



HEATED APPAREL

Product range and instruction manual

microCARBONfibre



“I've been using this heated vest from Keis for not one, but four years. It's covered thousands of cold weather miles and always performed admirably ...even scuba diving in freezing waters.” - Lee Skellett, RiDE Magazine

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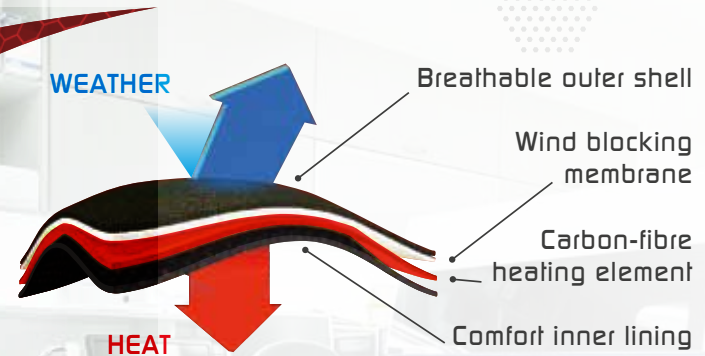
What makes Keis Apparel unique?

There's nothing better than getting outside on a clear, cold, crisp day. But imagine you could remain as warm as toast whatever the activity! Now you can with Keis Heated Apparel. Forget heated clothing as it used to be, Keis uses the very latest heat generating technology to deliver Far Infra Red Radiation providing reliable, even and strategically positioned heating in a garment so reliable you can even wash it!


microCARBONfibre
HEATING TECHNOLOGY



KEIS



What is Far Infra Red Technology?

Imagine being in the sun on a cold day. The warmth seems to penetrate your body. The air temperature maybe zero but you remain warm at least until the sun goes in! That's Far Infra Red. Compare that to being in a warm room where it's the air that keeps you warm. Keis technology is designed to deliver Far Infra Red reliably, effectively and efficiently as possible.



A range of heated apparel designed exclusively for cold weather activities

Keis garments are powered from a vehicle's battery, or a Keis Portable Battery (Dual-Power garments only).

Jackets, bodywarmers and vests

From Dual-Power vests to high power heated jackets, Keis makes use of the very latest heat generating technology.

Lifestyle, motorcycle and inner gloves

Keis heated gloves provide a layer of heat where you need it most - to the exposed top of your hands and around your fingers. EU Certified for various cold weather activities.

Trousers

Keis provides much needed warmth to the strategic areas, ensuring effective circulation and comfort during long, cold trips.

Boot insoles

Designed to be tailored to your unique boot profile, ultra-reliable Keis insoles help keep your toes nice and toasty whatever the weather.

Plus a range of accessories to power, connect, and control your Keis heated apparel, as a single garment, or integrated into a complete heated solution.



Being Safe and Conscientious

WARNING! READ THOROUGHLY BEFORE ATTEMPTING TO USE YOUR KEIS PRODUCT.

- Keis Heated Apparel brings immense advantages to the user. However, skin is a sensitive organ and can blister at as little as 44°C! Our products must be used strictly in accordance with the instructions. Failure to do so can result in burns, serious injury or death.
- ALWAYS ensure a correct fit. Tight fitting garments that press the heating systems hard against the skin can cause burns.
- Do not allow the garment to remain in the same position on any part of the body (particularly hands) for periods of more than 20 minutes. Always ensure that there is sufficient movement to reposition the heating panels on the body to some extent to help avoid localized overheating. Blistering of the skin can occur if this warning is not heeded.
- NEVER wear directly against the skin. Always wear a base layer between the product and the skin. (Excludes gloves)
- DO NOT use for prolonged periods particularly at high power and/or at temperatures above 5°C
- ALWAYS use the lowest possible setting for comfort.
- ALWAYS observe any product specific instructions attached to or accompanying the garment.
- DO NOT use when wet. This includes excessive sweat.
- DISCONTINUE USE IMMEDIATELY at any sense of discomfort.
- DO NOT use this product if you suffer from: Heightened or impaired temperature sensitivity or circulatory problems. If in doubt consult your doctor. Not suitable for young children.
- NEVER leave Keis garments unattended when switched on.
- This product is only suitable to be powered by Keis 12V Battery Packs or 12V systems. When using on 12V Vehicles be aware these can run at considerably more than 12V. Check the vehicle systems if in doubt or use a Keis Battery Pack.

