - Antenna In (RF or VHF Connection) 2-2
 - Channel 3/4 Switch 2-2
 - Phone Jack 2-2
 - Phono (RCA) Audio Outputs 2-2
 - Phono (RCA) Video Output 2-2
 - Satellite In 2-2
 - TV Set Out (RF or VHF Connection) 2-2
- Banners
 - Browse Banner 1-8, 2-13
 - Program Banner 1-8, 2-13
- Batteries 4-10
- Blacked-Out Program A-17
- Brick, Mounting Satellite Antenna 4-4
- Browse Banner 1-8, 2-13
- Browse Program Information for Other Channels 3-4
- Before You Start 4-38
- Buttons
 - Arrows 2-6
 - Cancel 2-7
 - Front Panel 2-1
 - Guide 2-5
 - Info 2-7
 - Menu 2-5
 - Mute 2-9
 - Numeric Pad 2-8
 - Power 2-5
 - Recall 2-8
 - Remote Control 2-3
 - Select 2-7
 - TV/Video 2-4
 - Unlock Receiver Buttons 3-10

View 2-7
Volume 2-5

C

- Cabling and Connections A-13
- Cancel Button 2-7
- Cancel Procedure 3-2
- Change Channels 3-3
- Change System Password 3-13
- Changing Channels
 - Channeling Up or Down 3-3
 - Channel 3/4 Switch 2-2
 - Channel Locks 3-12
 - Channel Order 2-20
 - Channel Surf A-12
 - Channel Surfing 3-3
 - Channeling Up or Down 3-3, A-17
- Channels
 - Changing 3-3
- Cinder Block, Mounting Satellite Antenna 4-5
- Clear Line of Sight 4-12
- Coaxial Cable Connections 4-29, A-13
- Components of the Satellite Antenna 4-9
- Composite Video A-14
- Composite Video Connections A-14
- Connect Receiver To Telephone Connection 4-39
- Connections
 - Antenna In (RF or VHF Connection) 2-2
 - Channel 3/4 Switch 2-2
 - Phone Jack 2-2
 - Phono (RCA) Audio Outputs 2-2
 - Phono (RCA) Video Output 2-2
 - Satellite In 2-2
 - TV Set Out (RF or VHF Connection) 2-2
- Connections and Cabling A-13
- Contents of Package 4-9
- Contents of User Guide 1-3
- Customer Service A-3

D

- Determine Direction To The Satellite 4-11
- Diagnostics 2-20
- Digital Video Broadcast (DVB) A-17
- Direction A-17
- Discussion of Potential Mounting Sites 4-2
- DISH-On-DemandSM PPV
 - Events 1-7
 - Free Preview 1-7
 - Ordering 3-8
 - Purchase Information 2-18, 2-20
 - Purchasing 1-7
 - Stay Legal A-4
 - DISH-On-DemandSM PPV A-17
 - Do Not's 4-3

Do's 4-2
Dual Output LNBF 4-4
DVB A-17

E

Electronic Mail 2-18
Elevation 4-11, A-17
Enter the Password 3-9
Event A-17
Exit Menus 2-9

F

Factory Default Settings 3-14
 Activate 3-6
Features 1-4, 2-13
 New Features 2-20
 Security 2-21
Find a Clear Line of Sight 4-12
Find the Satellite 4-10
Free Preview 1-7
Front Panel 2-1
Power Light 2-1
Lock Front Panel Buttons 3-9

G

Geosynchronous Orbit 1-2, A-17
Get the Direction and Elevation 4-11
Glossary A-17
Ground and Wire the Satellite Antenna 4-38
Grounding Block
 Attach the Cable 4-38
 Installation 4-27
Guide Button 2-10
Guide, Program 2-15

H

Help 4-33
Highlight Choice in List 2-16
Highlight Menu Option 2-10

I

Illegally Descrambling the Signal A-4
Information
Service Centre 1-1
World Wide Web Home Page 1-1
Installation and Setup -- A 5 Step Process 4-1
 Step 1: Before You Start Installation 4-8
 Step 2: Find the Right Location For The Dish 4-10

