

QD Belt Pack System User Manual



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SAFETY PRECAUTIONS AND IMPORTANT NOTICES

When using your Quail system, these basic safety precautions should always be followed to reduce risk of fire, electric shock and injury

1) Never push objects of any kind into your Quail equipment through the cabinet openings. They may touch dangerous voltage points resulting in risk of fire or shock.

2) To reduce the risk of electric shock do not disassemble any of the Quail equipment. Take it to a qualified service technician when repair work is required. Opening or removing covers may expose you to dangerous voltage or other risks. Incorrect re-assembly could cause electric shock when the unit is subsequently used.

3) Unplug the Primary Station or Charger Unit from the wall outlet and refer servicing to qualified personnel under the following conditions:

- When the power supply cord, plug or adaptor is damaged or frayed
- If liquid has been spilled into the product
- If the product has been exposed to rain or water
- If the product does not operate properly after instructions have been followed
- If the product has been dropped, or the cabinet appears damaged
- If the product exhibits a distinct change in performance

4) Avoid using the equipment during a lightning storm, there may be a remote risk of electric shock from lightning. If possible, unplug the AC power for the duration of the lightning storm.

5) Never dispose of batteries in a fire. There is a serious risk of explosion and / or the release of highly toxic chemicals. Dispose of used batteries in accordance with local regulations.

6) When not using your Quail system for an extended period of time, please disconnect the mains power from the Primary Station and Charger Unit, and remove the batteries from the belt packs.

7) The Quail belt pack uses a specific Quail rechargeable NiMH battery. Do not substitute any other battery.

INTRODUCTION

Thank you for choosing a Quail Digital wireless communication system. You have selected the latest in Digital technology to improve your communications, but in order to make the best use of your equipment you need to read the following instructions carefully.

If you have any further questions about the use of your equipment, please contact your local distributor through our website www.quaildigital.com

PREPARATIONS FOR USE

To use the system you will require the following:

1 QD-PS Digital Primary Station



2+ QD-BP Digital belt packs



1+ QD-CG7 four port charger units



1 QD-RH5 headset per belt pack



1 Registration Point & Cable



2 Power Cables

For the belt packs to operate their batteries will need to be charged. When your system arrives, plug the charger unit into the mains power socket. The power indicator will illuminate green. Now place the belt packs in the charger ports. The LED on each belt pack will initially flash red to show that it has located itself correctly, and is now charging. When fully charged, the

LED will flash green, and the belt pack is ready for use. This takes about 6 hours, and the belt pack will then provide about 30 hours of use before it needs to be charged again.

Note: To get the best performance out of your rechargeable batteries, you should first fully charge the belt packs. The initial charge may take up to 16 hours.

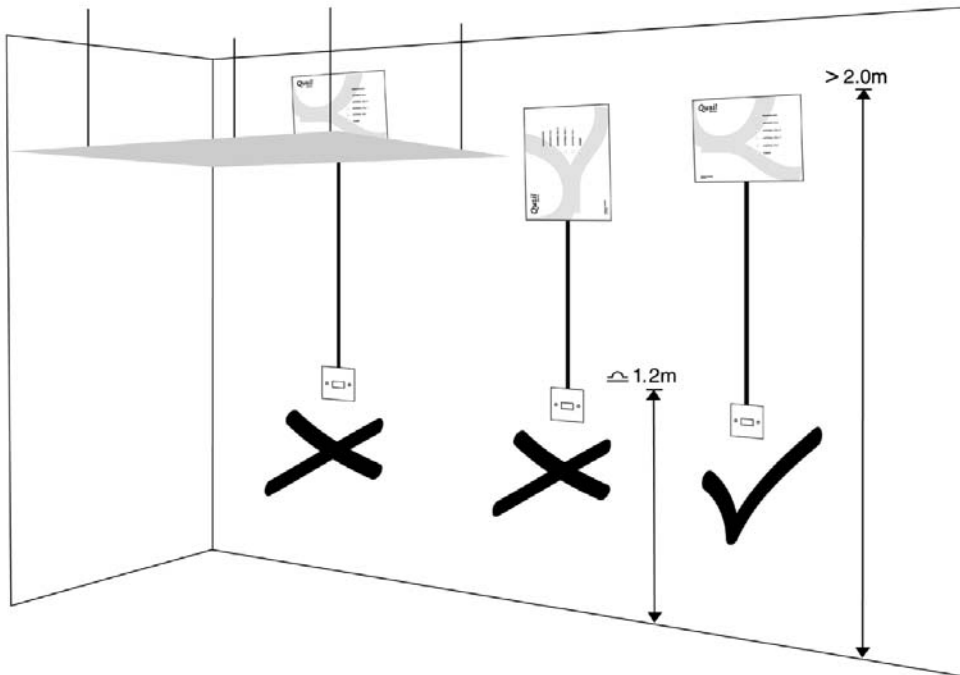
NOTE: The Quail Digital Primary Station is supplied with two DECT modules to allow a maximum of 6 users.

