



The Ultimate DMD TEST

Finding a distance-measuring device that fits your needs can have a dramatic effect on your scores. We put 16 of the latest GPS and laser devices through extensive testing

After the initial influx of distance-measuring devices (DMD) a few years ago the technology has gone from strength to strength. With a number of manufacturers producing fourth and fifth generation devices, many initial issues have been solved and the units are easier to use with more information than ever before. Both GPS devices and laser range finders have improved and as more brands enter the market prices are becoming more competitive. Since our last DMD test in February 2010, almost every manufacturer has released at least one new unit. We requested 16 units at a range of price points to be sent in exactly how a customer would receive one. This enabled us to see how easy it is to set each unit up as well as conducting thorough testing out on the course.

Photography Kevin Murray

VENUE

Eight staff members each tested two different units over 36 holes at Royal West Norfolk GC. The venue features a number of crossovers as well as holes running closely alongside one another. This gave a good opportunity to test how well the unit recognises the intended hole. There are also a number of blind shots as well as large greens with hidden hazards.

TEST CRITERIA

Each member of the team set up the two units they were testing. They then used each DMD for one round and utilised all of the features on offer. As well as playing their standard game, each golfer was asked to record a number of specific yardages, including distances to flags, bunkers and the front, middle and back of particular greens.

The devices were marked on the following:

- **VALUE:** Initial cost, download costs comparative to the features on offer.
- **SET-UP:** How easy the unit is to set up initially and download courses onto.
- **EASE OF USE:** How easy it is to read yardages on the course as well as using any other additional features.
- **INFORMATION ON OFFER:** What information is provided on the device.
- **ERGONOMICS:** How the unit feels in the hand, the button design and how well it clips onto your bag.
- **ACCURACY:** How the yardage readings compare with other units, yardage markers and yardage books.
- **PERFORMANCE:** An overall rating, including how robust the unit is, the battery life and the clarity of the screen.

BUSHNELL

PRO 1600 TOURNAMENT £340



Download costs: None
Key technology: The largest Bushnell range finder features 7x magnification, a range from five to 1,600 yards and a twist-up metal eyepiece. It features a PinSeeker mode that selects the closest object it can find. A scan mode allows you to pan across the landscape while distances between you and the targets are constantly updated.

Tester: Jeremy Ellwood
Handicap: 5
Current DMD: N/A

- + Easier to pick up on individual targets. Accurate readings to the flag will particularly help improve accuracy from short range.
- Comfortably the heaviest and biggest unit on offer – and one of the most expensive to match.

GM VERDICT

For those who have previously struggled to use laser devices the Pro 1600 makes it easier to find the flag. The design is more cumbersome as a result and this will be a particular issue for those who carry their bag. The unit is fully waterproof (the V2 is water resistant), which is an added bonus for peace of mind. The scan mode works well when scanning for hazard carry distances.

Value: 10/15
Ease of use: 14/15
Information on offer: 11/15
Accuracy: 14/15
Set-up: 10/10
Ergonomics: 7/10
Performance: 15/20

TOTAL: 81/100

BUSHNELL

TOUR V2 £270



Best laser device

Download costs: None
Key technology: Like the Bushnell Pro 1600 this also features a PinSeeker and scan mode. The more compact design has a range of five to 1,000 yards and 5x magnification. A rain mode compensates for precipitation to guarantee an accurate distance measurement through rain or snow. Available in grey, white, blue or pink colour options.

Tester: Neil Tappin
Handicap: 5
Current DMD: Nikon Laser 350G

- + Compact and ergonomically well designed. Ideal for those who carry their bag and predominantly want distances to the flag and key hazards.
- Not as effective in very windy conditions compared to the Bushnell Pro 1600.

GM VERDICT

This feels more comfortable in the hand than any other laser device on the market. This really helps in the cold and wind. The 5x magnification isn't the strongest on the market, but after a little practise it isn't too difficult to pick up accurate yardages to the pin. The different colours on offer and the excellent clip on the pouch also gain extra marks.

Value: 12/15
Ease of use: 13/15
Information on offer: 12/15
Accuracy: 14/15
Set-up: 10/10
Ergonomics: 10/10
Performance: 17/20

TOTAL: 88/100

CADDIE LITE

CADDIE LITE £89



Download costs: First course is free. £40 per year for unlimited downloads or £10 per course.
Key technology: The black and white screen gives yardages to the front, back and middle of each green as well as to three hazards per hole. It is designed to be easy to read in all-light conditions. Once out on the course there is no need to use the buttons.

