# The New Electronic and Digital Stethoscopes

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### Our Selection of the best models

The world has seen so much growing sophistication in smartphones, internet services, and computers. The good news for health workers is that stethoscopes were not left out. Today, we have electronic stethoscopes.

But now that we have several companies and brands producing these techy stethoscopes, it may become a little confusing in choosing what the best electronic stethoscope for you is. This is why we have written this guide.

In this guide, we will review the top 5 digital stethoscopes on the market today, stating the plausible features and downsides associated with each. We will look at the pros and cons you should consider before making your informed choice.

This isn't just the regular product review that tries to sell you a particular product, instead, this review will give you a fair and complete assessment of each stethoscope without trying to be biased by favoring a particular brand.

So, without wasting any more time, let's dive into our best electronic stethoscopes in the market right now. We'll start by listing them and then digging into their details a bit later.

# Best Electronic Stethoscopes

# 1. 3M Littmann Electronic Stethoscope Model 3200- Overall Best

This stethoscope is our best electronic stethoscope for several reasons. If you want a stethoscope that looks really good, fancy and will wow your friends, you should go for this. It is the standard digital stethoscope today, laden with many techy features that make it stand out.



It is produced by Littmann which is the most popular and perhaps most trust-worthy stethoscope brand today. Littmann is known not to compromise on quality or using substandard design materials.

This stethoscope has a superb amplification, it helps to make sounds clearer. It can amplify sounds by up to 24 times. So, what this means for a clinician is that those low unclear sounds will be louder with this device, and you can distinguish different sounds better.

Another good thing about it is that it lowers background noise. For a device that provides excellent sound amplification, the last thing you'll want to experience is the addition of ugly ambient sounds to your sound mix, disturbing your auscultation and irritating your ears. This stethoscope does a great job at lowering ambient sounds by up to 85%.

In addition, this Littmann model goes further by adding a 30-second audio-recording feature and Bluetooth connectivity. What this means is that you can record and save up to twelve 30-second clips and replay for your other colleagues, for the patient to hear or even for yourself at a later time. You can also connect this stethoscope to a Bluetooth device and play the sounds remotely. To wrap up its tech, it has an LCD screen that shows you some parameters like the battery level, the patient's heart rate, and the sound level.

These special features are what makes this Littmann model outstanding when compared with other electronic stethoscopes.

Away from all the tech, it has other features that almost all Littmann stethoscopes have. Its non-chill diaphragm makes auscultation comfortable for your patients, it has a long-lasting, next-generation tubing that can be used by people with latex sensitivity and a very comfortable headset. Now, to its downsides.

Price may be a concern for many people who don't want to spend more than 400 bucks on a single stethoscope piece. After all, that money can get you about 4 awesome Littmann non-electronic stethoscopes or 10 lightweight stethoscopes.

Another thing is there have been some reports of tech failure, either the battery having issues or the parts falling off or an error in function. All these aren't so uncommon. However, Littmann gives a 2-year warranty with this model, so you won't have any problems getting a replacement if yours develops a fault.

Here's a summary of its pros and cons:

#### Pros:

- · Beautifully designed
- Excellent acoustic performance
- Amplifies sounds up to 24 times
- Reduced background noise by 85%
- · Has Bluetooth connectivity
- Can record up to twelve 30-second clips

### Cons:

- Not the cheapest stethoscope
- · Technical issues aren't uncommon

• Not so useful in pediatric patients

# 2. Adscope 658 Electronic Stethoscope- Best For a Low-Budget

This stethoscope is a very good option for you if you want a good-looking one that has most of the desirable features of a digital stethoscope without breaking the bank. It is perhaps the cheapest electronic stethoscope in our review today.



It is significantly cheaper than its Littmann rivals and can compete with them function-wise. Honestly, it is also more affordable than most digital stethoscopes in its class and is by far the best stethoscope when looking at value for money.

It may not have the ability to record sounds for playback or be Bluetooth-ready, but this it has all the basics of a functional digital stethoscope. It helps to amplify sound up to 18 times, it reduces background noise relatively well too, and it has an LCD screen that displays the status of the device. This screen actually dims out when the stethoscope isn't in use, to help conserve the battery. Talking about the battery life, it can last up to 20 hours on a full charge, this should be enough for most clinicians, especially for those that have extended periods of work at a stretch. The battery is also conveniently chargeable by a USB cable.

Its tubing is something I find very appealing, it's of really high quality. How do I mean? Tubes come in different styles. Some stethoscopes have a single tube with one sound pathway, others have two tubes attached to the chest piece that lets you have two sound pathways. Stethoscopes that have two tubes usually have a better sound quality than those with a single tube. This particular stethoscope has two sound pathways in just one tube (bi-lumen), so it has a good sound quality without the usual 'rubbing' sound seen in stethoscopes with two tubes.

Another benefit of this stethoscope is that it is relatively lighter than other electronic stethoscopes and it comes with an ID tag, to help you identify yours easily and prevent it from theft or someone mistakenly taking it 'unintentionally'.

