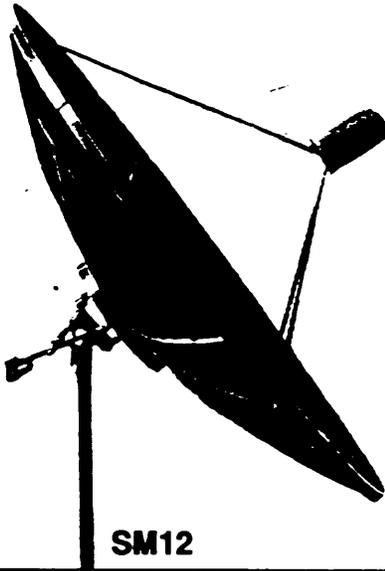




Superior Antenna Manufacturing Inc. Antenna Installation Manual

This manual covers ALL 12ft, 10ft, 7.5ft, and 6ft sectional models



SM12



SM 10



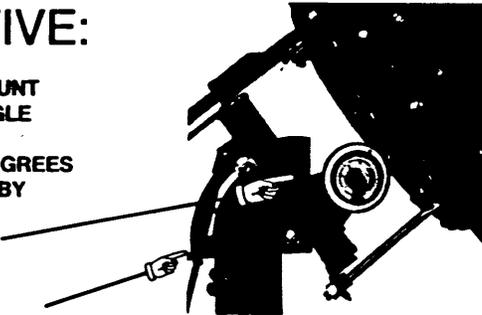
QSL 7.5



UPS 6

STEP FIVE:

SET POLAR MOUNT
ELEVATION ANGLE
EQUAL TO SITE
LATITUDE IN DEGREES
AS MEASURED BY
ANGLE FINDER
AS SHOWN



USE THIS BOLT TO MAKE ADJUSTMENT

PLACE ANGLE FINDER ON
BACK PLATE OF DISH AND
SET DECLINATION ANGLE
EQUAL TO APEX ELEVATION
AS MEASURED BY ANGLE
FINDER AS SHOWN



USE THIS BOLT
TO MAKE
ADJUSTMENT



STEP ONE:

A successful installation begins with a site survey. In this process a good decision about where to install the antenna is top priority, along with planning the wire run etc. Locate the antenna close to the house with an unobstructed view of the sky where satellites are located. This is an arc with its apex at true south (in northern hemisphere) and ends at each horizon (east-west). Use trees and buildings to block any interfering signals from ground based microwave towers.

check for unobstructed view to all satellites before digging

use buildings and trees to block unwanted signals from ground based transmitters

short cable run is best



STEP TWO:

Set mount pipe in cement. The mount pipe (not supplied) should be 3 1/2 inches in diameter (outside) and long enough to extend from the bottom of the hole to 1/2 the diameter of the dish above ground. For example a 10 foot dish should be mounted on a pipe that is 7 feet long, with 2 feet of the pipe set in cement.

Footing hole size can vary with dish size, soil type, wind load, and weather conditions. For example a 10 foot dish in standard soil should use a footing about 8" in diameter and 24 inches deep. In areas where frost is a problem the footing must be extended to 18 inches below the frost line to prevent frost heave. In areas with soft, sandy soil a much deeper footing is also required.

STEP THREE:

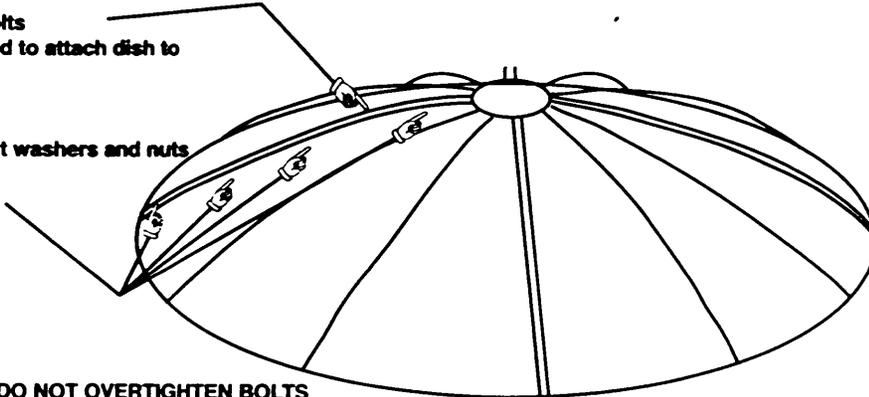
Assemble the antenna face down on a flat surface. Place pre-assembled mount on mount pipe, and attach antenna to mount as shown in photos.

