

ISDN PABX System Installation Manual

Profi Line: AS 100 IT



AGFEO
einfach | perfekt | kommunizieren

Safety Instructions

- Equipment setup and maintenance should only be carried out by specially trained personnel.
- Caution! The PABX needs to be electrically earthed. To avoid danger to persons and possessions, plug the Euro protective grounding contact plug attached to the mains cable into a correctly installed, earthed socket outlet (protective grounding contact socket outlet)! This outlet should be positioned close to the PABX.
- Do not remove or plug in any cables during a storm.
- Lay the cables so that they cannot be stepped on or tripped over.
- Remove the mains plug before removing the patch panel cover.
- Switch off the PABX by removing the 230 V mains plug before connecting the access lines to the extensions and ISDN network. Danger to Life!
- Protective measure! In order to protect PABX components susceptible to electrostatic damage, briefly touch the telephone system housing with your fingers before beginning any installation work. This will drain off any electrostatic.
- Make sure that no liquid can enter the PABX. This may lead to short-circuits.
- Liability for any resulting damage, such as unintentionally maintained connections is excluded.
- If a power failure occurs, you will neither be able to use the PABX, nor can you make any telephone calls.

The PABX is designed to be connected to ISDN base terminals (DSS 1, system or multipoint interfaces).

You are allowed to connect all analogue terminal devices permitted in the analogue telecommunication network to the PABX's extension lines.

You can connect all DSS 1 ISDN terminal devices directly to an internal S0 bus permitted in an ISDN network. You can also connect two digital AGFEO system telephones to each internal S0 bus.

Any alternative use of the PABX is not in accordance with its intended purpose and is therefore not permitted.

The PABX has been issued a General Operation/Connection Permit.

The PABX fulfills the requirements of the conformity and safety regulations prescribed by law.

About this manual

These instructions solely apply to the PABX's ex-works settings. If new software supplied by the manufacturer results in modification of the PABX, individual parts of these instructions may no longer be valid.

All ISDN user facilities referred to in these instructions are supported by the PABX. Not all user facilities, however, are provided by network carriers.

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AGFEO AS 100 IT modular ISDN PABX featuring a 19 inch metal housing and a housing fan. The operating temperature can be read off the AS 100 ITs standby display. This system provides numerous upgrade possibilities using tried-and-tested AGFEO modules, and is tailored to 19 inch rack system IT environments. The basic installation is supplied with five free module slots and five blanking plates. Allowing you to create a powerful ISDN PABX perfectly tailored to your needs.

Minimum Setup

Either the connection module or a V-Paket 4000 module need to be installed in slot 0 to make the PABX function correctly.

Connection module (in slot 0)

Connection module featuring an external S0, a switchable S0 and two varioports allowing you to use ST 20 or analogue telephones and an analogue port.

V Module 410/402 (in slot 0)

V Module 410/402 featuring an external S0, a switchable S0 and two varioports allowing you to use ST 29 or analogue telephones and an analogue port, and a network socket for networking two AS 100 ITs.

AGFEO Module Slot Upgrades

AGFEO S0 Module 420

S0 Module 420 featuring two ISDN S0 basic rate connections; one external and the other switchable between external and internal depending on choice. Up to two digital ISDN system telephones can be connected to the internal ISDN connection.

AGFEO S0 Module 440

S0 Module 440 featuring two switchable ISDN S0 basic rate connections. This module allows you to connect eight digital telephones to the AS 100 IT at the same time.

AGFEO T Module 404

T Module 404 featuring four varioports for using analogue telephones or a/b telephones.

AGFEO T Module 407

T Module 407 featuring seven analogue ports with CLIP functionality.

AGFEO T Module 408

T-Module 408 featuring eight analogue ports (CLIP in connection with the T Module 407)

AGFEO TFE Module 402

TFE Module 402 featuring two interfaces for connecting door intercom systems with 4-wire TFE FTZ 123 D 12 specification (can be used as an all-or-nothing relay alternatively).

AGFEO TFE Module 403

TFE Module 403 featuring an interface for connecting a door intercom system with 2-wire TFE specification (CE interface) and an FTZ 123 D 12 TFE interface (can be used as a relay alternatively).

AGFEO DECT Module

Up to eight AGFEO DECT 30 system handhelds or other DECT GAP handhelds can be connected to the AGFEO DECT Module. If you want to fit the DECT Module to your AS 100 IT, you first need to check to see whether the conditions in your server room allow for this, as they are often screened. This results in a considerable reduction in the DECT Module's radio coverage.

