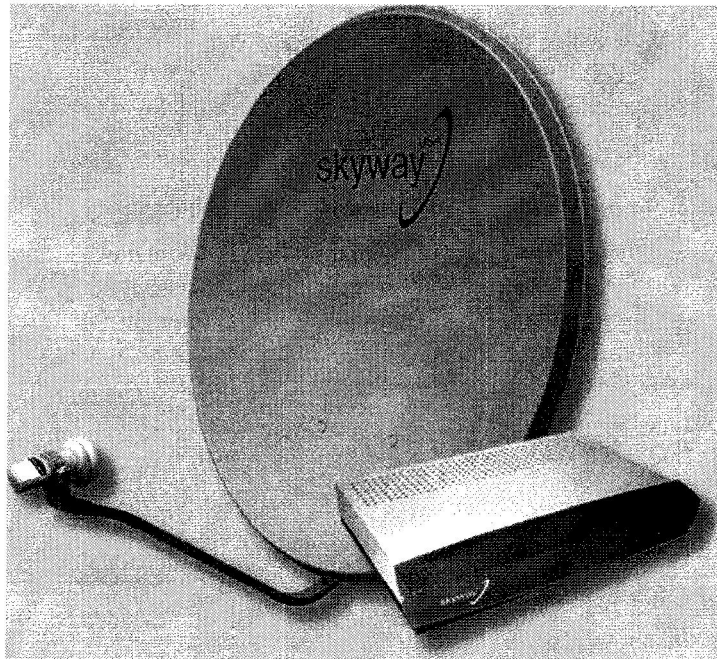


skyway^{USA}

**SATELLITE
Internet System**
Model DS-4248, DS-3118



Installation Manual

*EXTENDED
DIRECTV J-POST*

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DISCLAIMER

The information provided in this Installation Guide is given in good faith, and following this guidance should lessen the risks of injuring yourself and others. However, neither SkyWay USA, Inc. nor its affiliates, partners, third party companies, and individuals associated with the preparation of this information shall have any liability to any person or entity with respect to liability, loss, or damage caused or alleged to be caused directly or indirectly by the instructions contained within this booklet, to the full extent that such liabilities can be excluded at law.

A possibility exists that the Installation Guide could include inaccuracies or errors. Although we attempt to ensure the integrity and the accurateness of this information, we make no guarantees whatsoever as to the correctness or accuracy of the Installation guide. In the event that such an inaccuracy arises, please inform us at support@skywayusa.com, so that it can be corrected.

You are advised to hire a professional satellite dish installer to carry out the installation on your behalf. Your satellite service provider can refer you to a specialist installer if required. In the event that you decide to install it yourself then you should first carefully read the contents of this disclaimer notice, the information set out below on use of a ladder and the contents of the Installation Guide.

It is assumed and stressed that you are familiar with good, safe ladder practice and that you are familiar with all tools, components and terms used. If you have any doubt about your ability to carry out such work competently and safely, the work should be referred to a specialist installer from your Service Partner.

This is particularly important if you are elderly or not fit enough, or suffer from giddiness or aren't confident with heights - think about getting someone else to do it for you. Do not use a ladder if you tire easily, are pregnant, are subject to fainting spells or are using medications or alcohol that makes you dizzy or drowsy.

The performance of a dish is not affected by whether it is located higher up or lower down on a building, as long as the line of sight with the satellite is not affected. **You should always check the place to install the dish yourself in order not to over-estimate your abilities.**

When using a ladder, place the base of the ladder on a firm, level, and dry surface. If there is a time when this is not possible - working on grass, for instance - tie the feet of the ladder to stakes in the ground to stop it slipping, and place a large flat wooden board underneath to help prevent it sinking.

Remember that the overall length of a ladder is not the same as its usable length: allow one meter of ladder length above the highest rung you use. **Never stand on the top three rungs. Never put a ladder on top of boxes, bricks, barrels or any other unstable surface just to gain extra height.** If you plan to climb onto a roof or platform from your ladder, be sure the ladder extends above the edge at least three feet.

Don't reach too far forwards or sideways, or stand with one foot on the ladder and the other one on something else. Move the ladder to avoid overstretching, and re-secure it whenever necessary, however frustrating that might be! Wear strong, flat shoes or boots, with dry soles and a good grip (no sandals, slippers or bare feet). Make sure a door is locked, blocked or guarded by someone if you are up a ladder in front of it.