 Step 3: Assembling The Dish 4-12
 Step 3.1: Assembling The 60 cm Dish 4-13
 Step 3.1A: Pre-Assemble The Parts (60 cm Dish) 4-13
 Step 3.1B: Attaching the Mount to Your Dwelling (60 cm Dish) 4-14
 Step 3.1C: Installing the Dish On The Mount (60 cm Dish) 4-15
 Step 3.1D: Connecting Things Together (60 cm Dish) 4-16
 Step 3.2: Assembling The 76 cm Dish 4-16
 Step 3.2A: Pre-Assemble the Parts (76 cm Dish) 4-16
 Step 3.2B: Attaching the Mount To your Dwelling (76 cm Dish) 4-17
 Step 3.2C: Installing The Dish On The Mount (76 cm Dish) 4-18
 Step 3.2D: Connecting Things Together (76 cm Dish) 4-19
 Step 3.3: Assembling The 90 cm Dish 4-19
 Step 3.3A: Pre-Assemble the Parts (90 cm Dish) 4-19
 Step 3.3B: Attaching the Mount To Your Dwelling (90 cm Dish) 4-21
 Step 3.3C: Installing the Dish On The Mount (90 cm Dish) 4-22
 Step 3.3D: Connecting Things Together (90 cm Dish) 4-22
 Step 3.4: Assembling the 120 cm Dish 4-23
 Step 3.4A: Pre-Assemble the Parts (120 cm Dish) 4-23
 Step 3.4B: Attaching the Mount To Your Dwelling (120 cm Dish) 2-24
 Step 3.4C: Installing The Dish On The Mount (120 cm Dish) 4-26
 Step 3.4D: Connecting Things Together (120 cm Dish) 4-26
 Step 4: Installing The Receiver 4-28
 Step 5: Aligning the Dish 4-29
Install Batteries in the Remote 4-10
Install the Antenna Mount 4-21
Install the Grounding Block 4-38
Install the Satellite Antenna 4-38
Install the Smart Card 4-28
Installation
 Introduction 4-1
 Aim Antenna for Strongest Signal 4-29
 Attach the Cable to the Grounding Block 4-38
 Authorize Your Services 4-39
 Before You Start 4-38
 Connect Receiver to Telephone Connection 4-39
 Direction and Elevation to Satellite 4-11
 Find a Clear Line of Sight 4-12
 Find the Satellite 4-28

User and Installation Guide

- Fine-Tuning Aim of Antenna 4-29
- Ground and Wire the Satellite Antenna 4-38
- Install the Antenna Mount 4-24
- Install the Grounding Block 4-38
- Install the Satellite Antenna 4-38
- Install the Smart Card 4-28
- Installation and Setup Menu 2-19
- Introduction 4-1
- Locate the Satellite 4-29
- Mounting Antenna on Brick 4-4
- Mounting Antenna on Cinder Block 4-5
- Mounting Antenna on Roof 4-5
- Mounting Antenna on Siding 4-4
- Mounting Antenna on Wood 4-6
- Mounting Sites 4-2
- Safety Recommendations 4-2
- Summary 4-7
- Unpack and Check Contents 4-8
- Weather and Wind Considerations 4-2
- What You Need 4-11
- What You Need to Have 4-9
- What You Need to Know 4-9
- Wire from Antenna to Receiver 4-38
- Installation and Setup 4-1
- Installation Kit 4-9
- Introduction 1-1

L

- Limited Warranty A-1
- Lists of Choices 2-11
- Highlighting 2-11
- Selecting 2-11
- LNBF 4-4
- Locate the Satellite Approximately 4-29
- Lock Receiver Buttons 3-11
- Lock the System 3-9
- Low Noise Block amplifier with integrated Feed (LNBF) 4-4