Tester: Stephanie Atkinson
Handicap: 30
Current DMD: N/A

- + Easy to set up and the unit cost is very cheap. Front, middle and back yardages are very clear.
- Only offering three hazard distances per hole can get confusing. Download costs are higher than most after you have used your first free credit.

GM VERDICT

The Caddie Lite doesn't face many competitors at this price point, particularly if you only tend to play the same course. Downloads are quite expensive if you tend to play a lot of courses. The green yardages are very easy to follow, while hazards are a little more difficult to work out, as only three per hole are provided. Not the best looking, but at this price it offers reasonable value.

Value: 13/15
Ease of use: 13/15
Information on offer: 8/15
Accuracy: 10/15
Set-up: 8/10
Ergonomics: 7/10
Performance: 14/20

TOTAL: 73/100

CALLAWAY

UPRO £299



Download costs: Credits range from £4.95 for one course credit to £99.95 for 150 course credits.
Key technology: The uPro displays hi-resolution aerial photography of each hole. These overhead images are available when ProMode is activated. It also allows golfers to check distances from any spot. BasicMode is free to use and gives distances to the front, centre and back of greens.

Tester: Alex Narey
Handicap: 13
Current DMD: SkyCaddie SG5

- + Overhead flyovers are very impressive and ideal for courses you haven't played. The unit is well made and felt hard-wearing.
- Both the initial unit cost and the download fees are expensive. Flyovers of each hole could result in slow play.

GM VERDICT

A well thought-out and impressive piece of kit with flyovers that will help identify hazards. The standard yardages are easy to follow and provide all the information you need. The unit is compact and well made, and the controls are easy to use. It took a little longer for the device to switch from one hole to the next compared to others on test.

Value: 11/15
Ease of use: 12/15
Information on offer: 13/15
Accuracy: 14/15
Set-up: 6/10
Ergonomics: 9/10
Performance: 16/20

TOTAL: 81/100

FREECADDIE

FREECADDIE FREE



Download costs: Upgrading to Pro mode costs £5.99
Key technology: The free version gives standard front, middle and back green yardages from a wide range of phones. For £5.99 users can also receive distances to hazards, length of shots, score and stat collection as well as overhead maps. You can also add any courses that aren't on the FreeCaddie database.

Tester: Paul O'Hagan
Handicap: 5
Current DMD: Bushnell Tour V2

- + The Pro version represents excellent value for those who don't want to splash out on a full unit. The information is well presented and easy to follow.
- Using a phone on the course isn't ideal. You require an expensive smart phone to use the software.

GM VERDICT

A smart piece of software that has improved considerably. It is a great option for those who want to try out a GPS before committing to an actual unit. The yardages update slower than other units and getting your phone out on the course is not ideal. The stat collection software is impressive.

Value: 14/15
Ease of use: 10/15
Information on offer: 10/15
Accuracy: 9/15
Set-up: 8/10
Ergonomics: 6/10
Performance: 10/20

TOTAL: 67/100

GARMIN

APPROACH S1 £179.99



Easiest to use

Download costs: None
Key technology: The Garmin Approach S1 is the first GPS wristwatch designed for golf, giving distances to the front, back and middle of the green. The watch is preloaded with over 14,000 courses. It features a rechargeable lithium-ion battery that lasts up to eight hours in GPS mode and up to three weeks in watch mode.

Tester: Alex Narey
Handicap: 13
Current DMD: SkyCaddie SG5

- + Perfect for those who just want straightforward yardages to the back, front and middle of each green. Easy to set up and no download or subscription costs.
- Some will want a lot more information than what is on offer here. Not every golfer likes to wear a watch when playing.

GM VERDICT

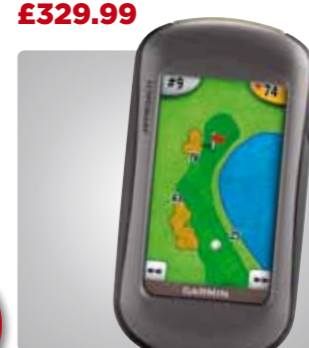
As we'd initially hoped this gives straightforward information and is easily accessible. The unit did get confused on occasions as to which hole was being played, resulting in some serious miscalculations. But for the most part it was useful to have the yardages on the wrist and definitely helped speed up play.