Any ladder can develop a problem, which can render it unsafe. Before using your ladder, inspect it. Stepladders should be fully opened with the spreaders locked. Straight ladders should be placed at a four-to-one ratio. This means the base of the ladder should be one foot away from the wall or other vertical surface for every four feet of height to the point of support. Always face the ladder and hold on with both hands. If you need tools, carry them in a tool belt or raise and lower them with a hand line.

Don't use a ladder in a strong wind and never near any power lines. Don't drill holes through walls with risk of hitting gas or water pipes, or electrical wires. In any case, never allow any child under 16 to use or play with your tools or a ladder. Keep infants and toddlers out of reach of small parts such as screws, bolts and plastic bags that may endanger their life.

REMEMBER: It is your responsibility to check if your local laws place home owners under an obligation to install a satellite dish in such a way that minimizes its impact on the external appearance of the building, and to remove it when it is no longer needed. Reasonable care should be taken to avoid damage to yourself or third parties.

If you fall from the ladder, calmly assess the situation and determine if you are hurt. Get up slowly, however, if you feel that your injury will prevent standing and walking call for assistance. If the injury is at all serious, call the emergency number in your area. If you are not injured, regain your composure before climbing again.

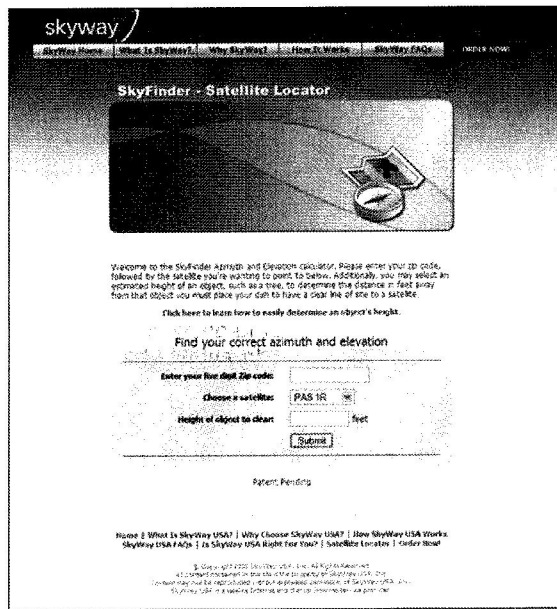
YOURNETPLUS.COM/ROPSSEARCH.HTML

STEP ONE: Verify Dial-Up Number

Go to <http://support.skywayusa.net> to verify that you will have access to a local dial up number(s). This also contains easy step-by-step instructions. If a dial up number(s) is not available in the city that the Skyway USA internet system is to be installed, then look for the next nearest city's dial up number(s). **Determine that the dial up number(s) will not be long distance to dial into as this could be very costly.**

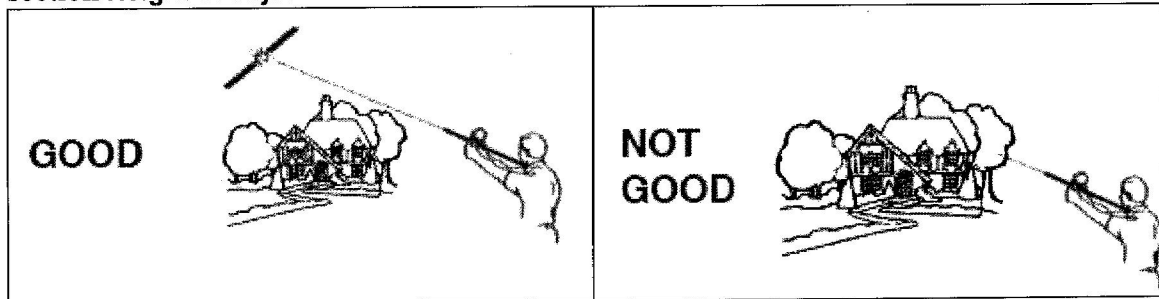
STEP TWO: SITE SELECTION (SkyFinder)

Now, find the best location for the antenna remembering that the antenna must have a clear line of sight to the satellite. (Refer back to the azimuth and elevation determined from <http://skyfinder.skywayusa.com>.)



