S TO U CONVERTER

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TABLE OF CONTENTS

INTRODUCTION

arcareach|Sigma is a simple S-bus line extender product which converts a standard ISDN S-bus to a U interface. Two ports are available on the unit.

arcareach|Sigma allows two basic rate S_0 interfaces (i.e. I.430 compatible) to be converted to U interfaces (i.e. ANSI T1.601 compatible). This will allow an S-interface to be driven over a much greater distance by using the longer drive capabilities of a U interface. The U interface can then be converted back to an S interface using an ordinary NT1.

This manual outlines how **arcareach|Sigma** should be installed and its basic specification

SPECIFICATION

Input Supply Connection	**arcareach|Sigma** is designed to be plugged into a mains supply. 240V a.c. 50 Hz.
Mains Input Fuse	The mains input fuse is rated 200mA, and should only be accessed by authorised personnel.
Operating Temperature and Humidity	The operating temperature range is 50°C.
U interface power feeding option	Power feeding is available on each U interface port.

INSTALLATION

Unpack arcareach|Sigma

First unpack **arcareach|Sigma** and check for signs of damage in transit. If the unit or packaging is damaged this should be reported immediately to your supplier.

Take an Inventory

Assuming there is no damage, take an inventory of the parts supplied. Check that the items ordered were actually received.

arcareach|Sigma S-bus extender.

Check that the correct unit configuration has been received as marked on the label. This should have been specified on order. The specification section will explain what options are possible.

Cables for ISDN "S" interfaces - RJ45 plug to RJ45 plug (2 off).

This Manual.

Connection

arcareach|Sigma may be wall-mounted or desktop mounted.

The mains lead must be connected to the correct AC supply, as specified on the product label.

Line 1 "S" RJ45 port should be connected to the S-interface that is going to be extended and the "U" port to the cable driving the extension. Similarly Line 2 connectors may be used for the second line, if required.

The other end of the "U" connection should be connected to an NT1 to provide the remote "S" interface.

WARNING: - Do not connect the "U" port to "S" interface equipment, or vice versa.

DESCRIPTION

ISDN Connections

arcareach|Sigma has two ISDN S_0 ports and two U BRI ports. One S port and one U port make up one line. Therefore two lines are provided by the unit. The U interfaces can optionally provide 70V 1.5W to power terminal equipment or sealing current feed. This option is selected by jumpers internally fitted to the unit, and should be requested on order of the unit.

The S-interfaces are normally terminated with 100Ohm terminators. This termination may be removed by jumpers fitted internally. This option must be specified on order of the product.

LED Indicators

A power LED indicates that the unit is plugged in and switched on.

In operation, port LEDs indicate the operating level of each port:-

- A flashing red LED indicates that the port is in the process of activating layer 1
- An on-steady red LED indicates that the port is activated

Rear panel connections

The mains input cable exits through the back panel. An ON/OFF switch is also presented on the rear of the case.

Internal components

The unit has several options which control its configuration. None of these options are user accessible, and are factory configured to the required user options.

A mains input protection fuse is also fitted internally, and if this fuse blows then the unit must be returned for repair, or repaired by authorised service personnel. There are no user serviceable parts.

DESCRIPTION

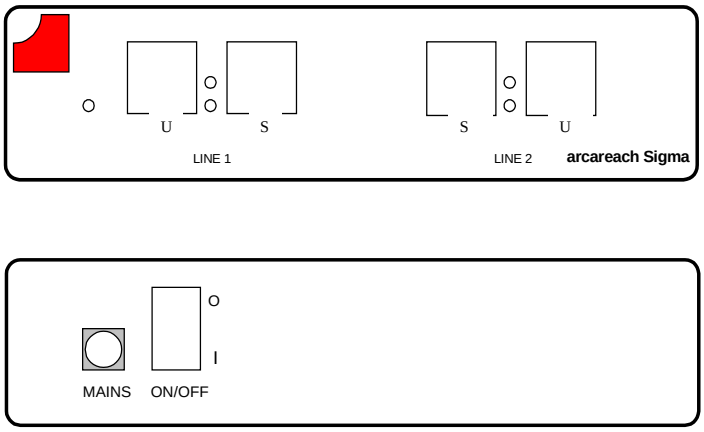

Figure 1 **arcareach|Sigma** Front and Back Panels

S Interface Pinout

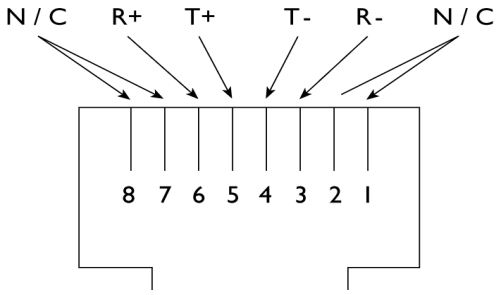

Fig 2a RJ45 Signals

U Interface Pinout

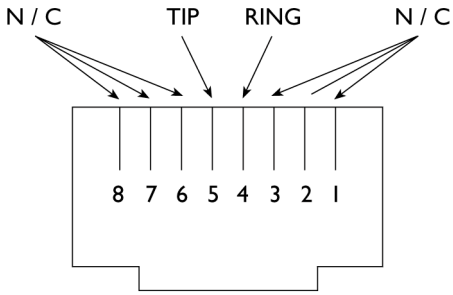

Fig 2b RJ45 Signals