INSTALLING THE PRIMARY STATION AND REGISTRATION POINT

Installing the Primary Station

The Primary Station defines the working area of the system, and needs to be located centrally within the desired coverage zone. In an open space you will be able to use the belt packs up to 150m from the Primary Station, but once inside a building this range will be reduced by the building's structure and internal fittings. e.g. large metal objects like cold stores are potentially a problem as they block

the radio frequency path. This reduction in range is difficult to assess accurately unless a site survey is carried out, but typically in most buildings you can expect to operate at least 50m from the Primary Station. This is a radius measurement, so teams of belt packs users can easily communicate over a 100m distance. If you would like to invest in a site survey, please contact your local distributor.

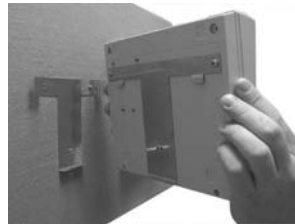


The Primary Station should be wall-mounted at least 2 metres from the ground for best performance. In general use there is no need for users to touch the Primary Station, and installing it out of reach is OK. In many commercial premises with

suspended ceilings, this will mean mounting just below ceiling level. Do not site the Primary Station above a metal frame suspended ceiling. The Primary Station must always be mounted in a “landscape” orientation, as shown above.



1



2



3



4

The unit should be secured to the wall using the supplied mounting bracket as shown in fig 1 and 2. Lower the Primary Station onto the wall section of the bracket (fig 3), and make sure is clipped

correctly. You can use a screwdriver to clip the brackets together as shown in Fig. 4. Once positioned, plug the Primary Station into the mains power socket using the supplied cable. The power indicator will illuminate green.

Installing the Registration Point

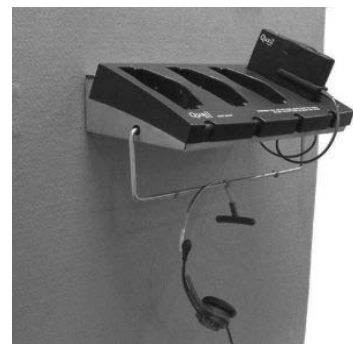
The cable for the Registration Point should be inserted into the socket at the top of the Primary Station and must then pass down the wall, allowing it to be positioned at waist height, approximately 1.25m from the floor, as shown in the diagram

on the previous page. The Registration Point should be surface mounted in a similar way to a conventional telephone socket. Any excess cable can be placed between the Primary Station and the wall.

INSTALLING THE CHARGER UNIT

The Charger Unit is supplied with a simple wall-mounting bracket. The rear metal sheet should be positioned securely with 3 screws at a height that will allow belt packs to be inserted and removed easily. The bracket should be placed close to a power socket.

The charger clips into position as shown below. Once positioned, plug the unit into the mains power socket using the supplied cable. The power indicator will illuminate green. You can store the headsets on the supplied hanger.