The satellite signal will NOT travel through buildings, heavy tree cover and other obstructions.

If after eyeing your azimuth you find that there are obstructions in your line of site, determine the approximate height of these objects and enter that figure in the SkyFinder section **Height of object to clear:**



Height of object to clear: feet

Package Contents

Inspect the package and confirm that all parts are present. If any parts are missing, or you need installation support, please contact SkyWay USA, Inc. at 1-866-MYSKYWAY.

PARTS LIST

CODE	QTY	PART #	DESCRIPTION
A	1	2745265	18" (46 cm) Reflector
B	1	2745441	Back-up/Feed Support Assy.
C	not supplied		RG-6 Coaxial Cable
D	1	2745404	Mount Pipe/Roof Bracket
E	1	2780197	Single LNBF Models Only
	1	2780185	Dual LNBF Models Only
	1	2762417	Hardware Package

HARDWARE PACKAGE PART #2762417

CODE	QTY	PART #	DESCRIPTION
[1]	4	2160228	1/4-20 Hex Nut
[2]	4	2160340	1/4-20 x 5/8" Carriage Bolt
[3]	1	2160217	10-32 Flange Hex Nut
[4]	1	2160346	10-32 x 1-1/4" Carriage Bolt

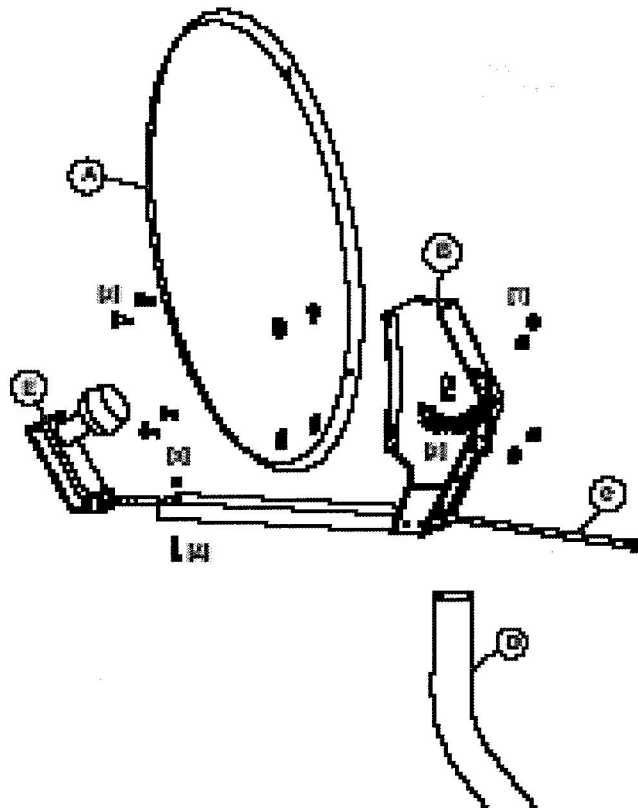
SW-10 MODEM



Modem/ Ethernet Cord/ Phone Line/
Power Supply

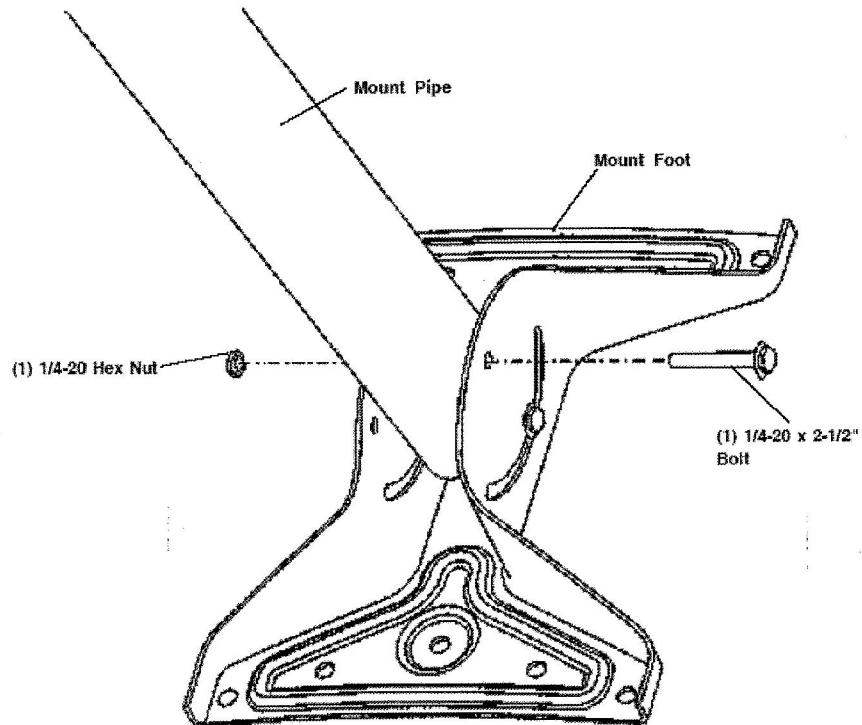
SELF INSTALL KIT (If Applicable)

