PBX System

Installation Manual

AS 200 IT





Safety Notes

- Installation and Maintenance of the System only by trained personnel.
- Important! To prevent personal injury and damage to equipment please ensure that the system is properly earthed and that the appropriate cable is connected in the mains plug.
- The System must be installed horizontal so that the connection panel is on the right hand side.
- Do not connect or disconnect any PSTN lines during a thunderstorm.
- Install lines and extensions in such a way that no one walks or trips over them.
- Disconnect the System from the mains supply before opening the connection panel.

 Before connection of lines and extensions please ensure that the system is unplugged from the mains supply. DANGER!
- Preventive measure! Before carrying out any installation work, please touch briefly the PC/ Printer socket of the telephone system. This will discharge any possible electrostatic charges, thus protecting the telephone system's electrostatically sensitive components.
- Do not allow liquids to enter the system as short-curcuits may occur.
- No liability will be accepted for consequential damages such as an unintentional continued connection of a line.
- The telephone system will not operate in case of power failure and you will not be able to make any type of call.

The PBX System can be connected to Basic Rate ISDN lines (DSS1, Point to Point, System Access, or Point to Multi Point, Standard Access) and may also be connected to analogue exchange lines.

Should you operate your PBX-System on an analogue exchange line, then please ensure that your telephone service provider has meter pulse sending disabled as this may otherwise interfere with speech quality of a call.

You may connect any equipment which has been approved for the connection to the Public Switched Telephone Network (PSTN) to the extension port of the system.

Any DSS1 ISDN device which has been approved for the connection to the ISDN telephone exchange may be connected to the internal SO Bus. In addition you may connect up to two digital AGFEO System Phones to each SO Bus.

Any other use of the telephone system which is not listed or described is prohibited.

The telephone system has been issued with a universal connection licence.

The system fulfils the specified conformity and safety regulations.

About this manual

The instruction is valid for the default setting of the system. If the system should be modified due to software made available through the manufacturer then it may be possible that sections of the instruction manual become invalid. All listed ISDN features will be supported by the system. However, some features may not be available through the Network Operator.

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The AS 200 IT Telephone System

The AGFEO AS 200 IT is a modular ISDN telephone system in a 19 inch rack housing with a temperature controlled cooling fan. The current operating temperature will be displayed when the system status is idle. This system with its various expansion facilities can be tailor made with the numerous AGFEO modules and is ideal for an IT environment in a 19 inch rack housing. The system will be delivered with 5 free module slots and 5 blanking plates. Due to this the system can be individual designed to a powerful ISDN telephone system to the highest specification.

AGFEO AS 200 IT initial configuration:

1 PC connection (RS 232)

1 USB connection for programming

1 AIS Module (on Motherboard)

1 Interconnection sockets to link 2 AS 200 IT (on Motherboard)

Optional Expansion Modules

AGFEO K-Module 524

The K-Module 524 offers two switchable ISDN BRI Lines (Trunk Access/Internal for System Phones and/ or ISDN Devices) and 4 Analogue Extensions (SLT's)

AGFE0 S0-Module 540

The S0-Module 540 has four switchable ISDN BRI Lines (Trunk Access/Internal for System Phones and/ or ISDN Devices. Up to 8 Digital System Phones can be operated with this module.

AGFEO T-Module 508

The T-Module 508 offers up to eight Analogue Extensions (SLT's) and includes CLIP.

AGFEO AL-Module 4504

The AL-Module 4504 offers up to four Analogue Trunk Lines.

AGFEO DECT SO-Base

Up to eight AGFEO DECT 30 System DECT's or GAP compliant DECT Handsets can be connected to this Base Station.

K-Module 544

The K-Module 544 offers 4 alarm input contacts, 3 Analogue Extensions or one FTZ 123D12 Door Phone, one two-wire Door Phone and one analogue two-wire doorphone (e.g. AGFEO TFE 2/4), two switching Relays, one audio ouptut symmetrical for loudspeakers, switchable as pre-amp output (asymmetrical) for an external amplifier and one Audio Input for external MoH.

UP0-Module 508

The UPO-Module 508 offers up to eight UPO ports.

Tecnical Data

Specification ModularISDN Telephone System with 5 Expansion Slots

and On board Interconnection in a 19" rack

Measurements 3 HE x 19" x 31 cm (High x Width x Depth)

Weight 6,4 kg

Ambient temperature

- Operation/Storage 5 °C to 40 °C / -25 °C to +70 °C

Humidity max. 70 % (none condensing)

Mains Connection 230 VAC, +6%/-10%, 50 Hz

- Power Consumption $P_{max} = 60 \text{ W}$

PC/ Printer Connection RS 232C
- Range/Level 3 m / +/- 5 V
- Connector 9 pin D-Socket

USB Connection Universal Serial Bus

- Cable Length 3 m

Installation of the System on telescopic tracks

The AGFEO AS 200 IT from Serial Number 001301 can be fixed to Telescopic Tracks from Accuride. These tracks enable the system to be drawn from the IT cabinet and giving easy access to all modules.