REGISTERING THE BELT PACKS

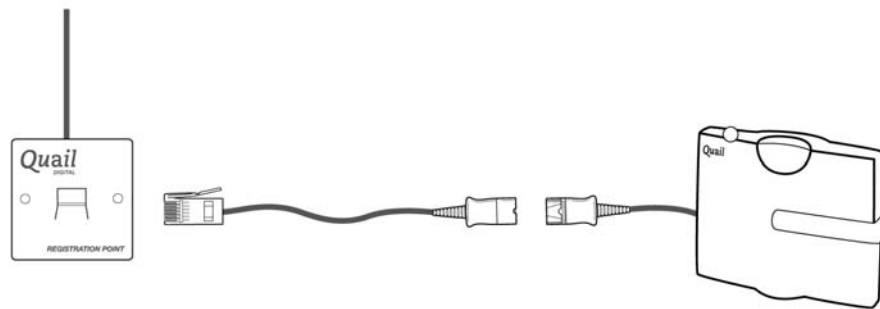
Now that the fixed part of the system has been installed, it is necessary to “register” all the belt packs to the Primary Station to use the system. This process ensures that your communications are secure, and local businesses cannot interfere with you.

The registration cable supplied with your Primary Station should be plugged into the Registration Point as shown below.

Then take the remaining end of the cable and plug this into each belt pack cable in turn.

The belt pack and Primary Station will automatically “shake hands” and register with each other. You can tell this is taking place by looking up at the Primary Station – you will see the “Registration” LED lit in red and at the same time the belt pack LED will flash green. At this point the belt pack can be unplugged from the registration cable.

When the LED stops flashing orange and stays in solid green the belt pack is ready for use. Each belt pack must be registered to the Primary Station in this way in order to function.



The registration cable is like a security key to your Quail Digital system, and we suggest you keep it in a safe place on site. If you need to register additional belt packs in the future, or in the unlikely event of a belt pack requiring maintenance off site, you may need to access the registration cable again to re-register a belt pack.

USING THE BELT PACK

When you take the belt pack out of the charger, the LED will initially flash orange for a few seconds, and then it will flicker green, and finally the LED will turn a solid green colour as the belt pack “subscribes” to the Primary Station. At the same

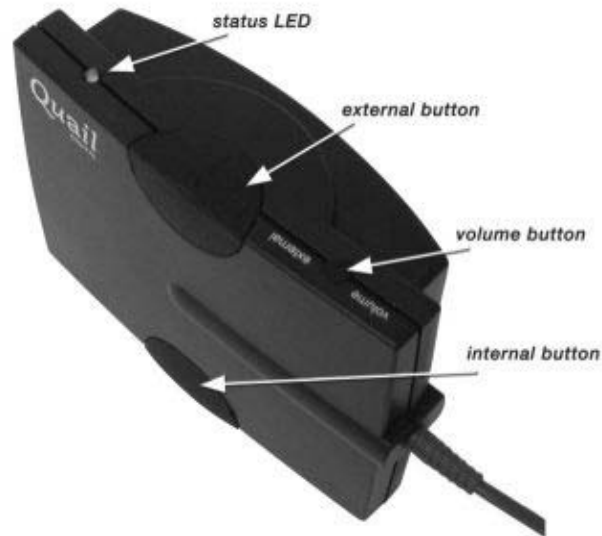
time, an audible tone is heard in the headset, and the belt pack is now ready for use.

Note: If the LED fails to turn green after 30 seconds, place the belt pack in the charger for a few seconds, and then try again.

Controls

The belt pack is easy to use, with only three buttons: “Volume”; “Internal”; “External.”

There is also an LED that shows the operational status of the belt pack. A full table of LED variations is shown on page 9.



Volume: This selects the volume level in the earpiece, and has 5 level settings. Each time the button is pressed the headset earpiece volume will step up a level to its maximum and then down to its minimum, and a single audio tone in the headset will signify this change. When the volume reaches the top and the bottom of the scale, the earpiece will sound a double tone to tell you that you have reached the maximum or minimum level. Each time the belt pack is removed from the charger unit, it will begin operation at the level 4.