- DO NOT modify or disassemble any part of the systems in any way. Only use Keis Genuine Accessories.
- Check garments and cables regularly for signs of wear and fatigue.
- Do not use if the product is visually damaged.
- Unless otherwise stated Keis garments are not designed to provide crash protection.
- Check out our updated safety information at: www.keisapparel.co.uk.

Safety & environment

- Do not dispose of electrical equipment with standard domestic waste.
- Contact your local authority for disposal information specific to your area.

Wash and care instructions

- Make sure that all the Keis heated garments are disconnected before they are washed (including controllers and connection leads).
- Hand wash only, using a mild soap and cold water.
- Hang dry or lay flat.
- Not suitable for dry cleaning.
- Store your dry Keis garment out of direct sunlight. Note: retained moisture and prolonged sunlight may result in fading to the garment's colour. This will also effect the garment's lifespan.

Safe riding tips

- Extended exposure to extreme temperatures, including cold, can lead to hypothermia, dehydration, and desensitisation of the skin.
- Check your skin regularly - before, during and after use.
- If two riders are connecting to one Keis on-bike wiring harness, ensure the motorcycle wiring and battery will safely operate the combined amps for all the heated apparel, and you are safely making use of a fuse that will allow the combined current usage.

Keis Heated Vests

The Keis Premium V501 Vest features the latest heat generating technology, combined with a lighter construction, improved pockets and distinctive styling.



Comfort Model V106

Premium Model V501

Premium Model V501RP

Keis Heated Vests provide a layer of warmth to important front and back areas of the body. An optional Keis Heat Controller allows you to cycle through three different levels of warmth, providing the ultimate in comfort control during cold weather outdoor use.

The Keis Heated Vest can also be integrated with: Keis Gloves (inner or outer), Keis Trousers, and Keis Boot Insoles.

Technical Data

Voltage: 12V

Approximate* Current: 1.3A - 1.5A

Approximate* Power: 15.6W - 18.0W

Shell: 94% Polyester, 6% Spandex

Lining: 100% Polyester

* Depending on the size or type of garment



POWER INPUT OPTIONS

PORTABLE BATTERY
 KEIS PORTABLE BATTERY (optional extra)
 ONLY SUITABLE FOR DUAL-POWER GARMENTS

OR

ON-BIKE WIRING HARNESS

MOTORCYCLE BATTERY (not supplied)

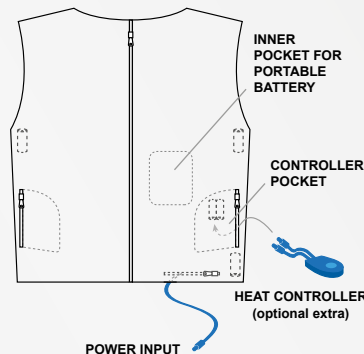


POWER OUTPUT TO GARMENT

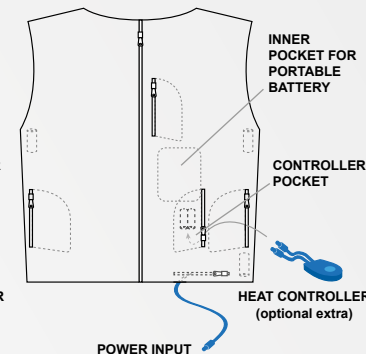
USE THE CORRECT FUSE (see page 24)

