Assembly Instructions

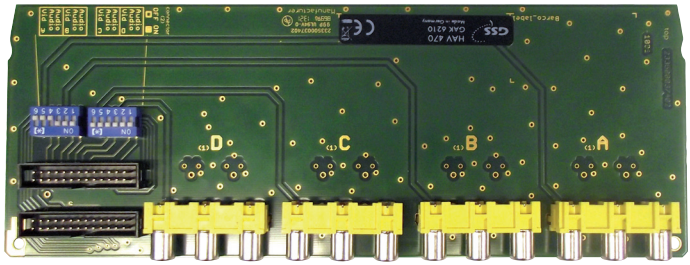
English

Grundig SAT Systems

Head-End Station STC 160

4 x AV Connection Panel

HAV 470



Notes on the Assembly Instructions.
As well as this supplementary Assembly Instructions, the Assembly Instructions for the STC 160 apply.

CE

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1 Safety regulations

- The standards EN/DIN EN 50083 resp. IEC/EN/DIN EN 60728 must be observed.
- Do not perform installation and service work during thunderstorms.
- Assembly, installation and servicing should be carried out by authorised electricians.
- Switch off the operating voltage of the system before beginning with assembly or service work.
- Avoid short circuits!
- Observe the relevant standards, regulations and guidelines on the installation and operation of antenna systems.
- To ensure electromagnetic compatibility, make sure all connections are tight and the covers are screwed on securely.
- No liability is accepted for damage caused by faulty connections or inappropriate handling of the device.

Check the head-end station according to the safety instructions listed in their assembly instruction.

Take precautions to prevent static discharge when working on the device!

Electronic devices should never be disposed of in the household rubbish. In accordance with directive 2002/96/EC of the European Parliament and the European Council from January 27, 2003 which addresses old electronic and electrical devices, such devices must be disposed of at a designated collection facility. At the end of its service life, please take your device to one of these public collection facilities for proper disposal.

2 General information

2.1 Scope of delivery

1 Connection Panel HAV 470
4 Triple Cinch cable
1 26 pin ribbon cable
1 Brief assembly instructions

2.2 Meaning of the symbols used

Important note

—> General note

• Performing works

2.3 Technical data

The devices meet the following EU directives:
2006/95/EC, 2004/108/EC
The product fulfils the guidelines and standards for CE labelling (page 12).

Unless otherwise noted all values are specified as "typical".

Audio Inputs:
Impedance:..... 47 kΩ
Audio level: .....0.5 V_{rms}

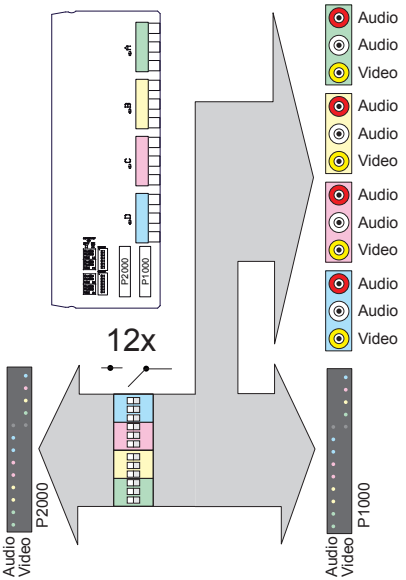
Eingänge Video:
Impedance:.....75 Ω
Video level:.....1 V_{pp}

Anschlüsse:
CVBS video connectors (Cinch): 4
Audio connectors (Cinch): .....4 x 2
AV connectors (26-pin socket):.....2

2.4 Description

The quadruple AV connection panel HAV 470 connects 4 analogues audio and video signals from modules with AV 26 pin sockets with modules with cinch sockets.

The Cinch sockets are permanently connected to the AV socket P1000. Via DIP switches the contacts of the AV socket P2000 can be connected individually to AV socket P1000.



Connection variants

4 x Cinch AV ➡ AV socket P1000

Feed of external AV signals into the quadruple modulators HFM 470, HMM 470 (OIRT), HMS 470 (OIRT), HMS 480 (OIRT) or HMM 480 (OIRT).

