

# Panasonic EY78AI 18v SDS Plus

## Light and Compact but very Capable

### Independent Review by Peter Brett

There is a difference between using a standard hammer or impact drill compared to using an SDS type rotary hammer. An ordinary hammer drill will cope well enough with drilling holes in brickwork and plaster and the occasional bit of concrete. But for continuous and efficient service, especially drilling into hard materials, it becomes a necessity to use a rotary hammer simply because the amount of time you will save becomes critical.

Also, the standard three-jaw chuck found on most drill/drivers is perfectly fine for drilling and driving, but the impacts needed to drill into bricks or concrete can cause the chuck to loosen and the bit to drop out. Not great!

But the invention and rapid uptake of Lithium ion cordless technology has made possible a practical use of a cordless SDS rotary hammer – hence the welcome arrival on the scene of the Panasonic dual voltage EY78AI.

There are so many features on this rotary hammer that it is hard to know where to start,

so I will start with the impression I gained of it when I first picked it up to handle. The “T-shape” design just seems to fit the concept very well and provides good balance and good “feel” in handling.

For an SDS Plus hammer/drill it is amazingly compact and at just 2.6 Kgs with battery attached it is quite light too. The weight of an SDS drill is always a balance between having some heft and inertia to enable good drilling, but also not being too heavy to make continuous use a pain in the hands.

The slimline handle design is similar to the other drills in the Panasonic range, and I like the design because it truly provides good grip and comfort. There is a comfortable and grippy black rubberized overmould that runs from the handle all the way round the back of the motor casing where it provides good protection as well as a place where the operator’s other hand can provide extra pressure while drilling.

Switchgear is very simple and easy to operate. This is marked out in a dark grey or black in contrast to the light grey of the well-constructed ABS body.

Just above the speed-sensitive trigger there is the usual push-through forward/reverse and lock selector switch. Set into the main body just above is the rotary selector switch. It travels only about 60 degrees from drilling/driving mode to hammer mode and works very easily, unlike some SDS drills I have come across.

Round the collar of the SDS Plus chuck there is a six-position collar that is used to select the five torque positions and drilling mode. This too is easy to use and does not show any sign of being stiff or difficult to select.

A design feature I like very much is the inclusion of a small hex chuck in a spring-loaded catch on the front loop handle. This has an SDS Plus end that fits

into the standard chuck and also has a collar-locked 6mm hex chuck on the other end. Since there is a huge number of hex-chuck accessories available now from drill bits to torx drivers, most users will have no difficulty finding whatever they need to make this rotary hammer an equally useful drill/driver.

Another feature that intrigued me was that this drill comes with the facility to use two voltages. Standard Panasonic 14.4 and 18v Li-Ion battery packs will fit onto the drill base equally easily. This gives the user a huge flexibility if they have bought other tools from the Panasonic range that may have a different

voltage. I didn’t get a chance to try a 14.4 volt battery pack, but my guess is that it may not be as powerful as the 18v battery, but there is only 3.6v difference!

The battery pack has a flat bottom so the tool can be easily set down on a flat surface. I also like the fact that the two-clip design on the battery pack means that the battery pack can be released easily without some of the hassle associated with sliding clip designs used on other makes.

On the base of the trigger loop there is a small push switch to activate the LED work light located on the front of the loop handle.

There is also a battery ‘high temperature’ and ‘low voltage’ indicator to keep the user informed of the battery status.

With an Ah rating of 4.2 the battery pack has quite a lot of oomph for long working spells. Using the diagnostic charger a battery will be usable in 55 minutes or fully charged in 70 minutes, which is fine if you have two batteries available in your kit.



What is especially important for me on an SDS rotary hammer is the Panasonic “Tough Tool” IP designation. The IP or ‘Intelligent Powertool’ concept can range from high levels of dust and water protection for the tool, all the way through to intelligent electronics that protect the motor from overload, electronic spindle braking plus communication from the battery to prevent cell over-discharge / overheat and more.

Well, apart from the fact that I found this compact SDS Plus drill was very capable when I drilled some 12mm diameter holes into some very hard concrete paving slabs, what I found most likeable about it was the light weight and ease of handling. I have been accustomed to bringing out my corded SDS Plus drill, for example when I was attaching my built-in workbench to my workshop wall, but with the Panasonic this would be unnecessary. Not only do you get enough punch for drilling, but the flexibility of not having a cord is a great bonus.

As usual, Panasonic has also done extensive testing on this and all tools in its cordless range so its durability and toughness are built in. It is a great tool, I like it.

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