Internal: When you press this button you will be able to talk to all the other members of your team that are wearing headsets. When you have finished talking you should release the button. Because Quail Digital is a duplex system, you can talk and listen to each other at the same time – you do not have to wait for another person to stop talking before you can talk.

Note: When you press the internal button, you will also hear your voice over your own headset. This is perfectly normal, and is a sign that you are in range of a Primary or Secondary Station, and the system is functioning correctly.

External: This button allows you to make a call to an external piece of equipment, as well as to your team, provided you have other communications equipment hard-wire connected to your Primary Station. This equipment could be, for example, another Primary Station, or a voice paging system. If no other equipment is installed, the external button simply duplicates the internal button, and can be used in exactly the same way.

Hands - Free Mode

The belt pack can be selected to work in hands-free mode. This means that you can work totally hands-free and do not have to push any buttons to talk and you are permanently in a call with the other users.

To switch to hands-free mode, hold down the volume button, and simultaneously press the internal or external button (according to which group you want to communicate with.) Release both buttons simultaneously, and the LED changes from green to red to indicate hands-free mode is operating.

To cancel hands-free mode, simply press either the internal or external buttons.

Note: Remember that with internal hands-free mode activated, the other team members will be able to hear everything you say. This also applies when you use external hands-free mode – potentially your customers may be able to hear everything you say.

WE SUGGEST THAT HANDS-FREE MODE SHOULD ONLY BE USED BY TEAM MEMBERS WHO ABSOLUTELY NEED TO OPERATE HANDS-FREE.

Low Battery Warning

There are two warnings that the belt pack needs to be recharged.

- a) The LED flashes red
 - b) An tone is heard in the headset
- You now have 15 minutes of power

remaining in the belt pack, so place it in the charger unit as soon as it is convenient.

Note: Always store the belt packs in the charger when not in use.

Power Save

Usually after the belt pack is removed from the charger it is permanently switched on and ready to be used. However, sometimes it may be useful to turn off the belt pack to save power.

This is done holding the volume button for about 20 seconds, after which the LED flashes red. Release the button and the LED will go out.

To power the belt pack back up, place it back in the charger.

Belt Pack LED Status Table

The LED on the belt pack has a variety of functions. To make these easier to identify, listed below you will find descriptions of all modes of operation.

LED Colour	What's Happening?
Green	OK, ready for action
Red	OK, in VOX mode and ready for action
Red	You are speaking to other team members
Orange flashing	Belt pack needs to be registered or is out of range.
Green + flashing red	Battery is low, put the belt pack in the charger
None	Battery is flat or the belt pack in sleep mode
Red + flashing green (While in the charger)	Battery is trickle charging
Red flashing (While in the charger)	Battery is fast charging
Green flashing (While in the charger)	Battery is fully charged

USING THE HEADSET

Quail offer a variety of headsets for use with QD-BP belt packs. Always use Quail Digital headsets, as the electronics in our belt packs and other headsets may cause damage to each other. When using headsets please follow this general guidance:

- All headsets need to be adjusted in order to fit correctly. Take some time to do this, as it will be much more comfortable.
- Firstly adjust the headband, so that the headset fits comfortably over the head, with the earpiece covering the ear.



