



StarPort 700 User Manual



WARNING: To avoid damaging the unit or battery:

- a. Make sure the unit is OFF and the adapter is disconnected before connecting the battery to the unit
- b. Plug in the adapter.
- c. Turn on the unit.

Congratulations on the purchase of your StarPort 700 Fax Interface. This product is designed for use with any of the following Globalstar satellite products: the GSP-2900 Stationary Fixed Terminal, the GSP-1600 Handheld Phone, or the GSP-1620 Satellite Data Modem. The StarPort 700 requires certain programming dependant on the Globalstar satellite product being used. This programming has been done for you by your Globalstar Authorized Dealer at the time of purchase. Should you need to change the programming of your StarPort 700, please contact your local Globalstar Authorized Dealer or Globalstar Customer Care at 1-877-452-5782. For a list of Globalstar Dealers, please visit www.globalstar.com.

StarFax 100
ON-Go Unit ID No. _____

Globalstar Authorized
Dealer Name _____

Date Purchased _____

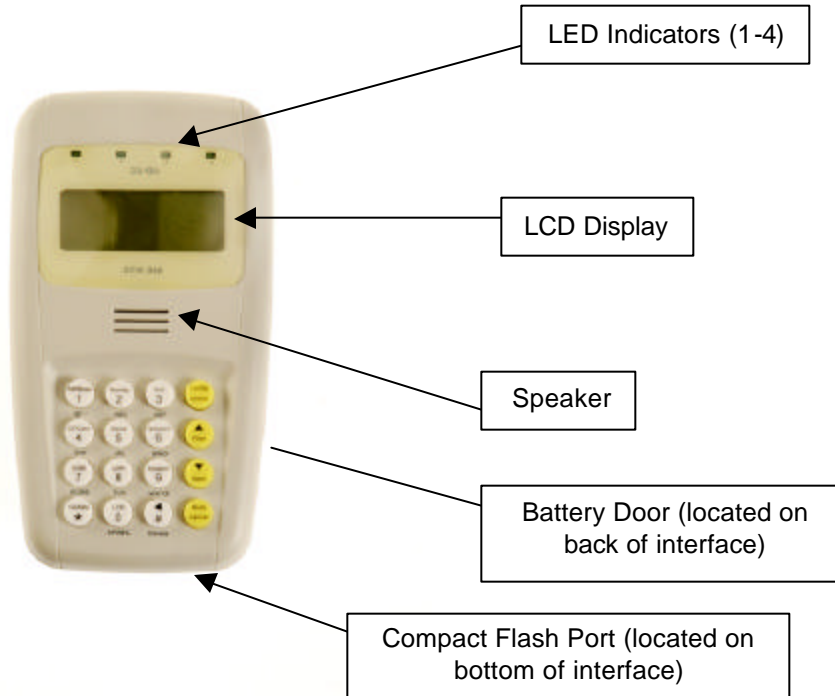
Note: The information in this document applies to the StarPort 700 Interface product. This product may also at times be referred to as the UCH-300.

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GS-04-700 Reference Number: User Guide-SPT -700
01/25/05

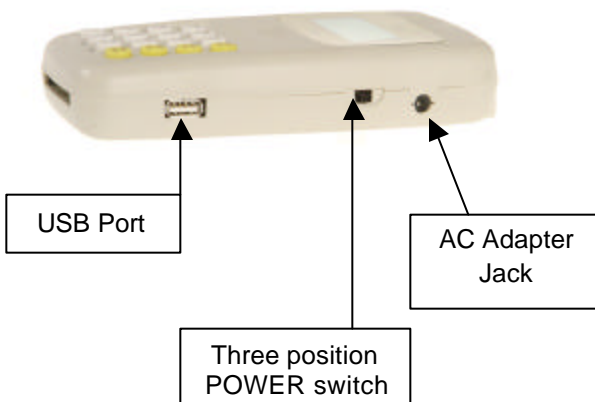
General Information

StarPort 700

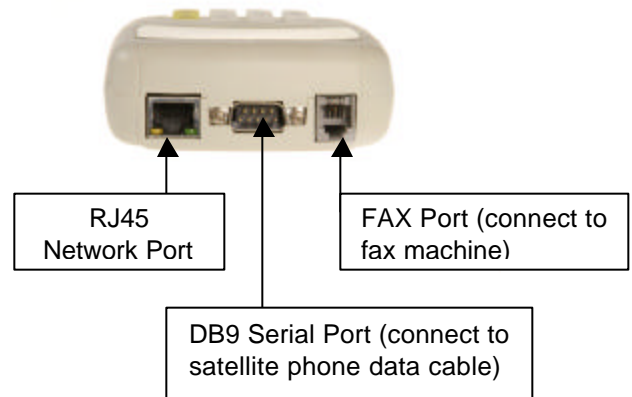
1. Front View



2. Right Side View



3. Top View



1 Product Overview

1.1 Concept

Thank you for purchasing the StarPort 700 Universal Communications Interface Hub (UCH). The primary function of the StarPort 700 is to act as a fax interface allowing the user to send and receive faxes over the Globalstar Satellite Network. In addition to this, the StarPort 700 can also act as a network router and device interface allowing it to be used for more advanced data applications.

