

# CT130-EHS | CT130-DHSG | CT130-CALOG

## Wireless headset systems on Siemens LF-workstation switch USB-Adapter CT130

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### Product characteristics

## Plantronics wireless headset systems on Siemens NF-workstation switch USB-Adapter CT130

The EHS-adapters in the version CT130-EHS, CT130-DHSG and CT130-CALOG are adaptation moduls between the Siemens NF-workstation-switch-USB-Adapter and the wireless headset solutions of the companies Plantronics, Sennheiser and GN Netcom.

The adapter versions differ in functionality and purpose.

The business version (CT130-EHS supports the wireless Plantronics headset systems CS60, CS70, CS351/361 as well as Savi Office. The connection works by using the digital control output - Plantronics Serial Bus - (PSB) of the headset cradle.

The robust Plantronics wireless headset solution was developed for a 24/7 use in control centers. A modified solution with integrated logic control and additional features is called CALOG. Apart from the call answer and termination exists a special highlight in the multiplex functionality of the Push-To-Talk (PTT)-button and external button, respectively. During a call the control functions could be activated using a keystroke, for example to open a door lock. This product is connected with the CT130-CALOG adapter.

The DHSG-adapter CT130-DHSG realizes the transfer and the bidirectional headset control with **DHSG**<sup>1</sup> headset solutions.

This feature makes it possible to receive calls pushing a button on the headset or on the telephone or base station.

Examples for comfortable wireless headsets with DHSG standard are products of the following manufactures: Plantronics, GN Netcom and Sennheiser.

### Compatible wireless headsets

#### Business Version (p. 2-3) CT130-EHS

Plantronics  
CS60 | CS70 | CS351  
CS 361 | Savi Office

#### Business Plus Version (p. 4-6) CT130-DHSG

Plantronics  
CS60 | CS70 | CS351  
CS361 | Savi Office

GN Netcom  
9120 | 9350 | 9460  
6470 | 9470

Sennheiser  
BW 900 | DW Office

#### Control Center Version (p. 7-10) CT130-CALOG

Plantronics  
CA12CD - modified  
(CALOG)



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### Business Version CT130-EHS

#### Mode of Operation, control and configuration

Inside the adapter the digital control protocol will be converted from Plantronics (PSB) to analog input and output parameters.

Using the jumper inside the adapter the cable connection configurations and the call options will be chosen. The schematic illustration on page 5 shows the jumper configuration at delivery status.

At the 8-pin RJ45 connection cable the wiring is as follows: IN 1 and OUT 1 (as shown in the manual Siemens CT130).

With the jumpers 1,2,3 at the jumper region A the cable connection configuration of the input of the CT130 is arbitrary.

The modulation of the configuration of the output signal from CT130 could be determined by the jumper pairs 1 and 2 at the jumper region B.

The call trigger from the output, directed to CT130 will be determined with the jumper region C. If the Jumper C is not set, an impuls of at least 10 ms is enough to activate the call automatically. During this continuous call, the impulse will be converted to a call signal at the headset with an 1.2 sec duration.

#### Compatible wireless Plantronics headsets of business version CT130-EHS



CS 60



CS 70



CS 351/361



Savi Office



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## Wireless headset systems on Siemens LF-workstation switch USB-Adapter CT130

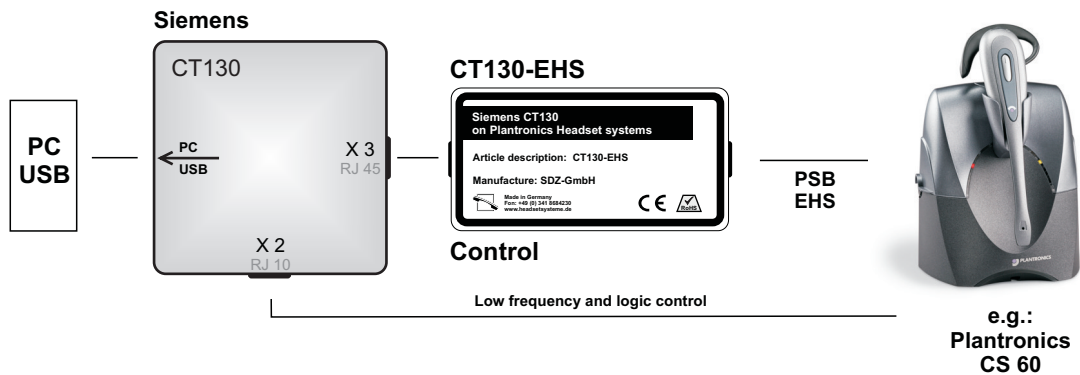
### Support of two call options:

- ✗ Continuous ringing depending on closing time of raising delay. A call cycles of an 1.2 sec and a 2 sec break will be generated at the wireless headset.
- ✗ The call initiation will become a ringing 1.2 sec (2 double ringings – delivery status).

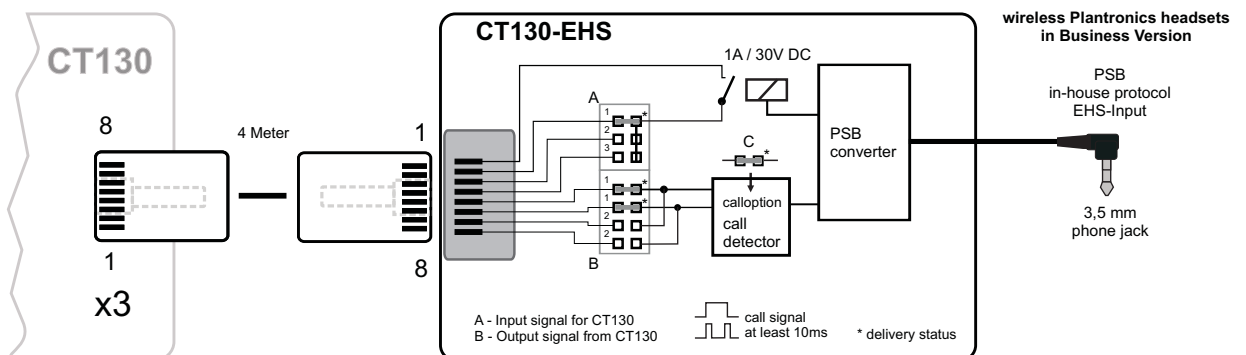
### Functions

- ✗ Call receiving and call completing at the headset.
- ✗ Call activation at the cradle of the mobil handset.
- ✗ Logic control at the CT130 for the headset status ON/OFF.

### CT130-EHS



### Schematic board illustration CT130-EHS



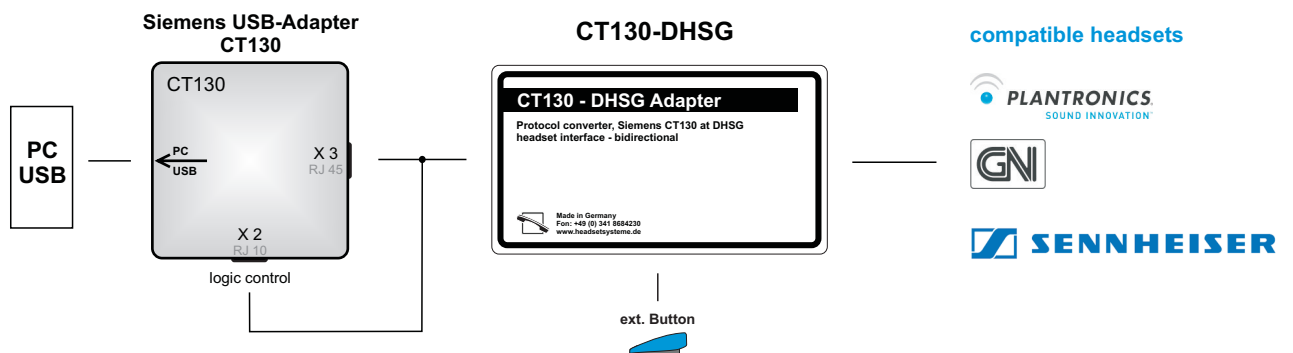
# CT130-EHS | **CT130-DHSG** | CT130-CALOG

## Wireless headset systems on Siemens LF-workstation switch USB-Adapter CT130

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### Business Plus Version CT130-DHSG - bidirectional

**Connection and bidirectional control wireless headset systems  
at DHSG<sup>1</sup>-interface at Siemens USB-Adapter CT130**



#### Product characteristics

The CT130-DHSG-Adapter operates bidirectionally. This feature enables a two-way control between the headset cradle and the phone. A telephone call can be received and terminated on the headset or on the phone.

