Spark CXS1000 CompletePBX Getting Started Guide

Package Contents

- CXS1000 (1U 9" width unit)
- Power cord
- Desktop power supply

- Optional cable(s) for additional telephony modules (allows upgrade to a total of two telephony modules – see Appendix for details)
- CompletePBX software preinstalled on the hardware

Prerequisites

You will need a computer equipped with an Internet browser. Firefox or Chrome is recommended. By default, the Spark CXS1000 is configured for static IP address 10.10.10.10 with the network mask 255.255.255.0. Configure Ethernet interface of your computer for an IP address from the same sub-network range. For example, 10.10.10.11/255.255.255.0

## Step 1: Submit Warranty Activation Request

Activate the product warranty (a pre-requisite for submitting any request for technical support). Go to https://xorcom.com/xorcom-product-warranty/, complete and submit the form found there.

Step 2: Powering Up the Unit

1. For safety reasons, if the line wiring exits the building, it is essential to ground the unit.
   Note: Not properly grounding this device will void your warranty!
   a. Connect a grounding tab to the grounding screw on the rear panel.
   b. Using 12-16 gauge wire, connect the grounding tab to a reliable ground.

| **Ethernet Port** | **USB2 Port** | **Power Supply** | **Grounding** | **HDMI Port** | **Audio Output** |
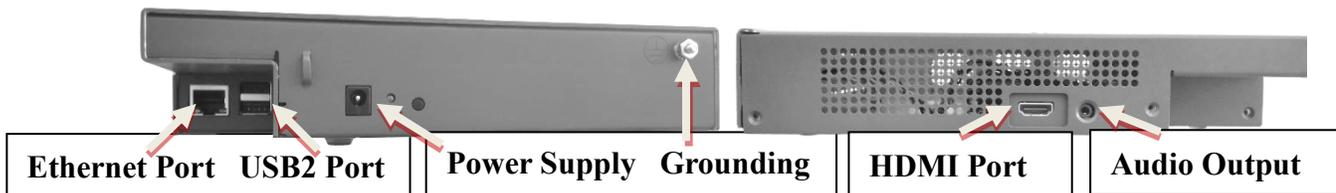
Figure 1: Ethernet & USB2 ports, power supply and grounding screw on Spark CXS1000 rear panel; HDMI and audio ports on Spark CXS1000 side panel.

2. Using a straight Ethernet cable, connect the Spark to your computer.
3. Connect the power cord to the Spark and turn on the power by pressing the blue button on the front panel. The device startup process takes about 30 seconds.

Step 3: Configure the Spark CXS1000

If the unit is equipped with FXS ports they are configured as CompletePBX extensions starting from number 3001.

In order to configure your device follow these steps:

a) From a computer's Internet browser enter the Spark CXS1000 IP address: http://10.10.10.10

b) You will be prompted to define a password for "administrator". Once you define a password you will be able to connect to the web interface as user **admin** with password that you defined.

Now you can modify your Spark CXS1000 CompletePBX configuration.

The *CompletePBX Reference Guide* can be found on the Xorcom Web site.

Step 4: Protect CompletePBX Against Unauthorized Access

Once you have **fully configured** CompletePBX we highly recommend that you use the following procedures and applications supported in CompletePBX to protect it against unauthorized access:

Change the Linux Password

The default password for the Linux root user is !x0rc0m!voip5472# It can be changed by using the Linux `passwd` command.

IP Protection

CompletePBX must be installed on a protected LAN and must not be directly connected to the public Internet. The LAN must be protected by a Firewall/NAT router.

Intrusion Detection (fail2ban) and Firewall

In order to maximize protection from external threats, the **fail2ban** process is activated, in addition to the internal firewall. Use the Admin|Security|Firewall and Admin|Security|Intrusion Detection dialogs to modify the internal firewall and intrusion detection settings.

Powering Down the Unit

In cases where you elect to turn off the IP-PBX, press and hold the blue power button for less than 5 seconds for a graceful shutdown, and for more than 5 seconds for an immediate shutdown.

Unit Status LED (Light Emitting Diode) Indicators

The Spark CXS1000 is equipped with varying LED indicators on the front panel, depending on the model.

Power Button Indicators

There are two LED indicators, each located on a different side of the blue Power On/Off button. The one on the left indicates activity of the micro SD card and the one on the right indicates the power status of the IP-PBX (blinking green during power-up, and steady green when ready for use).

Digital (BRI ISDN or E1/T1) Spark CXS1000 Models

Digital Spark CXS1000 models (models that have at least one digital ISDN BRI or E1/T1 port) have a vertical array of four status indicators on the left side of the front panel (**Fig 2**).

Fig. 2 – PRI/BRI Panel (pictured with additional optional 8 FXS or 8 FXO ports)

LED Label	Indication
PHONE	This yellow LED indicates that the Spark CXS1000 is supplying the necessary voltage for analog, PRI or ISDN telephone sets.
SYNC	This green LED is the synchronization. It blinks once the Spark CXS1000 is synchronized with the telephony modules.
ACTIVE	This red LED lights up when at least one PSTN / Analog phone is active.
ON	This green LED lights up when the Spark CXS1000 is powered.

Analog (FXS and/or FXO) Spark CXS1000 Models

The LED sets on the front panel of an analog Spark CXS1000 (**Fig. 3**) include:
- 4 LED indicators that indicate device status
- A green LED for each analog line that indicates port status

Figure 3: Spark CXS1000 with 16 analog ports and I/O ports

Note: Analog ports also have a red LED but this LED is never used to show line activity.
Once the unit is active, the status LEDs will indicate the following:

LED	Indication
ON	On – unit is functioning
ACTIVE	On – at least one of the analog ports is currently active
SYNC	Blinking– once ports have been synchronized with the Asterisk server
H/W	Off

For more information about the unit status and port status LED indicators refer to the **Astribank** manual on the Xorcom Web site: www.xorcom.com

Appendix

Most Spark CXS1000 base units can be upgraded to support up to two telephony modules. Each unit is supplied with the relevant cables, which should be connected as indicated in the photo below:

Cables for attaching telephony modules to the main board

Lexan left-panels for self-assembly

1st board connection

2nd board connection