CRYPTOPHONE

GSMK CryptoPhone PSTN/1

Quick Start Guide

Installation

1. **Connect the telephone** that comes with your CryptoPhone PSTN/1 to the encryption unit (jack on the back of the PSTN/1 encryption unit labeled "Phone")
2. **Connect the telephone power supply** to a power outlet
3. **Connect the phone line** to the PSTN/1 encryption unit (jack on the back of the PSTN/1 encryption unit labeled "Line")
4. **Connect the encryption unit's power supply** to the PSTN/1 encryption unit on one side and to a power outlet on the other side.
5. **Press the large Power button** on the front of the PSTN/1 encryption unit until it is lit blue
6. **Wait two to three minutes for the system to initialize**. The phone will ring once briefly when the initialization process is finished. You cannot use the CryptoPhone PSTN/1 before the initialization process is finished.

Using the CryptoPhone PSTN/1

To place a secure call:

1. **Lift up the telephone receiver.** You will hear the usual dial tone.
2. **Dial the desired number.** You will first hear the ringing tone. Once the called party has accepted the call, the ringing tone will be followed by a "ditt-dutt ditt-dutt" sound that signals to you that the "key setup" procedure for the secure connection is in progress. Key setup may take from 3 to 15, but typically 4 seconds, depending on line quality. Once the key setup is completed you will hear a "Ping" sound and can start talking to your partner.
3. **Verify the authenticity of the key.** Please take a look at the telephone display and read the three letters after "SAY:" to your partner and check the three letters after "CHK:"
Reading the three letters to your partner and verifying what your partner says is meant to protect you against so-called "man-in-the-middle attacks" on the secret session key. The letters are mathematically derived from the unique secret key that is used for each call. By reading and verifying them with your partner, you make sure that you are indeed communicating using the same key. Please pay attention to the voice of your partner when he reads his three letters. To be completely on the safe side against very sophisticated voice impersonation during key verification, you could periodically re-verify the letter code with your partner during the conversation.
4. **Hang up the telephone receiver when you wish to finish the call.**

Note: The CryptoPhone PSTN/1 is intentionally designed to only support secure calls. This prevents operating errors with potentially grave consequences. History has shown that time and again, users of secure telephone equipment forgot or neglected to activate encryption if both secure and insecure mode were supported on the same device. This is why you cannot place unencrypted calls with the CryptoPhone PSTN/1. Think of it as your "secure line".

Calling from the CryptoPhone PSTN/1 to mobile GSM CryptoPhones

In order to place a call **from a CryptoPhone PSTN/1 to a mobile GSM CryptoPhone** (e.g. a GSMK CryptoPhone G10, a CryptoPhone model 100, 200, or 220XS), you must obtain a separate data number for incoming V.32 data calls from your mobile network operator. This number is also known as a "Data Terminating Number". Please contact a customer service representative of your mobile network operator of choice to learn how to order an incoming data number for your specific GSM service contract. Once you have received such a separate data number from your mobile network operator, only use this number (instead of the regular voice number) to initiate a secure call.

Calling from mobile GSM CryptoPhones to the CryptoPhone PSTN/1

In order to place a secure call **from a mobile GSM CryptoPhone to a CryptoPhone PSTN/1**, you must switch the "CSD Line Type" on your mobile GSM CryptoPhone from "V.110, non-transparent" to "V.32, non-transparent" (if it is not already set to V.32). For instance:

- *As a CryptoPhone G10 user,* go to "Start" → "Configurations" → "CSD Line Type" and in the menu that will appear select "9600 bps(v.32)" instead of "9600 bps(v.110)". V.32 may or may not be your default CSD Line Type depending on your local network environment.
- *As a CryptoPhone 200 or CryptoPhone 220 user*, go to Start → Settings → Connections → CSD Line Type to do the same.

Please always refer to the manual that came with your mobile GSM CryptoPhone for details. Do not forget to reset your mobile GSM CryptoPhone after the CSD line type has been changed, and then place a secure call.

Switching the CryptoPhone PSTN/1 off

The CryptoPhone PSTN/1 needs to be turned on all the time in order to be able to accept incoming secure calls. It is designed to run for months and years without interruption. In case that you need to, e.g., transport the unit to a different place, please press the Power button on the front of the PSTN/1 encryption unit for five seconds. The blue light will turn off. You can then disconnect all power and telephone lines attached to the unit in reverse order as when you did when turning the unit on.

Telephone Features

To use the advanced features of the telephone that came with your CryptoPhone PSTN/1 system, please refer to the separate telephone operating instructions that also came with your CryptoPhone PSTN/1 system.