



elmeg hybrid

Operating instructions
English

elmeg
by **funkwerk** 

These operating instructions are designed to assist you in using your elmeg hybrid.

Whether you're employing your system for business or personal uses, it always provides exceptional calling comfort and fun while telephoning .

Take a few minutes to try out the functions of elmeg hybrid to learn to take full advantage of the whole range of available features.

Statement of compliance and CE mark

This device complies with the requirements of R&TTE Directive 1999/5/EC:



“Directive 1999/5/EC of the European parliament and council of 9 March 1999 on radio installations and telecommunication terminal equipment and the mutual recognition of their conformity”.

The statement of compliance may be viewed at the following Internet address:
<http://www.funkwerk-ec.com>.

Disposal



The symbol with the crossed waste container reproduced on the device indicates that it is to be disposed of separately from household waste at the appropriate disposal facility upon the end of its service life.

GEMA

This product uses internal music for calls on hold for which approval from GEMA (German Society for Musical Performance and Mechanical Reproduction Rights) is not required. This has been confirmed by GEMA via certificate of exemption. The certificate of exemption may be viewed at the following Internet address: <http://www.funkwerk-ec.com>.

System music on hold:
elmeg Song 1,
Hold the line.

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Description

The elmeg hybrid systems were developed to accommodate the market trend toward native IP PBX systems with the option of extension to classic TDM interfaces.

The elmeg hybrid systems originated on the basis of a fully migrated software platform which retains the core Funkwerk competencies—PBX as well as router technology.

The systems can be used as straightforward PBX systems, but may also be used in hybrid or purely TDM environments.

The elmeg hybrid is designed as a wall-mounted system for up to 60 users.

These systems are upgraded with modules offering the traditional TDM interfaces such as S0, Up0, FXS.

3 module slots are available in the elmeg hybrid wall-mounted version.

6 module slots are available in the elmeg hybrid 600.

The systems are configured via web-browser; individual users have individual, password-secured access to their own terminals and settings.

The systems are systematically developed for the future and solution-orientated. The integrated hotel and Mini Call Center solutions can be used without licence and in multiple variations, along with the included voice applications, allowing production of an “announcement before query”, for example, or music-on-hold functions, with your own or professionally-produced Wav files.

Together with the extensive system telephone features, the elmeg hybrid family offers future-proof, state-of-the-art ICT systems on the basis of the same software platform.

The performance features for analogue terminals can only be used with terminals that use the MFC dialling method and feature an flash key. Detection of flash length can be set in configuration.

Analogue terminals which dial with the PDM method cannot use functions or codes. PDM dialling is automatically detected after dialling a numeral >1.

Note:

At initial launch of the configurator, you'll be asked for a user name and password. As username, please enter »**admin**« and as password » **funkwerk**«. Make sure the spelling is correct! You can subsequently modify your password and the username in the configuration.

Safety notices



Caution: All areas which can only be opened with tools are maintenance areas. Unauthorised opening of the device may pose a risk to the user.

Please note that condensation may form on or within the device during transitions from cold to warm temperatures. Only remove the device from the packing materials once the authorised operating ambient temperature has been reached.

- Only open those parts of the devices described in setup and operating instructions.
- Do not connect or disconnect any lines during a thunderstorm.
- While in operation, the wall-mounted system must be secured to a wall.
- Only fit the connection cables to the appropriate connectors.
- Lay connection cables to prevent accidents.
- Avoid the following influences:
 - Direct sunlight.
 - Heat sources (e.g. heating elements).
 - Electronic devices (e.g., audio equipment, office equipment or microwaves).
 - Penetration of humidity or liquids.
 - Corrosive liquids or vapours.
 - Heavy dust.
- Do not assemble the system in damp rooms or in areas subject to a risk of explosion.
- Do not touch plug contacts with sharp, metallic or damp objects.
- Only use approved accessories.
- Only terminals that offer SELV (safety extra low voltage) and/or meet ETS 300047 may be connected to the device. Correct use of the permitted terminals meets these requirements.
- Clean the system only with a slightly dampened cloth.

Mains connection (230V~mains)

- Please note that installation of the electrical connection (shockproof socket) for the device (and any additional devices) must be performed by an authorised electrician to avoid damage to persons and property.
- If a functional earth is intended for your device, connect it before the mains connection.
- Disconnect the device from the mains before you remove the top of the housing and start working on the connection terminal field. Replace the top of the housing before restoring the mains connection.
- As your elmeg hybrid features a functional earth connection, an “earth line” (water line, heating line, building installation earth circuit connector) should be located in the vicinity of the assembly site. This connection is required when using surge protection modules (FSM). Connection to elmeg hybrid must occur with a connecting line of min. 2.5 mm².
- If you're using terminals connected to the elmeg hybrid via USB or RS232, you must install the functional earth to avoid the appearance of ground loops.
- If possible, provide a separate electric circuit for the 230V connection of your elmeg hybrid. If other household devices short circuit, the elmeg hybrid can then still operate.

- We recommend installation of surge protection for the elmeg hybrid against the overvoltage that may occur during storms. Consult your electrician about this.

Battery-powered devices

- Use only batteries supplied with the device or available as accessories.
- Employ the battery pack only for the intended use. Never use a damaged or spent battery pack.
- Do not touch the charging or battery terminals with conductive objects, e.g. keys, paper-clips, rings or bracelets.
- Dispose of spent batteries according to legal requirements. Recycle! Do not throw batteries into the fire.

Radio devices (e.g. DECT, Bluetooth)

- Under certain circumstances, medical equipment may be influenced by operating radio devices. Therefore, please observe requirements imposed by local conditions.
- Do not operate radio devices in vehicles or in areas subject to a risk of explosion.

Power failure








In the event of a power failure (230V~ mains voltage), the elmeg hybrid cannot operate, and you thus can neither make internal nor external calls.






When the power is restored after a failure, separate internal and external connections are not automatically reestablished. Performance features set up via configuration remain unaffected by the power failure.

Symbols

Please note: different terminals may not display the same tones, ring patterns and operating procedures. You'll find information on frequency and pulse length in the assembly instructions.

Symbols used

-  This symbol prompts you to pick up your telephone receiver.
-  This symbol shows the call status. You've lifted the receiver of your telephone.
-  This symbol tells you to lift the receiver of your telephone or the telephone is not in use.
-  This symbol shows a signal on a terminal, e.g. your telephone is ringing.
-  This symbol tells you to dial a number.
-  One of these symbols prompts you to dial the displayed numeral or character.
- 

-  This symbol prompts you to dial a specific selection (numeral or character) from a list or table.
-  This symbol tells you to press the Flash button (signal button).
-  This symbol shows that an acknowledge tone can be heard on the receiver.
-  This symbol indicates a conference call.
-  When you enter a number to dial via a SIP provider, dialling output only occurs ca. 5 seconds after entry of the last code. Completing a number with the hash key prompts immediate dialling. Here, the terminal must be able to also dial the # in the elmeg hybrid.

Telephoning

Information for use and operation of telephones

Not all described performance features are included in the connection provided by your network operator. Ask your network provider which performance features are included in your connection, and which must be additionally ordered.




Certain terminals may use their own, device-specific procedures for the described functions. Please inform yourself from the relevant terminal instructions.

