### Installation Instructions

# HS-Module 30

Headset module

for retrofitting

ST 30 system telephones





- Do not remove or plug in the ST 30 connection cable during a storm.
- Lay the ST 30 cable so that it cannot be stepped on or tripped over.
- Make sure no liquid is allowed to enter the system telephone. This may lead to shortcircuits.
- Remove the western plug on the ISDN connection cable from the ISDN socket first before opening the system telephone ST 30 module slot.

To remove the ISDN connection cable, press the clip on the western plug (using a small screwdriver if necessary) towards the body of the plug and pull on the cable at the same time to remove it.

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#### Included in Supply Package

- 1 HS Module 30
- 1 RJ 11/RJ 11 cable (60 cm)
- 1 RJ 45/RJ 45 cable (60 cm)
- 1 Installation Instructions

#### System Documentation

The HS 30 headset module consists of a slot-in module for the ST 30 system telephone. This module allows the signaling of 'Off-hook', 'On-hook' and 'Ring' to be transmitted between the headset and the ST 30.

At the jack, the module provides an interface for signaling 'Off-hook', 'On-hook' and 'Ring'. The interface is supplementary to the standard, 4-core interface for listening and speaking on the headset jack (on the underside of the ST 30). Correspondingly, you need to connect your headset to the ST30 with 2 cables.

#### System Requirements

Software version 3.1 or above needs to be installed on your ST 30 system telephone for the module to function. The version installed appears on the display when you connect your telephone: for instance 'ST 30 Digital Ver. 3.1'. The telephone has to be updated before slotting in the module. The system firmware does not have to be updated!

The HS 30 functions on all AGFEO PBEs which support the ST 30 system telephone.

To update the telephone's software, press ≆,⊚ and ⊞ simultaneously. This procedure is described in detail in the Appendix 'Updating your ST30'.

#### Installing the Module

# You need to remove the western plug attached to the ISDN connection cable from the ISDN socket first before opening the system telephone ST 30 module slot!

To remove the ISDN connection cable, use your finger nail (or a small screwdriver) to press the clip on the western plug towards the body of the plug and pull on the cable at the same time to remove it.

Opening the Module Slot on your ST 30 System Telephone

Push the retainer on the cover to one side and raise the cover to open the module slot on the underside of your ST 30 system telephone. Remove the cover.



Diagram 1: connections and view of the underside of the ST 30 digital system telephone.

#### The Headset Module Jumper

You need to set the operating mode on both jumperblocks before installing the HS Module 30.



#### Installing the Headset Module

- Plug in the cable, lay it around the module and feed it through the opening in the ST 30 housing.
- Place the module upright in the upper and lower guide slots with the module's shortest edge pointing towards the earpiece connection.
- Carefully press the module down until you feel the plug connectors grip.
- Keep pressing until it can go no further.
- Close the module slot.



#### **Operating mode: DHSG**

The DHSG (Wireless Headset) interface is a newly designed industry standard which various headset and end device manufacturers have joined up with.

This bidirectional interface ensures that all telephones and headsets function together irrespective of the manufacturer, and provides a wide range of features. The telephone can signalise On-hook, Off-hook and Ring to the headset and the headset can signalise On-hook and Off-hook to the telephone the other way around. Prerequisite for this feature is that both telephone and headset conform to this protocol!

The DHSG interface requires an 8-core cable. The four inner wires of the 8-core cable transmit the audio data for listening and speaking, while the 4 outer wires transmit the control information. With the help of the module, the control information contained in the 4 outer wires can now be analysed. However, the audio data in the 4 inner wires must be transmitted to the headset jack on the underside of the ST 30 with a separate cable, as before.

#### Installation

- 1. Detach and plug in the ST 30 ISDN cable and check the telephone's software version when booting. It has to be 'Ver. 3.1' or higher. If this is not the case, perform an update first.
- 2. Detach the ISDN cable from the ST 30 and remove the plug. The display and LED should now be dark.
- 3. Set jumperblock 1 to DHSG
- 4. Connect the headset jack on the underside of the ST 30 to the corresponding jack on the headset (jack with the telephone symbol, but NOT the handset symbol) using the 4-core cable supplied.
- Caution: if the DHSG cable supplied by the headset manufacturer has an audio plug and a control plug, do not use the audio plug, but the 4-core cable supplied with the HS Module 30 instead.
- 5. Plug the 8-core cable supplied with the headset into the jack on the HS Module 30 and set jumperblock 2 to DHSG You can also use the cable supplied with the HS Module 30.

Exception: if you are using a headset from GN-Netcom and the HS 30 8-core cable supplied, you should set jumperblock 2 to 'AUX'.

6. Lay the cable around the module, plug in the module and feed the cable though the opening.

#### Operation with System Firmware 6.0 and Above

Allocate a headset button on the ST 30 or a dedicated STE 30 with the help of the TK-Suite Configurator or via the menu with the help of  $\ominus$  1. The headset is now ready for operation.