SOME MOUNTS PIVOT OFF CENTER FOR BETTER AIMING RESOLUTION.

leave out bolts in holes used to attach dish to mount ring

use bolts flat washers and nuts to assemble

assemble dish face down on flat surface



CAUTION: DO NOT OVERTIGHTEN BOLTS

EASTERN USA

MOUNT ACTUATOR ON THIS SIDE

WESTERN USA



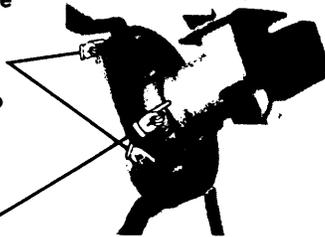
double ribs fit into and are bolted to clips use flat washers and tighten until clips contact ribs. CAUTION: do not overtighten

STEP FOUR:

Feed system assembly and adjustment is next. Measure focal length from center of front plate to 1/4 inch inside feed opening.

CAUTION: Do not touch probe inside feed

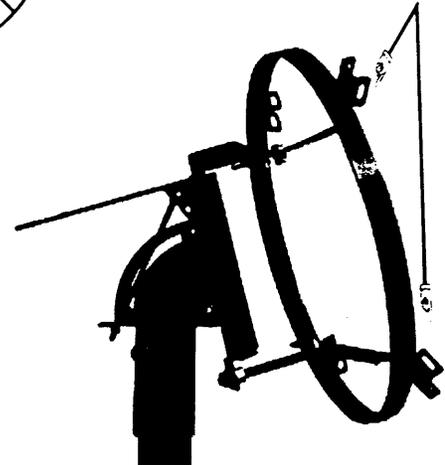
attach black plastic feed cover mounting plate to bolts after legs are attached to feed, focal length is set and nuts are tight. Use flat washer and second nut to fasten



set F/D ratio on feed follow instructions provided by feed manufacturer

attach feed legs to reflector use flat washers

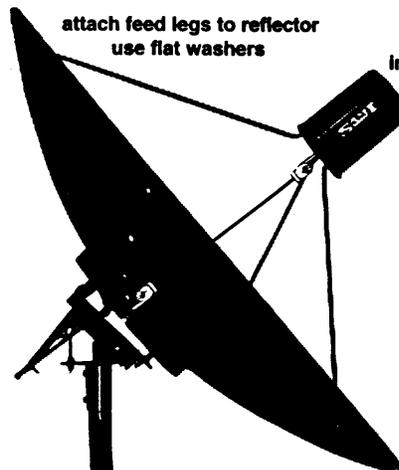
assemble feed system attach to feed legs include base for feed cover



DISH SIZE	FOCAL LENGTH	F/D RATIO
12 FOOT	57 5/8 INCHES	.38
10 FOOT	45 5/8 INCHES	.38
7.5 FOOT	33 3/4 INCHES	.375
6 FOOT	26 1/4 INCHES	.375

set focal length measure from center of front plate to 1/4" inside feed opening

adjust feed to aim at center of reflector



SPECIAL NOTE:

Before attempting to track the satellite arc, be sure to have a television, and satellite receiver set up next to the dish. This will allow you to see exactly how strong the signal is while making adjustments. It is not recommended to have someone else looking at the TV and telling you how strong the signal is.

STEP SIX:

Tracking the arc.

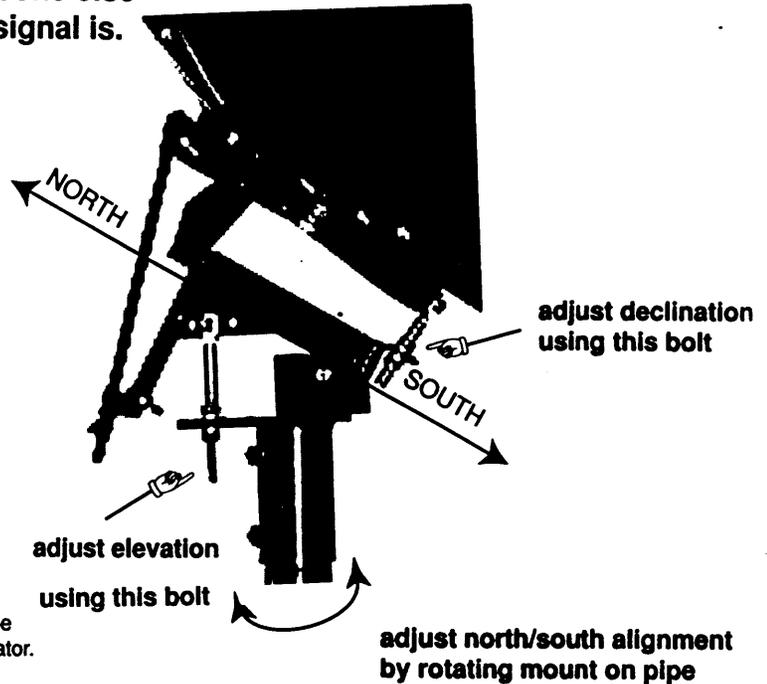
Align the polar mount with north/south. Adjust the dish to the apex of the arc (looking south).

With the satellite receiver and television connected and easily viewable from the dish, and with the polar mount aligned with north/south, and with the polar mount elevation/declination pre-adjusted, begin to look for your first satellite signal. You should first look for the satellite closest to south of your location. Once you find a satellite peak the signal by making small adjustments to polar mount elevation.