CONNECTING TO A HEAT CONTROLLER

KEIS HEATED VEST
 (Model X10 / V106)



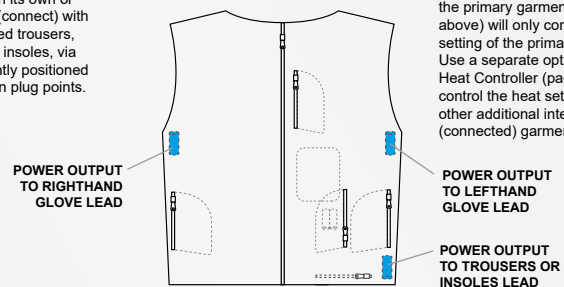
KEIS HEATED VEST
 (Model V501 & V501RP)



CONNECTING KEIS GARMENTS TOGETHER

The Keis vest is able to operate on its own or integrate (connect) with Keis heated trousers, gloves, or insoles, via conveniently positioned connection plug points.

KEIS HEATED VEST CONNECTION SOCKETS



Important note:

The heat controller connected to the primary garment (as shown above) will only control the heat setting of the primary garment. Use a separate optional Inline Heat Controller (page 22) to control the heat setting of any other additional integrated (connected) garment.



Keis Heated Ladies Premium Bodywarmers



Premium Model B501W



Premium Model B501WRP

Ladies, need some protection against cold temperature riding?

The Keis Ladies Heated Bodywarmer features a heated collar, and heating panels front and back, to deliver a cosy spread of warmth. Designed to provide a comfortable ladies fit and a complimentary cut, the Keis Heated Ladies Premium Bodywarmer has built-in connection plugs, so that you have the option to also power your Keis Gloves, Trousers and Boot Insoles, directly from your primary garment.

Technical Data

Voltage: 12V
 Approx. Current: 1.2A
 Typical Power: 14.4W

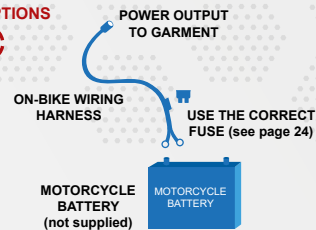
Shell: 94% Polyester,
 6% Spandex
 Lining: 100% Polyester



POWER INPUT OPTIONS



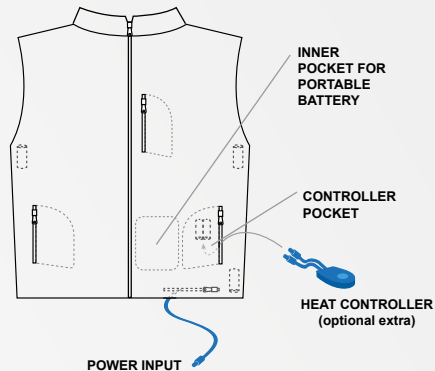
OR



CONNECTING TO A HEAT CONTROLLER

Important note:
 The heat controller connected to the primary garment (as shown above) will only control the heat setting of the primary garment. Use a separate optional Inline Heat Controller (page 22) to control the heat setting of any other additional integrated (connected) garment.

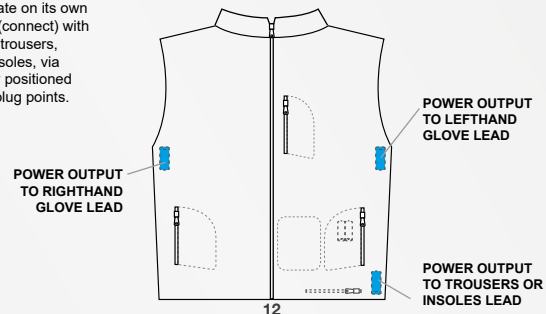
KEIS HEATED BODYWARMER (Model B501W & B501WRP)



CONNECTING KEIS GARMENTS TOGETHER

The Keis bodywarmer is able to operate on its own or integrate (connect) with Keis heated trousers, gloves, or insoles, via conveniently positioned connection plug points.