100' Cable w/connectors/grounding clamp/ cable clips/
leveling bubble/ cable ties/ ground block/ ground wire

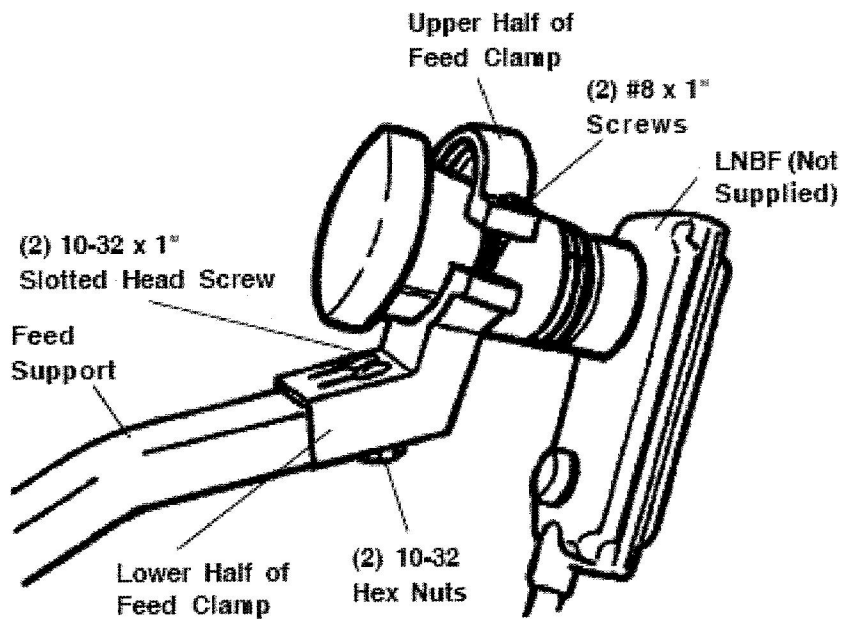


STEP 1. Assemble the mount pipe and foot as shown in Figure 1.

CAUTION: Do Not Overtighten the 1/4-20 X 2-1/2" Bolt. May Crush Mount Pipe.



Attach LNBF to feed arm as shown below:



INSTALLATION

STEP 1. After confirming that you have a line of sight from where you wish to mount the dish, you must determine how you are going to mount the dish and run your coax downlead to your SW-10 Modem. Figure 3 shows a typical home installation. As indicated in the figure, you must ground both the dish and the coax downlead before it enters your home.

