

# The heat is on!

Plug it in, turn it on and enjoy a whole new winter riding experience. ABR's gear editor **Paul Jennison**'s on a mission to find the perfect cold-weather companion: a heated jacket



## Features we like...

### ■ Heat controllers

Instant warmth on tap is great, but after a while it can get a little too hot, so being able to control the temperature of the jacket is ideal, and most of the latest jackets have a built-in controller to allow you to do just that. This is usually accomplished by way of a simple on/off switch and multiple depressions of this will adjust from low to high and back again with glove-friendly sized buttons. Some jackets also have the added gadgetry of a wireless controller. These can be handlebar mounted, so you don't have to take your eyes off the road in order to adjust your jacket on the go.

### ■ Easy connections

An easy connection to the battery terminals with the supplied leads and an in-line fuse is all it usually takes to connect your jacket and ride. However, more and more bikes are coming with an auxiliary power socket fitted as standard or owners are installing their own. These are useful for many applications such as sat navs and phone chargers, so instead of wiring your jacket direct to the battery, fit a suitable plug to the wiring and insert it straight into the socket.

### ■ Cable storage pockets

Having plenty of wire trailing from the jacket is great when you're riding, so you can move around freely without becoming inadvertently unplugged. However, when you stop and get off you don't want to be tripping over the leads while you're walking around the shops. A nice zippered pocket that will secure the leads and controller out of sight until it's time to re-connect is a must.

### ■ Lightweight

Let's face it, our motorcycle kit is heavy at the best of times and for winter riding it becomes even more so. A heated jacket that's lightweight and can replace the original thermal liner is the way to go.

### ■ Snug fit

Bike kit's cumbersome enough and we don't need to add to that, so a heated jacket or gilet that's a snug fit and employs stretch materials that will move with you rather restrict movement has to be the answer. Also, if the garment is a close fit then it stands to reason that the heat it radiates will be directed on to your body and not lost to the outside world.

### ■ Add-ons

We're only featuring jackets and gilets in this review, but there's a vast array of other heated garments out there that can be added to your jacket, like glove/boot liners and trousers. Some of the jackets we've tested have the facility to add glove liners to them with built-in leads and some companies offer other products to complement their jackets to have you wrapped up with that all-over Ready-Brek glow.

**M**y first real biker jacket was a Belstaff Trial Master wax-cotton affair, and riding my old Suzuki GT 250 Ram Air, I thought I was the business. When it came to winter, it was exactly the same outfit, mainly because there was no choice. I couldn't afford another jacket, so all I did was layer up with a thick hand-knitted woollen jumper – and literally anything else I could find to fit underneath the Belstaff – in a feeble attempt to keep warm on the daily commute.

Since then, like everything else of course, technological advances have given ABRs a vast range of apparel to suit each and every season, so much so we're now spoiled for choice. Couple that with riding for pleasure in the winter, and it's only natural to want every creature comfort that's on offer so the ride is both endurable and enjoyable.

Layering up is still the best way to keep insulated beneath your waterproof outer textiles, but how about that extra bit of warmth and comfort underneath?

I used to scoff at the mention of heated jackets. The first generation that came out and connected to the bike's power supply made virtually no difference to the wearer's warmth and comfort; then there were the ones which came with their own battery pack. These would generate just enough heat for the outbound journey, but it was necessary to carry a spare set of batteries for the run home. There was also the added problem of the wire elements breaking and the whole thing being rendered useless after only a few rides.

But like I said, technology moves on. Motorcycle alternators now generate more amperage to power all the electrical systems; the elements in the clothing are mostly made from carbon fibre or microwire, which gives instantaneous, deep and comfortable heat, and the garments have heat controllers, some even being wireless, so you aren't forced to slow cook from the inside out.

The materials that go into making these jackets are better, too. Gone are the bulky body warmers that are adapted to make do and enter the light, snug-fitting, stretch materials that won't leave you looking like the Michelin man on steroids.

What we have on test are a mixture of gilets and full jackets that use the latest developments to keep you at the desired temperature for that winter ride, whether it's the commute on an icy cold day or a blast across Europe to the Elephant Rally.

*Keis and BMW were contacted to participate in this feature but either refused or failed to send products for testing*

## ■ Jacket or gilet?

The body's own heating pump works hard to keep the core temperature at 37.4°C. This ensures that all the major organs which surround it are operating properly and kept healthy. A gilet will give the torso that added warmth, to help the heart maintain the right temperature, and it won't have to work overtime to achieve this.

This may be all you want or need, plus gilets offer a slimmer fit under a tight jacket.

Extremities, like the arms and legs, can survive if they get cold, so the heart will minimise the circulation to these areas when the temperature drops in order to maintain core body heat. A full heated jacket under a waterproof outer will help keep the arms warm, too.