KEIS HEATED BODYWARMER CONNECTION SOCKETS





Keis Heated Jackets



Powersport Jacket Model J501RP



Powersport Jacket Model J501

The ultimate in heated clothing, Keis heated jackets deliver warmth across the back, chest, arms and collar.

The J501, and the J501RP (black with red piping) Powersport Jackets, feature a breathable soft fabric shell, elasticated sides for maximum comfort, convenient pockets and elasticated cuffs that do not bunch up under your motorcycle jacket-glove area.

These Keis heated jackets provide power output sockets so that other Keis heated garments can be connected to the jacket. Heated gloves can be connected to each jacket arm, and heated trousers to the power output socket at the jacket waist.

Technical Data

POWERSPORT J501 & J501RP

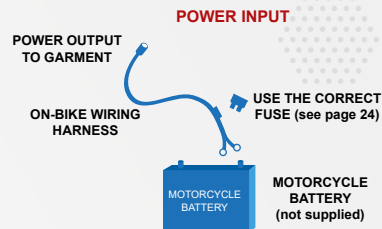
Voltage: 12V

Approx. Current / Power: 5.5A / 66W

Shell: 94% Polyester, 6% Spandex

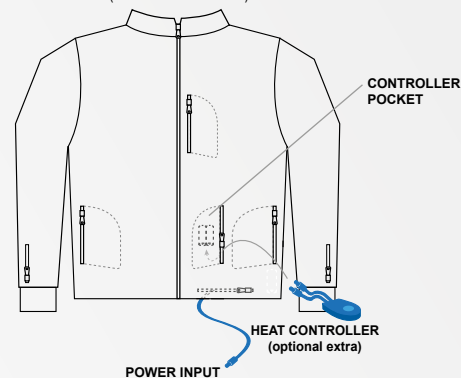
Lining: 100% Polyester

Both Keis heated jackets feature the latest heat generation technology powered by a 12V Keis Portable Battery Pack, or a vehicle connection.



CONNECTING TO A HEAT CONTROLLER

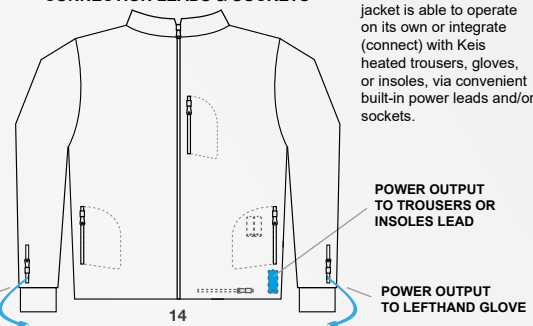
KEIS POWERSPORT JACKET (Model J501 & J501RP)



CONNECTING KEIS GARMENTS TOGETHER

KEIS POWERSPORT JACKET CONNECTION LEADS & SOCKETS

Important note:
The heat controller connected to the primary garment (as shown above) will only control the heat setting of the primary garment. Use a separate optional Inline Heat Controller (page 22) to control the heat setting of any other additional integrated (connected) garment.



The J501 & J501RP Keis jacket is able to operate on its own or integrate (connect) with Keis heated trousers, gloves, or insoles, via convenient built-in power leads and/or sockets.



KEIS DUAL Keis Heated Gloves



Motorcycle Gloves with flexible hard armour - Model G601



Motorcycle Gloves with bonded-textile outer - Model G701

NEW



Leisure Gloves with battery pack - Model G801



Inner Gloves - Model G102

The range of Keis heated gloves provide cosy warmth to your hands, powered by either a motorcycle battery power lead, a single pocket-sized portable battery, or dedicated glove batteries (inserted into each glove cuff). The Keis heated motorcycle gloves (G601 and G701) integrate the latest abrasion resistant materials, a protective scaphoid guard, convenient visor wipe, (3M)Thinsulate™ and Hipora™ waterproof membrane, and conforms to the latest European PPE directive **EN 13594:2015**. We recommend the use of S100 Waterproof Spray to maintain the waterproofing of all outer gloves.

