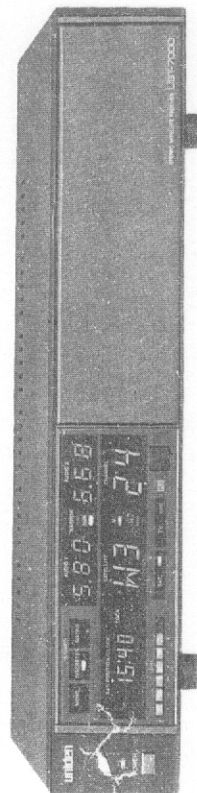


Uniden®
Satellite Television Systems

UST 7000 Satellite Receiver



**Installation and Operations
Manual**

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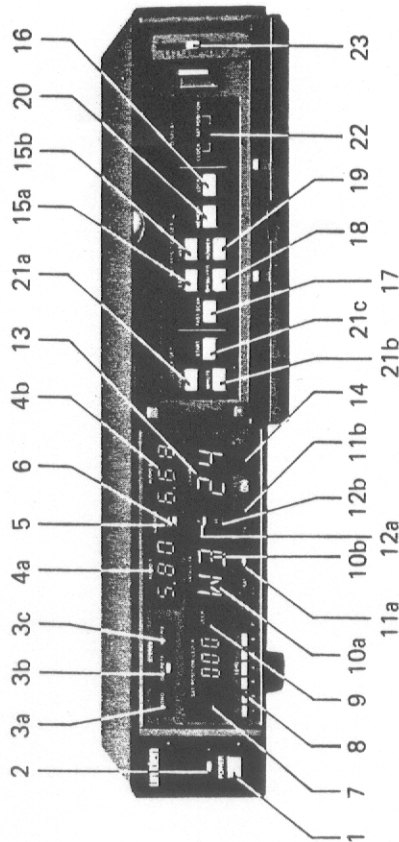
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FEATURES OF THE UST 7000 SATELLITE RECEIVER FRONT PANEL CONTROLS AND FEATURES

To properly operate the UST 7000 satellite receiver, it is necessary to understand the various features that are on the front panel of the unit. (see diagram A)

DIAGRAM A



1. **Power On/Off Switch** — This switch turns the unit on and off.

2. **L.E.D. Power Indicator** — This red indicator turns on when power is applied to the unit, and turns off when power is off.

3. **L.E.D. Audio Mode Indicator** — Following Mode selection will be done by the Mode Button (35) on the handheld controller, and indicates type of audio in use.

3a. **Mono Audio Indicator** — This audio control allows the receiver to process only mono mode audio.

If in mono mode only L.E.D. Audio 1 Indicator (4a) will appear and L.E.D. Audio 2 Indicator (4b) will turn off, and only the Manual Audio 1 Up/Down Buttons (33) serves as the adjustment for mono audio tuning.

3b. **Discrete Audio Indicator** — This audio control allows the receiver to process discrete stereo audio frequencies and when in use, the discrete Audio Indicator will appear. If in discrete mode, both Manual Audio Up/Down Buttons (33, 34) can be adjusted to tune the discrete audio channel.

3c. Matrix Audio Indicator — This audio control allows the receiver to process matrix stereo audio frequencies. When in the matrix mode the matrix indicator will appear. If the UST 7000 is in matrix audio format, both Manual Audio Up/Down Buttons (33, 34) can be adjusted to tune the matrix audio channel.

NOTE

MATRIX MODE TUNING

If two subcarriers are found and one has a noticeably lower "loudness" and sounds somewhat muffled, the transmission is most likely in matrix mode. In this case, tune the AUDIO 1 control to the lesser subcarrier while in the DISCRETE mode, and set the AUDIO 2 control to the louder subcarrier while in the DISCRETE mode. Switch then to MATRIX mode to hear true stereo.

4. L.E.D. Audio Indicator

4a. This 3 digit indicator represents audio 1 frequency.

4b. This 3 digit indicator represents audio 2 frequency.

5. Narrow L.E.D. Indicator — Narrow audio is a term which describes a certain amount of audio information that is being received. Many channels utilize a very narrow frequency to carry the sound. Full sound in stereo is a dull frequency. If two audio channels are located very close to each other when then narrow button is pushed, then the UST 7000 will change its audio receiving capabilities to only receive the narrow strip of sound.

This indicator will appear when the narrow button is pushed on the handheld (37). Check any satellite program guide for listings of audio frequencies and references to narrow audio.

6. L.E.D. DNR Indicator — DNR™* Indicator — DNR = Dynamic Noise Reduction™, which means that it will cut out unneeded (extra) noise that may exist on a given audio frequency will be dynamically eliminated — also termed Dolby™.

When DNR Button is pressed (36 on handheld controller), the DNR Indicator will appear.

*TM DNR is a trademark of National Semiconductor Corporation

7. L.E.D. Satellite Position and Clock Indicator — This digital indicator displays either relative satellite position or time of day. Either position of readout may be obtained by moving switch (22). The clock readout ranges from 0:00 to 23:59. When the indicator is in clock mode and any antenna position button is touched (to select and move antenna position) the mode will automatically change to the Antenna Position Indicator mode. If you attempt to move the

antenna and something is wrong at the dish, (no pulse is coming to receiver) the Antenna Position Indicator readout will disappear after 2 seconds. When repair is made (connection is repaired and pulse is coming to receiver), the antenna position will reappear and then, after 4 seconds, readout will change back to clock mode. Antenna position Indicator ranges from 000 — 600.

If the Initial Key (60) is touched during Antenna readout, Position Indicator will return to 000. If the indicator is in clock mode and Initial Key is touched, the Clock Indicator will return to it's original time.

8. L.E.D. Level Indicator — This indicator, which consists of seven small lights, indicates, the strength of the incoming signal.

9. Lock Indicator — The Lock Indicator, when on (lighted), indicates that all antenna programmed positions are locked in.

10. Satellite L.E.D. Indicator —

A. Satellite Name Indicator. The Satellite Name indicates which name of satellite has been selected.

W=Westar

F=Satcom

D=Comstar, etc.

