

NEC IP DECT Handset care and cleaning guide



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Preface

This guide provides you with instructions to protect and clean your NEC DECT handset in the best possible way. It also describes the durability when exposed to dropping the handset on hard surfaces.

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Great care has been taken to ensure that the information contained in this document is accurate and complete. Should any errors or omissions be discovered or should any user wish to make a suggestion for improving this handbook, they are invited to send the relevant details to:

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1 Handset protection and cleaning overview

NEC provides a wide range of DECT handsets, varying from standard office to purpose built for healthcare, industry, warehouses, retail and other high-demanding environments. Some of the handset models have dedicated features to withstand dust, moisture, cleaning with chemicals as well as having anti-bacterial characteristics.

NEC specifies the IP-rating of a handset. The first digit indicates the level of dust protection, the second the level of moisture protection. The higher the level, the better. In general the dust level 4 is sufficient for office, healthcare and many other sectors. The moisture level 5 is sufficient for the daily cleaning of handsets and exposure to cleaning fluids and wipes. Handsets with a lower protection level should be cleaned with great care and optionally protected with a protecting pouch. NEC also specifies the cleaning agents that can be used daily for cleaning the devices.

For most of the handsets in the NEC portfolio a protecting case (pouch) is available. The use of such a case may help to protect the surface of your DECT handset and will help preventing liquids such as used for cleaning, from entering it. However for healthcare environment these are not recommended as dedicated cleanable handset models are available.

Overview of handsets models and protection offered

Model	IP rating 1)	Basic cleaning 2)	Cleaning with Disinfectants 2)	Anti-bacterial 2)	Drop specification	Pouch 3)
M166	IP65	X	X		1.6 m on hardwood	
G266	IP40	X			1.2 m on hardwood	EU917041
G566 / G566s	IP40	X			1.2 m on hardwood	EU917043
G277	IP40	X			2 m on hardwood	EU917129
G577	IP65	X	X		2 m on concrete	EU917129
G577H	IP65	X	X	X	2 m on concrete	EU917129
I755	IP64	X			1.2 m on hardwood	
I766	IP65	X	X		2 m on concrete	EU917111
I766Ex	IP65	X	X		2 m on concrete	EU917111

1) see chapter 3

2) see chapter 2

3) **Note: in healthcare environments, the use of a pouch is not recommended, because it may collect dirt. A pouch is primarily intended to protect the handset in hazardous environments**

2 Cleaning instructions

2.1 Basic handset cleaning

The following cleaning instructions apply to all handset models. Please note that IP40 rated handsets are not waterproof, and exposing the handset to liquids may result in permanently damaging the unit.

1. Before cleaning the device, your hands should be cleaned
2. It is recommended to power-off the handset
3. Wipe the handset with a dry cloth or one moistened with a mild soap solution
4. Do not exert undue pressure or rub the DECT handset roughly when cleaning the DECT handset
5. In case additional cleaning is required, use a mild detergent, e.g. household glass and surface cleaner, on a soft cloth or cotton swab and gently wipe the soiled spots

2.2 Cleaning with disinfectant liquids

In a care and cure environment handsets need to be cleaned at regular intervals with disinfectant cleaning liquids. NEC recommends to use handsets with an IP65 rating which are cleanable and can withstand a range of cleaning agents.

Note; always follow the guidelines of your healthcare institute regarding the frequency of cleaning and cleaning method, for which NEC cannot take any responsibility

1. In general Isopropyl alcohol or Ethanol may be used, applied by a soft cloth
2. The DECT handset may be cleaned **occasionally** with disinfection solutions or cleaning wipes used for general cleaning purposes in medical environments. Again apply the disinfectant on a soft cloth and then gently wipe the DECT handset. IP65 model handsets can be cleaned on a daily basis
3. Avoid cleaning and disinfection solutions containing skin moisturizing or corrosive components
4. When applying alcohol or disinfectants, do not rub the keys vigorously, as this may damage the keys (and void your warranty)
5. After cleaning the DECT handset dry the DECT handset with a soft cloth

The following liquids have been tested with the DECT handsets:

Liquid disinfection solution 4)	M166	G266	G566 / G566s	G277	G577 / G577H	I755	I766 / I766Ex
M-alcohol (85% methylated ethanol) Occasional cleaning (weekly)	X	X	X	X	X	X	X
Undiluted dishwasher detergent Occasional cleaning (weekly)	X	X	X	X	X	X	X
M-alcohol (85% methylated ethanol) Daily cleaning (5 times/day) 5)	X				X		X
Isopropyl alcohol (99%) Occasional cleaning (weekly)	X	X	X	X	X	X	X
Isopropyl alcohol (99%) Daily cleaning (5 times/day) 5)	X				X		X

Liquid disinfection solution	4)	M166	G266	G566 / G566s	G277	G577 / G577H	I755	I766 / I766Ex
3% Hydrochloric Acid Occasional cleaning (weekly)		X	X	X	X	X	X	X
3% Hydrochloric Acid Daily cleaning (5 times/day)	5)	X				X		X
60% Chlorhexidin 0.5mg/ml Occasional cleaning (weekly)		X	X	X	X	X	X	X
60% Chlorhexidin 0.5mg/ml Daily cleaning (5 times/day)	5)	X				X		X

- 4) The M166, G577, G577H and I766(/Ex) handsets can be cleaned with agents commonly used in healthcare institutes. NEC refers to ISO 2812-4:2017 (en) - Paints and varnishes – Determination of resistance to liquids - Part 4: Spotting methods
- 5) Frequent and intensive cleaning may lead to excessive wear of the handsets for which NEC cannot take responsibility

Note; even though devices are resistant against the solutions as specified in above table, they may absorb substances such as from cosmetics and food during use. These substances may have a surface-softening effect that will make it more sensitive to abrasion with cleaning fluids resulting in damage to e.g. the keyboard

2.3 Cleaning wipes

Only use cleaning wipes containing fluids as mentioned in chapter 2.2. Some wipes may contain different fluids and/or a concentration which may damage parts, such as the lens and keyboard.

Make sure that you also follow the manufacturer guidelines for these wipes, as they mostly offer variants of these wipes for general cleaning as well as for cleaning of delicate equipment such as mobile phones.

2.4 G577h Anti-bacterial DECT handset

The G577h has been designed for healthcare. Special substances have been added to all parts of the handset that may touch the skin, such as plastics, lens and rubber parts. This minimises the risk of bacterial infections.

The following substances are applied to various handset parts:

- Handset main body (soft): DSM, TPEE L-X07805
- Handset main body (hard): ZEOMIC DAW502
- Keypad: ADMIRE ADM-BF
- Lens coating: Admire ADM-BJ01
- Belt Clip Silicone: ST1007

The placing of the keys allows for easy cleaning of the keypad surface.



3 The handset IP-rating

NEC DECT handsets offer either an IP40 or an IP65 rating. In the following tables this is explained (highlighted text) for dust as well as moisture:

First digit	Dust intrusion protection
0	No special protection. Not rated (or no rating supplied) for protection against ingress of this type
1	Protection from a large part of the body such as a hand (but no protection from deliberate access); from solid objects greater than 50mm in diameter
2	Protection against fingers or other object not greater than 80mm in length and 12mm in diameter (accidental finger contact)
3	Protection from entry by tools, wires etc, with a diameter of 2.5 mm or more
4	Protection against solid objects larger than 1mm (wires, nails, screws, larger insects and other potentially invasive small objects such as tools/small etc)
5	Partial protection against dust that may harm equipment
6	Totally dust tight. Full protection against dust and other particulates, including a vacuum seal, tested against continuous airflow

Second digit	Moisture Protection
0	No special protection
1	Protection against vertically falling droplets, such as condensation. ensuring that no damage or interrupted functioning of components will be incurred when item upright
2	Protection against water droplets deflected up to 15° from vertical
3	Protected against spray up to 60° from vertical
4	Protected against water splashes from all directions. Tested for a minimum of 10 minutes with an oscillating spray (limited ingress permitted with no harmful effects)
5	Protection against low-pressure water jets (6.3 mm) of directed water from any angle (limited ingress permitted with no harmful effects)
6-9	Protection against direct high pressure jets – submerged up to steam cleaning