Next, use the actuator to find the satellite at the extreme east or west (if you are in the east look for the western most satellite, if you are in the west look for the eastern most satellite). No adjustment to elevation should be made at this point. Adjust north/south alignment to peak signal level. This procedure will fine tune north/south alignment. This procedure should be used until the satellite located at the apex of the arc and the satellite at the extreme end of the arc are both peaked and the dish can move between them using only the actuator.

Now you are ready to check declination. If the satellite at the apex of the arc, and the extreme east or west satellite is peaked, but small elevation changes are needed to peak the satellites in between, then an adjustment to declination is indicated. Usually, if you have correctly pre-set the elevation and declination at the beginning of this procedure, no adjustment to declination should be needed. However, if you need to make this adjustment, you should understand that if you change declination, an elevation change will also be needed.

Shown below is a drawing to help you visualize what is going on when performing this procedure.



If elevation must be lowered to peak eastern most sat and raised to peak western most sat a small adjustment to north/south alignment must be made (clockwise)

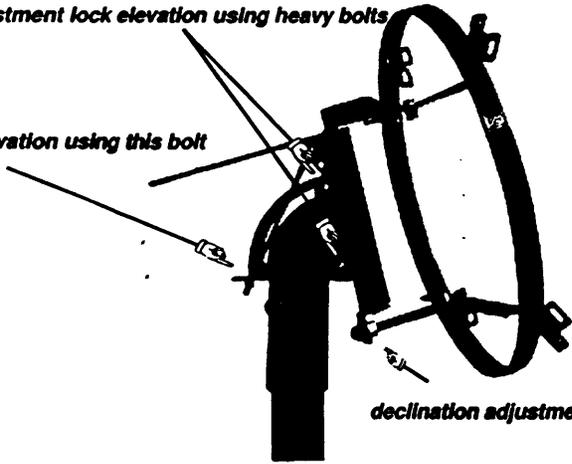
If elevation must be raised to peak eastern most sat and lowered to peak western most sat a small adjustment to north/south alignment must be made (counter clockwise)

A diagram showing a curved arc of satellites in orbit above a grid representing the Earth's surface. The satellites are represented as rectangular blocks with circular antennas. A dashed line follows the path of the satellites. A text box in the center explains the Clarke Orbit Belt.

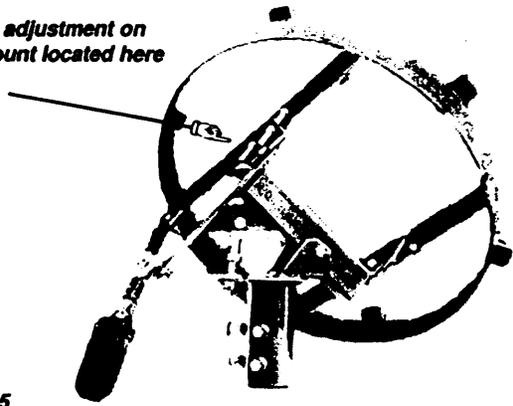
When tracking correctly, elevation changes do not improve signal strength since the dish accurately follows the "Clarke Orbit Belt". This is where satellites surrounding the earth are parked. The belt lies above the equator at an altitude of 22,300 miles. All satellites that remain motionless in our sky are parked along this "Clarke Orbit Belt".

after adjustment lock elevation using heavy bolts

adjust elevation using this bolt



declination adjustment on
12 ft. dish mount located here



declination adjustment on the GSL 7.5

STEP SEVEN:

Once you have the dish tracking the arc correctly, carefully tighten all hardware. Pay special attention when tightening mount cap bolts to be sure the mount cap does not move while tightening these bolts. Install feed cover, and connect wires that lead into house. This completes the antenna installation procedure and leads to programming the receiver. Use extreme caution when programming east/west limits since the dish can cam over and break the actuator if it is overextended.



Superior Antenna Manufacturing Inc

1009 North First Street

Judsonia, Arkansas USA 72081

Phone (501) 729-3103 Fax (501) 729-3671

www.samidish.com

e-mail: samid@ipa.net

Limited Warranty

SAMI provides a one year warranty on your new aluminum antenna. This Warranty covers only those defects in material or workmanship that might affect performance of the antenna and excludes cosmetic defects and paint. This warranty is valid only when the antenna dish is installed on the SAMI mount designed for that particular antenna. Antennas will be repaired or replaced, at our option, when returned to the manufacturing plant of SAMI located in Judsonia Arkansas, freight prepaid, together with proof of purchase.

This warranty is void if in the opinion of SAMI the antenna has been subjected to damage, abuse, misuse, improper handling, improper installation, or modification. This warranty is in lieu of all other warranties expressed or implied.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

LIMITED WARRANTY REGISTRATION CARD

Please clip and mail to SAMI at the above address

Customer Name
Address
City/State/Zip
Phone
Date of Purchase

Dealer Name
Dealer Phone Number