## ■ Heated jackets and waterproof membranes

There's a misconception circulating that a heated jacket liner can undermine a waterproof membrane such as Gore-Tex. In essence, rumour has it that the heat generated from the liner can reverse the properties of the membrane and allow water to pass through from the outside, leaving the rider open to a soaking. This simply isn't true.

Gore-Tex in particular has a thermal range of -250°C to +260°C, so as long as the wearer is warmer than the outside temperature, which will always be the case, the membrane will perform as normal.

The confusion may stem from issues associated with heated grips and waterproof membranes, which is a different set of circumstances. Using gloves with a waterproof membrane and heated grips on your motorcycle *can* compromise the liner, because the heat *outside* the gloves is greater than that within. In this case, water in between the membrane can vapourise causing the membrane properties to reverse and liquid will be drawn inside the gloves, making them wet.



## ■ Power ranges

Some bikes – particularly later model BMWs – that have auxiliary sockets fitted as standard may have a limited power output, so although plugging your jacket into this socket will make it work for a while, the power it's using may well be in excess of what the BCM (Body Control Module) would ideally like, and as it regulates power to most of the more essential systems, it will likely identify the excess drain and shut the socket down. Before you send your jacket back as faulty, check the power required for the jacket and what your socket will give out. It may be that the socket doesn't like the power drain! ■



## Oxford

## Inox Heated Vest

www.oxprod.com

SRP £150



**ABR  
RATING  
8 out of 10**



Side stretch panel

The Inox Heated Vest is a versatile, snug-fitting vest from well-known motorcycle accessory producer Oxford Products. The jacket has a soft shell outer, which is widely used in the outdoor industry for its water-resistant and wind-proofing properties.

The vest has a mesh liner, which keeps the heat elements away from the rider, but still allows warm air to circulate to the wearer; it also assists in moving excess warmth away from the body. On the sides there are elasticated stretch panels which give the jacket its snug fit while still allowing good range of movement.

Heating in the Inox comes by way of highly durable, woven stainless steel heat pad technology, which is soft, flexible and comfortable to wear. These pads are sited in the chest, back and neck, the most important areas, which need to be kept warm to allow the rider to feel the full benefit of the jacket.

The collar is quite large but not overly bulky so it should fit under most outer jackets that have a reasonable amount of adjustment. However, I'd advise wearing a Buff or similar so the heat pad isn't in direct contact with the skin as this could

lead to minor burns.

Oxford has included all the leads you need to connect the vest straight to the bike's battery and an inline on/off switch with a temperature regulator. The unit is on the small size and set a little high on the lead, but can be operated with a gloved hand. Once it's connected, the desired temperature can be selected from four different heat settings with multiple depressions of the switch.

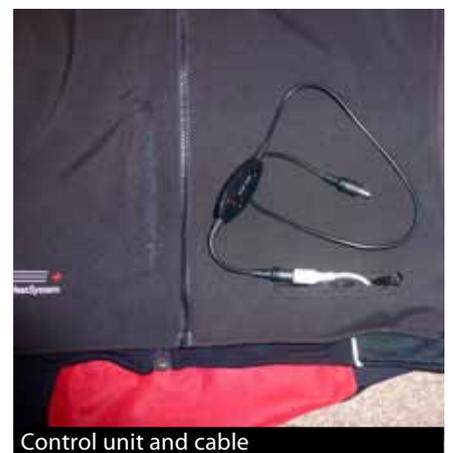
I found this jacket to be very versatile when it comes to the heat settings. Turning it to max to start with gets it nice and toasty and then you can select a lower temperature for a more comfortable heat over a longer ride.

Once off the bike the control unit can be stowed in the small zipped compartment near the jacket's hem. There's also an additional zipped pocket which will easily take a mobile phone or a wallet.

Oxford has a good-quality jacket here that offers a good level of warmth with a flexibility that makes it suitable for wearing on and off the bike.

**In a Line:**

**A versatile gilet with good temperature regulation**



Control unit and cable



Mesh lining and heat pads

# Alpinestars

## Tech Heated Vest

www.alpinestars.com

SRP £169.99



**ABR  
RATING  
7 out of 10**

Very few of the larger motorcycle clothing manufacturers include any heated jackets within their ranges, leaving it in the main to specialised companies to fill this void.

One exception to this is Italian clothing producer Alpinestars. Its Tech Heated Vest is a snug-fitting, light and stretchy gilet that's hardly noticeable when worn under an outer shell. That is, until it's switched on and the heat begins to radiate through to the wearer.

Alpinestars has employed its innovative flat polymer heat panels in the chest, back, shoulders and neck, which give an even distribution of warmth, and because they are light and flexible, the jacket can be packed down easily for storage. It's also washable, but read the care instructions carefully before you throw it into the machine as it is hand-wash only!