The StarPort 700 is shipped with the following connections or ports enabled and ready to use.

- Serial (DB9)
- FAX
- Ethernet (RJ45)
- USB
- Compact Flash

Each of these ports can be configured as the Globalstar or "Network" port, and the remaining ports are then used as "Local" ports.

1.2 Product Applications

The StarPort 700 provides for the following

- Data and fax capability

With the additional ports enabled, the StarPort 700 can also be used for the following

- Mobile to mobile (Point to Point) fax capability
- Network routing (Ethernet or Wireless LAN)
- Data aggregation

The product version number will display momentarily during the power-on boot process. If you wish to display the version number after the unit has been powered on:

1. Activate the keypad by placing the 3-position POWER switch in the middle position
2. Press the "#" key
3. The hardware and software version of the unit will be displayed

1.3 Keypad

There are 16 keys on the unit. The Yellow keys are used mainly for configuration, and the other keys are "ACTION" keys, which are associated more with the operation of the unit.

Keypad Lock: The keypad can be locked by sliding the POWER switch all the way towards the top of the StarPort unit, up to the KEYLOCK position. This design prevents the keys from being accidentally pressed.

Keypad Activation: Set the POWER switch to the middle position for the keypad to become active.

1.4 LED and LCD Display

There are four LED indicators on the unit (marked 1,2,3,4). For most applications, the LED indicators represent:

1. Flow Control (On=Unit is being flow controlled on the network interface port)
2. Modem Ready (On=Modem port is ready to receive incoming call)
3. Network Status (On=Network connection established, Flashing=Unit is trying to connect to the network)

4. Incoming Fax failed to print (Need user intervention – i.e. replace paper. Dial ##4 on the local analog fax to re-attempt printing. See *Section 3: Local Commands* for more information.)

The bottom row of the LCD display presents a status of the message count in the unit. The status display consists of four counts.

- a) The first is the INBOX count (incoming from network)
- b) The second is the OUTBOX count (outgoing to network)
- c) The third number (next to the “R:” symbol) is the number of messages that have been transmitted but not yet acknowledged from the Gateway (ACKWAIT Queue, see Section 2.1.2).
- d) The final number is the count of messages that failed to be delivered or failed to receive any status indication after a long period of time.

2 Application

2.1 Fax

2.1.1 Store and Forward Fax

Store and forward fax means the fax is stored and relayed over the data network.

2.1.1.1 Notification (for incoming fax messages)

The first configuration step of store-and-forward faxing is to determine what type of notification is to be used depending on the type of Globalstar equipment being used (GSP-1600 or GSP-2900).

Notification is used for two purposes:

- a. Indicating the delivery status (Mobile Originated Fax)
- b. Indicating the availability of incoming fax (Mobile Terminated Fax)

Two notification mechanisms are supported:

1. Short SMS: This method of notification must be used by customers equipped with a GSP-1600 Handheld Phone and/or GCK-1410 Car Kit. With this method, an SMS message is used to “wake up” the StarPort and instruct it to communicate with the fax server.
2. Direct Call: This notification method must be used by customers with the GSP-2900 fixed unit because the GSP-2900 does not support SMS service. This method uses a direct call to “wake up” the StarPort and instruct it communicate with the fax server.
NOTE: A secondary “remote terminated data number” must be activated. See your Globalstar dealer for details.

Your Globalstar dealer will ensure that your phone is configured properly to receive incoming calls.

2.1.1.2 Mobile Originated Fax

Mobile Originated fax allows an off-the-shelf G3 analog fax machine to be used to send documents over the data network. After connecting the G3 fax machine to the RJ11 modem port, wait for the LED #2 to be ON (indicating modem port is ready), then dial the number in the format: 1 + Area Code + NUMBER.

2.1.1.3 Mobile Terminated Fax

Mobile terminated fax is automatic. When the user subscribes to a service plan, a fax phone number "MAILBOX" will be assigned to the unit. When a fax is sent to that MAILBOX number, a notification is sent to the StarPort which will connect to the Gateway to pick up that message. **(NOTE: This fax MAILBOX number is a SEPARATE U.S. based phone number and is not the same as the mobile data number or satellite telephone number. As indicated above, the user is assigned the MAILBOX number when activating the fax service.)** When the message is completely downloaded to the unit, it will simply ring the fax machine and print the message out.