The adapter converts the CT130 control-protocol into the DHSG headset protocol. The used headset technique is not proprietary. Furthermore an optional connection for a external pedal button for the control of the headset is integrated.

An integrated link plug (bridge one) switches the mode of operation on "send PTT" when the jumper is open. This means that the phone is controlled only after a incoming call.



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### Technological functionality

#### [Link: X2 and X3 on CT130](#)

**Call** for headset cradle, 1:3. The incoming call-signal will be transmitted over X3, pin 5 and pin 6 (DHSG-protocol) to the headset cradle in real-time.

#### [Calling acceptance by CT130](#)

CT130-Control (output-signal X3, pin 7 and pin 8): ON/OFF. Managed by converter and will be sent to headset cradle (DHSG). At the same time the control-signal „Answer a telephone call“ is sent over input CT130, X3, pin 1 and pin 2.

#### [Call signal stop](#)

Open X3, pin 7 and pin 8, signal over X3, pin 1 and pin 2 unlinked by the converter.

#### [Calling acceptance over wireless headset](#)

Answering and termination will be managed by pressing on the headset-button. The headset cradle DHSG-protocol is converted into the switch-signal to the CT130, link X3 (pin 1 and pin 2). (calling acceptance and hang up).

For system synchronisation the CT130 must be send a response (ON/OFF) to link X3, pin 7 and pin 8 to the CT130 converter. Afterwards the converter sends a DHSG protocol command to the headset cradle.

The trigger criterion (active ON) on X3 (pin 7 and pin 8) must be present as long as the signal exists on pin 1 and pin 2.

#### [External pedal button](#)

##### **Function calling acceptance using external button:**

- × call-signal on link X3, pin 5 and pin 6 switching by call-frequency → causing DHSG-signal on headset cradle
- × external button is pressed → DHSG-Code is sent to the cradle → link on X3, pin 2 and pin 2 will be closed → call answering
- × feedback signal → active on link X3, pin 7 and pin 8 will await for the confirmation → code will be sent to cradle for synchronisation.



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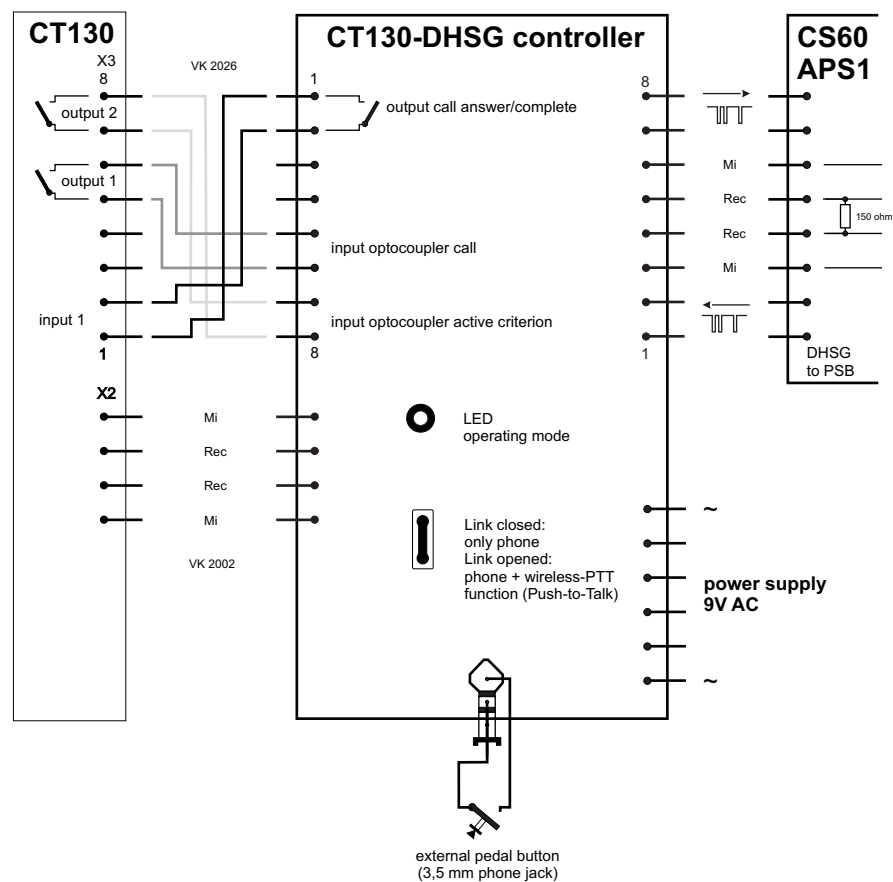
### Functions special