B. Satellite Number Indicator. The Satellite Number indicates which number of X name satellite has been selected.

Westar 5=5

Satcom 3=3

If F button is pushed (Satcom), F will appear, then if 3 is pressed, 3 will appear.

The purpose of the Satellite Indicator is to indicate which Satellite Name and Number you are viewing or desire to view.

Operations — After pushing the Memory Button, the Satellite LED Indicator will blink twice to indicate that satellite has been set in Memory.

11. TV/Satellite Indicator —

a. Satellite Reception indicator — When the TV/Satellite switch (25) is depressed this indicator light comes on to indicate that you are receiving satellite TV signals.

b. TV Reception indicator — When the TV/Satellite switch (25) is released this indicator light comes on to indicate that you are receiving UHF/VHF TV signals.

12. Polarity Indicator —

- a. (V) **Vertical Polarity Indicator** — This green indicator appears when the receiver is receiving a vertically polarized (V) channel.
- b. (H) **Horizontal Polarity Indicator** — This red indicator appears when the receiver is receiving a horizontally polarized (H) channel.

The H and V indicators change when the receiver receives a horizontal (i.e., even numbered channel — ch. 22) or vertical (i.e., odd numbered channel — ch. 13) channel.

13. **L.E.D. Channel Indicator** — This two digit, green readout indicates the channel that the receiver is receiving. This number will change when the Channel Up/Down Controls (28a, 28b) are pushed.

14. **Infrared Sensor** — This is the sensor that receives the message from the Hand-held Remote control unit.

15. Satellite Selector Buttons —

15a = East
15b = West

Push East key and the satellite antenna will move toward the east. Push West key and the satellite antenna will move toward the west.

If the unit is not in "Lock" Mode and the East or West key is pressed, the antenna will move continually in the indicated direction until the key is depressed. If UST 7000 is in the "Lock" Mode the East and West Keys are used only for fine tuning. Each time the key is pushed, the antenna will move only ± 10 digits on the Antenna Position Readout. Example: If the readout is 100 (F3 satellite) and the East Button is pushed, then the maximum change is to 110 on the readout, or if you push the West Button maximum change is to 90 on the readout. Thus, the E/W Keys are only for Fine Tuning, not for continual East/West movement, while in "Lock" mode.

16. **Lock Button** — The Lock Button is used to lock and set all memory positions. When "Lock" is activated the Lock Indicator Light will come on. When in "Lock" position, no more memory positions can be set.

If additional inputs are necessary, hold the Lock Button down for over 4 seconds and the Lock Indication will disappear. Then, you may program more positions.

Note: While the antenna position is in Lock Mode and fine tuning is necessary from a satellite position, the digital readout will change a maximum of ± 10 on the digital readout.

17. **Fast Scan Control** — This control is to be used when moving the antenna from one satellite to another. The satellite search is a very fast version of the channel scan. When the antenna is moving from one satellite to another (between two satellites) the television screen will become snowy and filled with black and white dots. As the antenna moves towards the satellite and begins to receive the satellite transmission, the satellite's channels will appear on the television screen at a very fast rate (fast scan). To stop the Fast Scan, press the button again.

18. **Satellite Name Button** — This button selects the desired Satellite Name (i.e., F, W,D,A). Each time the button is pressed, the next Satellite Name will readout, and will change progressively. If the Name button is held continuously, the Satellite Name will continue to change.

19. **Satellite Number Button** — This button selects the desired satellite Number. Each time the button is pressed, the number on the readout will change progressively through the available Satellite Numbers. If the Satellite Number Button is continually pressed, the Number on the Satellite Indicator will continue to change.

20. **Memory Button** — This button is used to set the Satellite Name, Number, and Antenna Position Indicator. The memory button will set a total of 81 positions. If the Satellite Name and Number are selected, and the memory button is pressed (within 8 seconds), memory input will be accepted. If more than 8 seconds elapse before the memory button is pressed, memory input will not be accepted.

To alert you as to when memory input is accepted (completed), the Satellite Number will flash two times. If more than 8 seconds pass after the Name and Number are entered, and the Memory Button is pushed, the LED Satellite Indicator will return to the previous Satellite Name and Number.

21. **Clock Set Button** — By pressing these buttons when in "CLOCK" mode, you can change the indication of the Clock Indicator (7). (0:00 — 23:59)

- a. **Hour Button** — Pressing this button, the hour indication of the Clock Indicator (7) can be changed to any desired hour.

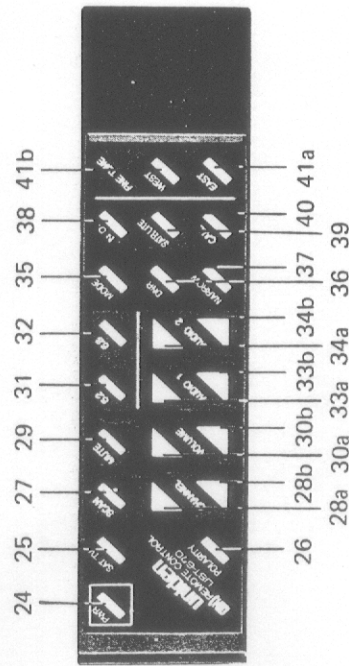
- b. **Minute Button** — Pressing this button, the minute indication of the Clock Indicator (7) can be changed to any desired minute.

- c. **Start Button** — Pressing this button, the minute indication of the Clock Indicator (7) returns to " :00". This is used for time set.

22. **Display Clock/Sat, Position Switch** — This switch is used to select either the antenna position mode or the clock mode on the readout (7).

23. Skew Control — This adjustment controls part of the internal portion of the Mechanical Polarization Device (Unirotor) which is located at the antenna. The control adjusts the picture on the television set for best reception. This control is operable only when using a Mechanical Type Polarization Device.

INFRARED HANDHELD REMOTE INFORMATION
DIAGRAM B.