The following Telescopic Tracks can be fixed to the AS 200 IT:

DZ0201-0014 Overall length 356mm

DZ0201-0020 Overall length 508mm

Please enquire via your dealer or manufacturer of the IT cabinet if these tracks can be used/fixed in your IT cabinet.

Installation Note

After disassembling the mounting brackets from the AS 200 IT, please be aware to reassemble the screws before switching on the AS 200 IT.

Opening the Cover on the AS 200 IT

Remove the screws on the side 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 Patch Panel



You can remove the patch 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.

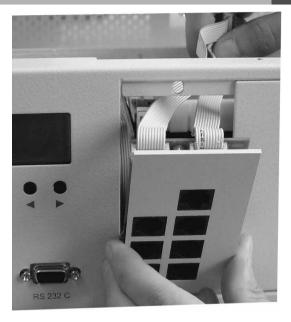
Inserting the Modules



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. 1101332) before performing the installation.

Inserting the Modules' Patch Panels

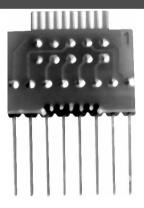


To insert the patch panel, hook the notch on the bottom edge into the appropriate groove. Push the cable through the opening in the front plate as shown in the photograph. Then shut the front plate and screw it tight using the knurled screws.

Connecting Patch Panel to Modules

The plug strips on the patch panels are numbered, pin 1 is marked with a red wire. Please make a note of the pinning for each patch panel. (See pages 8-10)





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

Patch Panel of Modules

The correct patch panel 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 patch panel to identify which module it has been designed for. A soldering point is located next to the name of the module for which the patch panel has been designed. The wires marked red on the patch panel connectors signify pin 1.

If a switchable S0 bus is switched to a module, the patch panel has to be set appropriately by porting a jumper. The patch panels' 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.

External



Internal

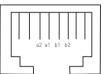


Patch Plug Assignment

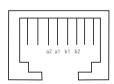




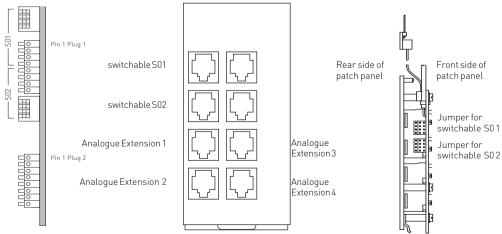




Plug Assignment on internal SNs

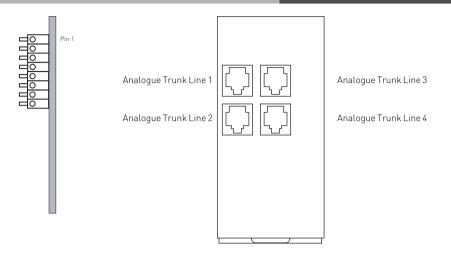


Patch Panel of the K-Module 524

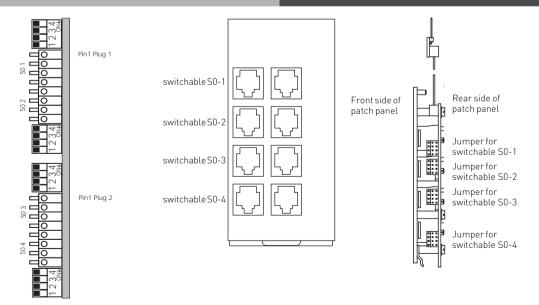


For notes referring to the plugs, please read "Connecting Patch Panel to Modules" on Page 7. For notes referring to the jumper setting of the Patch Panel, please read "Patch Panel of Modules" on Page 8.

Patch Panel of the AL-Module 4504

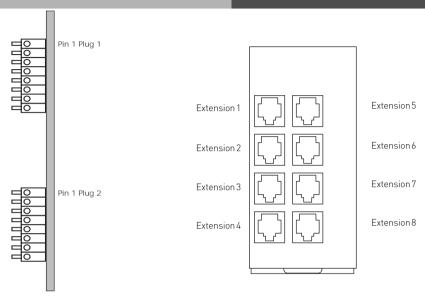


Patch Panel of the S0-Module 540



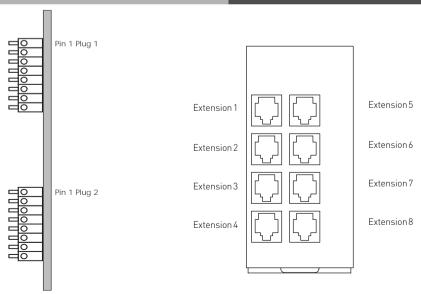
For notes referring to the plugs, please read "Connecting Patch Panel to Modules" on Page 7. For notes referring to the jumper setting of the Patch Panel, please read "Patch Panel of Modules" on Page 8.