Value: 13/15
Ease of use: 15/15
Information on offer: 9/15
Accuracy: 12/15
Set-up: 9/10
Ergonomics: 8/10
Performance: 16/20

TOTAL: 82/100

GARMIN

APPROACH G5 £329.99



Download costs: None
Key technology: A touch screen is combined with overhead maps of each hole. Stats can be collected and downloaded onto Garmin's stat-tracking software, which lets you analyse putts per round, greens in regulation and fairways hit. Tapping on the flag zooms in on the green to help give a more accurate yardage. Course downloads are free.

Tester: Stephanie Atkinson
Handicap: 30
Current DMD: N/A

- + A very solid unit that will cope with all-weather conditions. The course maps are easy to follow and stat collection is simple.
- The screen is not the clearest in sunny conditions. The unit requires two AA batteries, which, if rechargeable, obviously need to be removed to be charged up.

GM VERDICT

As you would expect from Garmin this feels indestructible and will cope with all-weather conditions. The screen isn't the best in the sun, even when turned up to maximum brightness. The course maps are easy to follow, while lacking the detail of some. It clips onto a bag better than any other on test.

Value: 11/15
Ease of use: 13/15
Information on offer: 11/15
Accuracy: 11/15
Set-up: 8/10
Ergonomics: 8/10
Performance: 13/20

TOTAL: 75/100

GOLFBUDDY

PLATINUM £349



Download costs: None
Key technology: All downloads are free and the unit can hold up to 40,000 courses. Overhead images give a full-hole view as well as close-up views of each green. The touch screen unit can be used to gain yardages from anywhere on the course. Stats and scoring can be recorded onto the unit, and golfers can plot their own targets onto the device.

Tester: Jeremy Ellwood
Handicap: 5
Current DMD: N/A

- + This was very easy to use and the overhead view gave me everything I needed to know on the course. The 40,000 course storage capacity is impressive.
- The unit lost its way a little when holes ran closely together. The screen wasn't the easiest to read in sunny conditions.

GM VERDICT

The actual unit is a huge improvement compared to the GolfBuddy Tour thanks to a touch screen and a well-made casing. The Platinum couldn't be easier to set up if you just want standard hole views and yardages. Things become more complicated when you want to start entering stats.

Value: 12/15
Ease of use: 13/15
Information on offer: 12/15
Accuracy: 12/15
Set-up: 9/10
Ergonomics: 9/10
Performance: 14/20

TOTAL: 81/100

GOLFBUDDY

WORLD
£279



Download costs: None
Key technology: A stripped-back model compared to the GolfBuddy World Platinum for those focused on yardages rather than stat collection. A colour touch screen is combined with three buttons on the front of the unit to make navigation easier. Up to 40,000 courses can be stored and there are no added costs. Overhead images give distances to any point.

Tester: Michael Harris
Handicap: 6
Current DMD: SkyCaddie SGX

- ⊕ A well-built, robust unit that is easy to set up. No download fees and a large worldwide course database make this good value.
- ⊖ Not the best looking on test (the Platinum is more stylish). The auto hole recognition struggled a little on holes close together.

GM VERDICT

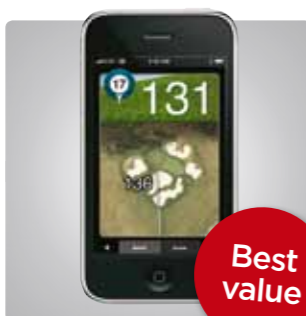
Similar performance as the Golf Buddy Platinum, but with a smaller stat collection and a cheaper price. Most won't miss the stat collection, but more noticeable is the smaller screen and understated design. The ability to plot your own yardages was a nice touch for temporary greens or lay-up distances.

Value: 13/15
Ease of use: 12/15
Information on offer: 13/15
Accuracy: 12/15
Set-up: 9/10
Ergonomics: 7/10
Performance: 13/20

TOTAL: 79/100

GOLFSHOT

IPHONE/ANDROID APP
£17.99



Best value

Download costs: None
Key technology: The latest version of Golfshot is now available on iPhone, Android and even iPad for those who want to plan their round at home, or create a large GPS device in a buggy. No software is needed on your computer. The screen shows aerial views of each hole as well as a list of key yardages. Stat collection can be presented in graph form.

Tester: Kevin Murray
Handicap: 7
Current DMD: Bushnell Tour V2

- ⊕ Superb value for money and plenty of courses available to download. The overhead images are clear and give a good idea of how the hole plays.
- ⊖ Loading times are dependant on signal and using a smartphone in poor weather is not ideal.