AGFEO 1 LAN Module 310

The AGFEO 1 LAN Module 310 lets you set up your AGFEO AS 100 IT in a LAN. The module provides up to eight ISDN-over-IP channels.

AGFEO AIS Module 400

The AGFEO AIS 400 Module lets you upgrade the features on your PABX. You can record a personal "Message Before Answer" or on 'engaged' for up to two callers simultaneously. A 'Message Before Answer' can be played for each external line and you can choose between the caller initially receiving a message and then being connected or a message being played when a party or group is engaged.

You can also import your personal choice of music on hold using the AGFEO AIS Configurator supplied in the package.

The AGFEO AIS Module 400 features audio input for music on hold (MoH), a four-wire FTZ 123 D12 interface, a 2-wire CE interface for connecting door intercom systems and 2 12 volt sensor inputs for connecting motion detectors.

Technical Data

Specifications	modular ISDN PABX with 5 module take up slots in a 19" rack
Housing dimensions	3 HE x 19" x 31 cm (height x width x depth)
Weight	7,4 kg
Ambient temperature	
- Operation/storage	5 °C to 40 °C / -25 °C to +70 °C
Humidity	max. 70 % (non-condensing)
Power supply	230 VAC, +6%/-10%, 50 Hz
- Power consumption	P = 50 W, I _{Nom} = 300 mA
PC/printer interface	similar to RS 232C
- Coverage/level	3 m / +/- 5 V
- Connection	9pin. D-Sub. jack
Input external music on hold	e.g. via a CD or MP3 player's variable headphone outlet
- Input impedance	10 kOhm, asymmetrical
- Input voltage	max. 100 mVss
- Connection	3,5 mm stereo jack

AS 100 IT

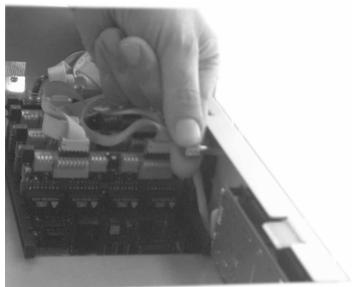
Installation Note

After disassembling the mounting brackets from the AS 100 IT, please be aware to reassemble the screws before switching on the AS 100 IT.

Opening the Cover on the AS 100 IT

Remove the screws on the back of the housing cover. Slide the cover backwards and remove it.
Please read the safety instructions first, each time you remove the cover!

Removing the Front Panel



You can remove the front panel after you have taken off the cover. To do so, loosen the knurled screws on each front panel. Then tilt the front panel forwards and pull it out.

Inserting the Modules



Slide the modules into the guide and press down until they fit securely into the slot.

At first, please read the module installation instructions (Item No. 1527122) before performing the installation.

AS 100 IT

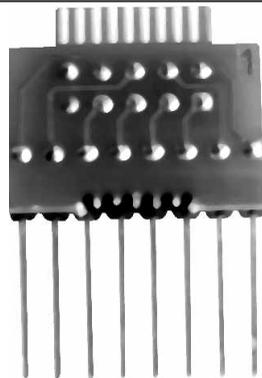
Inserting the Modules' Front Plates



To insert the front plate, hook the notch on the bottom edge into the appropriate groove. Push the cable through the opening in the front plate as shown in the photograph. Then shut the front plate and screw it tight using the knurled screws.

Connecting the Front Plates to the Modules

The plug strips on the front plates are numbered, pin 1 is marked with a red wire. Please make a note of the pinning for each front plate. [See pages 8-12]

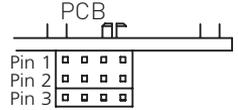


After you have connected the front plates to the modules, shorten the cables by tying them together using cable ties.

The Modules' Front Plates

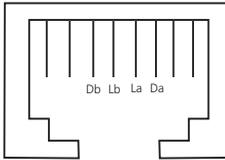
The correct front plate is required for each AGFEO standard module so that the module's terminals rest flush against the patch panel. Please refer to the reverse side of each plate to identify which module it has been designed for. A soldering point is located next to the name of the module for which the front plate has been designed. The wires marked red on the front plate connectors signify pin 1.

If a switchable S0 bus is switched to a module, the front plate has to be set appropriately by porting a jumper. The front plates' default settings are switched to 'internal' and pins 1 and 2 are connected. Pins 2 and 3 have to be connected to switch to 'external'. The jumpers are assigned to the appropriate S0s spatially.

