

# Com.X2 host server

## Getting Started



**farsouth**  
networks

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Welcome to the world of Comma intelligent Asterisk™ solutions! This leaflet will help you to get started with your new Com.X2 host server and Comma iTA solution. This getting started guide addresses networking and installation of the Com.X2 host server with one or more Comma iTAs and should be read in conjunction with the Comma iTA Getting Started guide.

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

### Description

The Com.X2 host server includes 4 LAN ports (1 - 4) that have been pre-configured to support LAN access, as well as access to iTAs.

### Hardware Installation

1. The Com.X2 host server is powered using the power adapter included with your server. Connect the power adapter to the host server and to mains supply and turn the server on.
2. Connect the Comma iTA units to the third and fourth LAN ports via crossed-over Ethernet cables.
3. Connect the Com.X2 host server to the LAN switch using the first Ethernet port using and a standard cable.

### 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 host server requests its IP address from the LAN / WAN via physical Ethernet port 1, (labelled the eth0 interface in the Operating System). This interface can be re-configured with a static IP in /etc/network/interfaces as follows:

```
auto eth0
iface eth0 inet static
address xxx.xxx.xxx.xxx
netmask 255.255.255.0
```

Note that the Operating System networking will need to be restarted after this configuration change:

```
sudo /etc/init.d/networking restart
```

### Software Installation

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

Interface	DHCP client	IP	Netmask
LAN1 (eth0)	Yes	-	-
LAN2 (eth1)	No	192.168.101.1	255.255.255.0
LAN3 (eth2)	No	192.168.102.1	255.255.255.0
LAN4 (eth3)	No	192.168.103.1	255.255.255.0

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

- a. Zaptel or DAHDI (no patches required) for PRI and analog
- b. mISDN with Comma patches for BRI

3. The Com.X2 server is pre-configured with fixed IP addresses on the Ethernet ports that iTAs are connected to.

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

For User Guide and Developer information please see <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.

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 host server, type the following:

```
comma-ls -v
```

2. 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.
3. 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 the Comma Manager directory by typing:

```
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 from 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:

1. Copy the new image file to `/var/comma/`
2. Update the `appimage=XXX` configuration record in the configuration file to the new file name
3. Restart Comma iTA:

```
comma-ls -r
```

4. In an Ubuntu based system, updating the package `commaimg` will result in updated firmware:

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