24. Same as number 1.

25. **TV/Satellite Switch** – This switch controls whether your television picture comes from your satellite TV antenna or your regular television antenna. Use of this switch allows switching from one type of television reception to another.

26. Polarity Control — This control is to be used when changing from horizontal channels to vertical channels. The control is primarily used when changing from a Galaxy, Anik, or Westar satellite (i.e., channel 1 is horizontal) to a Satcom, Constar or Telstar (i.e., channel 1 is vertical). When the Polarity Control is pressed the Polarity Indicators (12a, 12b) will change.

27. Slow Scan Control — When pushed, this control will scan through all of the channels on the satellite. This control should be used to indicate what type of programs are being broadcast. If a desirable channel is seen, the operator can then press the control again to stop the scan.

28. Channel Up/Down Control –

- a. — Channel up
b. — Channel down

This change in readout controls the channel that is received. (1CH – 24CH)

29. Mute Button — This button switches the volume from on to off. If the Mute Button is on, or pressed once, audio will be discontinued. If the Mute Button is pressed a second time (mute off) the volume will continue as previously set.

30. Volume Up/Down Control –

- a. — Volume up
b. — Volume down

If the up or Down Button is pressed, volume will change accordingly.

31. 6.2 MHz Button — If this button is pressed, the Mono Indicator (3a) will turn on, and Audio Indicator channel 1 (4a) will display 6.20. While in this mono mode, Audio Indicator channel 2 (4b) will disappear.

32. 6.8 MHz Button — If this button is pressed, the Mono Indicator (3a) will turn on, and Audio Indicator channel 1 (4a) will display 6.80. While in this mono mode, Audio Indicator channel 2 (4b) will disappear.

33. Manual Audio 1 Up/Down Buttons – These buttons control the readout of Audio Indicator channel 1.

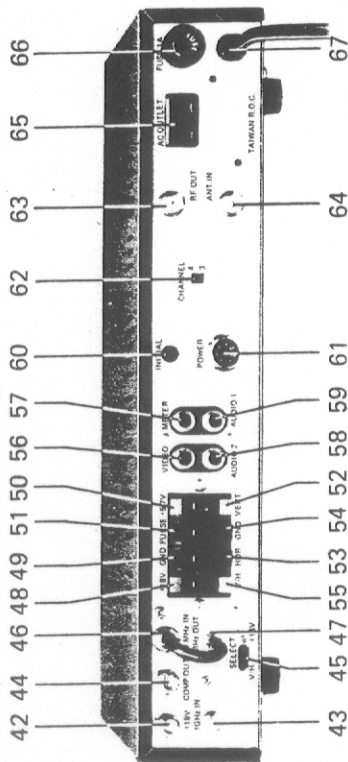
- a. — Audio up
b. — Audio down

This change in readout controls the audio frequency that is received.

Stand Alone Descrambler

REAR PANEL INFORMATION

DIAGRAM C.



The rear panel of the UST 7000 receiver is where all receiver installation terminals, plugs, and switches are located. Except for the Channel Switch (40), the rear panel should not be used by the owner.

42. +18V — This connection supplies the splitter or Horizontal/Vertical Switch with 18V of power through a RG-59/U cable.

43. 1 GHz IN — This connection receives the incoming signal directly from the LNB, Block Down Converter, or Horizontal/Vertical Switch in the case of multi-receiver hook-up.

44. Comp. OUT — This connection is to be used in conjunction with an External Descrambler. This connection is usually called an Unclamped Baseband Output.

45. Select — V/H +18V Switch — This switch should be moved to one of the two positions, depending on the type of installation utilized.

a. For single receiver installation using Pin Diode or Motor-Type Polarization Device: +18V position.

b. For multiple receiver installation using Dual Feedhorn and/or Vertical/Horizontal Switch or Dual Splitters: V/H position.

34. Manual Audio 2 Up/Down Buttons — These buttons control the readout of Audio Indicator channel 2.

- a. — Audio up
- b. — Audio down

This change in readout controls the audio frequency that is received.

35. Mode Button — This button changes the mode of audio frequency received from mono, to discrete matrix.

36. DNRTM Button — This button controls the DNR (Dynamic Noise Reduction) sound. When button is pushed once, the DNR Indicator (6) turn on, and when pushed again, the DNR Indicator turns off.

37. Narrow Button — This button controls the narrow band Audio Control. When button is pushed once, the narrow Indicator (5) turns on, and when pushed again, the narrow indicator turns off.

38. Satellite Number Button — Same as (19) on front panel features.

39. Satellite Name Button — Same as (18) on front panel features.

40. Call Button — Once the memory is set (completed), and the Satellite Name and Number have been selected, the Call Button should be pressed to move to the selected satellite. A beep tone will be emitted to confirm that the process has been completed. If the Call Button is not pressed within 8 seconds of selecting a desired satellite, the Satellite Indicator will return to the previous designation.

If the Satellite Name and Number are selected, and the Call Button is pressed and the Satellite Name flashes (for 4 seconds), this indicates that the desired satellite is not set in memory, and the Satellite Indicator will return to the previous indication.

41. Satellite Selector Buttons — Same as (15) on front panel features.

- 41a = East
- 41b = West

46. 70 MHz IN — This connection receives the signal from the External Filter Output.

Special Note: If no filter is used, a jumper cable from 70 MHz Out to 70 MHz IN must be connected.

47. 70 MHz OUT — This connection supplies power to an external trap or filter which can be used to filter out Local Terrestrial Interference (TI) or, in some cases, adjacent satellite transmissions.

48. +18V — This terminal supplies 18V DC current for auxiliary equipment.

Motor-Type Polarization Device Control Terminal

49. GND — Provides the grounding connection for the Motor-Type Polarization Device.

50. +5.7V — Provides constant voltage to the Motor-Type Polarization Device.