### Function Call by ext. button

- ✗ Ext. button is pressed → converter opens link X3, pin 1 and pin 2.
- ✗ Link CT130 (active criterion) X3, pin 7 and pin 8, open.
- ✗ The converter sends OFF-Code to headset cradle.
- ✗ Wireless headset OFF (stand by).

All operations are free in order and can be combined.

## Connector pin assignment

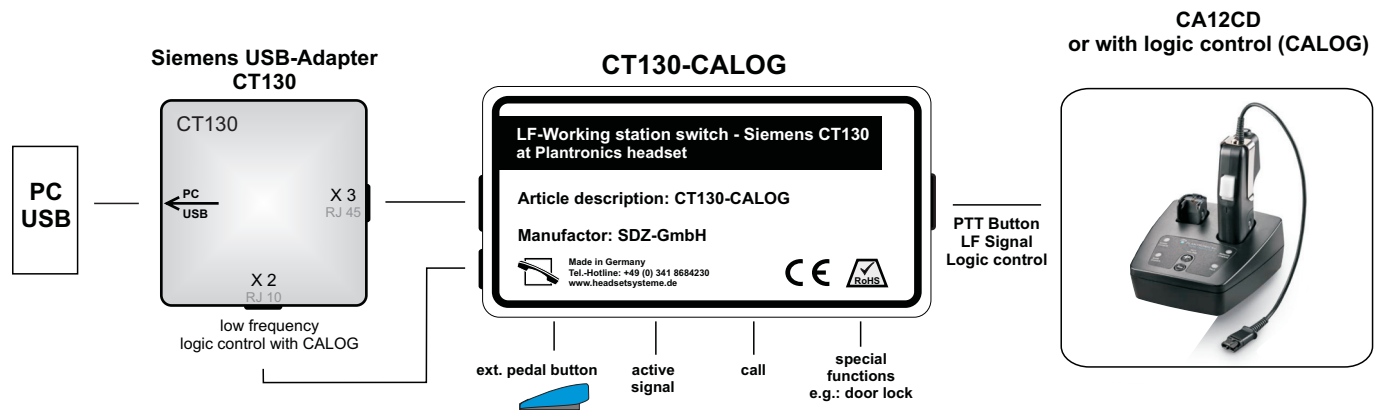


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### Control Center Version CT130-CALOG



#### Product characteristics

The adapter CT130-CALOG was optimized for the control center application and offers besides the input of professional wireless headsets plantronics CA12CD with push-to-talk (PTT) button although an extended functionality as compared to the adapter version CT130-EHS. Through the connection of an external button (pedal) at the EHS adapter, with the same performance as the PTT button at the headsets, an efficient remote control of the phone/USB and the wireless headset solution is possible.

Apart from the call answer and termination exists a special highlight in the multiplex functionality of the PTT button and the external button, respectively. During a call, the control functions could be activated using a keystroke, for example to open a door lock.