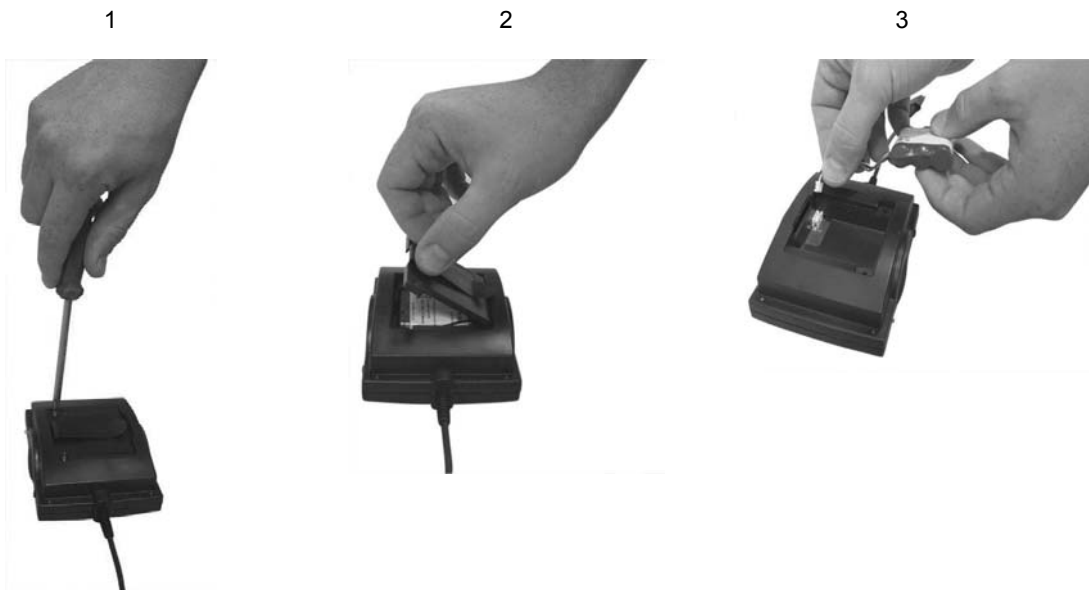
- Always try to position the tip of the headset microphone about 2 finger widths from the corner of your mouth. Your voice will sound clearer than if you position the microphone directly in front of your mouth.
- The headset is connected and disconnected from the belt pack using a two-part Quick Disconnect. This is a robust connector designed to be plugged and unplugged several times each day.
- Always use the supplied clothing clips. These are designed to take the weight from both the belt pack and headset cords, and can help guide the cabling around your body securely.

- Only use QD-RH5 headsets in a kitchen environment – these are the only products that are designed to withstand extremes in temperature and are resistant to kitchen materials like mineral oils. QD-RH1 headsets are designed for use in a standard retail environment.
- Headsets are lightweight, in order to remain comfortable for the user. However, this also makes them vulnerable to accidental damage, so, in particular, try to avoid putting excess strain on the cables, connectors and the microphone boom. If looked after, your headset should give you many years of reliable use.
- For health and safety reasons we recommend that one headset is issued to each operator for their personal use.
- Replacement ear pads are available for most Quail headsets. Contact your local distributor or www.quaildigital.com for more information.

REPLACING A BELT PACK BATTERY

As a general guide, we suggest replacing the battery every 18 months, or after 500 charge cycles. Batteries are simple to replace and are available from your local distributor, or direct from our website www.quaildigital.com. The only tool you will need is a cross-head (“Philips”) screwdriver. Before connecting up the new battery, write the date on the label for future reference.

- 1) Place the belt pack on a flat surface and undo the two screws located on either side of the clip.
- 2) Remove the battery cover, taking care not to damage the hinge
- 3) The battery itself is removed by separating the plug from it’s connector. With the new battery push the connector and plug together until they click, and replace the battery cover. Do not over-tighten the screws.



Note: Always dispose of the old battery carefully. If in doubt, take advice from your distributor.

FREQUENTLY ASKED QUESTIONS

Q: The sound on my headset is breaking up. What's wrong?

A: This generally means you are at the limit of the Primary Station's range. As you walk out of range the sound will start to break up like a bad signal on a mobile phone, and the LED will start to flash green/orange. To maintain the call, walk towards the Primary Station. If you go completely out of range the call will be lost, and you will then have to move back into range and wait a few seconds for the belt pack and Primary Station to get to know each other again.

Q: I work in a tough environment, and I'm worried about keeping the belt pack clean. Is there anything I can do?