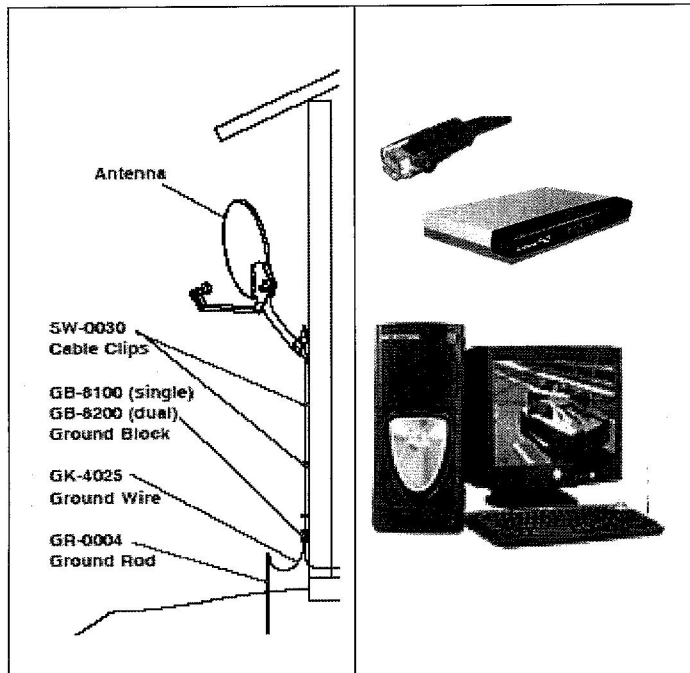


FIGURE 3

STEP 2. Attach the mount foot to wall (roof, mast, etc.) making sure that the mount foot is vertical (90°). See Figure 4. Attach ground wire to mount foot (wrap wire between bolt/lag screw and mount foot).

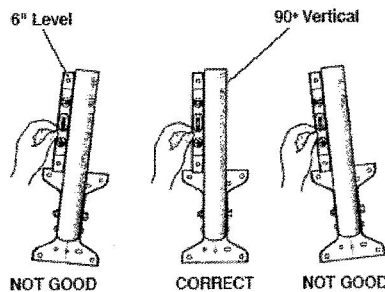


FIGURE 4

STEP 3. Level the mast (insert bubble level in top)

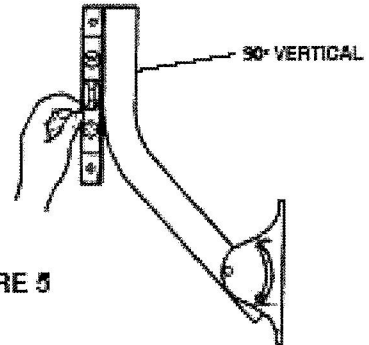


FIGURE 5

STEP 4. Set antenna onto mount pipe. See Figure 1.

STEP 5. Feed coaxial cable(s) up through the mount pipe and through the LNBF feed. See Figure 1.

STEP 6. Attach coaxial cable(s) to LNBF. See Fig. 1.

STEP 7. Attach LNBF to antenna. See Figure 1.

STEP 8. Set elevation on antenna; align colored edge of clamp with degree marking. See Figure 6.

STEP 9. Run coax cable to point where you plan to enter the house. Be sure to secure the cable so that it will not flap in the wind (Cable Clips Model SW-0030 are ideal for this task).

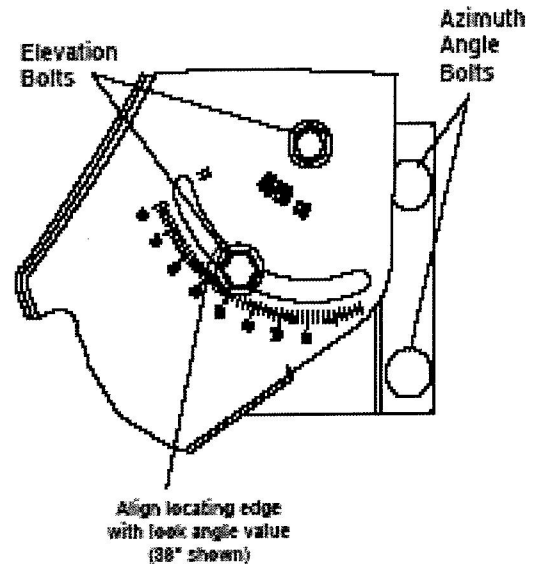


FIGURE 6

Mounting the Dish

There are several ways to satisfactorily mount your SkyWay satellite Dish. The most important things to take into consideration are:

