Application Note

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Prepared by: Gunnar Hermelink		Approved by: Geir Godheim

PC dialling with NERA Saturn B High Speed Data and Ramsat RVP24 or ROP24 with asynch PPP protocol

It is now possible to dial your Internet service provider or corporate office server using Nera Saturn B terminals, with the High Speed Data function, and the Ramsat RVP24 or ROP24. ROP24 has integrated fiber optic output extension, up to 2000m, for maximum noise immunity. Noise is very common on vessels.

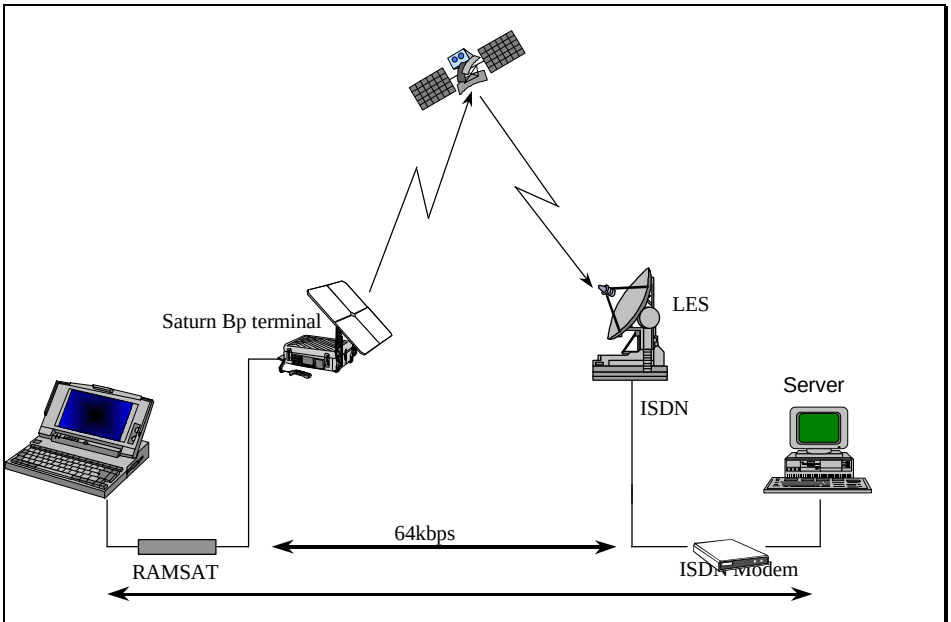
What you need

Remote side:

One fixed or mobile Nera Saturn B with High Speed Data function. MCU must have SW 5.00 or higher. To use the V.25bis function the Serial Number of the MCU must be higher than 3000. If you have a older MCU you can use the Hot-dial function.
One Ramsat Terminal Adapter RVP24 or ROP24.
One PC with an available COM Port, with a 16550 UART, in order to do serial communication at the asynchronous speed of 115.2 kbit/s.
PC standard Internet related software Dial Up Network, Outlook, FTP etc.

Fixed side:

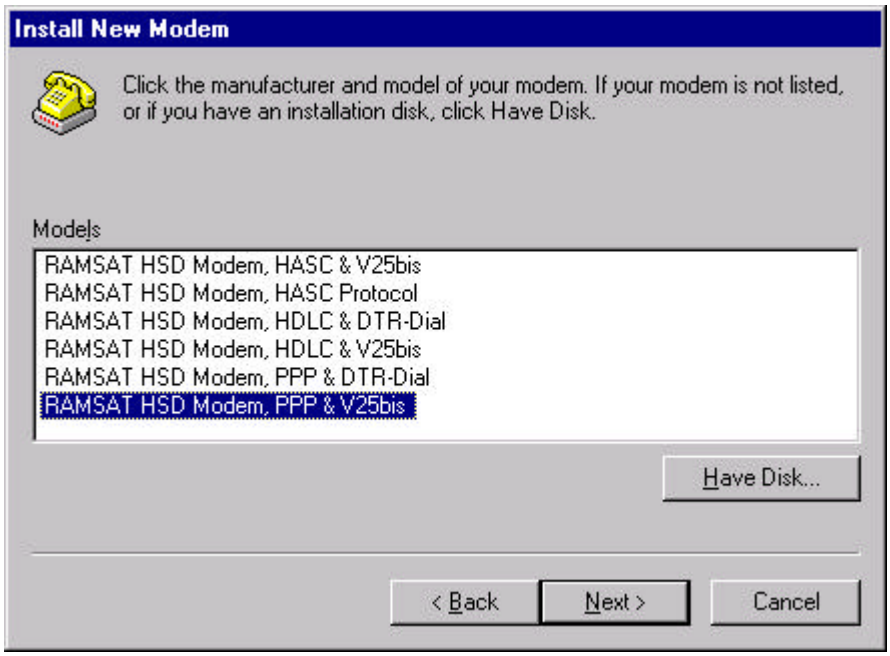
One ISDN TA or one ISDN based Router with PPP support.
One PC installed as Server and connected to ISDN by TA or Router.
Internet Service Provider