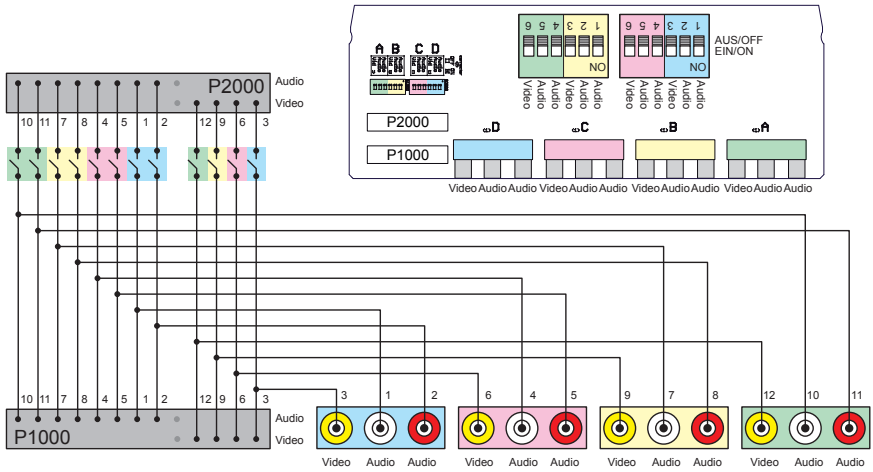
AV socket P1000 ➡ 4 x Cinch AV

Feed of AV signals of the modules HDC 470 CI AV, HDC 480 CI AV, HDCT 460 AV, HDCT 461 AV into the modules HDE 164 or HDC 166.

Cinch AV + AV socket P2000 ➡ AV socket P1000

– 1…3 cinch AV signals and 3…1 AV signals of socket P2000 can be output at P1000.
– Video signals of socket P2000 combined with cinch audio signals can be output at P1000.

Block diagram



You can find the current assembly instructions on the website "***www.gss.de/en***".

The AV connection panel is designed exclusively for use in the STC 160 head-end station.

3 Installation

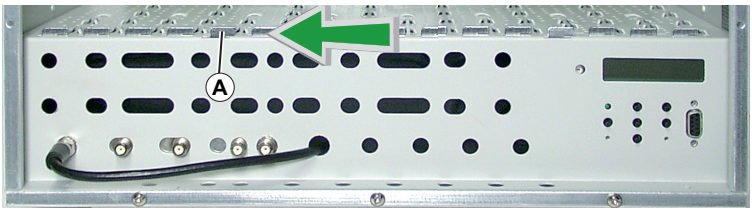
– Ensure the head-end station is mounted so it will not be able to vibrate. Avoid, for example, mounting the head-end station onto a lift shaft or any other wall or floor construction that vibrates in a similar way.
– Before installing or changing a module, switch off the head-end station or unplug the power cable from the mains power socket.

– Take measures to protect against ESD!

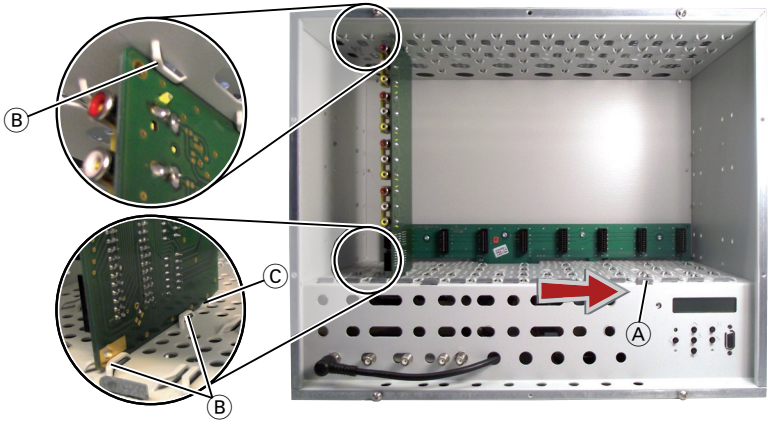
• Open the housing of the head-end station in accordance with the assembly instructions for the STC 160.

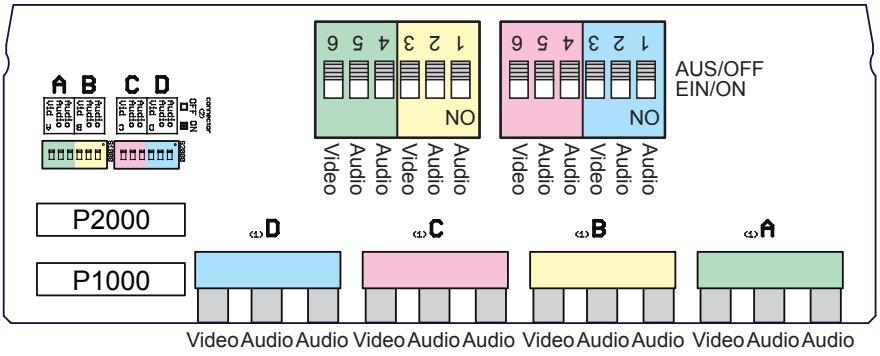
– When installing a connection panel, make sure that it is inserted between signal source and signal load in the **short** grooves **without** contact strip on the board at the rear wall of the housing.

