

# Digital Residential Gateway, DRG

INSTALLATION INSTR.



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# 1 GENERAL

The Digital Residential Gateway 22i (DRG22i), in conjunction with the MX-ONE™ Service Node adds the following connections to the small branch office solution:

- Of G3 faxes to an IP environment
- Of a legacy analog extension to an IP environment with access to a basic call

This document covers the installation of the DRG22i. For the other components, see the appropriate installation instruction.

## 1.1 TOOLS

To install a DRG22i, the following equipment is necessary:

- A PC with Internet Explorer (version 5 or higher).
- A Local Area Network (LAN) connection

## 1.2 PREPARATIONS

### 1.2.1 SITE SURVEY

It is important that the IP network infrastructure and traffic be analyzed prior to installation and a proper Quality of Service (QoS) mechanism be implemented to ensure high voice quality when connecting MX-ONE systems across an IP network.

Therefore, a site survey should be conducted to ensure that all parties agree on the actions needed to run high-quality Voice over IP (VoIP) in the customer's LAN or Wide Area Network (WAN) environment.

### 1.2.2 GENERAL PREPARATIONS

The following steps shall be followed in preparation of installing the DRG22i:

- Take a system dump of the MX-ONE if it is up and running, keeping the backup in a safe place.
- Ensure that the IP infrastructure provides the necessary QoS between the different IP gateways.
- Check that an IP address is available for the DRG22i.

## 1.3 DELIVERY

The following items are delivered with the DRG22i:

- Power supply
- Cable between DRG22i and the WAN
- Quick Guide

The following cables must be locally sourced:

- Between the LAN and PC
- Between the analog port and analog extension

## 1.4 UNPACKING

Check that the equipment has not been damaged during transport. Damaged equipment must be reported immediately and sent back.

## 1.5 MOUNTING

This document provides brief instructions for installing the DRG22i. It is possible to have two telephone lines and one internal connection for a computer over a broadband connection.

### 1.5.1 VERSIONS

The four different versions of the DRG22i are as follows:

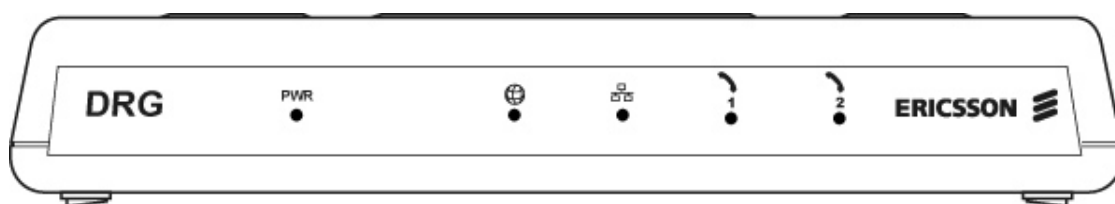
- DRG22i for EU, KDU 137 006/111
- DRG22i for US, KDU 137 006/112
- DRG22i for GB, KDU 137 006/113
- DRG22i for AU, KDU 137 006/114

The only difference is the power supply unit.





### 1.5.2 DESCRIPTION OF LEDS

The front contains five LED control lamps, 1 DRG22i Front Layout on page 4. For the purpose of each LED, 2 Description of LEDS. on page 5

The DRG22i should be placed on a flat surface, with the LEDs in plain sight.



**Figure 1: DRG22i Front Layout**

Symbol	Text	Description
PWR	Power	The power lamp indicates whether or not power is being supplied to the DRG.
	Line 1	The Line 1 LED will glow steadily when the line is activated by the system operator.
	Line 2	The Line 2 LED will glow steadily when the line is activated by the system operator.
	LAN	The LAN LED will glow when a link is detected, then begin to flash when transmitting is in progress.
	WAN	The WAN LED will glow when a link is detected, then begin to flash when transmitting is in progress.

**Figure 2: Description of LEDs.**

## 1.5.3

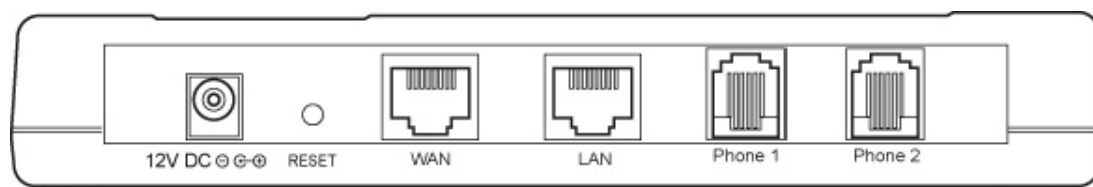
## CONNECTIONS

## 1.5.3.1

*Connecting the DRG22i*

To connect the DRG22i to an Ethernet connection, follow the steps below:

- 1) Connect one end of the Ethernet cable to the WAN port on the back panel of the DRG22i. Plug the other end into the Ethernet connection on the local LAN.
- 2) Connect the power cable to the power outlet on the back panel of the DRG22i. Plug the power supply adapter into the power source.

**Figure 3: Connecting the DRG22i**

A connection with the LAN infrastructure will now be established. When the Power and WAN LEDs are lit, the DRG22i is ready for use.

## 1.5.3.2

*Connecting Telephones*

It is possible to connect one or two telephones or faxes to the DRG22i with different telephone numbers.

**Note:** Only DTMF telephones can be connected to the DRG22i.

To make calls, it is necessary to set up the corresponding equipment on the PBX side, see the operational directions for *SURVIVABLE BRANCH NODE*, *SBN* and see operational directions for *IP EXTENSION*, *IP*.

To connect the telephones, follow the step below:

- 1) When the Line I and Line II LEDs are lit (this may take a few minutes), connect the telephones to the ports marked Phone 1 and Phone 2 on the back panel of the DRG22i. Use telephone cables with RJ11 connectors.

## 1.5.3.3

*Connecting a Computer*

To connect a computer, follow the steps below:

- 1) Use an Ethernet cable with an RJ45 connector to connect a computer to the LAN port on the back panel of the DRG22i.
- 2) When a computer has been connected successfully, the LAN LED should be lit. If the LAN connection is not working, the computer might need to be set up for TCP/IP.

**Note:** In order to fulfill electrical emission requirements (CE, FCC), use only shielded Ethernet cables.

## 1.5.3.4

*Operation*

The DRG22i should be left on at all times.

## 1.6

**POWER EQUIPMENT**

The DRG22i power supply adapter is suitable for both 110 V AC and 240 V AC mains supply.

Local regulations must be followed.

## 1.7

**GROUNDING**

Local regulations must be followed.

## 1.8

**POST-INSTALLATION MEASURES**

Make incoming and outgoing telephone and fax calls to verify operation.

Take a system dump.