In the following operation sequences, only the telephone connection, i.e. the call between two subscribers, is exemplified. For analogue telephones, functions are only described for DTMF terminals with flash key. You'll hear the following tones when using analogue telephones. For ISDN and analogue telephones that generate their own tones, these may vary. You may also find additional information on the displays of these telephones.

System telephones employ their own functions; you should therefore check system telephone instructions to determine whether the codes and procedures provided here should be used.

Note:

When you enter a number to dial via a SIP provider, dialling output only occurs ca. 5 seconds after entry of the last code. Completing a number with the hash key prompts immediate dialling. Here, the terminal must be able to also dial the # in the elmeg hybrid.

If "Automatic outside line" is defined for your telephone, you must press the  key before every internal operating procedure after picking up the  receiver. For the corresponding performance features, the symbol  is highlighted in colour, as in the example below.

 Pick up receiver	 Dial internally	 Conduct call
---	--	---

Making external calls

Your elmeg hybrid offers various possibilities for external calling.

- Via external VoIP connections.
- Via ISDN interfaces (additional module).

Selecting the external connection method

If you wish to make an external call, the elmeg hybrid attempts to establish a connection to the entered provider. If no connection can be established, the next provider can be selected if an automatic fallback has been configured. If no fallback connection is possible either, you will hear the engaged tone.

Note:

Please note that if you switch to another network, you may incur additional costs from this network provider.

Automatic route selection

The configuration defines over which external connection the call shall be routed. Automatic route selection is defined in configuration. You may enter full or partial numbers in the automatic route selection. When a number is dialled, the elmeg hybrid recognises it and dials the entered number via the defined connection. The telephone numbers

entered in automatic route selection are monitored by the blacklist, so blocked telephone numbers or parts of a telephone number cannot be dialled in this way. Emergency services numbers cannot be entered in the automatic route selection or blacklist.

Gateway functions

Connections over VoIP and ISDN can be established from all connected internal terminals. If you switch from analogue and ISDN connections to the VoIP connection, or from VoIP to analogue and ISDN connections, the maximum number of possible connections is dependent upon the size of the DSP module. For special external applications, such as voice mail systems with DISA, etc., the codecs on the DSP module are also required.

VoIP telephony

You can telephone over the internet using all internally connected telephones. The number of connections depends on various parameters:

- Availability of free channels on the elmeg hybrid.
- Available bandwidth of the VoIP connection.
- Configured, available SIP providers.



Note:

In case of automatic external line access, if you lift the receiver, the elmeg hybrid attempts to establish a connection. If a connection cannot be established, it automatically falls back to the next entered provider.

VoIP Provider

You can define up to 10 SIP accounts with specified telephone numbers.

ISDN interface (module)

Your elmeg hybrid features ISDN interfaces. You can simultaneously establish two external connections via both B channels of an ISDN interface. These connections can also occur simultaneously with different communication partners.

Thus, you can be calling an external business partner, for example, while you transfer data from your PC to another business partner. When you make an external call with your elmeg hybrid, the elmeg hybrid automatically transmits the phone number and service ID (identifies the terminal, e.g. telephone, fax). Thus only a terminal with the same service ID is called (telephone calls telephone, group 4 fax calls group 4 fax).

If a terminal connection of the elmeg hybrid is set up for multifunctional units, external calls are signalled with the service IDs “analogue telephony”, “ISDN telephony” and “device type fax” on the terminal. In this case, the service ID “analogue telephony” is sent when an external call is made.

Access to the external connection

Worldwide calls need not be possible from every telephone. Certain telephones may allow only local calls, for example. For each of the elmeg hybrid’s internal subscribers, individual authorisation can be set up in the configuration for outgoing (external) connections. Six authorisations are possible:

Unrestricted dial permission.

- National long-distance calls:
Permission to make national calls (not possible to dial 00).

- **Region:**
Regional codes can be configured, allowing national or international dialling.
- **Locality:**
Permission to make local calls (not possible to dial 0 or 00).
- **Incoming:**
The subscriber can receive incoming external calls but can only make internal calls.
- **Internal:**
The subscriber can only make internal calls.

 **Note:**

Please note that restrictions that go beyond these authorisations can be applied through entry into your elmeg hybrid's blacklist.

Outgoing telephone number

In the configuration, you define which telephone number is transmitted with an outgoing call over which provider. However, you can also suppress transfer of the telephone number.

 **Note:**

When you enter a number via a SIP provider, dialling output only occurs ca. 5 seconds after entry of the last digit. Completing a number with the hash key prompts immediate dialling.

External line access

Automatic outside line

You have connected terminals to your elmeg hybrid which frequently conduct external, but only very rarely internal, calls (e.g. fax machines or pay phones). Here, you have the option of allowing these terminals to establish an external connection as soon as the receiver is picked up. For these devices, automatic outside line eliminates the need to dial the exchange code, and the external number may be dialled immediately.

With automatic outside line, the external connection is established as soon as the receiver is picked up, and you hear the exchange's dial tone. You can thus start dialling an external number. To make an internal call, lift the receiver and press the star key; you can now dial internally.

Internal dialling (internal code)

If a subscriber with automatic outside line wishes to make an internal call, he/she must first press the star key. If a subscriber with automatic outside line receives an internal call, the caller's number is preceded with a star according to the configuration. For example, the number can then be dialled directly from the caller list.

Manual outside line

With manual outside line, you must first request the external connection with a code, e.g. "0" (which can be set in configuration) before proceeding with your call. If it's an internal call you wish to make, you can begin dialling as soon as you pick up the receiver.

Note:

If you have the corresponding authorisation, you can always get an external line via *2*.

Note:

For terminals with automatic dialling, note the various outside lines when you enter the call number; certain terminals currently on the market are unable to display the "x".

With the elmeg hybrid "automatic outside line" can be individually configured for each subscriber. You can specify whether the »*« should precede the internal call number for internal callers. For an internal subscriber with automatic outside line access, an internal call can be signaled with the internal code, even if the telephone doesn't independently support this function. In this case, the elmeg hybrid automatically places the internal code before the call number to be displayed. In case of callback (e.g. from the caller list), the number can then be immediately dialled.

Making external calls with manual outside line



Note:

If you hear the engaged tone after dialling 0, either the telephone has no authorisation to make external calls, or the external connection is engaged.

External call with automatic outside line access



Bundle

You wish to assign specific external connections to internal subscribers of your elmeg hybrid for outgoing connections. You can group external connections into bundles and provide these to subscribers for the outgoing dialling. In this way, all subscribers initiate the external dialling with same exchange code, but can only set up a connection over the bundles which have been cleared for them.

The external connections of your elmeg hybrid can be grouped into bundles. You can configure up to 99 bundles 01...99. The code number for bundle assignment can be modified ("Modifiable code numbers").

When an external call is initiated by the exchange code or in the event of automatic external line access a bundle released for this subscriber is used to establish the connection. If a subscriber has authorisation for several bundles, the connection is established using the first released bundle. If one bundle is occupied, the next released bundle is used. If all the released bundles are occupied, the subscriber hears the engaged tone.

Bundle assignment for internal subscribers

If an internal subscriber is to use bundles for external connections, you can assign each subscriber the authorisation for individual bundles in the configuration. This allows internal subscribers with the same exchange code ("0") to use different bundles. In case of an external call, assignment of a bundle occurs through the exchange code. If a subscriber has authorisation for individual bundles, the connection is established via the first released bundle. If a bundle is already occupied, the successively released bundles are assigned. If all the bundles assigned to a subscriber are occupied, he/she gets an engaged signal.

