

# User guide



**Quail**digital

**PRO7 HEADSET SYSTEM**

These installation instructions are aimed at a person with a reasonable level of technical competence and familiar with the safety precautions relevant to the use of electrical and electronic equipment. You should not attempt to install this system without the relevant level of expertise.



**This system operates with a 48v DC power supply. To maintain warranty, only Quail Digital approved parts should be used.**

*If your installation requires more than one Base you will require Cat5 cable, two or more RJ45 plugs and crimping tool - and a LAN + RJ45 network cable tester.*

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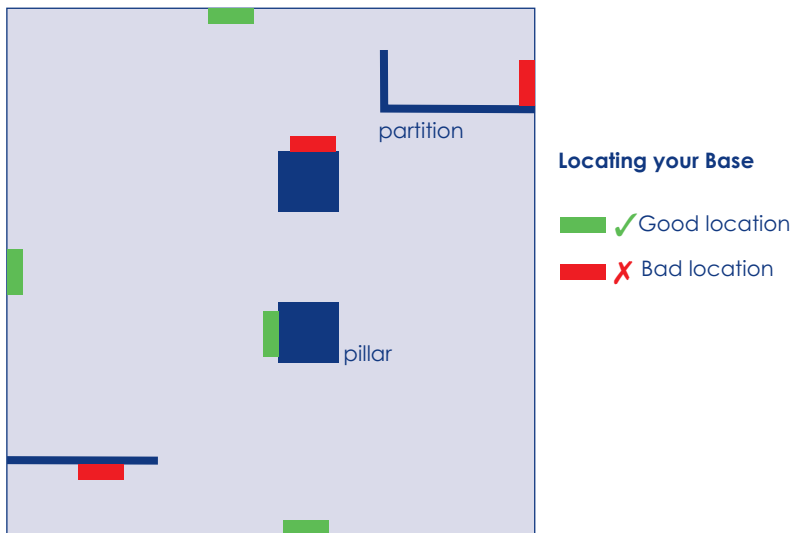
# Installing the system

The Base Station (Base) is a license-free DECT wireless transceiver using a 48v DC external power supply. The system can be expanded with multiple Bases, up to a maximum of 20, in a closed communications network linked by Cat5 cable.

The typical range of the Base is up to 50 metres internally and up to 100 metres in open spaces. Internal walls, stairwells, partitions, building fabrics and room height can affect range.

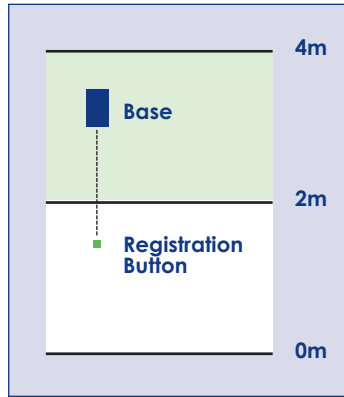
## Installing single or multiple Bases

The diagram below illustrates possible locations to mount your Base. As a tip always locate a Base where it has maximum direct sight of the area you want to cover. Before fixing your installation permanently, you could also place the Base in temporary locations around the premises to test and optimize coverage. You should also identify the location of power sockets and routes for Cat5 cables if you intend to use multiple Bases.

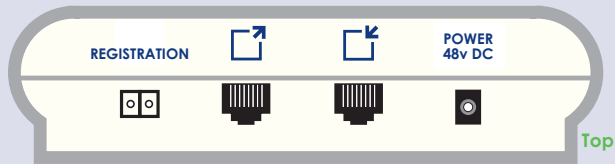


If you plan to mount the Base higher than 2m above floor level consider installing a **Registration Button** - it should be wall-mounted underneath the Base so you can see the Base LEDs during the registration process.

The Registration Button is used to activate the registration process (press for 5 seconds) and to reset the entire network (press for 15 seconds).



### Base Station



⏻ Power  
✓ Status

Registration Button    Cat5 Out    Cat5 In    Power adaptor



Micro SD card    Message volume    Registration: press for 5 secs  
Reset: press for 15 secs

## Rules when installing multiple Bases on the same network

- Ideal height for Bases is between 2 and 4 metres above floor level.
- The maximum cable length between any two Bases should not exceed 100m.
- The maximum cable length between two power sources should not exceed 200m.
- The maximum number of Bases a single power supply should support is four.
- When 'mapping' the premises, as a general rule place the next Base 10m beyond the point where the headset loses range from the previous Base.
- It is good practice to label the Cat5 cables that go into the top of the Base IN and OUT respectively to avoid mis-connection at a later date.

**Useful Tip** Power to the Bases should use a constant 24hr power outlet. If one or more mains circuits is switched off, it may affect the operation of the entire Base network.











### Follow the Type B wiring protocol for all RJ45 plugs









Colour code as shown right.