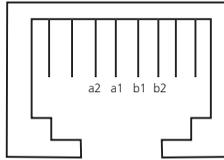


Patch Plug Assignment

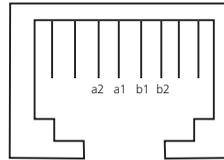
Plug Assignment on Analogue Port



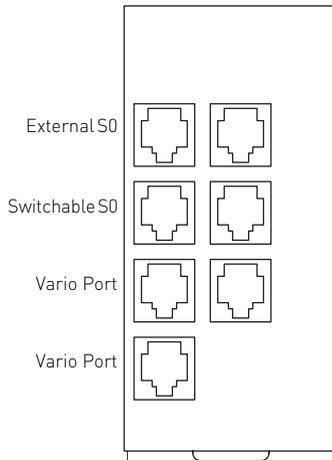
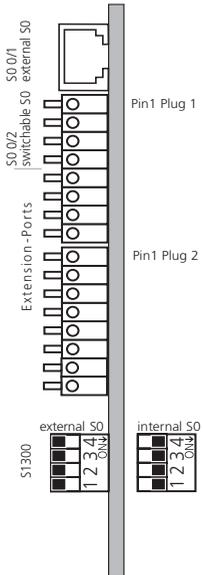
Plug Assignment on external S0