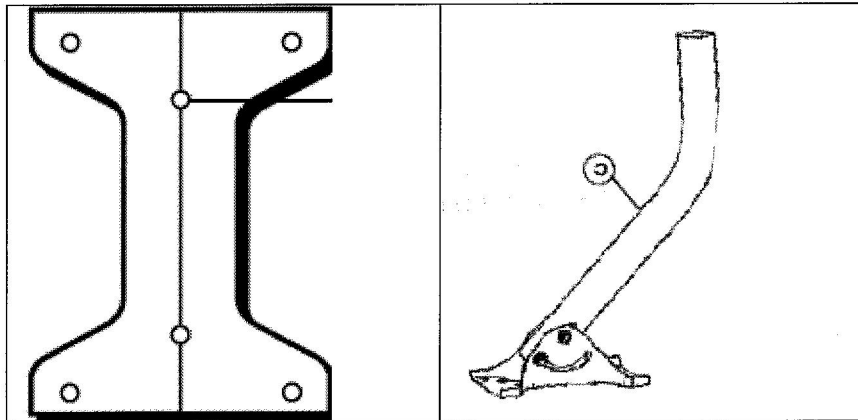
1. **Clean Line of Site:**
You must have a clean unobstructed line of site to your satellite azimuth and elevation settings.
2. **Level Mounting Mast:**
Whichever method you choose to mount your dish, the mounting mast must be perfectly level on all vertical sides and the horizontal top of the mast.
Note: SkyWay includes a bubble level which fits in the top of the mast to insure that the customer has the mast perfectly level.
3. **The Mount Must Be Secure and Stable.**
The Dish is like a sail in the wind. Whichever method you choose to mount the Dish (using the provided Mount Foot or an in-ground Pole), it must be stable and secure. Some "Do's" and "Do Not's" follow:
 - a. **Do Not** mount the dish under an eave or overhang that may block or partially shadow the dish.
 - b. **Do Not** mount the dish on any type of composite paneling, such as fiber board, particle board, or strand board.
 - c. **Do** make sure that if you use a wooden surface it is structurally sound
 - d. **Do Not** mount the dish on any type of aluminum or vinyl siding.
 - e. **Do Not** mount the dish on a tree! Trees grow!
4. **It is imperative that the SkyWay USA system is properly grounded!** It is recommended that the GROUNDING WIRE IS RUN FROM THE MAIN HOUSE GROUND TO THE GROUNDING BLOCK. A 4' ground rod is a second op

DANGER! AVOID POWER LINES! THEY CAN KILL YOU!

It is recommended that the dish be mounted more that **20 feet** from overhead power lines.

Mounting the Mast on Lap Siding or Solid Wood

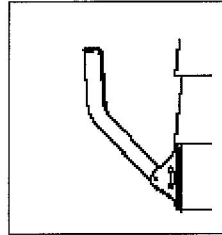
Materials Needed	Tools Needed
Two 5/16 X 3" Lag Screws	Electric Drill w/ 3/16" wood bit
Four 5/16 X 2" Lag Screws	Pencil
Four 5/16" washers	7/16" wrench
	3/8" wrench
	1/2" wrench
	Bubble Level (Included)



Instructions:

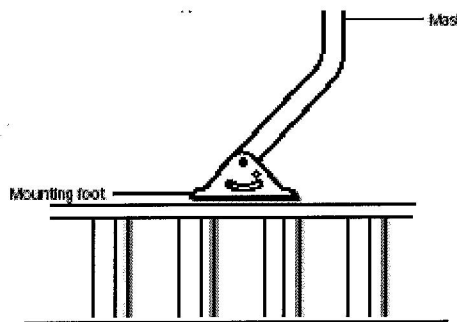
- Find the center of a **stud** where you want to mount the mast foot. Do not attempt to mount the mast foot **off center** of a wooden stud.
- Place the **Mast Foot** in position so that the **top and bottom mounting hole** (in line with the mast) are centered on the wooden stud. (A **stud finder** is a big help to find the center of the stud)
- With a pencil mark the top and bottom mounting holes and draw a line between the two marks making sure that the center line is perfectly level.
- If you are mounting the foot on a sloped or vertical surface, make sure that the center line is perfectly vertical.
- Line up the top and bottom center holes and mark the remaining **top 4 and bottom 4 corner mounting holes**.
- Drill two 3/16" holes in the two center hole locations, and four 3/16: holes in the four corner mounting holes.
- Install the two 5/16" x 3" lag screws into the two (top and bottom) center holes of the mounting foot. Securely tighten the screws making sure that the mounting foot is still level.

- h. Use the four washers for the four 5/16" X 2" lag screws and insert the screws into the four corner mounting holes. Tighten the screws.
- i. Make sure that the top of the mast is pointing straight up and that the top is level as shown below.