Technical Data

OUTER GLOVES: G601 / G701 / G801

Voltage: 12V
 Approx. Current: 1.2A - 1.6A (pair)
 Typical Power: 14.4W - 19.2W
 Shell: Nylon and Leather
 Lining: 100% Polyester

INNER GLOVES: G102

Voltage: 12V
 Approx. Current: 1A (pair)
 Typical Power: 11.5W
 Shell: 85% Nylon, 15% Spandex
 Lining: 100% Polyester



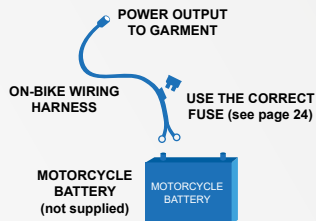
POWER INPUT OPTIONS



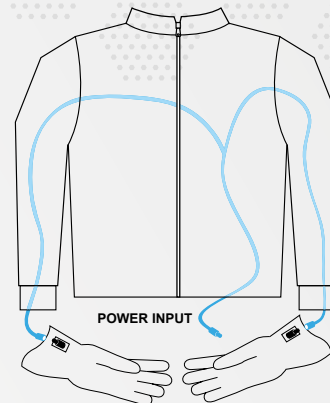
KEIS PORTABLE (pocket) BATTERY (optional extra for G601, G701 and G102)
A SET OF GLOVE BATTERIES ARE SUPPLIED WITH THE G801 LEISURE GLOVES



Pocket Battery OR Glove Batteries

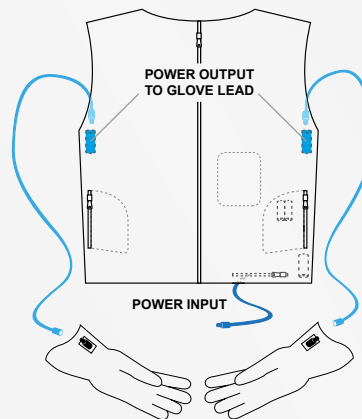


USING KEIS HEATED GLOVES WITHOUT A KEIS VEST, BODYWARMER OR JACKET



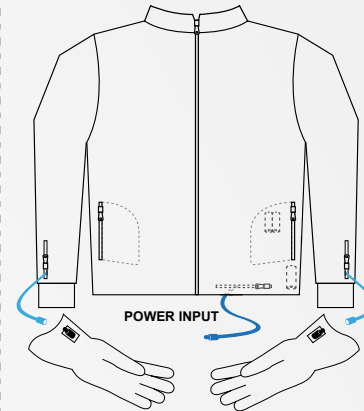
Use the supplied Y-Cable to connect the gloves to your choice of power input (Dual-Power).

USING KEIS HEATED GLOVES WITH A KEIS VEST OR BODYWARMER



Thread the (optional) glove connector leads through the inside of your motorcycle jacket sleeves.

USING KEIS HEATED GLOVES WITH A KEIS JACKET



The built-in glove power cables are accessed from within each jacket sleeve.



Keis Heated Trousers



Trousers - Model T102

Keis Heated Trousers use strategically placed heat to create all the warmth your legs will need on long cold trips. They can be powered from the supplied on-bike wiring harness, or plugged into a Keis Vest, Bodywarmer or Jacket. Heat adjustment while on the go is easily accomplished by pressing the button of the 3-stage integrated heat controller, found on the trouser controller flap.