Plug Assignment on internal S0



The Connection Module's Front Plate

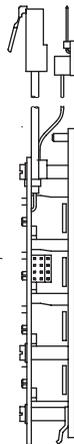


Analogue port

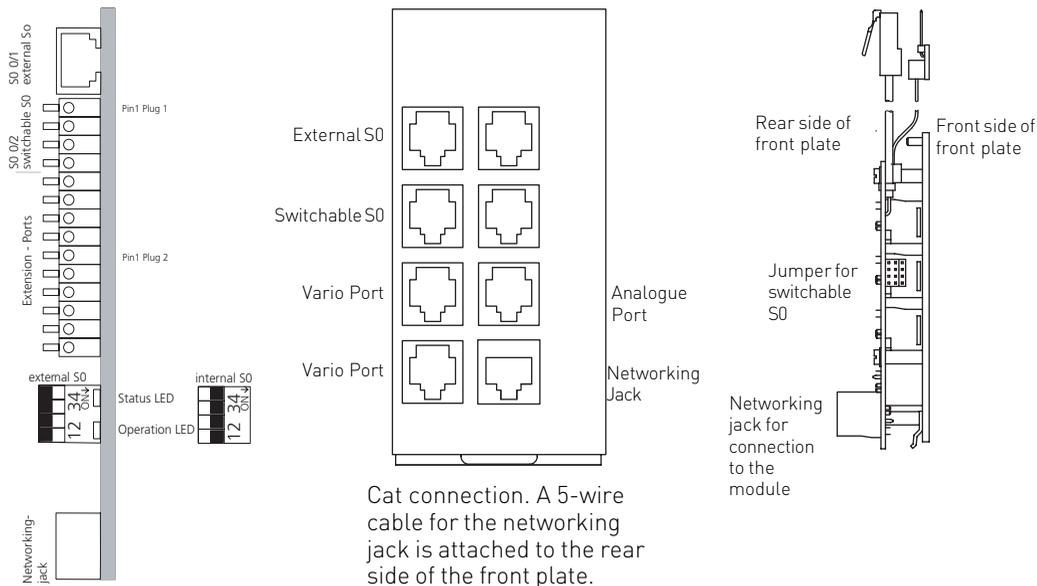
Rear side of front plate

Front side of front plate

Jumper for switchable S0

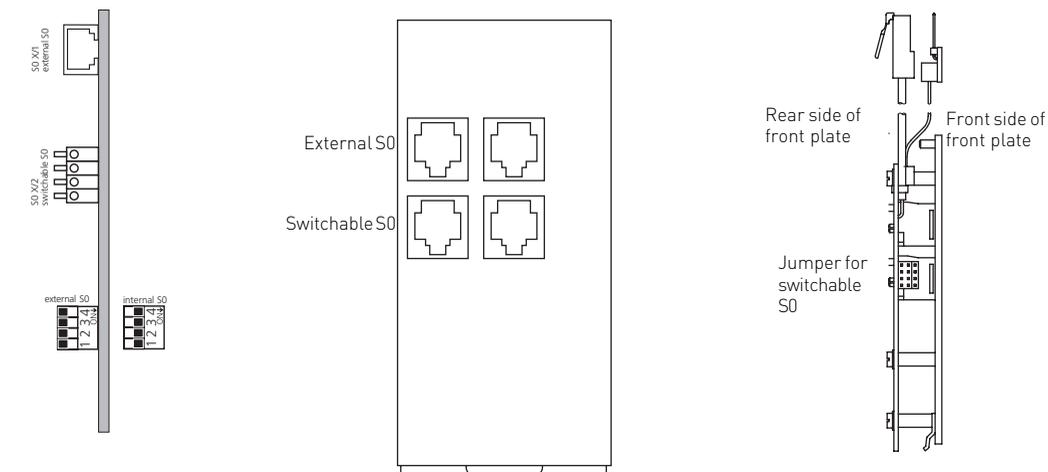


The Networking Module's Front Plate

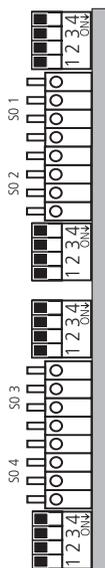


Cat connection. A 5-wire cable for the networking jack is attached to the rear side of the front plate.