Sequence of bundle assignment

Examples of external connections:

- ISDN interface via NTBA.
- VoIP interfaces.

If various external interface connections are present on the elmeg hybrid, assignment occurs in the sequence of connections defined for the bundle in configuration.

Selective bundle assignment

Besides general exchange access, an internal subscriber can also selectively use a bundle. Here, an external connection with the corresponding code number is initiated for selective use of the bundle, and not by dialling the exchange code.

To be able to perform a selective bundle assignment, the subscriber must possess the appropriate authorisation. This authorisation may also include bundles which the subscriber with the "0" code can not otherwise use.

If a subscriber does not possess the authorisation for selective bundle assignment, or if the selected bundle is in use, the busy tone is heard after dialling the code.

If "automatic outside line" is set up for a subscriber, he/she must press the star key before selective bundle assignment, then initiate external dialling with the code for bundle assignment.

Note:







Incoming calls are signaled via call options independently of bundle formation.

A subscriber can only use bundles (including with selective assignment) if these have been released for him/her in configuration.

In bundle assignment (including selective bundle assignment), the configured number is displayed for the caller.

Selective bundle assignment

Selective bundle assignment

 Pick up receiver	 * 2 0  Select bundle (01...99)	 Dial external number	 Call	 End call
---	--	---	---	---

Internal calls

All calls, fax transmissions or data transmissions occurring between internal terminals are internal connections. These connections are free of charge.

Note:

If you hear the special dialling tone after picking up the receiver, this indicates that a performance feature is enabled (e.g. call forwarding). You can still dial.

Internal call without “automatic outside line”

 Pick up receiver	 Dial internal call number	 Call	 End call
---	--	---	---

Making internal calls with “Automatic outside line”

 Pick up receiver	 * Internal number dial	 Call	 End call
---	---	---	---

Receiving calls

 Telephone rings	 Pick up receiver	 Call	 End call
--	---	---	---

Call pickup

Call pickups from group

Note:

Pickup is possible only in the pickup group to which your terminal is assigned.

Description

A call is signalled to a co-worker who is presently absent from his work station. You now have two options to respond to the caller. You could walk over to your colleague’s telephone, or transfer your colleague’s call to your phone.

Call pickup in the group

A call signaled at another telephone can be picked up via a code number. Call pickup up is only possible within the group to which a subscriber was assigned at configuration. In the basic settings, all subscribers (all internal numbers) are assigned to Group 00. Call pickup is not possible for open inquiry.






Call pickup in the group

 Pick up receiver	 # 0 Pick up call	 Call
---	--	---

Call pickups from a specific subscriber

A call signaled at another telephone can be picked up via a code number and dialling a partial number. In this instance, call pickup is possible across groups. Call pickup is not possible for open inquiry.

Call pickups from a specific subscriber

 Pick up receiver	 * 0 Dial code	 Select internal subscriber	 #	 You can make the call on your telephone.
---	--	---	---	---


Automatic callback on busy or no reply

This function can only be used on analogue telephones allowing suffix dialling. An automatic callback from an inquiry connection is not possible.

Note:

External callbacks are automatically deleted after a period specified by the exchange.

Configure callback

 Internal or external subscriber is busy or does not reply	 * 2 2	 Pos. Receipt	 Replace receiver
--	---	---	---

Your telephone is called when the called subscriber replaces the receiver. If you lift your telephone's receiver, the subscriber for whom you requested a callback is called. If the subscriber takes the call, you can speak to him or her.

Set up »callback on engaged« for ISDN telephones

This performance feature is supported for telephones at the internal ISDN connection on the elmeg hybrid. For information on operation, please see the user's guide for your ISDN telephone.

Delete automatic callbacks

 Pick up receiver	 # 2 2 Delete callbacks	 Pos. receipt	 Replace receiver
---	---	---	---

With this procedure, telephones delete internal and external callbacks on engaged and no reply.

Suspend display of own number

If you do not want the person you are calling to identify you before lifting the receiver, you can selectively prevent display of your phone number for the next call.

By dialling a code, you prevent display of the number to the next person you call. Here, entry of the code occurs immediately before entering the number of the desired called party.

Note:




With the following procedure, analogue or IP terminals suppress display of their own number. For ISDN terminals, please consult the associated user's guide. This configuration only applies to the next call to be made (temporary). If you wish to prevent call number display repeatedly, the code must always be entered before the called number.

For this type of calling line identification restriction, the performance feature “case-by-case calling line identification restriction” must have been requested from your network provider.

With the following procedure, analogue terminals suppress display of their number.

For ISDN / IP terminals, please consult the associated user’s guide.

Suspend display of own number

 Pick up receiver	 2 4 Dial code	 Dial number
--	--	---

Speed dial from the phone book

Description

The employees in your company must phone many customers. This is where the elmeg hybrid’s phone book comes into play. You need not enter the customer’s number but can extract the name via a system telephone display, and dial. Customer names and telephone numbers can be centrally administered by an employee. If a customer whose number has been entered in the phone book calls, his/her name appears in the system telephone display.

When creating a telephone book entry, an index is assigned to each entry. Authorised telephones can initiate speed dial from the phone book via the index.

Speed dial from the phone book

 Pick up receiver	 # Dial (000 ... 999)	 Speed dial index	 Subscriber is called	 Call
--	--	--	---	--

Announcement

Announcement to and from system telephones is possible.

System telephones

Announcement to and from system telephones is possible. System telephones can initiate an announcement via the system telephone menu or using a programmed function key. If the announcement is initiated via a function key, notifications appear in your telephone display as with a normal connection and the announcement key LED is switched on. The announcement can be ended by renewed pressing of the function key or by pressing the loudspeaker key. The LED switches off again at conclusion of the announcement.

The announcer’s number appears on the telephone display of the system telephone. The announcement is signalled with a positive acknowledge tone over the loudspeaker. The announcement can be terminated with the ESC key.

A function key with associated LED can also be set up on a system telephone to deny or allow announcements.

Individual announcement

You can initiate the announcement in a selective manner by dialling an internal number. The announcement can be allowed or denied by the destination subscriber (system telephone only). The announcement is signalled to the destination subscriber and the “announcer” with a positive acknowledge tone.






Team announcement

An announcement can also be made to a team by dialling a team number. The team subscribers hear the announcement simultaneously. The announcement is signalled to the destination subscribers and the “announcer” with a positive acknowledge tone. The announcement to a team is also possible from an inquiry. With a team announcement, it can take up to four seconds before the connection to the individual team subscribers is established. The announcement then proceeds to the team subscribers who have accepted the announcement within this period.

- Announcements are automatically accepted by the called telephone by enabling the loudspeaker function, if:

- The telephone is not in use.
- The announcement is set up.
- The “do not disturb” function is disabled.

Perform announcement

				
Pick up receiver	Internal or team number	Pos. receipt		Announcement

Room monitoring

Description

You wish to initiate sound monitoring for a room. For this, place a telephone connected to your elmeg hybrid in the room. Following a procedure, this telephone becomes a monitored phone. You can dial this phone from every authorised internal or external telephone and use it for sound monitoring of the room.