M

- Mail 2-18
- Electronic 1-5
- Read Electronic Mail 3-7
- Main Menu 1-8, 2-17
- Menu Button 2-5
- Menu Options 2-10
- Highlighting 2-10
- Highlighting in List 2-11
- Lists of Choices 2-11
- Menus 1-4
- Electronic Mail 2-18
- Exiting 2-9
- Installation and Setup 2-19
- Main Menu 2-17
- Open Main Menu 3-1

- Opening 2-9
- Options 2-10
- Point Dish and Signal Strength 4-30
- Program Guide 2-15
- Quick Look 1-8
- Software Upgrades 2-18
- System Setup 2-19
- Modulator Connection A-18
- Motion Pictures Expert Group II (MPEG II) A-18
- Mounting Brackets 4-2
- Mounting Sites 4-2
- Weather and Wind Considerations 4-2
- Mute Button 2-5

N

- Natural Interference with Programming A-16
- New Features 2-20
- Numeric Pad Buttons 2-8

O

- On-Screen Lists of Choices 2-11
- On-Screen Program Guide 2-15
- Open Main Menu 3-1
- Open Menus 2-9
- Open Program Guide 3-4
- Order DISH-On-DemandSM PPV Program 3-8
- Order Your ExpressVuTM Programming 4-40

P

- Parental/System Locks 1-5
- Password 2-26
- Changing 3-12
- Personal Identification Number (PIN) 2-22
- Phone Jack 2-2
- Phono (RCA) Audio A-18
- Phono (RCA) Audio/Video Connections A-15
- PIN 2-22
- Pirating the Signal A-4
- Point Dish and Signal Strength Menu 4-11
- Power Button 2-5
- Power Light 2-1
- Preview, Free 1-7
- Problems and Solutions Tables A-20
- Procedures
- Browse Program Information for Other Channels 3-4
- Canceling 3-2
- Change Channels 3-3
- Changing System Password 3-12
- Channeling Up or Down 3-3
- Lock the System 3-9
- Open Main Menu 3-1

Open Program Guide 3-4
Read Electronic Mail 3-7
Select Program in Program Guide 3-5
Select Program Using Program Guide 3-4
Set Locks by Channels 3-12
Set Locks by Rating Codes 3-11
Turn On System 3-1
Unlock Receiver Buttons 3-10
Program Banner 1-8, 2-13
Program Guide 1-4, 2-20, 3-4
Channel Order 2-20
Selecting Program 3-4
Program Information 2-13
Authorize Your Services 4-40
Available Services 1-6
Information in Browse Banner 2-13
Information in Program Banner 2-13
Natural Interference A-16
On-Screen Guide 1-4, 2-16
Select Using Program Guide 3-4
Purchase DISH-On-DemandSM PPV Program 1-7

Q

Quick Look at Menus 1-8
Quick Start Tips 1-8

R

Radio Frequency (RF) A-19
Rain and Snow Fade A-16
Rating Code Locks 3-11
Rating Codes A-18
Read Electronic Mail 3-7
Recall Button 2-8
Receiver 2-1
Arrow Buttons 2-6
Changing System Password 3-12
Front Panel 2-1
Lock Receiver Buttons 3-9
Menu Button 2-5
Menus 2-9
Power Button 2-5
Power Light 2-1
Security 2-21
Security Locks 1-5
Set and Use Security Locks 3-9
Set Locks by Channels 3-12
Set Locks by Rating Codes 3-11
Smart Card Installation 4-28
Unlock the System 3-10
Wire from Satellite Antenna 4-37
Wiring to Other Equipment A-13
Remote Control 2-3
Arrow Buttons 2-6
Buttons 2-4
Cancel Button 2-7