51. Pulse (Control Voltage) — Provides Pulse Control Voltage to the Motor-Type Polarization Device.

Pin Diode-Type Polarization Device Control Terminals

52. VERT — Provides the vertical connection for the Pin Diode-Type Polarization Device.

53. HOR — Provides the horizontal connection for the Pin Diode-Type Polarization Device.

54. GND — Provides the ground connection for the Pin Diode-Type Polarization Device.

NOTE: All three terminals for either the Motor or the Pin Diode-type Polarization Devices must be properly connected to the Polarization Device. Consult the unit's separate instructions for color-coding designations.

55. V/H — Same as 1GHz IN Terminal.

56. Video — RCA fitting delivers direct unmodulated video for inputs to auxiliary equipment such as a VCR, television tuner, or monitor.

57. Meter — This output allows for an External Signal Strength Meter or similar equipment to be connected.

58. Audio 2 — Provides Audio right channel to Audio equipment etc.

59. Audio 1 — Provides Audio left channel to Audio equipment etc.

60. Initial Switch — When this switch is pressed, Antenna Position Indicator (7) will reset to 000.

61. Power Supply Connection — This connection receives the power supplied from the Power Supply. This 8 pin plug, when connected, also sends a command signal to the power supply which then sends a signal to the actuator. The connector also receives a sensor signal from the actuator causing the unit to display the correct antenna position readout.

62. Channels 3, 4 — Provides ability to switch modulated output to either channel 3 or 4 for reception by your television set.

63. RF OUT — Provides Modulated Output Signal to Channel 3 or 4 (62) of the television set.

64. ANT. IN — Provides reception Input Connection for standard VHF (outdoor) TV antenna.

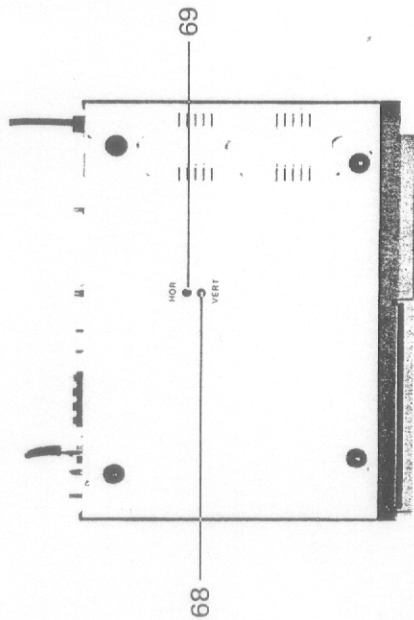
65. AC Outlet — This AC Outlet supplies power to Audio equipment, etc.

66. Fuse 1A — This is a 1 ampere fuse. An extra one is packed with each UST 7000. If the fuses continue to blow (burn out), do not replace the 1 ampere fuse with a larger one. Instead, contact the Uniden Service Center nearest you.

67. 120V AC 60 Hz — This cord plugs into a standard wall socket to provide current for receiver functions.

BOTTOM PANEL INFORMATION

DIAGRAM D.

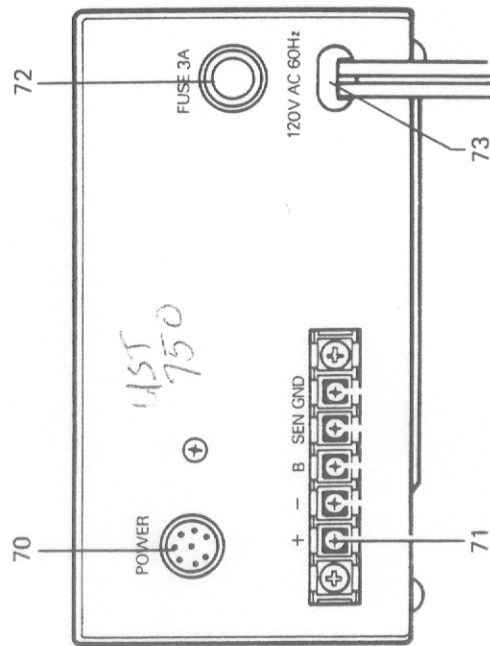


These are the only adjustments on the bottom panel of the UST 7000.

68. Vertical Polarity Adjustment Pot — Allows for adjustment of the vertical polarization of your system's polarization equipment.

69. Horizontal Polarity Adjustment Pot — Allows for adjustment of the horizontal polarization of your system's polarizing equipment.

POWER SUPPLY



70. Power Jack — This 8 pin connection sends power to the UST 7000.

71. Motor Terminal — Sends power (via a cable attached to the terminal by a screw) to the actuator, and receive sensor information from the actuator.

72. Fuse, 3 Ampere — This is a 3 ampere fuse. If the fuse blows (burns out) do not replace it with one of a larger value. An extra 3 ampere fuse is included. If fuses continue to burn out, contact your nearest Uniden Service Center.

73. 120V AC 60 Hz — This cord plugs into a common wall outlet to power the entire antenna positioner system.

SYSTEM LAYOUT

There are a variety of ways to receive TV pictures with the Uniden Block Down Conversion satellite equipment. System hookup varies depending on the number of receivers that are in the home.

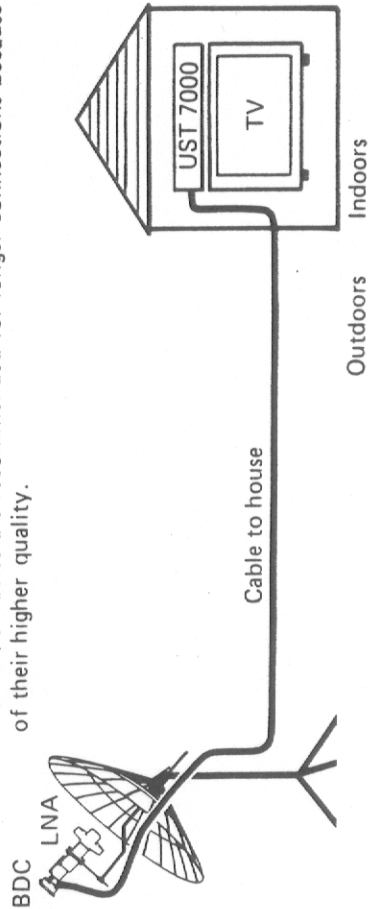
If more than one receiver is used in the home, the system will utilize extra equipment to make it possible to view all channels available with each receiver. If one receiver is to be hooked up, the system layout is much more basic.