An internal subscriber of the elmeg hybrid is configured as a room-monitoring telephone. For this, the receiver must be lifted from the relevant phone, or the hands-free function be enabled, following which a code is entered. After you've entered the code, the receiver should not be replaced or the hands-free function turned off. Room monitoring via this phone is now activated. The telephone is not available for conventional calls for the duration of activation.

This performance feature cannot be used for enquiries, call forwarding or team calls.



Note:

After every configuration of the elmeg hybrid, room monitoring is switched off and must then again be activated and configured.

Activate room monitoring for an internal telephone

			
Pick up receiver		Pos. Receipt	Do not replace receiver/Do not disable hands-free

Room monitoring from an internal telephone

An internal call to the room-monitoring telephone (direct dialling to the telephone number) is now automatically accepted by the phone and the connection is established. The caller can now acoustically monitor the room in which the corresponding telephone is located.

Room monitoring from an internal telephone

			
Pick up receiver	Dial call number of the telephone to be monitored	Pos. Receipt	Room monitoring in operation

Room monitoring from external telephones

Description

You are at an external telephone.

Pick up the receiver of the telephone from which you wish to conduct room monitoring, and dial the external number assigned to the elmeg hybrid's internal service number.

If remote access is authorised and available at this time, you will hear the special dial tone of your elmeg hybrid. Switch your phone to tone dialling, or use a tone dialling hand-held transmitter.

Room monitoring by an external subscriber can only be initiated via the elmeg hybrid's remote access. For this, from an external phone select a specific elmeg hybrid call number assigned to the service number in the configuration (in-

ternal virtual subscriber). Using a six-digit PIN (PIN 2 for elmeg hybrid), the elmeg hybrid checks the authorisation for remote access. If the room-monitoring telephone's internal number is entered following successful PIN entry, the elmeg hybrid establishes a connection to this telephone. The caller can now acoustically monitor the room in which the corresponding telephone is located.

Note:

Room monitoring can only be activated on the monitoring telephone itself.

Room monitoring of external phones

 Enter PIN 2	 Pos. Receipt	 Dial call number of the telephone to be monitored	 Pos. Receipt	 Room monitoring in operation
--	--	--	---	---

End room monitoring

If room monitoring is ended by the caller, the performance feature remains activated for the room-monitoring telephone. It is possible to resume room monitoring from an internal or external telephone. If the receiver of the room-monitoring telephone is picked up or the hands-off function disabled, no further connections to room monitoring are possible. The performance feature is thus deactivated.







Assign project number/client number

Description

You're conducting several calls for which you wish to subsequently bill your counterpart. During a call, you can enter a project number for the corresponding connection. When analysing the connection data records (e.g. using a PC fee program), you can then invoice the calls on a customer-specific basis.

An existing connection, or one to be established, may be manually assigned a project number consisting of a maximum of 6 digits. This project number is saved in the corresponding connection data record. For outgoing connections, a connection data set is always saved. For incoming connections, you can define whether the connection data records are always saved, or only in case a project number has been assigned. In case of output of connection data records via a cost input program, you can, for example, identify these data records individually, sort, filter or aggregate them according to project number.

Project number for a self-initiated call







 Pick up receiver	 2 3	 Enter project number (max. 6-digit)		 Pos. Receipt	 Dial number
---	---	--	---	--	--

Project number for an external call to the ISDN terminal

You can use this performance feature for the ISDN terminal if your ISDN terminal supports the "Net Direct" (Keypad) function in call status.

You're conducting a call and wish to record it for a project.

Project number for an external call to the ISDN terminal








 Call	 2 3	 Enter project number (max. six-digit)		 Pos. Receipt	 Proceed with call
---	---	--	---	--	--

Project number for an external call

You can use this performance feature for the terminal if it supports the "Net Direct" (Keypad) function in call status.

You're conducting a call and wish to record it for a project.

Project number for an external call

 Call			 Enter project number (max. 6-digit)		 Pos. Receipt		 Proceed with call
--	---	---	--	--	---	---	--





Send fax from a combined device**Description**

You have an analogue terminal with integrated fax, telephone and answering machine. As a rule, three different connection configurations are necessary on the elmeg hybrid for these. However, if you set up this connection as a multifunctional device, you can use the full range of said device. All calls can then be signalled on this device. Further, you can choose whether to initiate with the fax device or the telephone before establishing an external connection.

If an analogue terminal connection of the elmeg hybrid is set up for multifunctional devices, all calls are received, regardless of the service. In the case of an automatic outside line via a code, the service ID "Fax Group 3" can be transmitted independently of the analogue connection configuration. If **0** is dialled, the service ID "Analogue Telephony" is also transmitted.

Example: you cannot reach a group-3 fax machine that is operated with a service ID on a remote ISDN PXB. By dialling using the "***** **5**" code, your elmeg hybrid transmits the "Fax group 3" service ID. The remote ISDN PXB recognises the service and connects to the fax machine.

Send fax from a combined device

 Pick up receiver	 Dial code for telefax group 3	 dial external number	
--	---	--	---

**Note:**

If you set up a connection as "Multifunctional device" in the configuration, call waiting is prevented on this connection.

Direct Call**Description**

You wish to configure a telephone for which a call to a specific number is set up even without entry of the number (e.g. emergency telephone). You are not at home. However, there is someone at home who needs to be able to reach you quickly and easily by telephone, if required (e.g. children or grandparents). If you have set up the "Direct Call" function for one or more telephones, the receiver of the corresponding telephone only needs to be lifted. After a period with no further entries set in configuration, the elmeg hybrid automatically dials the configured direct call number.

If you do not dial within the specified period from picking up the receiver, automatic dialling is initiated.

Telephoning with direct call switched on




 Pick up receiver	 Begin to dial within the configured time	Wait The target subscriber is called after the preconfigured time.
--	--	---


Inquiry**Description**


You're conducting a customer call. To answer your customer's questions correctly, you wish to first consult with a colleague. After consulting with your colleague, you can resume the call with your customer, providing him/her with the correct information.




Inquiry allows you to interrupt an internal or external call to make a query call. The query can be made as an internal or external call. The subscriber cannot listen in to your query call. Once you're ended your query call, you may resume your initial call. If programmed, the subscriber on hold hears music on hold or an announcement.

During a call, you can call another subscriber at any time.

-  You are in a call.
You want to call another subscriber.
 -  Press the R key.
You hear the internal dialling tone.
 -  If you want to speak to an external subscriber, dial 0 first.









If you hear the engaged tone after dialling 0, either your telephone has no authorisation for this, or the line is engaged.
 -  Dial the subscriber.
You hear the ringing tone.

Your correspondent is being called.
The person lifts the receiver.
 -  Have a conversation.







To end the query call, press the disconnect key of your telephone.
- or
- When using analogue telephones:
-  The call in progress is disconnected. The active connection remains active.
 -  The active connection is disconnected and you return to the call in progress.
 -  Continue your conversation.

Open inquiry

Initiate open inquiry

-  You are making an external call. You wish to prepare the call for open inquiry.
-  Press the R key. You will hear the internal dial tone.
- 
-  Dial code    You hear the positive acknowledge tone.
-  Hang up, you'll find the external call in the call waiting queue.

Accept open inquiry

-  You wish to accept the call from an open inquiry.
-  Dial fixed code   .
-  You've accepted the call.

Call Waiting

Analogue terminals

Description

The call-waiting option can be individually configured for every subscriber. Allowing call waiting or not can be set via the configuration program or via a code number in operations.