**(Capabilities: barrier site, emergency call, attack report, process control, recording, door lock)**

**Is the modified headset solution CA12CD, called „CALOG“, in operation, the feature: automatically logic control/ headset ON after the removal of the mobile headset from the recharger, could be used.**



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The application of the modified headset solution CA12CD, called CALOG, combines following advantages:

- × Uncomplicated non-stop operation.
- × Fast cut connector for personalized headsets (each employee has its own) automatic headset detection and switch over in headset service after removal from recharger of the base station (necessary for control center logic switch).
- × Microphone and receiver analysis, criterium for logic control.
- × Masking of calls in headset.
- × Control of “door lock function” during a call using the push-to-talk button at the mobil handset or the external button.
- × Special push button at the mobile headset in halt and non-halt functionality for specific applications.
- × Low radiation system - health neutral.
- × Wireless disconnection using a button on mobile headset (Stand by).
- × High capacity battery in stand by.

### Functions

- × Call answer and termination at the mobile headset (PTT button).
- × Call ringing masking to hearing level.
- × Logic control on CT130, headset service ON for control center implementation.
- × External pedal button for call answer and completing.
- × Two way control for active analysis and control of external applications like ELA, speaker, active notification.
- × Two way contact for call analysis and control of external application, like central notifications, signaling device.
- × Two way contact activated by keystroke for the control of external applications, like door lock, barrier site, alarm, call, attack report.
- × Prevention of call waiting during an open connection (ON).





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### Extended functions CT130-CALOG with modified CA12CD (CALOG)

- × It is communicated to the CT130 and to the logic control, if the mobile headset is loaded to the base station and the automatic headset service is shifted to the hand receiver.

### Short and long keystroke

- × The multiplex functionality is activated by pushing the PTT button at the mobile headset or the external button under 0.5 seconds for call control and by pushing over 1 second, the special application, like the door lock will be activated. The switching operation is defined by 1.8 seconds.
- × A blocked button will be ignored after first analysis.

### Insert optional

- × To simplify the installation of the systems a insert is offered. It is delivered together with the adapter and 3x 20cm fast connecting wire. In the insert the relay outputs for external control systems could be switched on by spring clips.



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### Mode of operation, set up and configuration

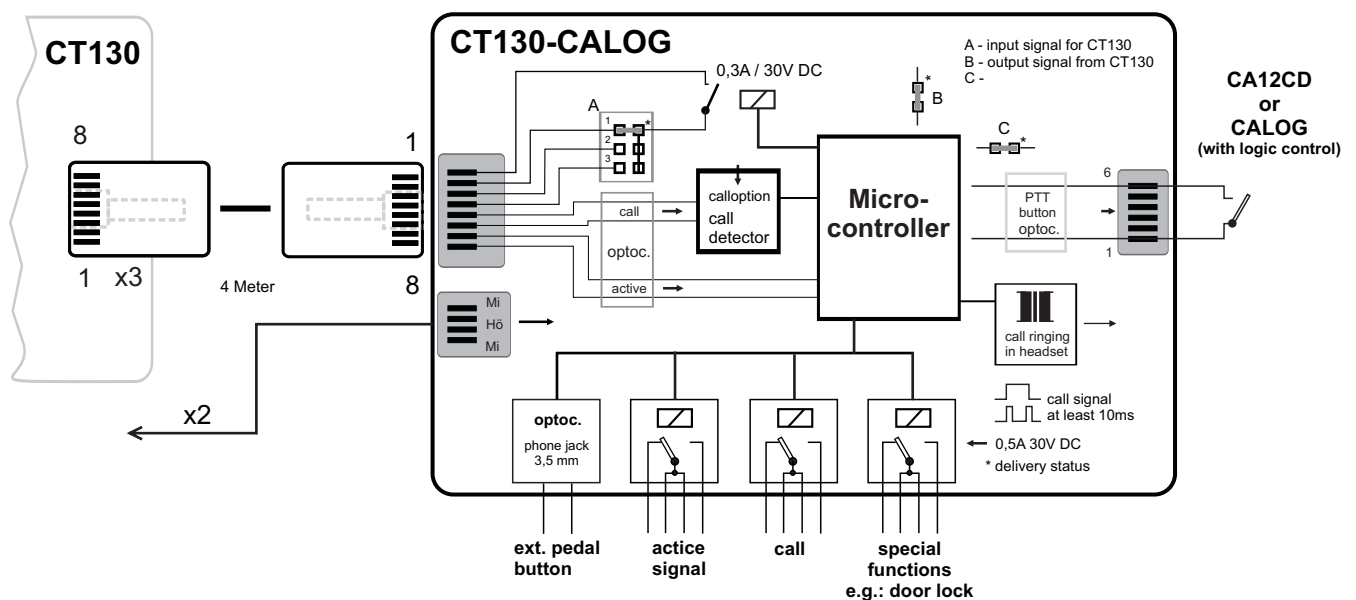
With the adapter the input and output signals are adjusted to the combined system solution. The received call signal from the CT130 causes a powerfree masking of the ringing into the hearing level of the mobile headset.

