1. **Cable requirements**
   - Shielded RS232 Cable ( RJ45 to RJ45) – Verifone part number 13836-01 Rev A
   - DB25 to RJ45 adapter – Verifone part number 13542-01 Rev B
   - A Standard telephone cable with RJ11-RJ11 connectors.

   If this is NOT a new installation and you are converting the Ruby System from VSAT to First Data’s Secure Transport® please confirm that the communication type is VSAT and proceed to the “Ruby System Configuration” Section. The communication port and baud rate for this communication type should be COM2 and 9600 baud respectively.

2. **Gemstall Configuration**
   2.1 **NEW Installation**
      1. Set the “First Network” communication type to Buypass_Hughes_Vsat.
      2. Set the communication port to COM2. This is the default communication port.
      3. Set the Baud Rate to 9600 baud. This is the default Baud Rate. The Baud Rate can be changed in the Network Configuration if required.
      4. Set the Data Bits, Stop Bits and Parity to “8 1 none” respectively. These are the default settings.

   2.2 **UPGRADE**
      1. In Gemstall, access the "First Network" from the Upgrade Menu
      2. Set the “First Network” communication type to Buypass_Hughes_Vsat.
      3. Set the communication port to COM2. This is the default communication port.
      4. Set the Baud Rate to 9600 baud. This is the default Baud Rate. The Baud Rate can be changed in the Network Configuration if required.
      5. Set the Data Bits, Stop Bits and Parity to “8 1 none” respectively. These are the default settings.

3. **Ruby System Configuration**
   3.1 **Network Manager / Network Configuration**
      The Backdoor password must be used to enter Network Manager and edit the Baud Rate in the Network Configuration.
      1. Enable the Buypass Network and any other networks required if not enabled yet.
      2. Confirm that the baud rate in the Network Configuration is set to 9600 baud. If not, set this to 9600 baud.
      3. Confirm that the Data Bits, Stop Bits and Parity are “7 1 e” or “8 1 n” respectively. The
MicroNode supports only these two settings.

4. Installing the MicroNode™

4.1 Before You Begin

- Determine if a router is required

If you have or plan to have more than the MicroNode connected to your Internet service, you will need to purchase a router. The MicroNode only supports Dynamic IP addresses. Thus a router with DHCP Server is required to assign IP addresses, Internet gateway and the DNS server(s).

- Determine where to install the MicroNode

The MicroNode 1400 should be no further than 500 feet away from the Ruby System and 328 feet away from the router.

4.2 Connect the Ruby System to the MicroNode

Present Configuration

1. Disconnect the RJ45-DB25M (male) connector from the Satellite Indoor Unit (IDU).
2. Connect the RJ45-DB25M (male) connector to the Serial Port of the MicroNode 1400 [a.].

NEW or UPGRADE Installation

1. Connect one end of the RS232 cable to the Ruby communication port (RJ45) that was selected during the Gemstall installation.
2. Connect the other end (RJ45) of the RS232 cable to the RJ45-DB25M (male) connector.
3. Connect the RJ45-DB25M (male) connector to the Serial port of the MicroNode 1400 [a.].
4.3 Connect the MicroNode to Internet and Power Supply

1 Connect to the Ethernet;
   a. If your Internet is provided by CABLE, DSL or a corporate LOCAL AREA NETWORK (LAN), using the Category 5 Ethernet Cable provided, connect one end of the cable to the port marked ETHERNET on the back of the MicroNode, and the other end of the cable to the Ethernet Port on your Router or directly to an Ethernet Port on the wall. [c.]

   OPTIONAL: If you require a backup Internet connection to your ETHERNET connection, connect one end of the Telephone Cord provided to one of the ports marked MODEM Phone Line on the back of the MicroNode and the other end to a Phone Line Jack on the wall.

   b. If your Internet is provided by a DIAL UP Service Provider, you need to connect one end of the Telephone Cord provided to one of the ports marked MODEM Phone Line on the back of the MicroNode and the other end to a Phone Line Jack on the wall. [d.]

2 Connect the power
   a. Connect the Switching AC Adaptor into the AC Adaptor Power Supply. [e.]

   b. Connect the Switching AC Adaptor into the back of the MicroNode panel labeled POWER and turn it to the right lock it in place. If it is not correctly locked in place, the MicroNode will not start.

   c. Connect the other end of the AC Adaptor Power Supply into an 110 VAC electrical outlet. [f.]

Once the power cord is locked in place and plugged into an electrical outlet, the MicroNode will go through its "power-up sequence".
4.4 The MicroNode Power-up Sequence

The MicroNode's initial power-up sequence includes the following LED sequence:

1. The STATUS LED on the front panel of the MicroNode will start by blinking rapidly yellow.
2. The STATUS LED will change to solid green on completion of self test.
3. The STATUS LED will change to a blinking green when it has received an IP address.
4. The MicroNode will download the configuration file.
5. The STATUS LED will blink rapidly green (4 times a second) for approximately 1-2 minutes.  
   **IMPORTANT:** Leave the MicroNode alone while the STATUS LED is blinking.
6. The MicroNode will reboot and will repeat Steps 1-3 above.

In summary, when the MicroNode is powered-up for the first time, you need to wait for the STATUS LED to blink green slowing and then wait again another 2-5 minutes for the MicroNode to reboot. Afterwards, if the MicroNode is restarted, it will only take 5-10 seconds to reboot.