Analogue terminals get the elmeg hybrid's call waiting tone. The number of the call-waiting party can be shown in the analogue telephone display if it features the corresponding performance feature (CLIP off Hook). CLIP off Hook is disabled for analogue terminals in the basic setting, but may be enabled via PC configuration.

Call waiting can only occur simultaneously in the elmeg hybrid for a limited number of analogue connections. If call waiting is already operating with this maximum number of call-waiting tones on analogue connections, additional call-waiting callers will get the engaged tone.

Transferring a call in progress from analogue telephones

If you hear the call-waiting tone during a call, you can take that call and transfer the ongoing call

An operating procedure allows transfer of the ongoing call and acceptance of the call waiting.

- The following conditions apply here:
- Every dialled number is accepted by the elmeg hybrid.
- After the operation procedure, the subscriber and the call-waiting subscriber are immediately connected to each other (no acknowledge tones).
- Transfer to one's own number is possible, then call waiting.
- Internal, external target subscribers as well as teams can be dialled.
- A return call occurs in case of invalid or engaged target number.
- The target subscriber's transfer options are not used; a return call is initiated.
- If the subscriber is free, a return call is made according to the target subscriber's defined period.
- With transfer to a team number, there is no return call in case of an engaged or unreachable team.
- With transfer to a team number only return call after time is supported.

Call waiting is not possible:

- For conference calls.
- For do not disturb (analogue terminals).
- For announcements.
- For room monitoring.
- For terminals in which the data protection performance feature is configured (e.g., fax, modem).
- In subscriber's dialling status (the receiver has been picked up, but there is no connection yet).
- For current call-waiting protection.
- For dialling a team number. Then there is no call waiting for analogue team subscribers.

ISDN terminals




Configuration and operation of call waiting occurs as described in the users' guides of the corresponding terminals. ISDN terminals use their own tones to signal call waiting.

ISDN telephones can also transfer a call waiting to another subscriber via the "Call Deflection" feature.





Allowing / Blocking Call Waiting

 Pick up receiver	 /  allow / block		 Pos. receipt	 Replace receiver
--	---	---	---	--



Accept call waiting (inquiry on waiting party)

-  You are in a call.
A second subscriber is calling you.
You hear your call waiting tone.
-  **2** Dial code.
-  You are connected to the subscriber whose call is waiting. Your first call is on hold (see hold for inquiry). For more information on the procedure, see “Brokering” or “Three-party conference”.

Accept call waiting

-  You are in a call. You hear your call waiting tone.
-  Replace receiver (first call is ended).
-  Your telephone rings.
-  Pick up your telephone receiver, you are connected to the waiting subscriber.

Reject call waiting




-  You are in a call.
A second subscriber is calling you.
You hear your call waiting tone.
-  **0** Dial the key to refuse the call waiting. The call is initiated and he hears the engaged tone.

Forwarding calls with or without notification**Description**

In the course of a call you realise that your colleague is the better contact person for the caller. You wish to transfer the caller to your colleague. Here, you can decide whether to convey some important information to your colleague before forwarding the call, or whether to forward it immediately to your colleague.


Forwarding calls internally without notification**Description**

Transfer without notification (Special Transfer). You can forward calls within the elmeg hybrid by dialling the number of your contact person, then replacing the receiver. Your contact person is called and receives the call on lifting the receiver. If the contact person does not accept the transferred call, it is signalled on your phone (return call) after a period configured in the .

-  You are making an external call.
-  Press the R key.
You hear the internal dialling tone.
-  Dial the internal subscriber.






You hear the ringing tone.
Your correspondent is being called.

If you hear the engaged tone, press the R button again to return to the received call.

-  Replace the receiver. Your correspondent is being called. The person whose number you dialled lifts the receiver and takes the external call. If the person whose number you dialled does not lift the receiver, the call returns to your telephone after a period defined in programming.

Forwarding calls with notification

You wish to forward a call to another internal or external subscriber, or transfer an external call to an internal subscriber while first speaking to him/her. If configured, the subscriber on hold hears music on hold or an announcement.

-  You are making an internal or external call. You want to forward the call to another subscriber.
-  Press the R key. You will hear the internal dial tone.
If you hear the engaged tone, press the R button again to return to the call.
-  Dial the desired subscriber.
You hear the ringing tone.
Your correspondent is being called.
The person lifts the receiver.
-  Conduct the internal call.
Announce forwarding of the call.
-  Replace the receiver.
The person whose number you dialled continues the call.

(Connect ECT)




Connect

Connecting two subscribers

During a call, you can take another call or make another call. The first subscriber is put on hold while you make this inquiry. You can then connect the two subscribers with each other; your connection is then cut.

Note:

If both subscribers are calling via an ISDN connection, insure that both B channels are used for this performance feature. During an external call, you cannot be reached by other external subscribers over the ISDN connection.

-  You're conducting a call with subscriber 1.
Another call is signalled, e.g. with call waiting.
-  **2** Dial code.
Subscriber 2 logs in; you can speak with him. Subscriber 1 is on hold.
-  **4** You wish to connect the two subscribers.
Dial code.
The two subscribers are interconnected. Connection charges are born by the subscriber who has set up the respective connection.

Brokering

Description


You're conducting a customer call. Your customer has several questions. In order to provide your customer with the answers, you wish to consult with a colleague. To address any additional concerns, you can switch back and forth between both calls (customer and colleague) during your consultation with the latter.

This performance feature allows switching back and forth between two internal subscribers, two internal subscribers, or one internal and one external subscriber. If programmed, the subscriber on hold hears music on hold or an announcement. Operation is terminal-dependent. ISDN or system telephones allow switching between more than two subscribers. You'll find more information on this in the instructions provided with the corresponding phones.

If you're mediating between an internal and external subscriber and replace the receiver, your call is terminated and the two subscribers are connected to each other.

If you're mediating between two external subscribers and replace the receiver, the call is terminated and the call on hold returns to you.

If you press the **R** key while mediating and then dial **4**, the two external subscribers are connected to each other and your call with the external subscribers is terminated. You bear the costs for your initiated calls.

- J** You are making a call and want to speak to another subscriber without the first subscriber hearing this conversation.
- R** Press the R key.
You hear the internal dialling tone.
-  If you wish to speak with an external subscriber, first dial **0**.
Dial the subscriber.
You hear the ringing tone in the receiver.
Your correspondent is being called.
The person lifts the receiver.
- J** You conduct the call.
The first call is held.
- R 2** Select the code to return to the first call; the second call remains on hold. By activating the code, you can toggle between both callers.
- OR
R 0 You can terminate the call on hold.
Dial code.
- OR
R 1 You can terminate the current call.
Dial code.

Three-Party Conference

Description

You wish to prepare a meeting with two people on the phone. Initiate a three-party conference in order to simultaneously speak with both people. This will contribute to better coordination as you will not have to make preparations via two separate telephone calls.

Three subscribers (up to two external subscribers) can hold a conference call. The conference ends when the initiating subscriber replaces the receiver. A subscriber included in the conference can hang up at any time; in this case, the initiating subscriber continues the call with the remaining subscriber. You can initiate a three-party conference from an existing call by bringing in a subscriber who is in "call waiting" or "on hold". If you're conducting a three-party conference with two external subscribers, the B-channel of an ISDN connection is required for each of these subscribers.










If you return to "Brokering" after a three-party conference, you are connected with the subscriber to whom you were connected before the three-party conference. The other subscriber is on hold.