GM VERDICT

When this piece of software works well there is no denying it is excellent value for money. It provides more information than some of the far more expensive models. The stat collection is also impressive. Using an app like this does drain the phone's battery though and is dependant on phone reception.

Value: 14/15
Ease of use: 12/15
Information on offer: 12/15
Accuracy: 11/15
Set-up: 8/10
Ergonomics: 6/10
Performance: 12/20

TOTAL: 75/100

NIKON

LASER 1000A S
£399



Download costs: None
Key technology: A First Target Priority mode displays the distance to the nearest target when the unit finds more than one reading. The unit takes into account hilly terrain and adjusts the yardage reading accordingly. A 6x monocular is combined with a large ocular designed to be suitable for those who wear glasses.

Tester: Michael Harris
Handicap: 6
Current DMD: SkyCaddie SGX

- ⊕ Very easy to operate and distances given with slope give you a good idea of how far shots will travel up and down hills.
- ⊖ Not suitable for use in competitions, making it an expensive investment if you play a lot of competitive golf.

GM VERDICT

This is just as effective as the Nikon Laser 350G when it comes to finding the pin. While the ability to see how much a slope affects the distance of a shot is interesting, the fact that it can't be used in competitions will outweigh the positives for most. But if you don't play in (many) official competitions then this is an impressive piece of kit.

Value: 8/15
Ease of use: 13/15
Information on offer: 13/15
Accuracy: 14/15
Set-up: 10/10
Ergonomics: 8/10
Performance: 14/20

TOTAL: 80/100

NIKON

LASER 350G
£249.99



Download costs: None
Key technology: Another which uses First Target Priority mode, which displays the distance to the nearest target. When the button is held down it provides an eight-second continuous measurement that allows numerous targets to be found in quick succession. A 6x zoom is combined with a measurement range of 10 to 550 yards.

Tester: Kevin Murray
Handicap: 7
Current DMD: Bushnell Tour V2

- ⊕ An effective zoom makes it easy to pick up distances in calm conditions. The simple one-button mechanism is easy to use.
- ⊖ The eight-second scan mode made things confusing at times. The drawstring on the pouch makes it very fiddly – not great when you need easy access.

GM VERDICT

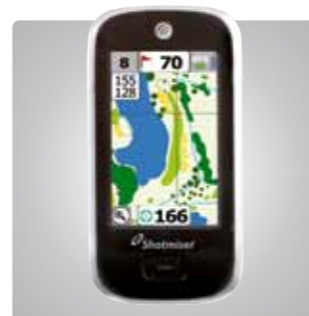
An impressive offering thanks to an effective zoom. The fact there is no need to download information or charge the unit before every round means it is always going to score highly. The unit is also lightweight and attaches easily to any bag. However, the fiddly drawstring on the pouch is an unfortunate flaw.

Value: 13/15
Ease of use: 13/15
Information on offer: 12/15
Accuracy: 14/15
Set-up: 10/10
Ergonomics: 8/10
Performance: 17/20

TOTAL: 87/100

SHOTMISER

G500
£279.99



Download costs: The first 100 courses you download are free. There are then various course bundles available.
Key technology: A waterproof unit that can be used as a golf GPS as well as a SatNav (for an extra £75). A 2.8 inch colour touch screen gives yardages to any point on the course and gives an overhead map of each hole. The screen image rotates and zooms to the next shot you face.

Tester: Neil Tappin
Handicap: 5
Current DMD: Nikon Laser 350G

- ⊕ The mapping is excellent and gives immediate readings when the touch screen is pressed. The new offer of 100 free courses makes the unit good value.
- ⊖ The unit did not automatically change from hole to hole. Having to flick to each was frustrating.

GM VERDICT

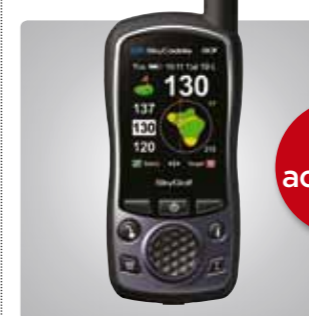
The software on offer here is excellent and gives a clear overhead view of the shape of the hole and the hazards. The colour touch screen wasn't the clearest on a very sunny day, but the device was well built and waterproof. Well worth considering if you play lots of different golf courses.