The definition of the mode of operation, if the call is connected over short term impulse or in real time, will be determined by the jumper region B in the adapter. In delivery status the jumper B is set and a call impulse is enough and an own signal cycle will be generated.

The PTT button at the mobile headset and the external button to the remote control of the CT130 as well as the bidirectional mode of operation with the switch function active ON of the CT130 and the door lock function through the keystroke are confirmed by a tone in the headset. In delivery status the jumper C in the adapter is set and the conformation tone is switched on.

On the left hand site of the shell the 3.5 mm phone jacks are situated for external hook ups and three output sockets, each with relay switch. The power is supplied from the headset technique.

### Schematic board illustration

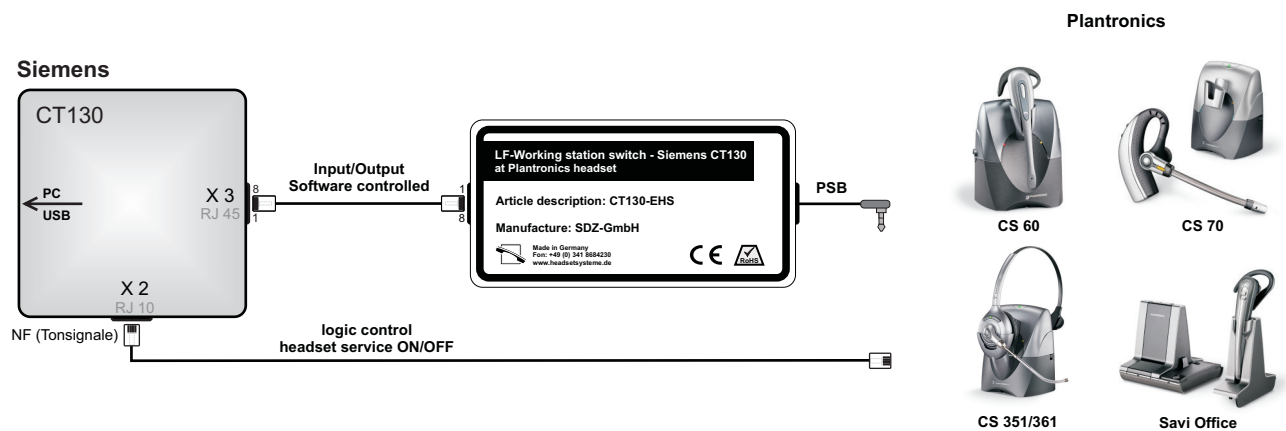


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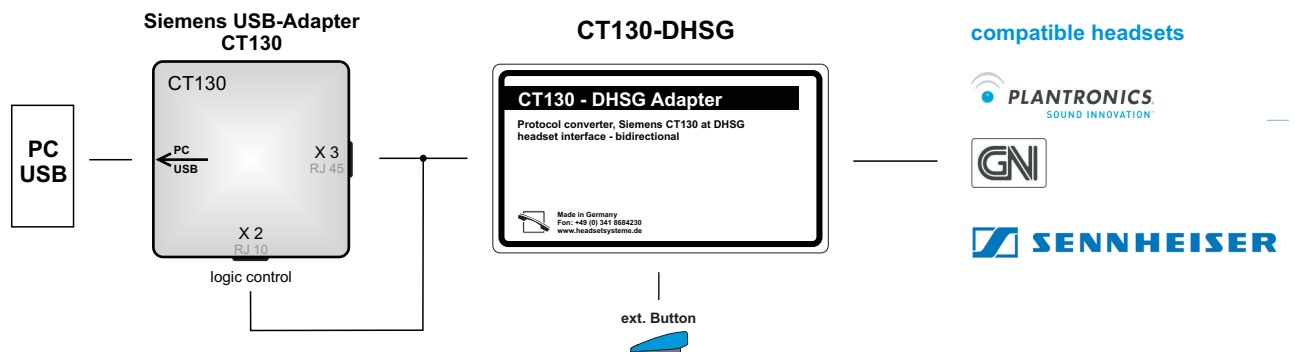
## Wireless headset systems on Siemens LF-workstation switch USB-Adapter CT130