The outer shell is Lycra – which is where the stretch comes from – with a thin fleece backing, to help retain the heat. This is then lined with a thin mesh in a contrasting vivid red colour, which is very nice! The mesh allows a thin layer of air in between the outer jacket and the rider's base layer, which allows the heat to circulate around the wearer. There are also breathable side panels which wick away any moisture and help keep you dry and warm.

The gilet is cut to fit under a riding jacket, so it follows that the collar

has a low profile, although it is slightly higher at the back. The benefit of this is that it'll still fit under your riding clobber even if your outer jacket has a snug-fitting collar.

As mentioned earlier, the heat is generated by the flexible panels in the gilet, and once connected to the power source, the warmth is immediate and grows gradually to full power in about 10 minutes. The only drawback on the model we have is that it's either on or off at the power switch, so you cannot regulate the temperature. Alpinestars does produce an optional extra temperature controller, but maybe the company should think about including one as standard like other manufacturers do?

Included with the vest is a power cord that connects directly to the bike's battery. This is protected by an inline fuse and installation is reasonably straight forward. The connection leads all fit inside a small pocket in the jacket so there are no trailing wires to trip over once you're off the bike.

For a heated gilet the Tech Vest has a lot of good points, like its fit, lightness and heat generation; if a temperature regulation control came as standard it would have scored a lot higher.

**In a Line:**

**A good-fitting, warm, heated liner that's just missing a temperature controller**



Control unit



Long tail with grip strip



Low collar

## Gerbing

Heated Jacket Liner

www.gerbing.eu

SRP £169.99

**ABR  
RATING  
9 out of 10**



Once the connection is made the heat control unit is fitted to the connectors. This has a generous amount of cable attached to it, so it's unlikely to pull or inhibit your movement, but you'll need to make sure it's tucked away and doesn't hang loose, to prevent it catching in the bike or losing the heat controller. A new digital controller for this outfit is due for release soon, but not in time for this test.

The controller is a rotating knob with numerous positions so you can fine tune the heat you require. The liner has two good-sized zippered hand-warmer pockets on the outside as well as three inner pockets, so ample storage is provided for the cables and other personal effects.

In operation the jacket warms quickly and the heat from the pads, which are positioned in all the right places, is even, comfortable and totally effective.

**In a Line:**

**A good jacket at a good price**



Inner pockets



Control unit

American company Gerbing produces probably the most well-known and popular range of heated clothing for the motorcyclist and has been doing so for over 30 years. It's so confident in the quality of its products that the company offers a lifetime warranty on all of the electrical components included in its garments.

The heated liner on test here is a full jacket with a soft nylon outer shell, which is wind resistant so can be worn as a stand-alone garment off the bike. The liner is nylon too, but has a soft and light feel to it. The fit is snug, as it should be, and only needs a long-sleeved base layer to be worn underneath it for the wearer to get the full benefit from its heat panels. There's no stretch in the liner, though, so be aware of this when trying it on for size. A close fit is good but it shouldn't restrict movement on the bike.

Gerbing has used microwires incorporated in panels sited in the chest, back, neck and arms which give even heat distribution. The liner also has Thinsulate Heatlock insulation which retains the warmth and assists in its even radiation. The panels are flexible and can be compressed for easy storage; the garment is also washable.

As with all the full jackets on test here, the collar is high so take care to ensure it's not going to be too bulky to fit under your outer shell. I'd also recommend that Buff again, to keep the heat panels from coming in to direct contact with your skin.

Connection to the motorcycle's battery is via the wiring provided, which has an in-line fuse holder and a selection of fuses of varying resistance. These are for use with the integral connections for gloves and trouser liners, if you want to go down that route, as a low-amperage fuse could blow if too much load is placed upon it.

## Exo2

StormRider Heated Bodywarmer

www.Exo2.co.uk

SRP £179.99

Optional extras: Controller unit and power pack

**ABR  
RATING  
9 out of 10**



Scottish heated clothing company Exo2 has a long history of producing quality apparel for outdoor enthusiasts. Its products are mainly

powered by portable power-packs which are mains rechargeable, but the company also has a range that's specifically aimed at the motorcyclist which uses a direct 12v supply or can run on a power-pack. The StormRider is a body warmer or gilet which features a fabric called 'AirX-treme' which is claimed to be water-and windproof. The fabric feels like a soft shell with a slight stretch to it and although it's close fitting it does allow for freedom of movement. There's also a soft mesh liner, which allows air to circulate while retaining the warmth. The manufacturer recommends this jacket be worn with a thin base layer underneath it so the heat from the panels can effectively radiate through to the wearer.

The heat panels used are FabRoc heating systems which comply with EU safety regulations so the gilet will be rendered safe even under fault conditions. The panels are sited in the chest, shoulders, upper and lower back and operate at a maximum temperature of 50°C while only drawing 2.5 amps from a healthy motorcycle battery.