HSD file transfer with Saturn B.

Setting up the Remote side

Connect the Ramsat to your PC with the deliver db9/db25 modem cable. Use the db25/db25 cable to connect the Ramsat and the DTE port on the MCU. Connect the power cable to the Ramsat. Install the Ramsat modem driver on the PC. If the MCU supports V.25bis, use the RAMSAT HSD Modem, PPP & V.25bis. For Hot-dial, use the RAMSAT HSD Modem, PPP & DTR-Dial. Configure your Dial Up Network using the Ramsat modem.



Configuring the Saturn B terminal.

- **Enable the High Speed Data service:**
  1. Enter function 89 - Enhanced Setup.
  2. Scroll through the list of choices to the **HS DATA** option. If it's **PASSWORD PROTECTED** refer to 'Renter/Owner level' in Operator's Manual.
  3. Activate the HSD function (1 = active, 0 = passive).
  4. Specify **SETUP** level, if required.
  5. Specify **UPDATE** level, if required.
  6. Verify settings and revert back to idle by pressing the **ESC** three times.

- **Configure the High Speed Data Service:**
  1. Enter function 85 - High Speed Data Configuration.
  2. Select **ACCESS_MODE** to 'v25_bis' (0=V25BIS, 1= manual 2= hot line).
  3. Select **BIT_RATE** either to 56 or 64kbps.
  4. Specify **MAX_CONNECT** if required, not specified (max_connect=0) as a default setting.
  5. Specify the Originating ID supplied with your IMM number, **ORGTERMID,** normally 65 Dec.
  6. Select response mode, **AUTO_ANSWER** to 'on, no 108', (0=off, 1=108, 2=on, no 108).
  7. Select clearing, **CLEAR_SIGNAL** to 'auto', (0=normal, 1=auto, 2=no).

- **Configure the DTE port for High Speed Data:**
  1. Enter function 70 - Configure Ports.
  2. Enter the list of connectors and scroll down to **"DTE"**.
  3. Select the HSD service on the DTE port, (**5=HSD**, 6=DTE Data, 7=ASD).
  4. Verify settings and revert to idle.

- **Routing High Speed Data to the DTE Port:**
  1. Enter function 71 - Incoming Call Route.
  2. Enter the destination ID you want to route.
  3. Specify the service to 5, (1=phone, 2=fax, 4=telex, **5=HSD**, 6=DTE_DATA, 7=ASD).
  4. Verify Settings and revert to idle.

For more information about the HSD configuration refer to 'Saturn B Data Service' operator's manual.

RAMSAT RVP24 package consists of:

1pc RAMSAT RVP24 async/sync terminal adapter.
1pc power adapter 220v/9v
1pc standard db9/db25 serial cable 0,30m.
1pc standard db25/db25 synchron flat cable 0,40m
1pc diskette with modem driver and RAMSAT LITE File transfer SW.
1pc manual

RAMSAT ROP24 package consists of:

RAMSAT ROP24 is delivered as a complete package but without the fibre optic cable that can be delivered in any length up to 2000 meters.
1pc RAMSAT RVP24 terminal adapter asynch part.
1pc RAMSAT RVP24 terminal adapter synchron part.
2pcs power adapter 220v/9v
1pc standard db9/db25 serial cable 0,30m.
1pc standard db25/db25 synchron flat cable 0,40m
1pc diskette with modem driver and RAMSAT LITE File transfer SW.
1pc manual