Value: 13/15
Ease of use: 12/15
Information on offer: 14/15
Accuracy: 12/15
Set-up: 8/10
Ergonomics: 7/10
Performance: 15/20

TOTAL: 81/100

SKYCADDIE

SG5
£249.95



Most accurate

Download costs: Range from £14.95 per year for front, centre and back distances to £99.95 for three years' unlimited access.
Key technology: A colour display shows up to 40 targets per hole, which have been mapped on foot in order to improve accuracy. IntelliGreen Pro not only shows the shape of the green, but also identifies major tiers, contours and mounds. The unit now also gives overhead hole maps.

Tester: Tom Clarke
Handicap: 18
Current DMD: Garmin Approach G5

- ⊕ As ever, SkyCaddie's accuracy gives added peace of mind and those who want added information will find plenty here.
- ⊖ The SGX is easier to use and more stylish. Subscription costs make this an expensive option.

GM VERDICT

The SG5 always impressed thanks to the accuracy on offer and the detailed information. It was eclipsed by the SGX though thanks to improved ergonomics and the ability to hold thousands of courses rather than just 20. The SG5 still does a good job and new software has improved the model, but the SGX is worth the extra investment.

Value: 12/15
Ease of use: 11/15
Information on offer: 13/15
Accuracy: 15/15
Set-up: 8/10
Ergonomics: 7/10
Performance: 14/20

TOTAL: 80/100

SKYCADDIE

SGX
£329.95



Best GPS device

Download costs: From £14.95 a year for basic distances to £99.95 for three years' unlimited access.
Key technology: A colour display is combined with a dual-navigation button design. Every course has been mapped on foot to help provide accurate yardages. Up to 30,000 course maps are preloaded and ready to play with basic information, while up to 50 full-featured courses can be held.

Tester: Paul O'Hagan
Handicap: 5
Current DMD: Bushnell Tour V2

- ⊕ Unbeatable for accuracy in terms of hazard placements and green shapes.
- ⊖ We understand the improved accuracy comes at a price – and downloads and subscriptions are expensive.

GM VERDICT

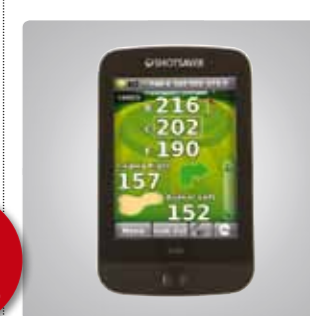
For those wanting all the bells and whistles currently available on a GPS there is none better than the SGX. The unit looks great and once you get used to the controls it is easy to operate. Those after the basic information won't need a unit this advanced. On the other hand players who want to collect stats, measure shots and find yardages to major green contours will love this.

Value: 10/15
Ease of use: 12/15
Information on offer: 14/15
Accuracy: 15/15
Set-up: 8/10
Ergonomics: 9/10
Performance: 18/20

TOTAL: 86/100

SNOOPER

SHOTSAVER S430
£249.99



Download costs: None
Key technology: The 3.5 inch colour touch screen is the largest on test and is designed to give high visibility. It comes preloaded with more than 4,500 EU course maps and has the capacity to hold 20,000 at no extra cost. The unit can record the distance each shot is hit and the club used.

Tester: Tom Clarke
Handicap: 18
Current DMD: Garmin Approach G5

- ⊕ Plenty of information for most golfers and an easy-to-use design. The large screen is clear and uncomplicated and the device is simple to set up.
- ⊖ Although the screen is very clear, the extra size was difficult to justify, particularly given the fact there are no overhead maps.

GM VERDICT

The large screen makes this feel awkward in the hand, meaning it does not score as well in the ergonomics category. While the design does make the information very clear it would have been more beneficial had the Snooper Software featured overhead maps of each hole. The larger screen would be useful if you wanted to upgrade the device and use it as a SatNav.

Value: 10/15
Ease of use: 13/15
Information on offer: 9/15
Accuracy: 12/15
Set-up: 7/10
Ergonomics: 6/10
Performance: 13/20

TOTAL: 70/100

OVERVIEW

It has been a year and a half since we last conducted a DMD test and the improvements since then have been impressive. While the basic requirements of these devices remain the same, the latest models are more user-friendly and provide extra information. While unit costs haven't dropped, in many cases, the price of course downloads and subscriptions have come down.