The S0 Module 420's Front Plate



The S0 Module 440's Front Plate



Pin1 Plug 1

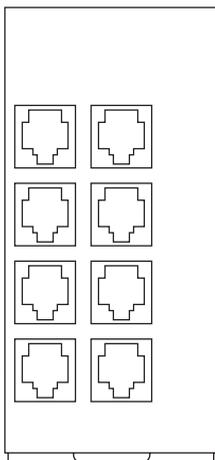
Pin1 Plug 2

Switchable S0-1

Switchable S0-2

Switchable S0-3

Switchable S0-4



Rear side of front plate

Front side of front plate

Jumper for switchable S0-1

Jumper for switchable S0-2

Jumper for switchable S0-3

Jumper for switchable S0-4



The T Module 404's Front Plate



Pin 1 Plug 1

Pin 2 Plug 2

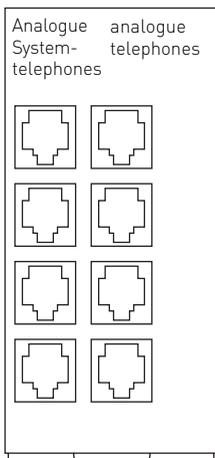
Analogue System- telephones

Vario Port 1

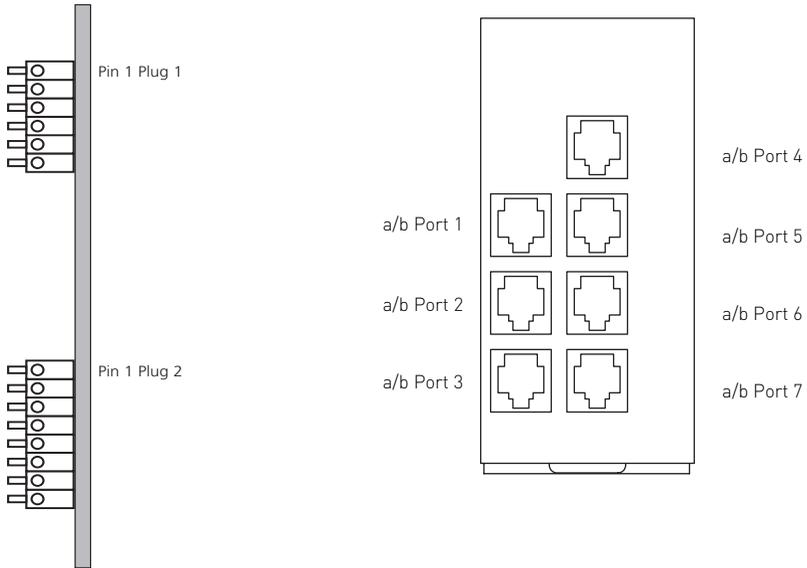
Vario Port 2

Vario Port 3

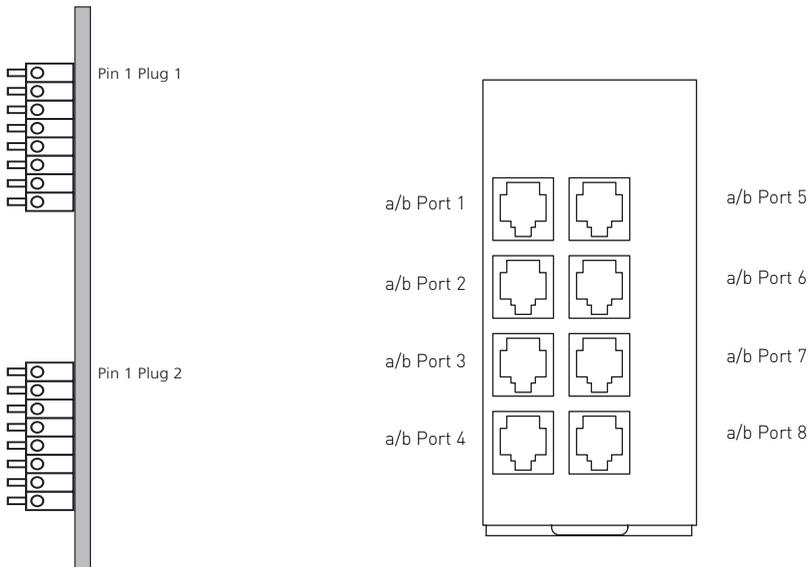
Vario Port 4



The T Module 407's Front Plate



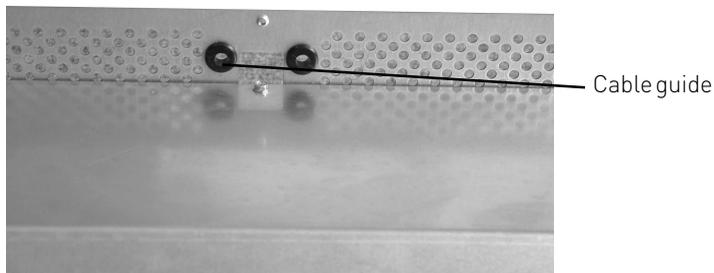
The T Module 408's Front Plate



AS 100 IT

TFE Modules and the DECT Module

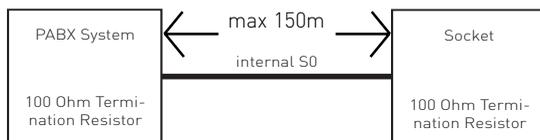
AGFEO does not supply front plates for TFE Modules or the DECT Module. If you want to connect a door intercom system or an external aerial to the DECT module, push the cable through the hole in the back of the housing reserved for this purpose.



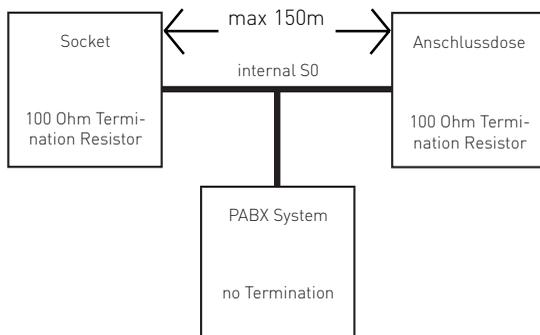
T-Shaped S0 Bus

Until now, AGFEO systems were not designed for split internal (t-shaped) S0 buses. The AS 100 IT now provides for this. However, the termination resistance assignment required has changed in this respect. While the PABX and the outlet furthest away have to be terminated with 100 Ohms, with t-shaped wiring, the PABX has no terminating resistance. The outlets to the left and the right of the system which are furthest away have to be terminated with 100 Ohms. The S0 bus cannot exceed the previous maximum length of 150 meters.

Old wiring:



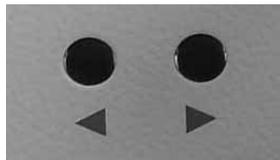
New wiring:



AS 100 IT

The AS 100 IT Display

You can read the system status, slot configuration and module configuration from the display on the AS 100. Simply use the two arrow buttons on the housing to do so.



AS 100 IT standby display

```
AS 40P
Di 01.01.2002 00:00
Operating Temperature 24.8°
System on Standby
```

If you press a button for longer than a second in standby display mode, the system's status is shown in the display.

```
Version      5.1
Checksum    3831
Operating Time
00000 Days 00 hrs 00 min
```

If the display remains in status mode, the display reading changes to operating mode after about 10 seconds. In this mode, the configuration for each individual slot (0 - 4) is seen in sequence for about five seconds and then returns to standby mode. Press any button to quit the operating mode.

If you press any button briefly in standby mode, you can page through the slot configuration manually. If you press the right-hand button, you can page through slots 0 - 4, ending in standby mode. You can do this in the opposite direction by pressing the left-hand button.

```
Modulslot   _ _ _ _ U
ConnectionModule
( ext int )
```

The exact configuration of the module is displayed if you press any button for longer than a second. For instance, for the connection module.

```
Extern1      Extern1
Herr Müller  ST30(15)
ab(11)       ab(13)
ab(12)
```

Press any button to quit the display mode.

Copyright

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AGFEO GmbH & Co. KG
Gaswerkstr. 8
D-33647 Bielefeld
Internet: <http://www.agfeo.de>