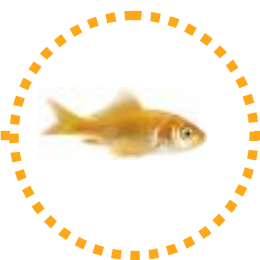# Operating Manual

IP21

IP22

IP24

IP28

innovaphone

PURE IP - TELEPHONY

Release 7.00, 3rd edition, February 2009

PDF-version of manual IP21, IP22, IP24 and IP28 is available for download under:
http://www.innovaphone.com

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1. Declaration of Conformity

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ➤ Reorient or relocate the receiving antenna.
- ➤ Increase the separation between the equipment and receiver.
- ➤ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ➤ Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

2. About this manual

This manual describes features of the telephones on the innovaphone IP21, IP22, IP24 and IP28 adapters.

As well as the usual operation of the telephone, the additional features specifically for the PBX telephone system are described.

The features are implemented using shortcut keys (feature codes), which are explained in this manual.

Additional information on administration may be found in the VoIP gateway and innovaphone PBX manuals available in the download area of the innovaphone Web site at www.innovaphone.com. All instructions specified there should be followed carefully and the devices should only be used in accordance with these instructions.

Please check for new versions in the download area.

2.1. Feature code activation

To activate the feature code, go to the IP address of your adapter using your Web browser and authenticate yourself.

In the basic settings,

➢ the **user name "admin"** and
➢ the **password** "ip21" (for the IP21 adapter) are preset. For the IP22 adapter, the password would be "ip22", for the IP24 adapter it would be "ip24" and for the IP28 adapter it would be "ip28".
➢

Then select the following menu:

1. **"Administration", "Gateway" and "Interfaces"**

2. Under "**Interfaces**", you will find all the interfaces of your IP adapter. Select the interface to which your adapter is connected.

3. You can activate the feature codes under "**Supplementary Services**".

2.2. Feature code configuration

All functions consequently described relate to preset standard feature codes. You can, however, change the feature codes or specify your own.

To specify your own feature codes, proceed as follows:

1. Select the "**Administration**" menu.

2. Then select the "**Gateway**" menu.

3. You will find the "**Feature Codes**" option under "**General**". You can change the standard settings for all functions and specify your own feature codes.

2.3. Feature code - general structure

The codes for these features can be configured. Here, it is to be noted that, in general,

➢ the **$** character stands for a **variable** number of characters (for example, a telephone number) and
➢ the **$(x)** character stands for a **fixed** number of characters.

➢ Usually, an action is **initiated** with a * character and
➢ is **cancelled** with a **#** key.

3. Diversion options

The call diversion function allows you to be available even whilst absent.

> Note:
> Call diversion operates in accordance with the H.450 standard. The gatekeeper must support this protocol.

The IP adapter supports three different types of call diversion, which are operated with the following codes on your telephone.

Activity	Code	Description
Permanent diversion *Enable/Disable*	*21*$# #21#	In this case, calls are always diverted to another subscriber. ➢ The $ character stands for the <u>destination number</u>. > Note: > This state of diversion cancels the other diversion types. > With this setting, calls are diverted immediately. The called party is therefore unable to answer the calls.
Diversion if busy *Enable/Disable*	*67*$# #67#	Calls are diverted if there is already an active call, that is, if the called line is busy. ➢ The $ character stands for the <u>destination number</u>.
Delayed diversion *Enable/Disable*	*61*$# #61#	Calls are diverted if they are not answered within a certain time limit. ➢ The $ character stands for the <u>destination number</u>.

> Note:
> Unlike permanent call diversion, the latter two types allow you to accept calls within a pre-defined time period before they are diverted.

4. Lock

In the initial state, you can lock your comfort telephone using the following shortcut key.

Activity	Code	Description
Lock keypad ***Enable/Disable***	*33*$# #33*$#	The keypad of your IP telephone is locked using this shortcut key. ➢ The $ character stands for a variable <u>character string</u>.

Before you can lock your IP telephone, you are prompted to enter your **PIN**.

5. PIN

The PIN is used to prevent unauthorised access. You can use this function to activate the protection and specify the PIN. Proceed as follows to set the PIN:

Activity	Code	Description
Change PIN	*99*$*$*$#	Changes the PIN. ➢ The 1st $ character is the <u>old</u> PIN. ➢ The 2nd $ character is the <u>new</u> PIN. ➢ The 3rd $ character is used for confirmation of the new PIN.

6. Station guarding

This function allows you to respond in a particular way to incoming calls.

In the idle state, the telephone is muted. A dial tone is nonetheless forwarded to the caller.

Activity	Code	Description
Station guarding: all		The mute function for incoming **external and internal** calls.
Enable	*42#	
Disable	#42#	
Station guarding: internal		The mute function for **internal** telephone calls.
Enable	*421#	
Disable	#421#	
Station guarding: external		The mute function for **external** telephone calls.
Enable	*422#	
Disable	#422#	

7. Call waiting function

Activity	Code	Description
Call waiting function		This function allows you to control call waiting while engaged in a telephone call.
Enable/Disable	*43#	
	#43#	

8. Delete local settings

Activity	Code	Description
Delete local settings	*00#	Deletes the adapter's local settings. The adapter's initial configuration is restored.

9. Pickup

Within a group, an incoming call can be picked up by a subscriber.