- You can now pick up or hang up on the headset using the headset button. If the set rings, you will hear it ringing in the headset earpiece. You can choose between accepting incoming calls on the ST 30 or the headset itself.
- To end the call, you can choose between hanging up with the headset button on the ST 30 or on the headset itself.
- You can switch off the ring tone on the ST 30 with the "Ring" button and still hear the call in the headset's earpiece. This is ideal for call centers or offices with multiple telephones.
- If the distant party hangs up first, the PDE also ends the call and hangs up on the headset. You do not need to hang up on the headset or the ST 30.

Operation with System Firmware prior to V. 6.0	

Allocate a headset button to the freely programmable buttons with the help of the TK-Suite Configurator or via the menu with the help of (). The button needs to be the bottom button in the left-hand row. The headset is now ready for operation.

- You can now pick up or hang up on the headset with the headset button. If the set rings, you will hear it ringing in the headset earpiece. You can choose between accepting incoming calls on the ST 30 or the headset itself.
- To end the call, you can choose between hanging up with the headset button on the ST 30 or on the headset itself.
- If the distant party hangs up first, the PDE also ends the call and hangs up on the headset. You do not need to hang up on the headset or the ST 30.

#### **Operating Mode: AUX**

This mode of operation is only presently authorised for headsets from GN-Netcom with an AUX jack. Further authorisation can be proofed on request.

In this mode of operation, the telephone can signalise an incoming call to the headset, and the headset can signalise 'On-hook' and 'Off-hook' to the telephone. A ringing tone can only be signalised in 'On-hook' mode however. That means that an incoming call picked up on the headset also has to be put down on the headset to be able to hear the ringing tone in the earpiece next time there is an incoming call.

Caution! If the distant party hangs up first, the system ends the call automatically. You also have to hang up on the headset itself as well.

#### Installation

- 1. Remove and plug in the ST 30 ISDN cable and check the telephone's software version when booting. It has to be 'Ver. 3.1' or higher. If this is not the case, perform an update first.
- 2. Detach the ISDN cable from the ST 30 and remove the plug. The display and LED should now be dark.
- 3. Set jumperblock 1 to 'AUX'.
- 4. Connect the headset jack on the underside of the ST 30 to the corresponding jack on the headset (jack with the telephone symbol, but NOT the handset symbol) with the 4-core cable supplied.
- 5. Plug the 8-core cable supplied with the HS Module 30 into the jack on the HS Module 30 and set jumperblock 2 to 'AUX'. Plug the other end into the jack marked 'AUX'. Lay the cable around the module, plug in the module and feed the cable though the opening.

# Operation with System Firmware 6.0 and Above

Allocate a headset button on the ST 30 or a dedicated STE 30 with the help of the TK-Suite Configurator or via the menu with the help of  $\bigcirc$  1. The headset is now ready for operation.

- If your set rings and the headset is hung up, you will hear the ringing tone in the headset's earpiece. You can then accept the incoming call on the headset.
- To end the call, press the appropriate button on the headset.
- If your headset is off-hook, you can accept and end a call with the headset button on the ST 30. However in this case, you will not hear any ringing tone.

#### Operation with System Firmware prior to V. 6.0

Allocate a headset button below and to the left of the freely programmable buttons with the help of the TK-Suite Configurator or via the menu with the help of rate. The button must be positioned at the bottom left! The headset is now ready for operation.

- If your set rings and the headset is hung up, you will hear the ringing tone in the headset's earpiece. You can then accept the incoming call on the headset.
- To end the call, press the appropriate button on the headset.

If your headset is already off-hook, you can accept and end a call with the headset button on the ST 30. However in this case, you will not hear any ringing tone.

#### Updating your ST30

To update the telephone's software, press 0 and 0 simultaneously. Select Software Update and then press 2 immediately afterwards. If you wait too long before pressing 2, the ST 30 menu window will disappear and you will find yourself back in the basic menu. Press arrow button '0' to return to the required menu.

Press 4 to update the software.

Enter the telephone number of the UpdateServer: 0049 521 447 099 50

If necessary, first enter '0' for an outside line, if spontaneous outside line seizure is not set: 0 0049 521 447 099 50

Press 📧 to confirm.

The Update Server will be dialed and the update started.

The update takes approximately 90 seconds. Your ST 30 then logs on to the PBE again. On starting up, the current software status will be shown on the display, signifying that the update procedure has come to an end.

#### **Headsets Tested by AGFE0**

The following headsets have been tested by AGFEO for functionality with the HS Module 30:

Manufacturer	Model	Settings
Plantronics	CS60 in conjunction with adapter AP-1	TX slide switch to 'C' RX slide switch to '1' Configuration rotary switch to '1'
GN-Netcom	GN 9120 DHSG	Switch setting 'G'

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