- Open the housing of the head-end station in accordance with the assembly instructions for the STC 160.
- Open the locking device Ⓐ in the direction of the green arrow.



- Insert the connection panel in a shorter groove Ⓑ between two module slots and gently slide it into the head-end station until it locks Ⓒ.
- After installing the connection panel close the locking device Ⓐ in the direction of the red arrow.





The possible connections depend on the usage of the AV connection panel (see page 2).
Via the DIP switches the individually contacts of P2000 can be connected to the P1000 and the cinch sockets. Connect only needed contacts. Avoid parallel connections of sources and sinks.

FEED-IN OF EXTERNAL AV SIGNALS INTO QUADRUPLE MODULATORS

4 x Cinch AV ➡ AV socket P1000

Feed of external AV signals into the quadruple modulators HFM 470, HMM 470 (OIRT), HMS 470 (OIRT), HMS 480 (OIRT) or HMM 480 (OIRT).

- Connect the external devices via cinch cables to the cinch sockets of the module.
- Connect AV socket P1000 to the AV socket of a corresponding quadruple modulator.

CONVERSION OF INTERNAL AV SIGNALS TO ASI OR LAN

AV socket P1000 ➡ 4 x Cinch AV

Feed of AV signals of the modules HDC 470 CI AV, HDC 480 CI AV, HDCT 460 AV, HDCT 461 AV into the modules HDE 164 or HDC 166.

- Connect AV socket P1000 to the AV socket of a corresponding QPSK or COFDM to AV converter.
- Connect the module HDE 164 (ASI) or HDE 166 (LAN) via cinch cable to the cinch sockets of the module.

Combination of external and internal signals

Cinch AV + AV socket P2000 ➡ AV socket P1000

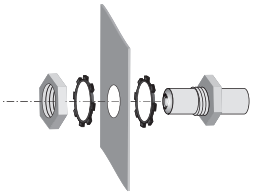
– 1…3 cinch AV signals and 3…1 AV signals of socket P2000 can be output at P1000.
– Video signals of socket P2000 combined with cinch audio signals can be output at P1000.

- Connect the external audio and/or video signals via cinch cables to the cinch sockets of the module.
- Connect AV socket P2000 to the AV socket of a corresponding QPSK or COFDM to AV converter.
- Connect AV socket P1000 to the AV socket of a corresponding quadruple modulator.
- Using the DIP switches the desired signals of P2000 can be switched to P1000.

—> Connect only needed contacts. Avoid parallel connections of sources and sinks.
—> Therefore observe the signal assignment of the DIP switches (page 8). A…D indicate the channel strips of the modules connected to P1000/P2000.

3.3 EMC REGULATIONS

To comply with the current EMC regulations, it is necessary to connect the lines leading in and out of the head-end station using cable terminals.
When mounting the module in a head-end station which is installed in a 19" cabinet, make sure the connections leading in and out for the 19" cabinet are made using cable terminals.



Tighten the nuts on the cable terminals until the teeth on the lock washer have penetrated the exterior coating and a good connection is made between the housing and cable terminals.

4 Final procedures

After installing the head-end station, upgrading accessories or installing modules it is necessary to tighten all cable connections, cable terminals and cover screws in order to maintain compliance with current EMC regulations securely.

- Mount the base plate and the front cover (see STC 160 assembly instructions).

Declaration of CE conformity

GSS	**Konformitätserklärung** **Declaration of Conformity** **015/ 13**	CE

Der Hersteller/Importeur The manufacturer/importer	**GSS Grundig SAT Systems GmbH**
Anschrift / Address / Adresse	**Beuthener Straße 43, D-90471 Nürnberg, Germany**

erklärt hiermit eigenverantwortlich, daß das Produkt:
declare under their sole responsibility that the product:

Bezeichnung / Name / 4Description	**4x AV - Anschlussplatte**
Type / Model / Type	**GSS HAV 470**
Bestell-Nr. / Order-No.	**GAK 6210**

folgenden Normen entspricht:
is in accordance with the following specifications:

EN 50083-2:	***2012***	***EN 60950:***	***2006***
EN 50581:	***2012***	***EN 60950-1 +A11 :***	***2009***
		EN 60950-1 +A1 :	***2010***

Das Produkt erfüllt somit die Forderungen folgender EG-Richtlinien:
Therefore the product fulfils the demands of the following EC-Directives:

2006/95/EG	**Richtlinie betreffend elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen** **Directive relating to electrical equipment designed for use within certain voltage limits**
2004/108/EG	**Richtlinie über die elektromagnetische Verträglichkeit** **Directive relating to electromagnetic compatibility**
2011/65/EG	**Richtlinie zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronik Altgeräten** **Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment**

Nürnberg, 12. Juni 2013

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