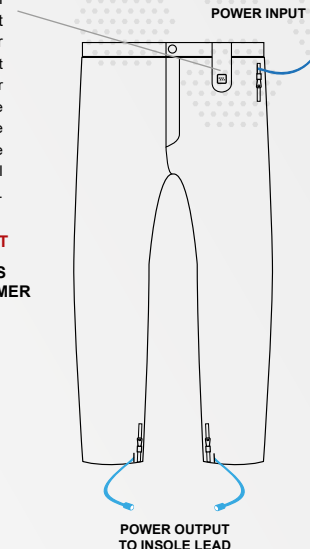
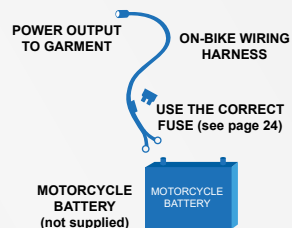
Technical Data

Voltage:	12V	Shell:	94% Polyester,
Approx. Current:	3.3A		6% Spandex
Typical Power:	39.6W	Lining:	100% Polyester



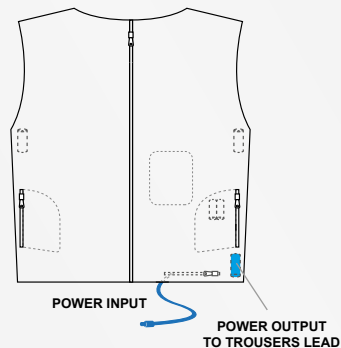
The Keis Heated Trousers feature an integrated heat controller. The heat can be set via pressing the controller button. This heat controller will not control the heat setting of any other connected garments, such as the insoles. Use a separate optional Inline Heat Controller (page 22) to control the heat setting of any other additional integrated (connected) garment.

CONNECTING THE POWER INPUT USING KEIS HEATED TROUSERS WITHOUT A KEIS VEST, BODYWARMER OR JACKET

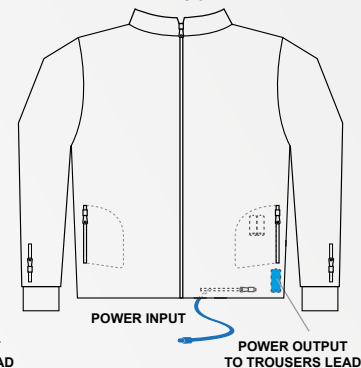


CONNECTING KEIS GARMENTS TOGETHER

USING KEIS HEATED TROUSERS WITH A KEIS VEST OR BODYWARMER



USING KEIS HEATED TROUSERS WITH A KEIS JACKET





Keis Heated Insoles



Boot Insoles - Model S102

Our feet are often referred to as our radiators. When warm, we feel warm; and when our feet feel cold, we are cold. Keis Insoles provide upto 11 Watts of warmth to toes and soles. As the skin on the feet is sensitive, please read the safety warnings (page 7 & 8).

Keis Insoles are available in 4 sizes: Small, Medium, Large and Extra Large. After selecting the size closest to your feet (see table on the Keis website - Insoles page), the insoles are designed to be trimmed to provide a custom fit to your boots. Care should be taken not to trim inside the indicated area.

The Keis Insoles are Dual-Powered, so they can be powered via the supplied on-bike wiring harness or an optional Keis portable battery.

Technical Data

Voltage:	12V	Typical Power:	11W
Aprox. Current:	1A	Material:	PU Foam

POWER INPUT OPTIONS



KEIS PORTABLE BATTERY
(optional extra)
ONLY SUITABLE FOR
DUAL-POWER
GARMENTS



OR

POWER OUTPUT
TO GARMENT

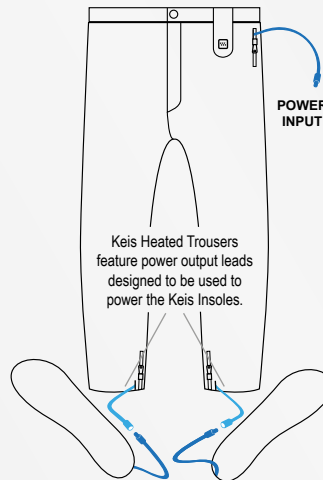
ON-BIKE WIRING
HARNESS

USE THE CORRECT
FUSE (see page 24)

