Field Notes in Conversion of Direcway .74m Dish

This procedure replaces the DWx000 NTI (Satellite Modem) and BUC (Block Uplink Converter – Transmitter).

Power down the DWx000 and proceed to remove the transmitter (BUC) on the Direcway ODU and rotate the LNB per the steps below.

Use the Birdog to zero in on new satellite position before modifying transmitter and LNB. Use marker to mark pole positions.

Using the supplied set screws mount the new BUC onto the feed arm wave guide. Rotate the LNB 90º (end piece) and discard the shroud. Installation should look like the following, Note BUC heat sink fins are up:

Use tie wraps to secure BUC to feed arm.

The transmit ground has to be fashioned as bolts are not supplied.

Verify satellite position with Birdog.

Make sure all pole positions are marked. Loosen elevation bolts and move off satellite so that the software version of satellite pointing can be used. Proceed to satellite pointing in iDirect manual "NetModem Installation Quick Reference Guide".

iDirect Technologies
iDirect 3000 Series Satellite Router

iDirect router takes 1 1/2 minutes to complete POST processing.

At pre-activation Rx and NET lights will be yellow and blinking, STATUS and POWER will be green.

At activation all lights will be solid green. No blinking occurs during NET, RX, or TX processing.

Rear panel lights are also important. It is easy to cause a "safe mode" failure if the 3100 router is powered on while coax connections are being made or tested. The NTI detects a short between the center conductor and coax shield and powers down the BUC and LNB. When this occurs the rear lights will become red and the front lights will continue to blink yellow as if they were displaying that signal was trying to be obtained when in fact the router is shut down. Recycle the power to the satellite router to restore functionality.

Power delivered to the LNB is 18 volts, to the transmitter (BUC) is 24 volts.

.74m Direcway Dish Conversion.
Remove LNB cover and discard.
Leave LNB in original 6 o'clock position.
Remove old transmitter and replace with new BUC.
Will have to come up with a ground wire bolt using one of the short shroud screws and several small slotted washers.
Secure BUC with wire ties.
Connect BirdDog and rotate dish to satellite and peak.
Remove BirdDog
Rotate LNB 90 degrees to the 3 o'clock position, as you face the LNB. (9 o'clock is OK too.)
Connect Rx cable to LNB.
Connect laptop with cross over (patch) cable provided to iDirect LAN A port (We will not use the monitor cable).
Set PC to acquire DHCP address or set PC static address to the IP address given in the Doc.
iSite software will "find" the iDirect NTI and list it as a "TDMA Remote".
Right click TDMA Remote and choose Login, use the password provided and option ADMIN.
Unscrew Tx cable.
Unscrew Rx cable
On icon line choose upward pointing satellite icon to start Antenna Pointing.
    (This software function does not work on Windows 98SE, an 8.33 yellow signal is as high as one can get.)
The satellite position calculator is not used but select the tab

Start Antenna Pointing (This disables Tx function of Satellite Router.).
Wait 10 seconds - red line appears on graph.
Screw in Rx cable.
Look for Green bar with a 12-18 signal strength.
Power off Netmodem.
Call VSAT contact to begin cross polarity test.
   (They will call NOC for carrier uplink frequency and coordination).
Select icon next to dish for cross polarity test.
Enter uplink frequency given.
Start transmitting.
Vary power as told to do so.
VSAT contact will activate system.
DHCP release/renew
Browse test.
Speed test & ping test.

Thinkpad600\\My Documents\VSAT.doc