 **Note:**

You can hold a three-party conference with external and internal subscribers. Eight simultaneous three-party conferences are possible on the elmeg hybrid. No three-party conference can be initiated if more than one connection is held. The connection on hold must first be terminated.

 **Note:**

If analogue terminals are used, the three-party conference is initiated through a elmeg hybrid procedure. For ISDN or IP telephones, operation depends on the terminal. For more information on the function, please consult the relevant user's guide.

-  You are calling a subscriber and want to include another subscriber in this call.
-  Press the R key.
You will hear the internal dial tone.
If you want to speak to an external subscriber, dial 0 first.
-  Dial the subscriber.
You will hear the ringing tone. Your correspondent is being called.
The person lifts the receiver.
-  You want to include the subscriber in the first call.
-  **3** Dial code.
-  You hold the conference call.
-  You wish to disconnect the first subscriber brought into the conference. The subscriber is then held in inquiry.
-  **2** Dial code.
-  You're speaking to the second subscriber again. The first subscriber is on hold.

The conference ends when you replace the receiver. A subscriber included in the conference can hang up at any time; in this case, the initiating subscriber continues the call with the remaining subscriber.

Call forwarding (CF)

Description

You are temporarily away from your office, but don't want to miss a call. You can also accept calls with call forwarding to another number, e.g. your mobile, when you're away from your desk. You can forward calls on your number to any call number. This can occur "immediately", "after time" or "on engaged".

Call forwarding "after time" and "on engaged" can be enabled simultaneously. For example, if you are not near your telephone, the call is forwarded to another number (e.g. your mobile phone). If you are making a call at your desk, other caller may receive the busy signal. You can forward these callers, e.g. to a colleague or the secretary, by using "call forwarding on busy".

Every internal subscriber of the elmeg hybrid can forward her calls to another number. Calls can be forwarded to internal subscriber numbers, internal team numbers or external numbers. When the number to which calls shall be forwarded is entered, the elmeg hybrid automatically checks whether it's an internal or external number.

In a team, call forwarding can be set up for one subscriber in the team. This call continues to be signalled to the other team subscribers. Call forwarding to an internal or external subscriber is performed in the elmeg hybrid.

Call forwarding to an internal number is performed in the elmeg hybrid. If an internal call to an external number is to be forwarded, forwarding also occurs in the elmeg hybrid. In case of external ISDN connections, call forwarding can also occur at the exchange. Here, the connection is set up over a bundle's B channel, cleared for the subscriber initiating the setup. This B channel remains occupied for the duration of active call forwarding.

Two possibilities exist for call forwarding of an external call to an external number.

Call forwarding at the exchange/provider

Call forwarding is conducted at the exchange if only one subscriber is entered in the call allocation for an external call. For call forwarding in the exchange, the performance features "Call Deflection" (point-to-multipoint connection) or "Partial Rerouting" (point-to-point connection) must be enabled with the network operator for the relevant ISDN connections.

Call forwarding in the elmeg hybrid

Call forwarding occurs in the elmeg hybrid if the required performance features for call forwarding at the exchange are not available for the relevant ISDN connections. If several telephones (e.g. a team), some of which have set up call forwarding, receive an external call, the corresponding call forwarding is performed in the elmeg hybrid. Here, the external connection is set up over a bundle's B channel, cleared for the subscriber initiating the setup. In the ISDN connection, this B channel remains occupied for the duration of active call forwarding.

The following types of call forwarding are possible:

Call forwarding on engaged

A call is forwarded to the specified subscriber if the called subscriber is already making a call.

Call forwarding on no response

A call is signalled on the dialled terminal for a defined period. If the call is not received during this time, the call is forwarded to the specified subscriber. The call is then no longer signalled on the terminal originally dialled. In case of call forwarding in the elmeg hybrid, the time is adjustable. For call forwarding at the exchange, this time is fixed at the exchange (currently about 20 seconds).

Immediate call forwarding

All calls for a subscriber are immediately forwarded to the specified subscriber.

System telephones

System telephones can enable or disable call forwarding via a programmed function key. Call forwarding status (on or off) can be displayed via an assigned LED.





Note:

Where an external number is entered as the destination of call forwarding, the code may not be entered along with it. An external number as destination of call forwarding can be linked to selective target assignment using the code. For this, the bundle must be authorised for the initiating subscriber. Call forwarding is then performed via the selected bundle. An existing call forwarding may be overwritten by a new call forwarding. Various call forwarding variants can also be simultaneously enabled. An example is CF "after time" to number 12345, and CF "on busy" to number 66778899. For call forwarding at the exchange, the corresponding performance features must have been requested from the network provider for each ISDN connection of the elmeg hybrid: for the point-to-multipoint connector "Call Deflection", for the point-to-point connection "Partial Rerouting".

 **Note:**

Using the length of the number, the elmeg hybrid automatically detects whether there should be call forwarding to an internal or external subscriber. For call forwarding to an external subscriber, entry of the destination number thus always occurs without an exchange code.

Enable call forwarding

	*	1 1 / 1 2 / 1 3		#		
Pick up receiver		CF immediate/ CF after time / CF on engaged	CF destination number (without EC)		Pos. Receipt	Replace receiver

Turning off call forwarding

	#	1 1 / 1 2 / 1 3		
Pick up receiver		CF immediate/ CF after time / CF on engaged	Pos. Receipt	Replace receiver

Call options

Description

You keep regular business hours. A team of employees answers calls during this period. These employees must be relieved during breaks and the calls to the team signalled on other terminals (e.g. an answering machine) You can configure additional call options for this team. By switching the call option, the calls are automatically signalled at the answering machine or the exchange.

Calls can be simultaneously signalled on different terminals. These terminals are aggregated as a destination in a call option. In the elmeg hybrid, several call options (e.g. for a team or a door intercom) can be configured, for each of which various terminals are entered. Switching between the individual call options allows calls to ring different terminals.

Switching all call options to night operation

	* / #	9 0		
Pick up receiver	Night operation on/off		Pos. receipt	Replace receiver

Activate call option 1-4 “all teams”

	*	9 1	1 X 4		
Pick up receiver	Call option on		Select call option	Pos. receipt	Replace receiver

Activate call option 1-4 “all door intercoms”

	*	9 2	1 X 4		
Pick up receiver	Call option on		Select call option	Pos. receipt	Replace receiver

Activate call option 1-4 “external announcements”

	*	9 3	1 X 4		
Pick up receiver	Call option on		Select call option	Pos. receipt	Replace receiver

Teams

Description

Teams are groups of people working together to realise an objective. In practice, this means that all people within a team can be reached under the same subscriber number for external and internal calls. In the elmeg hybrid, each team of telephones/terminals can thus be assigned a specific subscriber number to guarantee accessibility to internal and external calls. Individual structures of companies can be mapped by teams. Thus departments such as Service,

Sales or Development can be called from inside or outside in a selective manner via team numbers. Within a team, the call can, for example, be signalled simultaneously to all, or first to one, telephone, then also to a second, etc. In a team, answering machines or voice systems can also be used.






Entering into /deleting from a team (temporary)

You can authorise or block yourself for call options of a team or all teams. If you're blocked, no team calls are signalled to your telephone. Authorisation and blocking always occurs simultaneously in the call options. If all subscribers are blocked in the team call option, the external call goes to the terminals entered in the current call option.