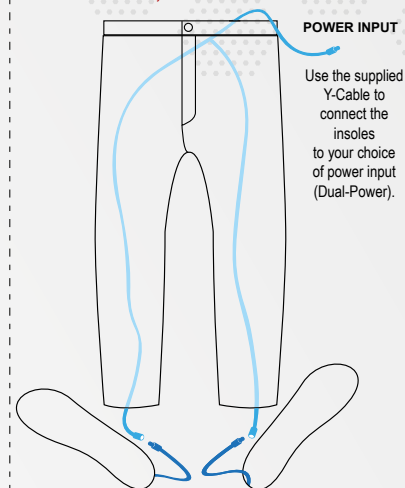
MOTORCYCLE
BATTERY
(not supplied)



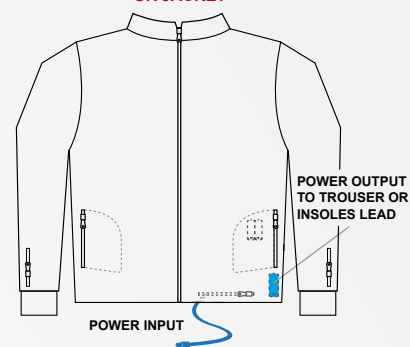
USING KEIS HEATED INSOLES WITH A KEIS TROUSERS



USING KEIS HEATED INSOLES WITHOUT A KEIS VEST, BODYWARMER, JACKET, OR TROUSERS



USING KEIS HEATED INSOLES WITH A KEIS VEST, BODYWARMER, OR JACKET





Keis Accessories

The Keis heated garments come with all you need to use them right away, but we do recognise that your individual setup and user-needs may require additional accessories.

Keis Portable Battery Pack - 2600mAh
and Charger (either UK or Multinational with EU, US, and UK), with USB Output to also charge phones or USB devices



Part # W54-370773 (UK) / W54-371992 (Multi)

Keis Portable Battery Pack - 5200mAh
and Charger (either UK or Multinational with EU, US, and UK) with USB Output to also charge phones or USB devices



Part # W54-371107 (UK) / W54-372005 (Multi)

Keis Glove Batteries - 2600mAh (each)
and Charger (either UK or Multinational with EU, US, UK). These batteries are available in sets of two



Part # W54-371978 (UK) / W54-372791 (Multi)

Keis Econo Battery Pack - 2600mAh
Economy battery pack without charger, as extra battery for a Keis Bodywarmer or Vest. Can also be used as a single Keis Glove Battery replacement



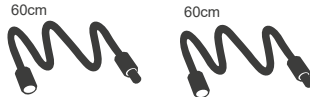
Part # W54-371213

Keis Spare Y-Cable for Gloves or Insoles



Part # W54-370605

Keis Vest or Bodywarmer to Gloves Connection Leads (pair)



Part # W54-371060

Keis Cable Extension 300 or 600mm



Part # W54-370087 / W54-370094

Keis Additional Motorcycle Supply Loom (on-bike wiring harness)



Part # W54-370070

Keis Heavy-Duty Heat Controller - for Vests, Bodywarmers or Jackets



Part # W54-370025

Keis Light-Duty Inline Heat Controller - for Inner Gloves or Insoles



Part # W54-370759

Keis Inline Controller - On/Off Switch



Part # W54-370124

OptiMate (KET or SAE) Battery Connection Lead to Keis Power Supply Lead - 68mm long



Part # W54-370063 (with the KET plug)
W54-370247 (with the SAE plug)

Keis Accessory Socket with OptiMate (SAE) Connector



Part # W54-370643

Keis Accessory Socket with OptiMate (KET) Connector



Part # W54-370056

Adaptor - Keis male to Generic female (5.5 x 2.1) (5.5 x 2.5)