The product also comes with a 2-year warranty for the chest piece and a lifetime warranty for the headset. This is not the longest warranty period, but for an electronic device, it is a fair amount of time.

So, what don't we like about this stethoscope?

Well, there are reports of poor amplification, especially among people with hearing difficulties. It also doesn't filter out background noise the way its Littmann counterparts do.

It doesn't give you the ability to transmit sounds to other devices or any audio-recording time at all. So, if these features are what you're looking for, perhaps you should try the Littmann.

Here's a summary of its pros and cons.

#### Pros:

- Relatively low price
- Amplifies sounds up to 18 times
- Decreases background noise fairly
- Has an LCD display
- Awesome bi-lumen tubing with good acoustics
- Comfortable to use (relatively light with good ear tips)
- Chargeable by USB
- Comes with an ID tag to help identify yours easily

#### Cons:

- Cases of weak amplification have been reported
- No sound recording functionality
- Can not transmit sounds to other devices

# 3. Thinklabs One Digital Stethoscope- Most Portable

This particular stethoscope changed the game. It is the most portable digital stethoscope and can fit very well in just your palm. It boldly goes against the 'conventional' stethoscope design, while focusing basically on the primary function of auscultation.



#### What do I mean?

Instead of the traditional, headset, chest piece, tubing, bell and diaphragm design, the Thinklabs One has just a simple chest piece without any tubing at all. It's so simplistic that you may not recognize it as a stethoscope.

You may be wondering:

How then do you hear its sounds if it has no tubing or ear tips, well, the designers of this revolutionary stethoscope decided that the chest piece should work with any headphone you desire. It has a regular 3.5mm audio jack, where you can plug in your headphones and listen to the body's sounds.

It does well at sound amplification, raising the sound by almost 100 times while decreasing the background noise at the same time. It also has a screen that shows its indicators like sound level, sound frequency, and battery life.

Talking about its battery life, I'll say fairly good. If you have a regular work schedule, you'll only need to charge it once or twice a week, it was designed to care for up to 100 patients on a full charge. It is also chargeable by USB, which is very convenient.

I think what the designers tried to do was to challenge conventional stethoscope designs and use the existing technology in the world today, to produce something that will work in simply amplifying and transmitting sounds, while using everyday headphones.

One strong advantage of this model over others is that it is very useful for clinicians with hearing impairments. It can be connected to the audio streamers which can then transmit the sounds from the stethoscope to hearing aids. It even works with streamers that connect with cochlear implants. This gives it a very clear edge over the regular electronic stethoscopes.

So, now that we have discussed the many awesome benefits of this stethoscope, are there any downsides? Well, yes, we identified some.

Its design may not be totally accepted by many health workers who aren't ready to ditch the traditional stethoscope for a chest piece and headphones. Perhaps they aren't comfortable walking through the ER with plugged in headphones in the name of stethoscopes. Hopefully, with time, more of these devices would be used in clinics and ERs, and be more acceptable.

Another downside is its price. It is about Bt 50,000, which makes it even more expensive than Littmann stethoscopes. So, if you want to use an electronic stethoscope on a budget, you may be better off getting another brand.

Here's a summary of its pros and cons.

#### Pros:

- Unique, simplistic design
- Very portable
- Good sound quality
- Uses simple headphones
- Sounds can be transmitted to other devices
- Good battery life
- Comes with a case for protection

#### Cons:

- Some clinicians may not be comfortable using headphones in the ER
- Relatively high price

# 4. Jabes Life Sound Electronic Stethoscope- Most Rugged and Durable

If you're looking for an electronic stethoscope that isn't too fancy but can do the job well, this is a good fit for you. It certainly isn't as fancy and tech packed as other digital stethoscopes, but one thing is for sure, it works, and works well too.



It amplifies sounds up to 20 times and reduces artifact sounds, this is very useful in cases that involve obese patients, faint heart sounds or noisy environments. The stethoscope also gives you the ability to switch between different sound frequencies very easily. You can switch the frequencies by just flipping a button with your fingertips.

Although it lacks an LCD screen, it has indicator lights that tell you the status of your device. It can help you record auscultated sounds and transfer to a computer for analysis, replay or for sharing with internet connected devices. This is very useful if you want to attach your recorded sounds for use in medical presentations or to send to a colleague.

As for its battery, it's fairly good, it uses two AA batteries, which are readily available, cheap and easy to replace. The batteries can power the stethoscope for up to 60 hours at a go. To conserve power, once the device lies idle, it switches off automatically.

This Korean brand is also very rugged, it is made of tough, durable materials, and since it lacks a screen, you won't need to be too scared of it dropping. It has a one year warranty period and isn't too expensive.

#### What are the downsides?

Well, it seems a bit basic, lacking a screen to show you the current status of the stethoscope. This also makes it less aesthetically pleasing and fancy. Afterall, most people buy digital devices for the fancy feeling and modern experience.