The internal number must be permanently assigned to one, several or all teams in the configuration.

Logging in/out of the team

With this procedure, you can log your telephone in or out of the team.

Logging in/out of the team						
 Pick up receiver	 Subscriber login/logout	6 0	 Team call number (00 ... 39)	#	 Pos. Receipt	 Replace receiver

Follow-me

Setting up/deleting follow-me internally						
 Pick up receiver	 Create/delete	1 0	 Follow-me *1)	#	 Pos. Receipt	 Replace receiver

* 1) Internal numbers whose calls are to be forwarded
The calls are now forwarded to the configuring internal telephone.

Mobile subscriber

You can have a call signalled to an additional phone parallel to a call. Signalling can occur internally as well as externally via analogue (POTS), ISDN, GSM or VoIP connections. Several different parallel calls can be configured.

It makes no difference whether the telephone is called directly, in a team or from an inquiry. For team call settings "linear", "rotating" or "setup", the internal telephone is called first, and subsequently, depending on the time setting, the "mobile subscriber". Parallel calling is only possible in the "simultaneous" signalling. Parallel calling of "mobile subscribers" within a team can be disabled or blocked via "Allow call forwarding"

As soon as a "mobile subscriber" has accepted the call, a DTMF receiver in the elmeg hybrid turns on. With the "mobile subscriber", it's then possible to initiate an inquiry via the *-key, forward calls within the elmeg hybrid and externally. For inquiry connections, the functions occur via the internal subscriber assigned to the "mobile subscriber". The "mobile subscriber" then behaves like an internal subscriber of the .

Note:

Inquiries are not possible if the DTMF receiver cannot be switched on.

A DTMF receiver cannot be switched on if:

- No PCM channel is linked if there's a direct IP to IP connection and a SIP provider.
- With an IP connection, there is no calling over the G.711 codec, or the DTMF signaling is outband (with other codecs, DTMF detection may not be operating correctly!).

Functions of the * key on the »Mobile Subscriber«.

The * key is interpreted by the “Mobile Subscriber” as an R-(flash) key and, depending on connection status, can execute the following functions:

In call status:	Initiate inquiry/hold.
In inquiry-dial status:	Dialling abort -> engaged tone.
In inquiry-call status:	Terminate caller. Back to connection on hold.
In inquiry-call-state:	Disconnect existing connection, return to call on hold.
In inquiry-engaged state:	Return to held connection (call).

Internally log in/out mobile subscriber

 Pick up receiver	 /  Login/logout	 	 Pos. receipt
--	--	---	--

Externally log in/out mobile subscriber

Pick up your telephone receiver and dial the external number to which the internal service number of the elmeg hybridis assigned. Reset your telephone to tone dialling:

Externally log in/out mobile subscriber




 /  Login/logout	 	 Pos. receipt	 Enter PIN 2	 Pos. receipt
--	---	--	---	--

Hotel functions

The elmeg hybrid features extensive hotel functions. Operation of these functions proceeds from reception telephones via the elmeg hybrid system menu.

Set hotel room status

It is possible to record the current room status by dialling a code from the room telephone. This recording can only be analysed and displayed in connection with a hotel software application.

Set hotel room status				
	* 5 1	0 / 1 / 2		
Pick up receiver		Enter status: 0 = Room not cleaned 1 = Room cleaned 2 = Room cleaned and checked.	Pos. receipt	Replace receiver

Wake-up call

If you wish to be reminded of an appointment or to be woken at a specific time at the hotel, you can use the appointment or wake-up call. For B&B's and hotels, a system telephone is configured as reception telephone. On this telephone, the wake-up call for room telephones can be configured once or for consecutive days. You can of course also set up the secretary phone, for example, as a reception telephone. You appointment calls can then be entered here. Further, it's possible to enter the wake-up time on a one-time basis for the next wake-up time (once a day) from any room telephone. You can also configure the appointment or wake-up call from your PC via separate hotel PC software. Appointment calls can also be configured in your system telephone.

Every internal subscriber of the elmeg hybrid can receive an automatic wake-up call / appointment call from the elmeg hybrid at an individually set time. Wake-up call signalling can last up to 99 seconds. If the wake-up call is not accepted within this period by picking up the receiver, there can be a maximum of 3 repetitions at intervals of up to 5 minutes. If the repeated wake-up call is not accepted either, the wake-up call configured in the elmeg hybrid is deleted. If the called subscriber accepts the wake-up call (e.g. by picking up the receiver), he/she hears music-on-hold or a wake-up announcement, depending on the setting. The wake-up call can be set up or deleted by the subscriber him-/herself via a code. In this case, wake-up call configuration is on a one-time basis, and must be newly entered each day. A wake-up call can also be set up or deleted from a reception telephone as a hotel application component.

Select music-on-hold or wake-up announcement

In the context of voice applications, specific speech and music data can be saved in the elmeg hybrid. Among others, additional music-on-hold or texts for wake-up announcements can be saved here. In the elmeg hybrid configuration, you can then centrally configure whether music-on-hold or a wake-up announcement should play on a wake-up call. If a wake-up call is set up by a subscriber, he/she hears the centrally set music-on-hold or wake-up announcement after acceptance of the wake-up call. When setting up a wake-up call over a reception telephone, configuration of the music-on-hold or wake-up announcement can be individually performed for each subscriber.

Note:

If a wake-up call has already been set up but not yet executed, upon renewed setup of a wake-up call, the new wake-up call is saved while the previous one is deleted. At the preset wake-up time, analogue telephones are called with "wake-up call". For ISDN telephones, one's own call can be configured according to the corresponding instructions.









Wake-up calls are not signalled during a call in progress. The wake-up call only occurs after the call is ended. If an internal subscriber is called while a wake-up call is signalled, the caller gets an engaged tone.

In the elmeg hybrid's configuration, you can perform the following settings for wake-calls:

- Duration of the wake-up call between 1 and 99 seconds.
- Number of wake-up call repetitions between 0 and 3.

- Period between wake-up call repetitions from 1 to 5 minutes.

In addition, you can set whether, after accepting the wake-up call, a subscriber hears the music-on-hold of the elmeg hybrid or a wake-up announcement from the voice application.

Set up wake-up call from room telephone (one-time wake-up call)					
 Pick up receiver	 5 2	0 6 Hour	3 0 Minute	 Pos. receipt	 Replace receiver
0 6	Enter the hour between 00 and 23 (6:00 in our example)				
3 0	Enter the minute between 00 and 59 (6:30 in our example)				
Delete wake-up call					
 Pick up receiver	 5 2		 Pos. receipt		 Replace receiver


Setting up a wake-up call from a “reception telephone”

The reception telephone is a system telephone. The wake-up call for a checked-in subscriber can be configured via the PBX system menu. Here, wake-up call signalling can be on a daily or one-time basis. Moreover, for each subscriber the music-on-hold or wake-up call played back after acceptance of the wake-up call can be individually set.