LAYOUT A—SINGLE RECEIVER INSTALLATION

NOTE: In this example, the Polarization Device would be cabled directly from the device to the rear of the UST 7000.

RG-59/U cables can be used for connections of 120 feet or less.

RG-216/U cables are recommended for longer connections because of their higher quality.



LAYOUT B - MULTI-RECEIVER INSTALLATION

In any multi-receiver installation, 2 LNA's and Block Down Convertors or 2 LNB's are necessary for full satellite viewing by each receiver.

A. As you can see, there are two Low Noise Amplifiers. One amplifies only horizontal channels, and the other amplifies all vertical channels.

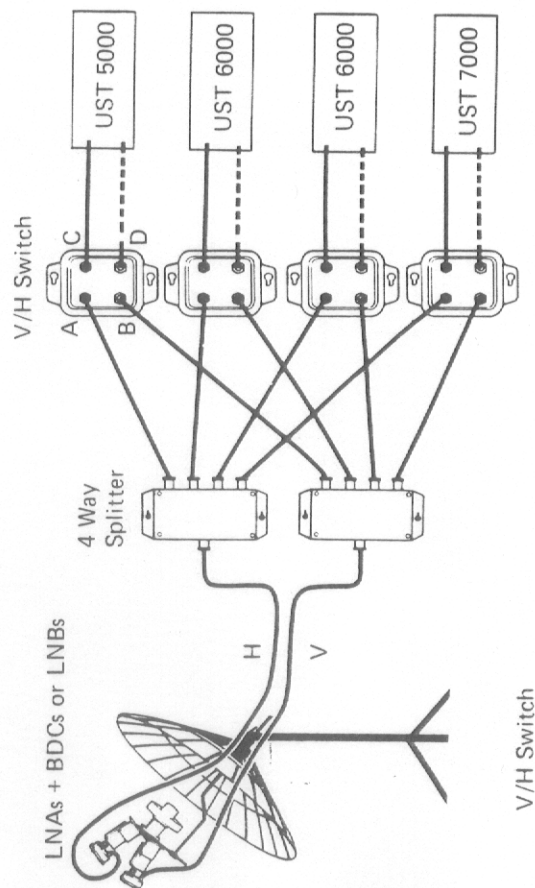
B. From there, cables take both Vertical and Horizontal Signals to separate 4-way splitters. In this example, up to 4 receivers can be used in one home.

C. The Four-Way Splitter splits the Horizontal or Vertical Signal into four separate Horizontal or Vertical Signals. From there, both signals go to a Vertical/Horizontal Switch. One switch is needed per multi-hookup receiver. The V/H Switch takes in both polarities (horizontal & vertical) and gives the receiver the ability to switch from one channel (polarization) to another.

D. The dotted line indicates an RG-59/U cable, which runs from the +18 Volts Terminal (42) to the power connection on the UST 502 horizontal/vertical switch.

E. An RG-59/U Cable is used to connect the output of the V/H Switch to the 1GHz in on the rear panel of the receiver.

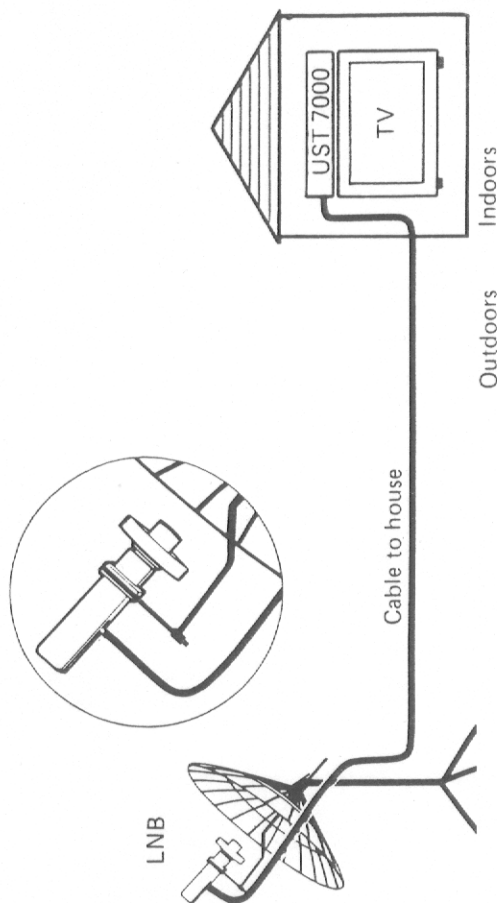
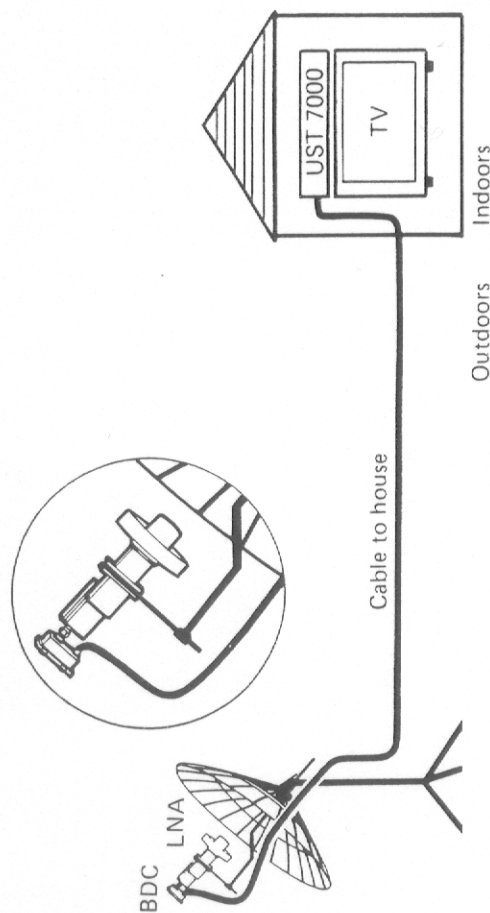
F. No polarization device is necessary, since the system is constantly receiving both polarities via the two LNA's.