Activity	Code	Description
Non-selective pickup	*0#	In this case, you can pick up a group call at your telephone. If there are several group calls ringing, it is not possible to specify which call to pick up.
Selective pickup		If there are several group calls ringing, you can specify a particular incoming call you want to pick up.
	0$#	➢ The $ character is the <u>number of the telephone</u> of the group subscriber.

10. Park

You can use this function to define the parking position. This parking position is linked to an existing object of the same group. The object can be the exchange line or the queue, for example.

Calls can be parked onto this position and retrieved again by any member of the group.

Activity	Code	Description
Park function on <u>own</u> telephone	*16$(1)*	You use this option if you want to park a call onto your own IP telephone or
Take call parked on <u>own</u> telephone	*#16$(1)*	would like to take a call parked on your telephone.
Park onto <u>external</u> object	*17(1)#*	This option is for when you want to park a call onto an external object, not your own telephone. The subscriber for whom you have parked the call can retrieve this caller with *16$(1) as described above.
Take parked call from <u>external</u> object	*#17(1)#*	This code allows you to take the parked call from an external object.

11. Join group

Activity	Code	Description
Join group	*31#*	This function allows you to join or leave a group with the current registration.
Leave group	*#31#*	

12. Summary

The table below is intended to provide a clear overview of all functions and their standard feature codes.

Function	Standard feature codes		Page
	Function on	**Function off**	
Diversion option			Pg 3
➤ Permanent diversion	*21*$#	#21#	
➤ Diversion if busy	*67*$#	#67#	
➤ Delayed diversion	*61*$#	#61#	
Lock	*33*$#	#33*$#	Pg 4
PIN	*99*$*$*$#		Pg 4
Station guarding			Pg 5
➤ Station guarding: all	*42#	#42#	
➤ Station guarding: internal	*421#	#421#	
➤ Station guarding: external	*422#	#422#	
Call waiting function	*43#	#43#	Pg 5
Delete local settings	*00#		Pg 6
Pickup			Pg 6
➤ Non-selective pickup	*0#		
➤ Selective pickup	*0*$#		
Park	*Park*	*Take a parked call*	Pg 7
➤ On own telephone	*16$(1)	#16$(1)	
➤ On external object	*17(1)#	#17(1)#	
Join group	*Join*	*Leave*	Pg 7
	*31#	#31#	

13. Control with numeric keys

The following key sequences are used to control your telephone calls.

Key sequence	Function
(R)+2	➢ Accept a waiting call ➢ Switch between active call and call on hold
(R)+1	➢ The connection set up is deleted before the consultation connection is set up
(R)+4	➢ Replaces a hang-up for hold and retrieve. Once a second line has been set up, the active call is connected with the call on hold using this key sequence. ➢ Consultation

> Note:
> Even if you have activated only one channel, you can use these shortcut keys to hold and retrieve, transfer a call and make consultation calls.

14. Safety instructions

The manufacturer assumes no responsibility for any personal injury, damage to property or subsequent damage that can be attributed to improper use of the device.

innovaphone® AG declares that the device meets all basic requirements of the 1999/5/EC European guideline.

The "innovaphone Administrator Manual - VoIP Gateways" and the "Administrator Manual - innovaphone PBX" should also be observed for the configuration of the VoIP terminals. All instructions specified there should be followed carefully and the devices should only be used in accordance with these instructions.

> Note:
> Please note the following instructions for your own safety:

➢ Power supply

The external power supply is designed for operation with a 100-240 V, 50 Hz AC mains network. Never try to connect the equipment to other mains systems!

The equipment cannot be operated during a mains failure. The equipment settings however are retained.

The power socket must be near to the equipment and easy to access. The power supply to the device can be interrupted by pulling the mains adapters out of the power socket or, if the power is supplied via a network cable (Power over LAN), by removing the network cable.

➢ Installation and connection

Lay the connection cables carefully so that no one can trip over them. Connected cables must not be bent excessively, pulled or subjected to mechanical strain.

The equipment is intended for use in dry rooms only.

The equipment must not be installed and operated under the following conditions:

- In damp, dusty rooms or in rooms where an explosion may occur
- At temperatures over 40°C or under 0°C
- Where it is subject to impact stress or vibrations
- At places subject to direct sunlight

Some types of furniture varnish or cleaning products can damage the plastic feet of the IP21, IP22, IP24 or IP28 comfort telephone and leave marks. In these cases, make sure you put the equipment on a stable, non-slip surface.

➢ Cleaning

Use a soft, slightly damp cloth to clean the surface of the equipment housing.

Do not use any chemicals or abrasives. The equipment does not require any maintenance.

➢ Malfunctions

There is no need to open the device if it is operated and serviced as intended.

Do not open or reconnect faulty equipment. In this case, return the equipment to your dealer or service centre. Keep the original packaging in case you need to return the equipment, since it provides ideal protection.

Back up all entries (for example, on a PC) to avoid losing data.

➢ Disposal

When due for disposal, the device should be disposed of as electronic scrap, in accordance with local regulations.

➢ Environmental sustainability

There is no contact with hazardous materials if the telephone is used as intended. The plastics used for this device are of partially recycled granulate. We do not use any plastic material for our packaging. We only use part recycled cardboard and paper.

➢ Warranty

Your IP terminal is a sophisticated, modern device which has been produced using state-of-the-art production equipment in order to meet high quality requirements. Only high quality components, which ensure a maximum of reliability, are used for their production.

A warranty seal has been applied to the bottom of the IP terminal (on a screw of the housing). Please make sure it is not damaged, since otherwise no warranty claims can be made.