Accept wake-up call			
 Your room telephone rings	 Pick up receiver	 Music-on-hold or announcement	 Replace receiver, the wake-up call is ended

Activate MWI from “reception telephone”

MWI information can be switched on and off from a reception to a room telephone via a telephone procedure. If MWI information is switched to a room telephone, the reception telephone number is entered into the caller list and the special dialling tone is enabled. Display or signalling of this information can occur at terminals (analogue terminal, IP terminal, ISDN terminal and system telephone) supporting these performance features. External MWI information is conveyed transparently by the elmeg hybrid. If there's a message from a voicemail system, there's a short call. Depending on the terminal, a symbol, a text generated in the telephone as well as the caller's telephone number can be displayed. If MWI information is deleted, there is no signalling. E.g. an MWI is present, the Funkwerk CA 50 telephone displays an envelope symbol and a text generated in the telephone, along with the caller's phone number.

Activate MWI					
 Pick up receiver	 / 	5 0	 Room call number		

Call Through

Call Through means dial-in via an external connection to the elmeg hybrid, with the call put through from the elmeg hybrid via another external connection.

One of the elmeg hybrid's telephone numbers is defined in the configuration for Call Through. An external caller using this telephone number first hears the elmeg hybrid's attention tone. The checks the caller's authorisation for Call Through, then activates a simulated external dialling tone for the call. The caller is authorised if he or she enters the correct 6-character PIN2.

Further protection is possible if the caller's number is entered in the phone book and is approved for Call Through. The elmeg hybrid then compares the number in the phone book with the caller's number and the entered 6-digit PIN 2.

As a rule, all numbers in the phone book are available to Call Through. In the connection data records, one data record is created for the incoming connection and one for the outgoing connection.

					
Pick up receiver	Dial number destined for Call Through on my elmeg hybrid	Dial tone	1) Enter PIN	Dial external destination number	Call

1) For this entry, configuration in the elmeg hybrid is crucial (with/without PIN, with call number detection, or both).

Alterable access numbers

For the following performance features, the codes can be individually set in the elmeg hybrid configuration. Here, the preset access number of the elmeg hybrid is completed by a call number from the internal elmeg hybrid dial plan.

You can enter the modified codes in the table. For the performance features bundle assignment, open inquiry and the operation of a door opener, several codes may be assigned.

Performance feature	Default status of the code	Modified code
Exchange code (EC)	0	
Call pickups from group	* 0	
Call pickups from a specific subscriber	# 0 #	
Speed dial from the phone book	* #	
Assignment of project numbers	* 2 3 #	
Bundle assignment	* 2 0	
Open inquiry	* 2 1	

Operation of performance features with a modified code occurs as described for the corresponding performance feature. You can either use the modified code (internal number), or the code described in the user's guide (except exchange code).

Connection/call costs

The elmeg hybrid generates a connection data record for every external call. These connection data records contain detailed information on the call.

E.g. Date and time, call duration, numbers for calling and called party, connection type, call costs and possible project number.

There are two options for recording incoming external connections.

- Only incoming connections are saved with a project number.
- All incoming connections are saved.

Output of connection data records

There are various options for output of saved connection data records. For example:

- Printer connection on RS232 interface.
- PC or laptop via RS232 or USB interfaces.
- LAN connection (configuration program).

Displaying call costs


Connection/call cost data can be displayed on every terminal supporting this performance feature. For ISDN and analogue terminals, there are differing processes for transmission and display of call costs.

Fee counter

On the basis of the transmitted tariff information, the elmeg hybrid administers a fee counter for each internal subscriber. For this, the costs for individual calls are added up. Fee counters for internal subscribers can be displayed via the elmeg hybrid menu, or using a fee program. If desired, they may also be deleted.

Overflow of connection data records

The memory for your connection data records is limited. If a specific number of connection data records are saved in the memory of the elmeg hybrid, a connection data memory overflow may be signalled on a system telephone. Depending on the system telephone type, either the service number alone, or along with a message, is displayed. The system telephone is set in the configuration.

 **Note:**

System functions are described in the operating instructions of the respective system telephones.

System menu of the elmeg hybrid

The elmeg hybrid provides a special menu with system-specific functions for system telephones. The menu and its related performance features are administered in the elmeg hybrid exclusively.

The following performance features are available in the system menu (examples):

elmeg hybrid phone book, follow me, direct call, activate day/night (call options), cost entry, hotel functions

You access the elmeg hybrid system menu as described in the operating instructions of the respective system telephones.

System telephones

Different elmeg system telephones can be connected to the internal ISDN interfaces of the elmeg hybrid. They are automatically recognised as system telephones after connection to the elmeg hybrid. The elmeg hybrid provides the system telephones a system menu and additional special performance features.

You can configure function keys on the system telephone and (optional) system telephone key extensions. You'll find the description and information on configuration and operation of these functions in operating instructions for the system telephones.

Note:

When you enter a number to dial via a SIP provider, dialling output only occurs ca. 5 seconds after entry of the last code. Completing a number with the hash key prompts immediate dialling. Here, the terminal must be able to also dial the # in the .

Service

Service access

This performance feature allows configuration of your elmeg hybrid by your specialised dealer's service centre, or loading of the elmeg hybrid's current software. You can initiate this function from an internal telephone of your elmeg hybrid, or clear your system for external PC dialin (e.g. your dealer).

Configure clearing for an incoming service connection (with subaddress check)

You can clear the elmeg hybrid for dialin of an external subscriber. Clearing of the elmeg hybrid lasts 30 minutes.

 Pick up receiver	  	 Pos. receipt	 Replace receiver
---	---	---	---

Delete clearing for an incoming service connection

You can delete a service connection for dialin of an external subscriber. This does not terminate any active service connection.

 Pick up receiver	  	 Pos. receipt	 Replace receiver
---	---	---	---










Configuration via IP and analogue telephones

Configuring performance features over a telephone



The following procedure must be carried out at the start of the configuration below.

Enable configuration

 Pick up receiver	 	 Pos. receipt	    Enter PIN 1	 Pos. receipt
---	---	---	--	---

After accessing the configuration, you can set the performance features using the keys described. The telephone used for programming cannot be reached during configuration of the system.

If a configuration is completed successfully, you will hear a positive acknowledgment tone. You can then configure the next performance feature. If you wait longer than 40 seconds between entries, the elmeg hybrid terminates configuration and you hear the engaged tone. All the entries you have made up to then, indicated by a positive acknowledgment tone, are saved when you replace the receiver. The data is stored for about 10 seconds after you replace the receiver. During this time, the system cannot be reconfigured and power supply to the elmeg hybrid must not be interrupted.







Modify PIN

Various settings are protected by the elmeg hybrid's PIN1. In the basic setting, PIN1 is set to 0000. Please keep the PIN1 in a safe place; if you lose the PIN, you can no longer configure the elmeg hybrid over the telephone. If you have forgotten your PIN 1, please consult your specialist dealer.







“Remote activation/remote control” is protected by PIN 2.

Remote access via the 6-digit PIN 2 is only available if this PIN 2 has been individually modified, i.e. the basic setting 000000 has been changed.

Modify PIN 1

   PIN 1 (4-digit) modify	 New PIN enter	 Enter new PIN (confirm)	 Pos. receipt
--	---	---	---

Modify PIN 2

   PIN 2 (6-digit) modify	 New PIN enter	 Enter new PIN (confirm)	 Pos. receipt
--	---	---	---

Reset performance features of elmeg hybrid

Reset to basic setting (Reset)

   Access number
--

Reset for a subscriber

   Access number	 or  Internal number or * for all internal subscriber	 Pos. receipt
--	---	---

 **Note:**

This function allows reset of IP and analogue telephone performance features.

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www.Funkwerk-ec.com where, you will find a Service / Support area

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