A: You should consider using a leather protective pouch for the belt pack. These are available from your local distributor or through our website www.quaildigital.com

Q: I want to add more users to my system – how can I do this?

A: There are two Primary Stations available, for 6 users and for 12 users. Provided the total number of belt packs registered remains within these numbers, you can simply purchase a new belt pack and headset, and then register the belt pack normally. Remember that each charger accepts 4 belt packs, so you may have to order additional chargers as well.

Q: Can I upgrade my QD-PS to expand the number of users?

A: Yes, this can be done, but it is essential that a qualified engineer carry out this work. Contact your local distributor for more details.

CARE AND MAINTENANCE

Your belt pack is a sealed unit, and the best way to look after it is to rub it with a moist cloth to clean away any surface dirt. Similarly, you should

clean the headset and its cable once a month with a moist cloth.

Alternatively you can use any “plastic-friendly” cleaning agent.

SERVICING

Do not remove the casing of any Quail product, as there may be a risk of electric shock.

Servicing should only be carried out by qualified personnel.

WARRANTY STATEMENT

All Quail Digital components are covered by a 12 months return-to-base warranty, from the date of purchase.

Conditions

- The warranty is only offered subject to the absence of, or evidence of, misuse, overload or accidental damage to equipment.
- The liability of Quail will be limited to the cost of repair / replacement of the unit under warranty.
- This warranty applies to the original purchaser only
- The warranty will become void if any unauthorised repairs or modifications have been made to the equipment.
- This warranty in no way affects your statutory rights.

Returns policy

If your business is resident **in the United Kingdom**, please pack the item in its original carton with a fault report and contact details, and send it by registered mail to:

Quail Returns
Cross Keys House
Westfield Industrial Estate
Bath BA3 4BF

If your business is resident **outside the United Kingdom**, contact your distributor for further information or visit our website www.quaildigital.com for assistance.

Note: Quail cannot be held responsible for items not sent by registered method, or in unsuitable packaging

TECHNICAL SPECIFICATIONS

QD-BP

Operating Frequencies (North America)	1.92GHz - 1.93 GHz
Operating Frequencies (Europe)	1.88GHz - 1.90GHz
Carrier Power	<250mW (24 dBm)
Typical operating range	150m outdoors, 50m indoors
Supply Voltage	3.6V NiMH cell, 1500mAh
Battery cycle	18 hours on 4 hour charge
Operating Temperature	-10 ⁰ C to 55 ⁰ C
Protection Class	IP 42
Dimensions H x W x D	94mm x 123mm x 42mm
Weight	0.280 kg

QD-PS

Operating Frequencies (North America)	1.92GHz - 1.93 GHz
Operating Frequencies (Europe)	1.88GHz - 1.90GHz
Carrier Power	<250mW (24 dBm)
Typical operating range	150m outdoors, 50m indoors
Power requirements	100V-240V voltage sensing. 47Hz-63Hz
Operating Temperature	-10 ⁰ C to 55 ⁰ C
Dimensions H x W x D	205mm x 255mm x 52mm
Weight	PS (6 users) 0.750 kg PS (12 users) 0.800 kg

QD-CG 7

Power requirements	100V-240V voltage sensing. 47Hz-63Hz
Operating Temperature	-10 ⁰ C to 55 ⁰ C
Charging output voltage	12V
Dimensions H x W x D	85mm x 286mm x 193mm
Weight	0.485 kg

Headsets

Refer to specific Headset User Guide

Compliance

All products comply, where applicable to: CTR 06, CE, FCC and IC.

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.

Quail Digital Primary Station complies with **FCC** RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimetres between the radiator and your body.

For body worn operation, this Quail Digital Belt pack has been tested and meets the FCC RF exposure guidelines when used with the belt clip supplied with this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

This device complies with **Industry Canada** rules and 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.

Modifications not expressly approved by this company could void the user's authority to operate the equipment



Quail Ltd
92 Lots Road
London SW10 0QD
www.quaildigital.com