A = H input
B = V input
C = Output
D = Power

BLOCK DOWN CONVERTOR

There are basically two ways to install a single receiver UST 7000 system.

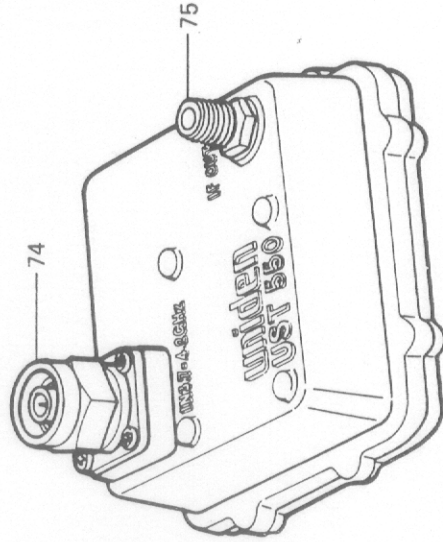


In example A, both an LNA and Block Down Converter are used to convert the signal to the 950-1450 MHz range. In example B, this frequency conversion takes place in one stage - the LNB.

If your UST 7000 satellite system utilizes installation A, your system will include the UST 550 Block Down Converter (BDC). The converter should be mounted directly to the LNA. The unit is completely weather-sealed, so that moisture will not penetrate it.

BLOCK DOWN CONVERTOR CONNECTIONS

(picture of Block Down Converter)



74. N Fitting Input — This connection receives the signal from the LNA.

75. F. Fitting Output — This connection sends the signal from the Block Down converter to either a splitter (for multi-receiver reception), or directly to your UST 7000 (for single receiver reception).

INSTALLATION INFORMATION

Consult materials accompanying your antenna and polarization device for instructions concerning installation of the antenna and polarization device.

1. CONNECTION OF THE BLOCK DOWN CONVERTOR TO THE LNA

The following steps should be taken for installation of the Block Down Converter. Again, installations may vary.

- A. Connect the Block Down Converter (BDC) directly to the rear of the LNA. Remember to attach the BDC with the Input side up and the Output side facing the ground.
- B. Connect the Output Connector of the BDC by RG-59/U cable to the 1 GHz IN connector (22) on the rear of the UST 6000. The cable should use an F fitting on both ends.

2. CONNECTION OF THE LNB TO THE UST 7000

If the LNB (Low Noise Block Converter) is used in the installation, run a RG-59/U cable from the Output connection on the LNB to the 1 GHz IN connection on the rear panel of the UST 7000 for single receiver hook-up.

3. CONNECTION OF THE UST 7000 TO A TELEVISION SET

- A. For cable ready TV sets, run the RG-59/U cable from the RF output (63) directly to the VHF input on the rear of the TV set. If the cable ready set has separate audio and video inputs, run the RG-59/U cable from the Video and Audio connections (56, 59) to the audio and video input connection on the television.
- B. For non-cable ready sets, an Impedance Matcher (adaptor) is necessary. The two wires coming from the adaptor connect to the VHF Input on the rear of the television. The RG-59/U cable should run from the RF Output (63) to the Input of the Impedance Matcher.

4. CONNECTION OF A ROOFTOP LOCAL ANTENNA TO A TELEVISION SET

After connecting the UST 7000 to the television, simply run the incoming cable from the outdoor local TV antenna to the Antenna IN (64) connection. When the UST 7000 is in the power "on" position, satellite TV will be received. When the UST 7000 is off (and the television is on), normal television viewing may be obtained.

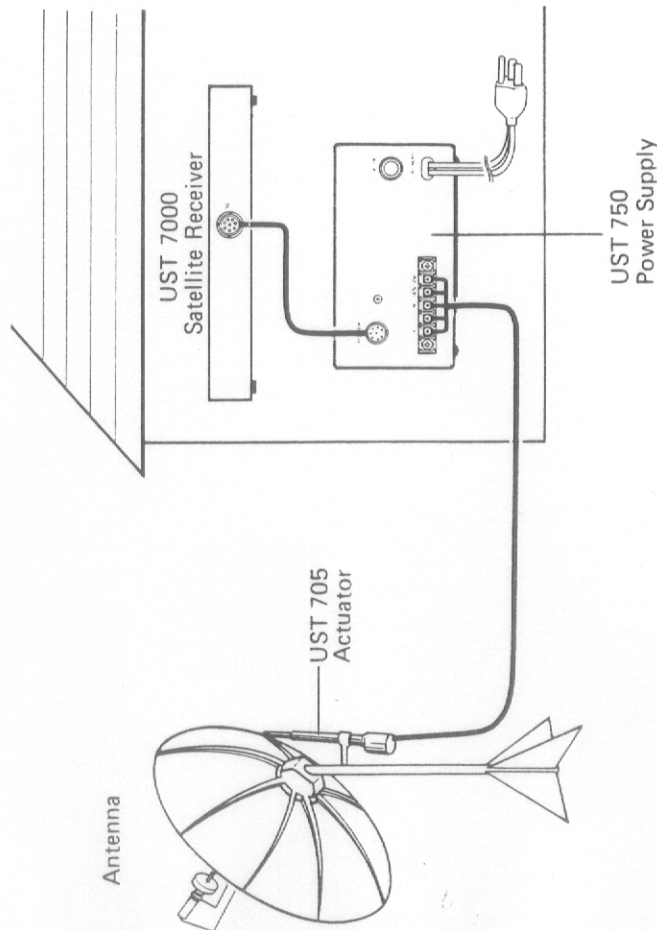
5. CONNECTION OF THE UST 7000 TO A MONITOR OR VCR

If a VCR or video monitor is to be used, connect the direct Video Output (56) on the rear panel of the receiver unit to the Video Input Connection on the VCR or video monitor. Then connect the Audio Connection (59) on the rear panel of the receiver unit to the Audio Input Connection on the VCR or video monitor.

