

Com.X2 (4U Wall Mount) **Getting Started**



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www.farsouthnet.com

Welcome to the world of Comma intelligent Asterisk™ solutions! This leaflet will help you to get started with your new Com.X2 4U wall mount solution. This getting started guide addresses the basics of powering up and connecting the Com.X2 system.

For further information see <http://farsouthnet.com/mediawiki>

Description

The Com.X2 4U consists of the following major components:

- 4U wall mount cabinet with power reticulation
- Dual Core Atom server with Com.X software
- Up to 2 Comma iTAs - see Comma iTA Getting Started for more details

Hardware Installation

Remove the side and/or back panels of the cabinet and find the main power cord. Connect to a 220VAC mains supply.

Connect the network as follows:

- If you want to connect directly to a PC for initial configuration, connect the PC to a free port on the switch in the range 3 - 8 (normally ports 1 and 2 are used by the Comma iTAs) and set the PC to an IP address of 192.168.101.100
- If you want the Com.X2 to obtain its IP address via DHCP, connect port 25 (Gigabit Ethernet) to your LAN

Install telephony wiring:

- See <http://farsouthnet.com/mediawiki/index.php?title=Comma:Installation>

Accessing the Host server

1. The Com.X2 host server can be accessed via its serial port using a null-modem cable with the following settings:

```
baud rate: 115200
data bits: 8
stop bits: 1
parity: none
```

2. The default access details are:

```
user: comma
password: farsouth
```

3. The Com.X2 server comes pre-installed with Ethernet interfaces configured as follows:

Interface	DHCP client	IP	Netmask	Switch Ports	Access
LAN1 (eth0)	Yes	-	-	9 - 23 25	http ssh
LAN2 (eth1)	No	192.168.101.1	255.255.255.0	1 - 8	http ssh

Power-on

The Com.X2 does show LED activity on LAN ports and on the front LAN indicators if the X2 is connected to LAN, even when not powered on.

To ensure the server is powered on, one should look at the power LED directly to the left of the power and reset buttons.

Software Installation

The Com.X2 server comes pre-installed with the Comma Manager supporting the following:

- Ubuntu 8.04 LTS
- Asterisk (currently 1.4.29) with patches
- DAHDI and mISDN drivers with patches
- Comma iTA Manager and Firmware
- FreePBX 2.5.1
- Comma GUI

Ubuntu 8.04 compatible packages are available at <http://fsnpub.dnsalias.com/apt>

For User Guide and Developer information please see <http://www.farsouthnet.com> and <http://farsouthnet.com/mediawiki>

Configuration

1. The Com.X2 has been pre-configured with each iTA device sold with the unit (/etc/comma.conf), including the MAC address and IP address configuration of each unit.
2. The Dahdi and mISDN configuration files have also been pre-configured to match the configuration of the Comma units.
3. The comma manager, Dahdi, mISDN and Asterisk starts automatically on system start-up.
4. The GUI is accessible on via a standard web browser, login username and password is **admin admin**
5. Full system access is available via ssh, with username **comma** and password **farsouth**

NOTE: The Comma unit is reconfigured from the information on the server on every power-up or reset. Firmware upgrades made available on the Com.X2 host server thus become active on the next iTA restart.

Identifying connected iTAs

1. From the GUI, select Configuration → Hardware
2. Alternatively, from a ssh session on the host server, type the following:

```
comma-ls -v
```

3. Connected iTA devices will be identified by their MAC addresses and IP addresses if connected correctly, and the hardware configuration and software versions will be listed.
4. If IP addresses are not listed, the unit may be connected in the wrong order. Connect the units to different host server Ethernet ports. The units' MAC addresses can be viewed with their interface configuration in /etc/comma.conf in order to determine the correct connection order.

Logging and Diagnostics

1. The command line interface of the Comma iTA may be accessed from a ssh session:

```
comma-console <IP ADDRESS>
```

2. A log is maintained while the Comma Manager is running, typically found at /var/log/comma.log.

```
less /var/log/comma.log
```

3. The host server system log keeps a record of system warnings and errors and can be viewed as follows:

```
less /var/log/syslog
```

4. The Asterisk PBX server command line can be accessed form the host server as follows:

```
sudo asterisk -vvvr
```

Firmware Upgrade

The embedded firmware is downloaded to the Comma unit from the server at every power-up or reset. In order to upgrade:

```
sudo aptitude update  
sudo aptitude install commaimg
```