**Important** *If you add one or more bases to a system that's already been used, always RESET the system by pressing the RESET button for 15 seconds. This will align the registration data on all bases. Failure to RESET the system will result in the bases failing to communicate with each other.*

The two LEDs on the front of the Base indicate its status, as below:

POWER LED	STATUS LED
  Booting up	  Synchronization signal receiving OK
  Base is master and ready	  Active call or calls on this Base
  Base is slave and ready	

BOTH LEDs FLASHING	CORRECTIVE ACTION
  Power too low to boot up  	Check the individual power supplies on the network for possible failure; or being switched off; or consider adding an extra power supply to the network
  Base in registration mode  	The system will time-out of this mode in 10 minutes but you can press the registration switch to exit the registration mode manually

# Positioning the charger

**The Headset Charger should be positioned on a worktop or wall-mounted Headset Charger Shelf (Q-P7SHELF) and plugged into a socket that is a constant 24hr power outlet. The charger should be located within range of a Base so that headsets remain active at all times.**

Return headsets to the charger when not in use. Charge time is approximately 2.5 hours. When charging, the blue LED on the headset will flash every 5 seconds. When fully charged the blue LED is constant.

Headsets will last up to 9 hours between charges in standby/PTT mode, and 6.5 hours in TalkLock mode. 3 beeps every 60 seconds indicate the battery is getting low.



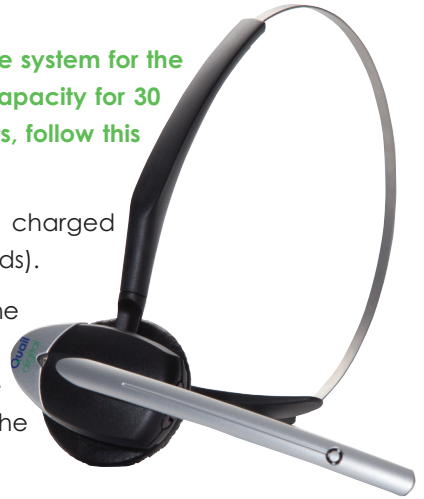
Headbands and neckbands can be stored neatly on the hanging bar of the Headset Charger Shelf.



# Registering and using headsets

Each headset needs to be registered to the system for the first time before use. The system has the capacity for 30 headsets. To register one or more headsets, follow this procedure:

- 1** Make sure the new headset has a charged battery (blue LED flashes every 5 seconds).
- 2** Make sure all the headsets in use with the system are in range of the Base. If a headset isn't in range of the Base during the registration process it will be deleted from the system.
- 3** Put the Base in 'registration mode' by pressing the Registration Button on the Base, or by pressing the wall-mounted Registration Button, for 5 seconds. On the Base both LEDs should be flashing green.
- 4** Place the new headset to your right ear, press the large silver button and volume toggle down for 3 seconds. Wait for the beeps to change their frequency and tone to one bleep every second.
- 5** A 3 second long bleep signifies successful registration. You may also hear a double bleep tone that will indicate it is ready to use.
- 6** Once headsets have successfully registered to the Base, the system as a whole goes through an internal process of alignment with all the headsets and Base(s). This process can take up to 10 minutes. After 10 minutes the headsets will be fully operational with the Base(s).
- 7** The registration process will time-out after 10 minutes, no further action required.
- 8** The system is now ready to use.



Audible tones for different headset status and functions:

STATUS	STONE
Registration mode	1 beep every second
Out of range	2 beeps every 10 seconds
Battery low	3 beeps every 60 seconds
Registration complete	1 long beep (3 seconds)
Busy tone	3 long beeps
Headset not registered	1 beep every 3 seconds
Base capacity full	As per busy tone
Call drop	Bloop-beep tone

**Volume** There are 5 volume settings. Use the toggle at the rear of the headset to adjust volume by pressing upwards for each step.

**Speech** The headset can be used in 2 speech modes:

- **TalkLock** This mode is hands-free. To activate, press the silver button for less than 1 second - the headset is then hands-free.

To de-activate it, press the silver button again. This will shut off the microphone.

- **PTT** Press the silver button while you are talking, then release when finished.

Up to 6 users can speak at any one time. All headsets hear all the time.