If for some reason the analog fax machine is not powered on, out of paper or not connected, the user has to use Message Management to get the fax to be printed (see Section 2.1.2).

How it Works



2.1.1.4 Point to Point Fax

In the case where someone wants to only send faxes to a KNOWN party, and both the sender and receiver are equipped with the StarPort interface, point to point fax can be advantageous. One of the key benefits is the additional privacy and security.

Note that each receiver must also be equipped with a StarPort 700 interface in order for this mode to work.



2.1.2 Fax Message Management

The messages in the StarPort are organized in several groups. When the message is ready to go out to the fax server, it is in the *Outgoing Queue*. When the message is sent over the network and acknowledgement has not been received yet, it is in the *Ackwait Queue*. After the acknowledgement is received indicating delivery attempts failed (or when the timer expired without receiving acknowledgment), it is put in the *Failed Queue*.

When the StarPort receives an incoming message from the fax server, it is put in the *Incoming Queue*. If it cannot be printed for some reason (ie., fax is disconnected, fax is out of paper, fax is turned off), it will be moved to the *FromNetworkFail Queue*.

All of these messages in various queues can be managed by pressing the NETWORK action key on the keypad (6).

2.2 Data (please detach the interface and use your GSP-1600 handset or GSP-2900 with the appropriate data cable kit.)

2.3 Serial Port Daisy-chain

Serial port daisy-chain is used to provide a serial connectivity to the mobile terminal from another computer/device through the StarPort 700. This function is designed to be used for advanced data usage and supports mobile originated data only.

2.4 GPS

The StarPort 700 can interface to a NMEA based GPS receiver (USB based or Compact flash based) process the information, and communicate that information to the configured destination. For more details concerning the configuration of your StarPort 700 interface for use with GPS, please contact your Globalstar dealer.

2.5 Networking

2.5.1 Serial

The most typical use of this port is for “upstream” communication between the StarPort and the Globalstar network. The serial port should be connected to your Globalstar telephone.

The connection protocol being established over the serial port is PPP.

2.5.2 Ethernet

The Ethernet port can be used to interface individual computers or local area networks to the Internet via Globalstar.

In this mode, the Ethernet port can be configured for either DHCP or Static IP addresses and can be connected to a Wired or Wireless Ethernet hub.

Wireless LAN Router – The StarPort 700 can serve as a Wireless LAN Access Point if a PRISM based WIFI compact flash card is plugged into the compact flash slot. Most of the CF- based WIFI cards are PRISM chipset based (e.g., DLINK DCF-660W). In addition to the Ethernet type of configuration (i.e., DHCP or static IP address), this port needs ESSID, WEP and Channel configuration. The default ESSID is uniHub and WEP is off and Channel is 6.

3 Local Commands

The StarPort 700 utilizes a set of “Local Commands” which allow the user to perform certain tasks or to retrieve internal status and print certain reports by using the dialing keys of a standard telephone device, rather than having to use the menu system of the StarPort. These commands are performed through a tone-based telephony device (such as a phone or fax machine). To enter a command, simply take the attached telephony device off hook, enter the key sequence and then hang up. Note that certain of the commands require a fax machine to be connected to the RJ11 port.

All the commands start with two “#” characters. The following table lists the supported commands. The only command the user needs to remember is “###” because that will give a printout of the command menu.

KEY SEQUENCE	COMMAND
##1	Poll now command – requesting StarFax-100 to connect to On-Go server
##2	Connect command – requesting StarFax-100 to connect to the Internet
##3	Disconnect command – requesting StarFax-100 to disconnect from the Internet

##4	Retry incoming command – requesting StarFax-100 to retry printing incoming messages (need to have a fax machine attached to the RJ11 phone port)
##5	Reserved for future commands
##6	Print status command – requesting StarFax-100 to print internal status (need to have a fax machine attached to the RJ11 phone port)
##7	Show Status command – requesting StarFax-100 to print internal software version and DIP switch setting, mostly for diagnostic purpose (need to have a fax machine attached to the RJ11 phone port)
##8	Show Config command – requesting StarFax-100 to print internal configuration setting, mostly for diagnostic purpose (need to have a fax machine attached to the RJ11 phone port)
##9	Reserved for future commands
##0	Reserved for future commands
##*	System Log command – requesting StarFax-100 to print system log, mostly for diagnostic purpose (need to have a fax machine attached to the RJ11 phone port)
###	HELP command– requesting StarFax-100 to print a command help summary (need to have a fax machine attached to the RJ11 phone port)