The optional extra power controller unit (£49.95) can be used to adjust the temperature to one of four settings

and there's also the option of a portable power-pack with mains charger (£69.00) which will only heat the lower back panel around the kidneys.

This would be beneficial if you're standing around at an outdoor event or even sat by the campfire at a rally, but I suggest you don't admit to it!

The jacket has no collar, so obviously your neck doesn't get the benefit of the heat, but the panels on the shoulders should generate sufficient warmth for this not to be a problem. I certainly didn't feel as though I was lacking in warmth when I used it – quite the contrary. The lack of collar also means you shouldn't have any trouble fitting this vest under an outer that's already tight in this area.

The gilet comes with the usual connection leads to couple it to the bike's battery and once it's done all you need to do is plug it in and away you go. Warmth is generated immediately and it will be at full temperature in 10-15 minutes.

The StormRider is another good jacket with excellent heating properties, but if you want the add-ons to make it useable in all conditions you'll get little change from 300 quid.

**In a Line:**

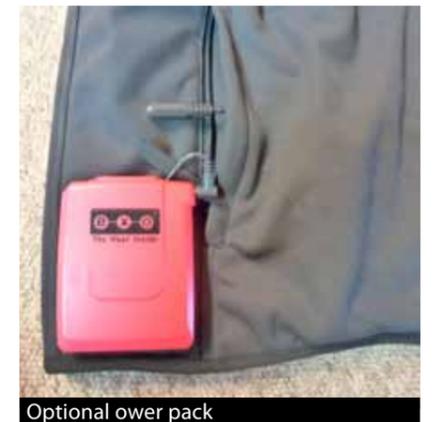
**A comfortable jacket with good features; it's just a shame these cost a little extra**



Long connector cable



Control unit



Optional power pack

## Powerlet

www.powerlet.com

### RapidFire Heated Jacket Liner

SRP \$349.99\*

(\*around £221 at current rate of ex)



**ABR  
RATING  
10 out of 10**

Riding with this Powerlet jacket in use was nothing short of luxury. Each of the other options on test here is good in its own right, but the RapidFire is simply better. With fully adjustable warmth, which penetrates right through, you feel comfortable all over.

**In a line:**

**Technically excellent, this jacket delivers from the off!**

**W**ith the latest technology available in heated clothing, the Powerlet RapidFire Heated Jacket Liner comes all the way from the good 'ol US of A and it's certainly worth the effort to get one sent over, that is until the company finds a UK distributor!

This is a full jacket that features CNC (Carbon Nano Core) heating which uses FAR infrared technology to provide fast, deep and soothing warmth. The energy released from infrared heat penetrates the skin and insulating layers deeper, producing a heating effect from the inside out rather than from the outside in like more traditional heating sources.

The inner and outer shell of the jacket is made from polyester, which is both wind- and water-resistant, and if worn as a stand-alone garment it's light, flexible and won't look out of place anywhere when you're not riding. The fit is good as long as you adhere to the sizing chart. The outer shell fabric has a four-way stretch for a good range of movement and this is enhanced by the stretch panels in the sides and around the back of the shoulders.

As mentioned, the heat from the CNC is placed into thin and very flexible panels which are sited in the front, back, arms

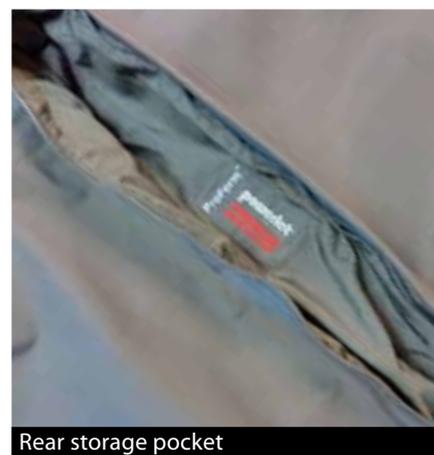
and neck. Once connected, the warmth is instantaneous and you can feel the heat radiating around the whole of your upper body. Lovely!

The jacket comes with dual-power connectivity which is either 105 or 60 watts, so for bikes with a lower output the 60-watt option will still allow full use of the liner without the bike struggling to cope. This conversion is simply a matter of unplugging a connector in the jacket.

To use, connect the wiring to your machine and then, prior to plugging in the jacket, pair the wireless dual controller to the jacket. This is a simple procedure and only needs to be done once. Full instructions come included in the package.

The control unit can be sited wherever you choose and has two knobs; a red one for the jacket and a yellow one is for use with the optional extra heated glove liners for which the jacket is already wired.

All the cabling can be stowed in its own zip-up pocket. The RapidFire also has a large zipped chest pocket with compartments for a wallet and a phone. Then there is a large full-width zipped pocket across the back which doubles up as a stuff bag for the jacket when not in use.



Rear storage pocket



Wireless temperature controller