**Best practice:** only use TalkLock if you need to be hands-free. Use PTT for routine communication.



# Frequently asked questions

<p><b>Up to 6 people can use TalkLock at one time. If 6 people are using TalkLock, can anyone else speak on the system?</b></p>	<p>No. Anyone else pressing their talk-button will hear an engaged tone and cannot enter the call.</p>
<p><b>How are the 6 speech channels freed up?</b></p>	<p>As soon as the 6th user engages TalkLock they effectively block anyone else entering the call. At this point the system hunts randomly for any of the other 5 users that aren't speaking at that moment and cancels TalkLock on one of them. This frees a channel. The system only attempts to free one channel.</p>
<p><b>Will the system throw off more than just the 6th user?</b></p>	<p>No. Up to 5 users can remain in TalkLock mode continuously without concern that their TalkLock will be cancelled by the system.</p>
<p><b>What happens if TalkLock is left on when the headset has finished being used? Is the TalkLock cancelled?</b></p>	<p>No, TalkLock isn't cancelled just because the headset isn't on someone's head. TalkLock will be cancelled if: a) the battery goes flat; b) headset taken out of range; c) placed in charger; d) becomes one of the randomly selected 5 headsets to have the channel cancelled because a 6th hands-free user has joined.</p>
<p><b>If the registration button is pressed, do the headsets currently registered to the system need re-registering.</b></p>	<p>No, they don't. Provided headsets are in range of the base station, whether in or out of the battery charger, they remain registered and do not need re-registration.</p>

# Product specifications

## BASE STATION

### Operating frequency

1.88-1.90 GHz EMEA, Asia,  
1.910-1.930 GHz North America

### DECT transmission power

250 mW EMEA, Asia  
125 mW North America

### Headset capacity

Up to 30 headsets all listening with a  
max of 6 simultaneous participants

### Multiple Bases (max)

Network via Cat5 cable, up to 20 Bases

### Expansion with Cat5 cable

max 100m cable length between Bases

### Power requirements

100-240v AC voltage sensing

### Dimensions HxWxD

170 x 130 x 35 mm

### Weight

200g



## REGISTRATION BUTTON

### Function

Activates registration and reboot functions  
on sites where Base is out of reach

### Cable requirements

2 core cable

### Dimensions HxWxD

80 x 80 x 30mm

### Weight

90g



## ACCESSORIES



NECKBAND Q-RH7NB



HEADBAND Q-RH7HB



BATTERY Q-RH7BAT



## HEADSET

## Q-P7HS

<b>Operating frequency</b>	1.88-1.90 GHz EMEA, Asia, 1.910-1.930 GHz North America
<b>Operating modes</b>	TalkLock and PTT as standard
<b>Microphone</b>	Noise cancelling, electric mic
<b>Battery capacity</b>	9 hours PTT, up to 6.5 hours TalkLock,
<b>Charge time</b>	2.5 hours to full re-charge
<b>Volume control</b>	5-stage, slide button up/down
<b>Battery (part number)</b>	Lithium Ion 3.7v (Q-RH7BAT)
<b>Weight</b>	23g

## CHARGER

## Q-P7CH

<b>Capacity for headsets</b>	6 port
<b>Power indicator</b>	Red LED
<b>Mounting</b>	Shelf / desktop
<b>Power requirements</b>	100-240v AC voltage sensing
<b>Dimensions HxWxD</b>	110 x 330 x 96 mm
<b>Weight</b>	680g



**POWER ADAPTER Q-48V**



**HEADSET CHARGER SHELF  
Q-P7SHELF**

**HYGIENE COVERS  
Q-RH7HC** Box of 100

# Troubleshooter

FAULT	ACTION
<b>None of the headsets are working</b>	Always check the headsets are registered. Check the Base power LED is illuminated. If not, check the mains power is on. If yes, power supply or Base may be faulty. Contact your service company.
<b>The system is working but the range is short</b>	Is your Base positioned on a wall as per specification on page 3? If in doubt, move it to another location, and see if range improves. If it doesn't, contact your service provider.
<b>One or more headsets isn't working</b>	Is the battery charger LED light illuminated RED? If not, check the power to that socket is on. If it is, check the power supply is connected. If it is connected and the power light doesn't illuminate, contact your service provider.
<b>Headset(s) LED is flashing, but not working</b>	Put the headset to your ear, stand near to the Base: are you hearing 1 beep every 3 seconds? If so, headset isn't registered. Follow registration procedure. Are you hearing 2 beeps every 10 seconds? If so, you're out of range of Base. Move closer. Once in range you'll hear 1 long beep.
<b>Headset has been in charger but LED light isn't flashing</b>	Swap the battery with another headset which you know is working. If the headset works with the alternative battery, discard the failed battery and contact your service provider for a replacement battery.
<b>Headset LED is on but the headset has 'locked up'</b>	Remove battery for 5 seconds then replace back onto the headset. This should clear the lock-up.
<b>Headsets are picking up audio from more than one system.</b>	Your headset is registered to more than one Base, and needs removing from the one you don't want it used with. See page 7 for procedure.
<b>How do I order accessories?</b>	Contact your service provider or email <a href="mailto:sales@quaildigital.com">sales@quaildigital.com</a>



**IC: 6402A-QP7HS**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**FCC ID: UDDQP7HS**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



The logo for Quaildigital features the word 'Quail' in a dark blue, sans-serif font, followed by 'digital' in a light green, sans-serif font. A small green quail icon is positioned to the left of the 'i' in 'Quail'.

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