Another downside is that it can't really be used in pediatric patients, due to the size of its diaphragm. It was built to cater to adults, hence, there's a limit to its use. Its warranty period of just one year is relatively short when compared with other brands of electronic stethoscopes.

Here's a summary of its pros and cons.

#### Pros:

- Very positive general reviews
- Good acoustics
- Quite durable
- Very easy to use
- Uses 2 AA batteries that can be easily replaced
- · Helpful for people with hearing impairment

#### Cons:

- Lacks a screen
- Not the best aesthetics

# 5. Eko Digital Stethoscope- Most Versatile

This is by far the most versatile stethoscope. I honestly doubt if there's any other digital stethoscope available today with more positive reviews.



The good thing about this stethoscope is that it is 'two' in 'one.

What do I mean? It actually can function both as an analog stethoscope and as a digital one. The Eko core is the digital component that attaches to the tube of the Eko cardiology analog stethoscope, amplifying its sounds for a more audible experience.

Also, if you are happy with your current analog stethoscope and don't want to ditch it entirely, you can purchase the Eko core, it will transform your analog stethoscope to a digital one in an instant.

This unique capability makes it the right device for a clinician who has to deal with pediatric patients. Most other brands aren't pediatric-friendly, they have adult-only chest pieces. But this one is different, you can use the smaller diaphragm to auscultate children, and use the wider diaphragm in adults.

Its digital capabilities also help you record sounds for replay later or transmit it to your phone or another device via Bluetooth. It also has a dedicated app for iOS and Android smartphones and

tablet that you can visualize and save all your data, it also works in sync with your electronic health records to paint a good picture of your patient's wellbeing.

The also has a fairly good battery that can last up to 9 hours on a full charge, its battery is chargeable via a USB cable.

This device will take a couple of hundred bucks from you but is worth every dollar you spend on it. It provides excellent value for your money.

How about its downsides?

Well, it lacks a screen, perhaps to make it very portable and less cumbersome. But a screen won't be a bad idea at all. It also has just a one-year warranty. This relatively short when compared to the warranty periods of other premium stethoscope brands.

Here's a summary of its pros and cons.

#### Pros:

- Versatile, can function as both a manual and digital stethoscope
- Excellent value for money
- Awesome acoustics
- One of the only digital stethoscopes that can be used for children.
- Bluetooth connectivity
- · Sound recording
- Dedicated iOS and Android apps that sync with EHR

#### Cons:

- · Just one-year warranty period
- · Lacks a digital screen

# Features To Consider When Choosing The Best Electronic Stethoscope For You

Now that we have explained our top 5 picks for you, it's time to tell you what to look for in a digital stethoscope. We'll run through some important features and tell you why they matter

## **Acoustic Performance**

One major feature you want to look out for is how well the sound quality is. It would be a waste of money if you purchase a stethoscope that produces muffled sounds with a heavy background noise. This is why you should consider each stethoscope's acoustics.

Generally, most digital stethoscopes perform well in this area because they amplify sound several times, but one area to look out for is the background noise reduction. There'll be no use of amplifying heart sounds if the stethoscope also amplifies other annoying ambient noise. It would be really loud and irritating to the ears.

#### Ease of Use

Now, I know this means different things to different people. Some people would say that a stethoscope that has headphones as its headset is really easy to use, after all, it's 'just plug and play'. To them, using the same headphones they use to listen to music on their smartphones and plugging it into their stethoscope chest piece is very convenient.

If this is you, the Thinklabs One stethoscope was made just for this reason.

However, if you're like some health workers that would classify headphones as uncomfortable and cumbersome, you can go for the digital stethoscopes that look very conventional-- I'm talking about those with the traditional tubing and headset.

With multiple styles, designs and options available today, it shouldn't be hard to decide which one suits your convenience.

## **Price**

To most people, pricing is very important, everyone wants good value for their money. Most digital stethoscopes cost between Bt 24,000 and Bt 60,000 which isn't bad at all, considering the amount of technology in them. Some of them are very 'smart', with Bluetooth technology and even specialized app for visualizing their date.

## Warranty

Now, if you end up buying a device and it develops a fault on its own, you'll definitely want some cover or at least be able to return its parts or the entire stethoscope. This is why the warranty period is so important.

Don't just be carried away by the beauty or function of the device, that you forget the warranty promise. If your device has a problem, and there is no warranty, you will have to purchase a new one or do without your stethoscope. This isn't the best.

Most digital stethoscope brands offer a 2-year warranty which is very fair, although very much less than the usual 5-year warranty their analog counterparts offer. You have to be careful with those that promise just a year warranty or none at all.

#### Over To You

We've been able to give you our top picks for the best electronic stethoscope. We also tried to go all in explaining their features, positives, and negatives. Now, it's up to you to decide which one is best for you.

If you have used any of the reviewed stethoscopes or think there's another one that should be in this list, please let us know by leaving a comment, we would seriously consider updating this article from time to time. Happy auscultations!

Anyone willing to purchase any of these stethoscopes, can contact the sales team at Thailand Medical News (sales@thailandmedical.news) and we are also looking for distributors for these items.

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