### Wiring diagramm

### Business Version CT130-EHS



### Business Plus Version CT130-DHSG



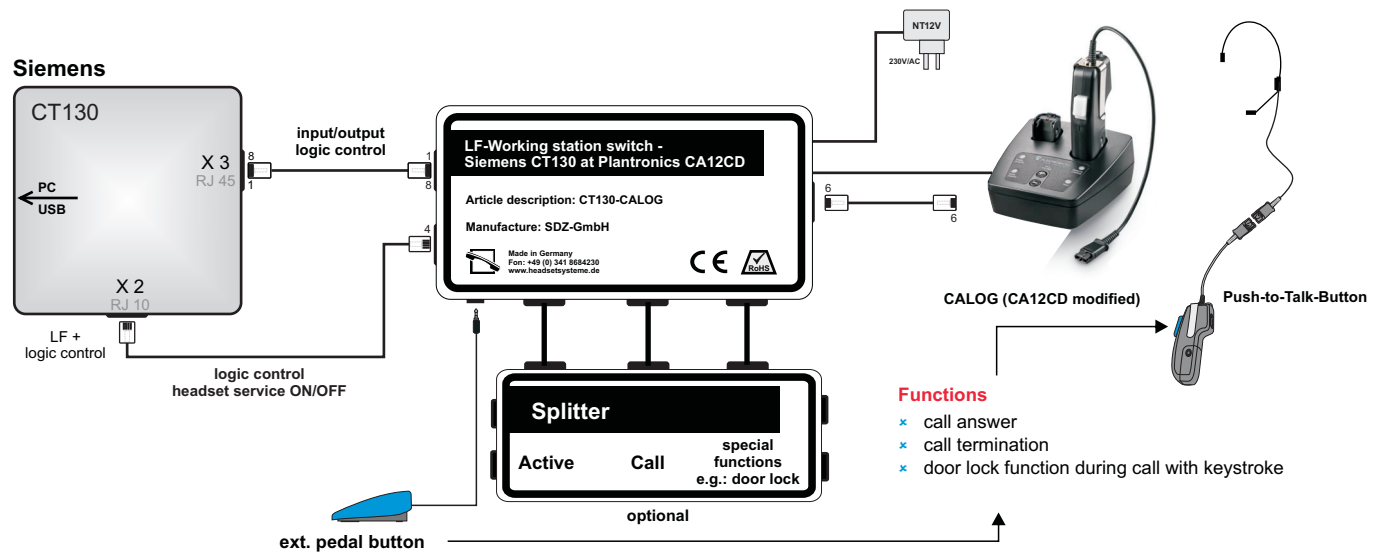
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## Wireless headset systems on Siemens LF-workstation switch USB-Adapter CT130

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### Wiring diagramm

### Control center version CT130-CALOG



#### Techn. parameters

#### CT130-EHS Adapter Item-no.: 14011001

Dimensions (HxWxD in mm): 40x70x20

Ports: RJ 45 - CT130-X3  
3,5 mm phone jack at PSB

Power supply: PSB headset station

#### CT130-DHSG Adapter Item-no.: 01031001 | 01031002

Dimensions (HxWxD in mm): 46x81x18,5

Ports: RJ 45 - CT130-X3

Item-no.: 01031002  
incl. DHSG-Adapter Plantronics

<sup>1</sup>DHSG - Drahtlose Hör- und Sprechgarnitur

#### CT130-CALOG Adapter Item-no.: 14011002

Dimensions (HxWxD in mm): 115x65x26

Ports: RJ 45 - CT130 - X3  
RJ 10 - LF-CT130 - X2  
3,5 mm phone jack for ext. button  
RJ 12 - CALOG

Power supply: over CA12CD



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