NOTE: At this point it is important to make sure that the TV set is on channel 3 or 4. The TV Channel Selector Knob, or channel readout, should correspond to the switch position (3 CH or 4 CH) on the rear of the UST 7000 (62).

SYSTEM LAYOUT AND INSTALLATION FOR UST 7000

The UST 7000 has, basically, three components which make up the positioning system. They are UST 7000 controller; UST 750 Power Supply; and UST 705 Actuator.



To interconnect the three components, please follow the step-by-step installation instructions listed below:

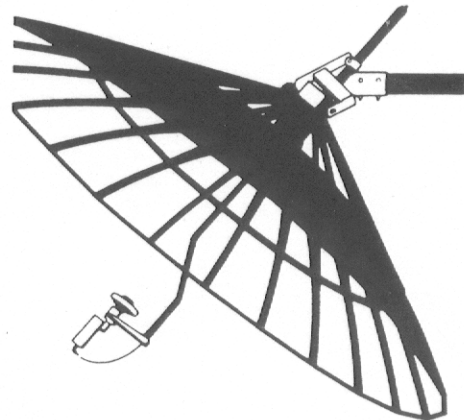
I. Installation of the UST 705 Actuator on the antenna.

1. There is a metal plate protruding from the mount structure (see picture A) that has two holes in it. Within the parts kit is a tube clamp that attaches to the metal plate extending down from the mount.
2. Slip the actuator arm through the tube clamp, and tighten the bolt that pulls the tube clamp together. (see picture B)
3. Pull the antenna down so that the other end of the actuator attaches to the metal plate (arm) that extends from the hub of the mount.
4. Attach the pivot socket to this metal extension plate by inserting the 3/4" bolt through the socket and through the metal plate. Be sure that the lock washer & nut are securely fastened, so that the connection is **very tight**. (see picture B)

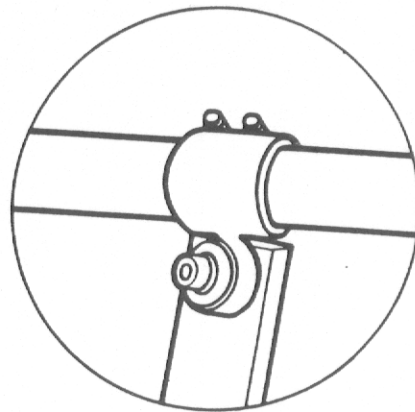
NOTE: The clamp that attaches to the bottom half of the Actuator (see picture A) should be attached to the Actuator two inches (2") from the end of the outer tube.

NOTE: The Actuator should be positioned so that the motor is tilted toward the ground. There is a small "weep hole" pre-drilled in the casing so that moisture can escape. If the motor is mistakenly turned in the "up" position, moisture will enter the hole and will increase the chance of moisture damage. (see picture A)

Closing: At this point the Actuator should be mounted on the Antenna, and the motor should be turned downward, and the inner tube should be retracted (pushed in) fully toward the outer tube. Double check to see that the actuator clamp and pivot socket bolt are tightly secured.



PICTURE A.



PICTURE B.

II. Connection of the Actuator to the Power Supply

The Actuator connects to the Power supply at the Motor Terminal Connections (71) located on the Power Supply. The cable needed for wiring the actuator to the power supply is a five-conductor cable.

1. Motor Cable — indicated by a (+).
2. Motor Cable — indicated by a (-).
3. Sensor Cable — indicated by a (B).
That is a +12V terminal.
4. Sensor Cable — indicated by a (SEN).
this is the signal terminal.
5. Ground Cable — indicated by a (GND).
This is the ground terminal connection.

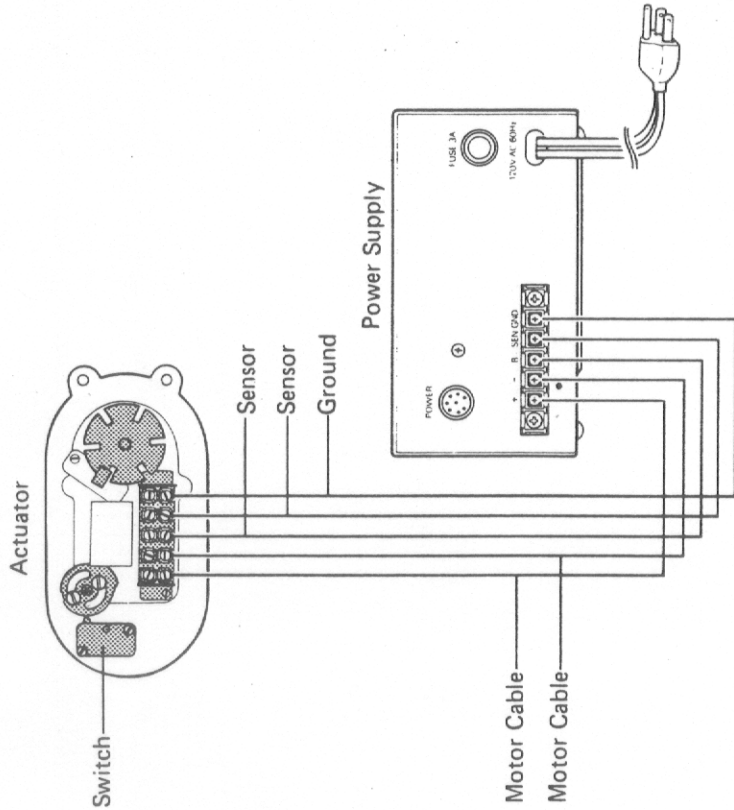
It is important to use the proper type and gauge cable to connect the actuator to the power supply. The two Motor Cables, which are the thickest of all the cables, should be the following gauges:

<u>Motor Cable</u>	
0' — 125' = 18 gauge	
125' — 200' = 16 gauge	
200+' = 14 gauges	

Sensor Cable
Feedback cable = 22 gauge shielded*

- * The ground cable (GND) is represented by the shielded cable.