Guide Button 2-5
Info Button 2-7
Install Batteries 4-10
Menu 2-5
Mute 2-5
Numeric Pad Buttons 2-8
Power Button 2-5
Recall Button 2-8
Select Button 2-7
TV/Video Button 2-4
View Button 2-7
Volume Button 2-5
RF A-14
RF Connections A-14
RF or VHF Connection A-14
RF or VHF Connections A-14
Roof, Mounting Satellite Antenna 4-5

S

Safety
Instructions iii
Satellite
Satellite Location Table ("Look" Angles)
4-34
Get Direction and Elevation 4-11
Locating Approximately 4-11
Aim for Strongest Signal 4-28
Attach the Cable to the Grounding Block
4-38
Components 4-9
Fine-Tuning Aim 4-28
Grounding and Wiring 4-38
Install the Grounding Block 4-38
Installation 4-27
Mount Installation 4-2
Mounting on Brick 4-4
Mounting on Cinder Block 4-5
Mounting on Roof 4-5
Mounting on Siding 4-4
Mounting on Wood 4-6
Mounting Sites 4-2
Satellite In 2-2
Satellite Television 1-2
Security
Changing System Password 3-19
Lock the System 3-9
Locks 2-20
Password 2-21
Personal Identification Number 2-22
Receiver Security 2-21
Security Features 2-21
Security Locks 1-4
Service Centre 2-22
Set and Use Security Locks 3-9
Set Locks by Channels 3-12
Set Locks by Rating Codes 3-11
Smart Card 2-22
Unlock the System 3-10

User and Installation Guide

- Security Features 2-21
- Select Button 2-7
- Select Choice in List 2-11
- Select Menu Options 2-15
- Select Program in Program Guide 3-5
- Service Centre 1-1, A-3
- Service Centre Security 2-22
- Service, Authorizing 4-40

Services

- Available Programming 1-6
- Service Centre 1-1
- World Wide Web Home Page 1-1
- Service Your System A-3
- Set and Use Security Locks 3-9
- Set Locks by Channels 3-12
- Set Locks by Rating Codes 3-11
- Siding, Mounting Satellite Antenna 4-4
- Smart Card 2-22
- Smart Card Installation 4-28
- Snow and Rain Fade A-16
- Software Upgrades 1-5, 2-18
- Solar Interference A-16
- Sound Quality 1-5
- Starting Quick Tips 1-8

Stay Legal A-4

Stop Button 2-13

Subscription Services 1-6

Summary

- Features 1-4
- User Guide Contents 1-3
- Summary of Installation 4-7
- Summary of Installation 4-7

System

- Features 2-13
- The Key To Setting Up Your System Easily
- This Is Important 4-8
- Locks 2-26
- System Features 2-13
- System Setup 2-19
- System/Parental Locks 1-4

T

- Television, Satellite 1-2
- Timers
- Tips for Quick Start 1-8
- Troubleshooting
- Problems and Solutions Tables A-20
- System Diagnostic Tests 2-20
- Turn On System 3-1
- TV Set Out (RF or VHF Connection) 2-2
- TV/Video Button 2-4
- Types of Cabling and Connections A-13

U

- Unlock the System 3-10
- Unpack and Check Contents 4-8

- Up/Down/Left/Right Arrow Buttons 2-6
- Upgrading Menus 2-18
- Upgrading Receiver Menus 1-5
- Uplink Centre 1-2
- Uplink Centre Mail 1-5, 2-18
- User Guide Contents 1-3
- Using the System 3-1

V

- Vertical Elevation Protractor - ANIK E2 4-37
- VHF Connections A-14
- View Banner 2-13
- View Button 2-7
- Volume Button 2-5

W

- Warranty, Limited A-1
- Weather and Wind Considerations 4-2
- Welcome 1-1
- What Is In This Guide 1-3
- What You Need To Have 4-9
- What You Need To Know 4-9
- What You Will Need 4-11
- Where Is It? 4-11
- Wire and Ground the Satellite Antenna 4-38
- Wire Your System Together A-13
- Wood, Mounting Satellite Antenna 4-6
- World Wide Web Home Page 1-1