(Aluminum Siding Note: If you are going to mount your dish on aluminum siding, it is recommended that you mount a 20" X 12" X 1" board between two 16" studs, and mount your mast foot to the board with four bolts.)

Mounting the Mast on Solid Wood

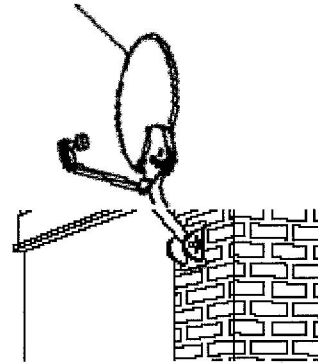


The mast can be mounted on any stable wood surface that is a minimum of 8" wide and 1/2" thick. Decks, railing, or wood buildings are possible solutions. Once again, as previously mentioned, the most important thing is to make sure that the mast is **100% level**, front to back and side to side, and that the structure is stable and unmovable.

Note: SkyWay includes a bubble level which fits in the top of the mast to insure that the customer has the mast perfectly level.

Materials Needed	Tools Needed
Six 5/16 X 2" Lag Bolts	Electric Drill w/ 3/16" wood bit
Six 5/16" washers	Bubble Level
	7/16" wrench
	3/8" wrench
	1/2" wrench

Mounting the Mast on Brick



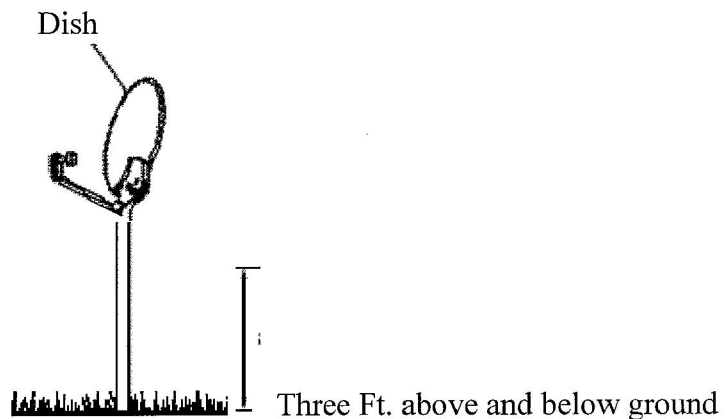
Materials Needed	Tools Needed
Four Double Expansion Anchors	Electric Drill w/ 1/2" masonry bit
Machine Screws	7/16" wrench
Four 5/16" Washers	Bubble Level
	Hammer

Do's and Don't's

- a. Do make sure that the wall anchors must have a minimum strength of 300 lbs. of pull-out pressure. B4015 or double expansion anchors are suggested
- b. Do not drill holes in mortar. Make sure they are directly directly in brick.
- c. Do make sure that mast is perfectly level on all sides.

Note: SkyWay includes a bubble level which fits in the top of the mast to insure that the customer has the mast perfectly level.

Pole Mount



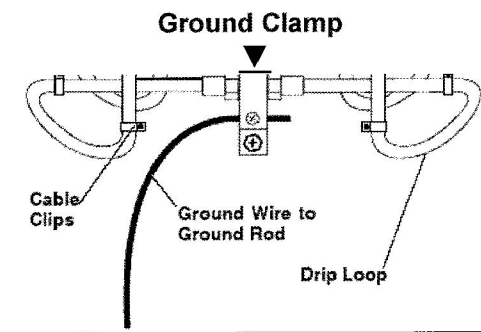


When mounting the Dish on a pole in the yard, use a 6' long x 1 ½ (OD)" Pole. The hole should be 8" to 12" wide X 3' deep. **Either flatten the end of the pole that goes in the ground or drill a hole and insert a 4" to 6" bolt. This will keep the pole from turning in heavy winds.** Fill the whole with one bag of quick setting cement. Insert bubble level in top of pole and make sure that pole is perfectly level as cement is drying. Do not install dish on pole until cement is completely dry and pole is solid.

Grounding

It is imperative that the SkyWay USA system be properly grounded. The safest way to ground the system is to run a copper ground wire from the Ground Clamp (see below) to the main house ground. A secondary option is to a 6' ground rod.

(Improperly grounded equipment may result in a voided equipment warranty)



Attach coax cable to ground block and route to SW-10 Modem. Be sure to seal coax cable entry into house with an appropriate sealant.