The actuator should be wired to the Motor Terminal Strip on the Power Supply as per next page.



III. Connection of the Power Supply to the UST 7000 Controller

The power supply, located at the viewing location, is connected to the UST 7000 controller via a 16' cable which is supplied with the unit. The 16' cable attaches at the Power Supply from the Power Output Connection (70) to the Power Input Connection on the rear of the UST 7000 (61).

At this point, the 120V AC Cord (73) located on the Power Supply is to be plugged into a standard wall outlet.

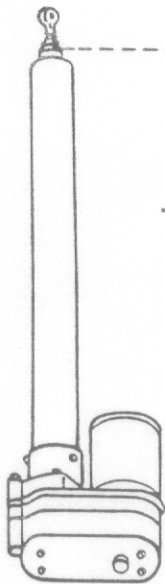
IV. Actuator Setup and Programming Information

Before initial Antenna movement is made it is necessary to reposition the Actuator Arm and set the Satellite Position Indicator to 000 (7).

NOTE: Presently, the inner tube (smaller tube) should be as far in as possible. If no movement has taken place, the Actuator Arm should be in this position, as preset at the factory.

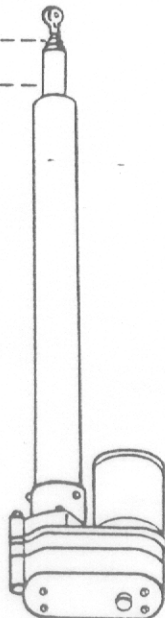
1. Push the East Key (15a) until Satellite Position LED becomes 20. This makes actuator inner tube move outwards about 6/10 of an Inch. See example B on opposite page.

A.



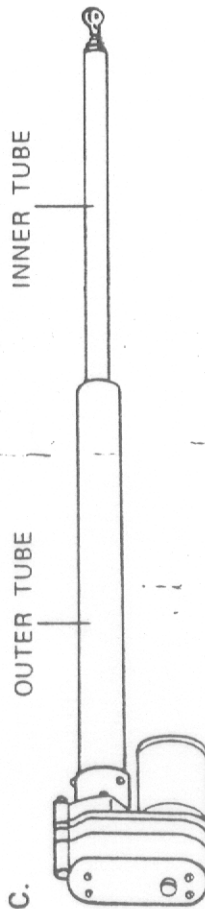
Factory Position and mounting position.

B.



Correct Position for "000" Initial Set.

C.



In Example A, the Actuator inner tube is in all the way, and in Example C the actuator inner tube is extended all the way. Before any programming, the actuator should resemble Example B and at this point the Initial Switch (60) should be pressed. Now, the antenna positioning system is ready for programming across the geostationary belt of Satellites.

PROGRAMING SATELLITE POSITIONS IN MEMORY

To program satellite positions in memory, power must be on and the "LOCK" Button (16) must be off (lock LED off - 9). The Sat. Position/clock switch (22) must be set to "SAT. POSITION". You will need to use both the handheld remote control and the base for programming.

1. Press the "FAST SCAN" Control (17) which will allow you to see on the screen when a satellite is being received. Press and hold the SAT. POSITION Button labeled "EAST" (15a) or "WEST" (15b). The antenna will begin moving and when a satellite is received the screen will flicker and some video programming will appear as the channels are scanned.



2. Release the "EAST" or "WEST" Button and press the "FAST SCAN" Control again to stop the scanning function. Press the Channel Up/Down Control (28a, 28b) to locate an active channel on the satellite. Press the "EAST" or "WEST" buttons momentarily to fine tune that satellite, until the best picture is achieved.



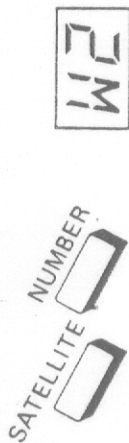
3. Check your program guide to determine which satellite you are receiving. Press the "NAME" button (18) until the correct letter for that satellite appears. Press the "NUMBER" button (19) to select the correct number. Press the "MEMORY" button (20) to enter that satellite and its position in memory. The number will flash to confirm entry. "MEMORY" button must be pressed within 4 seconds of selecting number.



4. Press the "FAST SCAN" and the "EAST" or "WEST" button to move to the next satellite. Continue the programming procedure until and the satellites are entered. When programming is complete press the "LOCK" button and confirm that the lock LED is lit.

CALLING A SATELLITE FROM MEMORY

1. Press the "NAME" button (39) and "NUMBER" button (38) until the desired satellite appears in the display.



2. Press the "CALL" button (40) within 4 seconds. The antenna will move to that satellite and automatically stop. Select the desired channel and audio frequency.



NOTE: The display will flash when the "CALL" button is pressed if the letter and number selected do not correspond to a satellite programmed in memory.

EXAMPLES OF CALLING A SATELLITE

- A. Select satellite W2, channel 24V with 6.2 MHz Audio (mono).

1. Press the "NAME" and "NUMBER" button to select satellite W2.



2. Within 4 seconds press the "CALL" button.



3. Press the "CHANNEL" buttons until 24 appears in the display. Check the polarity LED and change to "V" if necessary.



4. Press the "6.2" button to set Audio 1 to 6.2MHz. The "MONO" LED will light.



- B. Select W2, channel 24V with Matrix Stereo and Audio frequencies of 5.76 MHz and 5.94 MHz (Audio information can be found in most program guides).

1. Press the "NAME" and "NUMBER" buttons to select satellite W2. Select channel 24V.



2. Press the "MODE" button until the "MATRIX" LED lights. Press the "AUDIO 1" keys up or down to select 5.76 MHz.



3. Press the "AUDIO 2" buttons to adjust the second frequency of 5.94 MHz.



NOTE: In the Matrix Stereo Mode, Audio 1 will always be a lower frequency than Audio 2.

SETTING THE CLOCK

Move the Sat. Position/clock switch (22) to "CLOCK". Press the "START" button to reset clock to 17:00. Press the "HOUR" button, then the "MINUTE" button to adjust the correct time.