SkyCaddie continue to charge for subscriptions, but with this added cost you get the reassurance that every golf course has been mapped on foot. With this comes improved accuracy and a level of detail that no other GPS comes close to. The **SkyCaddie SGX** model is a big step up from the **SG5 (above)** thanks to improved ergonomics and a bigger memory. Previous versions of the **Shotmiser** impressed in the past and the **G500 (right)** is no exception. It still impresses



and the overhead maps are particularly useful. Both **Golf Buddy (left)** units offer very good touch-screen technology and a huge free database of worldwide courses, ideal for those who travel to

play golf. **Callaway's UPro (right)** is an impressive performer, but a new model is due for release soon.



Although laser range finders take some getting used to, and can encourage you to attack sucker pins, the ability to find an exact yardage is key. There is little to separate the best offerings from **Bushnell** and **Nikon**, with the **Bushnell Tour V2** receiving top marks for its ergonomics and the **Nikon Laser 350G** for being competitively priced. The choice between a GPS device and a laser really comes down to the needs of the individual. The laser will suit a better player who wants precise yardages to a flag, but it won't suit golfers with unsteady hands. A GPS device will help higher handicappers with their course management, particularly when it comes to lay-up yardages. A new **Bushnell** will be available later in the year, promising the best of both thanks to a built-in GPS that provides basic yardages.

When making your choice you should consider the type of golfer you are, the number of courses you play and your overall budget. Whichever model you choose there is no doubting that a DMD can have a positive effect on your game.

AT A GLANCE

● BUSHNELL PRO 1600 TOURNAMENT

The easiest laser to pick up the flag with, but much bigger than any other and expensive. Those who carry their bag will find it heavy.

● BUSHNELL TOUR V2

Superb ergonomics thanks to added grip and the compact size. Great for those who want precise distances to the flag.

● CADDIE LITE

A decent offering for those who want basic yardages to the front, back and middle of greens. The hazard yardages can be a little confusing.

● CALLAWAY UPRO

Very impressive flyovers of each hole are great if you play a lot of different courses. One of the more expensive units, but well put together with plenty of information.

● FREECADDIE

A great way of seeing the benefits of GPS devices before buying an actual unit. If you don't mind getting your phone out on the course the information on offer is very clear.

● GARMIN APPROACH S1

Refreshingly different to anything else and very easy to use. It provides the very basic information and will suit a specific type of golfer.

● GARMIN APPROACH G5

Hard-wearing and easy to use. A decent middle ground between the basic offerings and the most expensive ones.

● GOLF BUDDY PLATINUM

A very impressive all-rounder thanks to a robust, well-made unit that can be used out of the box. Good stat collection for those who want it.

● GOLF BUDDY WORLD

Lacks the visual and ergonomic appeal of the Platinum, but better value if you aren't interested in stats.

● GOLFSHOT

A well-presented piece of software that works out as good value if you already own a smart phone. It will drain your battery.

● NIKON LASER 1000A S

Those who play in competitions should try the range of non-slope versions. For those who don't the

1000A S will really help on hilly courses.

● NIKON LASER 350G

Easy to pick up the flag in calm conditions, making it great for those who play a lot on large greens. A scan mode works well on hazards.

● SHOTMISER G500

A new deal of 100 free course downloads makes this good value for a unit with excellent course mapping and a well thought-out touch screen.

● SKYCADDIE SG5

Accuracy is second to none and the information is impressive. The SGX model is well worth the extra money though.

● SKYCADDIE SGX

Extremely detailed, with impressive new overhead maps and incredible detail, particularly on the greens. There will be too much information here for some.

● SNOOPER SHOTSAYER 5430

An enormous screen provides very clear information, but the unit would really come into its own if overhead maps were available.

BEST FOR

VALUE:	Freecaddie/Golfshot	14/15
EASE OF USE:	Garmin Approach S1	15/15
INFORMATION ON OFFER:	Shotmiser G500/SkyCaddie SGX	14/15
ACCURACY:	SkyCaddie SGX/SG5	15/15
SET-UP:	Bushnell/Nikon (all models)	10/10
ERGONOMICS:	Bushnell Tour V2	10/10
PERFORMANCE:	SkyCaddie SGX	18/20

Best GPS device



SkyCaddie SGX The most accurate and well-designed of all the GPS units makes the SGX worth the extra investment. The screen is the clearest of all and works well in the sun. It provides all the information you need.

Best laser device



Bushnell Tour V2 Perfectly put together so that it feels comfortable in the hand, this really helps in less-than-perfect conditions. The bag design clips onto the bag with ease and provides easy access when playing.

GM