**Connect coax cable to SW-10 Modem.
(Refer to SW-10 Manual)**

Note: IT IS STRONGLY SUGGESTED THAT THE SW-10 MODEM, THE RG6 CABLE, THE PHONE LINE, AND YOUR PC BE CONNECTED TO A GOOD QUALITY SURGE PROTECTOR.

Aiming the Dish

Using the Azimuth and Elevations setting for your location from the <http://skyfinder.skywayusa.com> website.

(Note: Make sure that you choose the appropriate satellite. Usually Pas 1R is for customers east of the Mississippi River and Horizons 1 is for west of the Mississippi)

The screenshot shows the 'SkyFinder - Satellite Locator' web page. At the top, there is a navigation menu with links: 'SkyWay Home', 'What Is SkyWay?', 'Why SkyWay?', 'How It Works', and 'SkyWay FAQs'. A 'ORDERS NOW' link is also present. The main heading is 'SkyFinder - Satellite Locator'. Below this is a graphic of a satellite dish and a compass. The text reads: 'Welcome to the SkyFinder Azimuth and Elevation calculator. Please enter your zip code, followed by the satellite you're wanting to point to below. Additionally, you may select an estimated height of an object, such as a tree, to determine the distance in feet away from that object you must place your dish to have a clear line of site to a satellite. Click here to learn how to easily determine an object's height.' Below this is the heading 'Find your correct azimuth and elevation'. The form includes: 'Enter your five digit Zip code:' with a text input field; 'Choose a satellite:' with a dropdown menu showing 'PAS 1R'; 'Height of object to clear:' with a text input field and 'feet' label; and a 'Submit' button. At the bottom of the form area, it says 'Parent Pending'. The footer contains: 'Home | What Is SkyWay USA? | Why Choose SkyWay USA? | How SkyWay USA Works | SkyWay USA FAQs | Is SkyWay USA Right For You? | Satellite Locator | Order Now'. Small print at the very bottom states: '© 2001-2004 SkyWay USA, Inc. All Rights Reserved. All content contained in this site is the property of SkyWay USA, Inc. Content may not be reproduced without expressed permission of SkyWay USA, Inc. SkyWay USA is a satellite internet and data service provider.'

Using your compass, point your dish at the appropriate satellite using the correct Azimuth settings.*

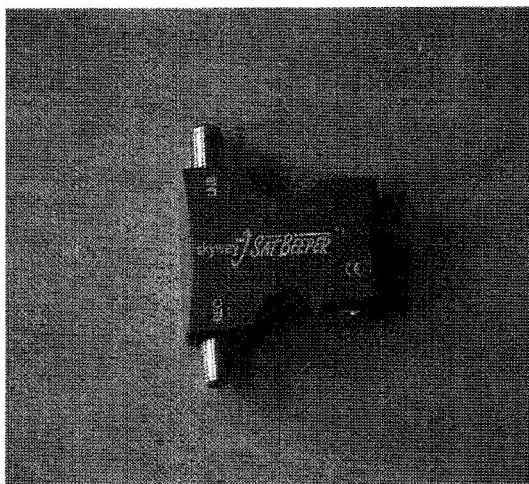
(*Note: Make sure that your compass is not affected by any metal objects)

Next, adjust the elevation setting on your dish to the correct degree angle.*

(*Note: When reading the elevation degree angle on the dish mount be sure to use the **“red locating edge”** as shown in *Figure 6* to read the correct degree. **Not the elevation bolt!**)

Adjust the LNB. As you face the front of the dish, loosen the LNB and push it all the way in towards the dish. The RF connector on the LNB needs to be pointing at the **7:00 position for the PAS1-R satellite**, and at the **4:00 position for the Horizons 1 satellite.**

SkyWay Sat Beeper



The SkyWay USA “Sat Beeper” is connected to the end of the LNB and the RG6 line going into the house. It is used to “tweak” your satellite signal. When you are pointed at the correct satellite the light will usually light up, and you will here an audible “beep” on the earphone. You can peak out the signal by moving the dish slightly left to right, up and down, and by moving the LNB in and out, or rotating it slightly clockwise or counter clockwise until you have maximum signal strength coming from the satellite.