Patch Panel of the T-Module 508



For notes referring to the plugs, please read "Connecting Patch Panel to Modules" on Page 7.

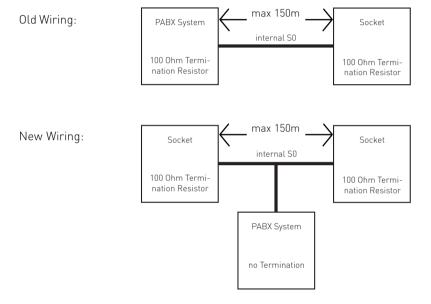
Patch Panel of the UPO-Module 508



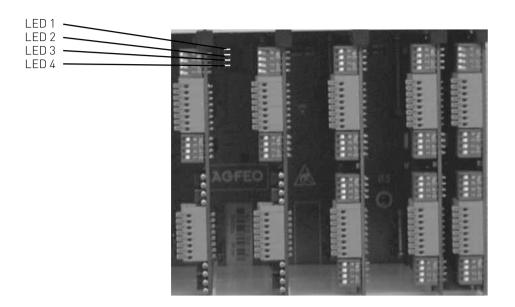
For notes referring to the plugs, please read "Connecting Patch Panel to Modules" on Page 7. 10

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.



LEDs of the AS 200 IT



	Permanentely Lit	Flashes
LED 1 (red)	System is operational	System being initialised
LED 2 (green)		Data being transferred
LED 3 (green)	System is connected to the computer via USB	USB Activity
LED 4 (green)	Interconnection Active	Interconnection not synchronised

Display of the AS 200 IT

You can read the system status, slot configuration and module configuration from the display on the AS 200 IT. Simply use the two arrow buttons on the housing to do so.



AS 200 IT standby display



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

Version Checksum	7.0 3831	
Operating T 00000 Days	ime 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 (1 - 5) 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 1 - 5, ending in standby mode. You can do this in the opposite direction by pressing the left-hand button.

```
Modulslot 1 _ _ _ _
K-Module 524
( ext int )
```

The exact configuration of the module is displayed if you press any button for longer than a second. For instance, for the K-Module 524.

External1 Mr. Miller	
ab(11) ab(12)	ab(13) ab(14)

Press any button to guit the display mode.

Declaration of Confirmity

EU-Konformitätserklärung

EC-Declaration of Conformity CE-Déclaration de Conformité

Der Hersteller:

AGFEO GmbH & Co. KG

The Manufacturer: Le Constructeur:

Adresse:

Gaswerkstr. 8 D - 33647 Bielefeld

Address: Adresse:

Erklärt, dass das Produkt: AS 200 IT

Declares that the Product: Déclare que le Produit:

Type:

Telefonanlage

Model:

AS 200 IT

Components:

die grundlegenden Anforderungen gemäß Artikel 3 der nachstehenden EU-Richtlinien erfüllt:

meets the essential requirements according to article 3 of the following EC-Directive: est conforme aux exigences essentielles d'article 3 de la Directive CE:

Richtlinie 1999/5/EG des Europäischen Parlaments und des Rates vom 09. März 1999 über Funkanlagen und Telekommunikationsendeinrichtungen und die gegenseitige Anerkennung ihrer Konformität

Directive 1999/5/EC of the European Parliament and of the Council of 09 March 1999 relating to radio and telecommunications terminal equipment, including the mutual recognition of their conformity Directive 1999/5/CE du Parlement européen et du Conseil du 09 mars 1999 concernant les radio et équipement terminaux de télécommunications, incluant la reconnaissance mutuelle de leur conformité

und dass die folgenden harmonisierten Normen angewandt wurden:

and that the following harmonised standards has been applied: et que les standards harmonisés suivants ont été appliqués:

EN 55022/2003 EN 55024/2003

Bielefeld, 3. November 2005

Ort und Datum der Konformitätserklärung Place and date of the declaration Lieu et date de la décleration

Phone : +49(0)5 21 44 70 9-0 FAX : +49(0)5 21 44 70 9-50 Name und Unterschrift Name and Signature Nom et Signature



The crossed out wheeled bin on the product means that this belongs to the group of Electro- and electronic apparatus.

In this context you are directed by the European regulation to dispose of used apparatus $% \left(1\right) =\left(1\right) \left(1\right)$

- at the point of buying an item of equal proportion / value
- at the local available collection point for disposal

With this you will participate in the reuse of material and valorisation of disused electricand electronic apparatus, which otherwise could be a health hazard and be negative to the environment.



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