Part # W54-371374



Adaptor - Generic male to Keis female (5.5 x 2.5) (5.5 x 2.1)

Part # W54-371381



Keis 1-into-3 Cable Splitter



Part # W54-370117

Keis Portable Battery Charger - From a vehicle



Part # W54-370049

Vehicle Cigarette Lighter / DIN Power Socket Supply Lead



Part # W54-370032

Not viable for BMW DIN socket due to BMW's 5A limit



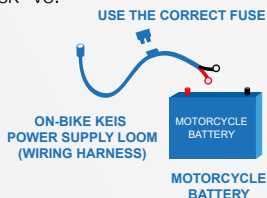
Powering your Keis equipment

Your Keis heated garment has been designed to be powered from a 12V source, such as a motorcycle battery or a Keis Portable Battery (for Dual-Power garments).

Powering your Keis heated garment from a motorcycle battery

Attach the Fused Connection Lead directly across the battery taking into account any safety notices issued by the manufacturer and observing the polarity Red +ve and Black -ve.

WARNING: Suitable for 12v systems ONLY. Always connect the Red +ve lead to the battery first. Position the power socket so it is in a convenient position to power your garment and secure if necessary using cable ties (NOT tape) ensuring that it cannot become trapped, damaged or interfere with the normal operation of the Motorcycle.



Powering your Keis garment from a Keis Portable Battery

WARNING: Use only Keis Battery Packs. Use of third party battery packs will invalidate the warranty and may cause injury.

Insert the Power Input lead directly from the garment into the Keis Battery Pack. For convenience the battery pack can be placed in the inside pocket of the Keis body garment and secured with the Velcro strap. According to comfort considerations, larger batteries may be best accommodated in the pocket of existing garments or a dedicated Keis Battery Pouch. Note: Control of the garment is affected using the optional Heat Controller, and not via the Keis Battery Pack.

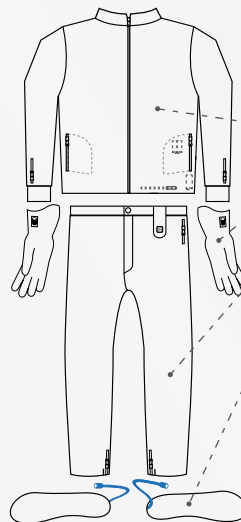
Fuses

Fuses protect both the garment and the motorcycle. Select the correct fuse by adding up the amps drawn for the garment, or combination of garments. Always use the fuse with a greater amp value.



Fuse Usage When Using Individual Keis Garments

ITEM:	APROX. CURRENT:	RECOMMENDED FUSE
KEIS HEATED VEST	1.3 - 1.5A	2A Fuse (grey colour)
KEIS HEATED BODYWARMER	1.2A	2A Fuse (grey colour)
KEIS HEATED JACKET	5.5 - 6.0A	7.5A Fuse (brown colour)
KEIS HEATED GLOVES	1.0 - 1.6A	2A Fuse (grey colour)
KEIS HEATED TROUSERS	3.3A	5A Fuse (orange colour)
KEIS HEATED INSOLES	1.0A	2A Fuse (grey colour)



Fuse Usage With Combined (Integrated) Keis Garments

$$\begin{array}{r}
 6A \\
 + \\
 1.6A \\
 + \\
 3.3A \\
 + \\
 1.0A \\
 \hline
 11.9A
 \end{array}$$

Recommended Fuse 15A

15

Warning: The potential current drawn when using several garments can be high in some situations. It is your responsibility to ensure the power source can provide the required current.



Keis Heat Controllers & Battery Care

Keis Portable Batteries - Care Warning

Your Keis Lithium Ion (Li-ion) Battery Pack uses selected high-quality cells. However, like all Li-ion batteries they self-discharge over time. If allowed to fully discharge they cannot be recovered. Control circuits built into your Keis Battery Pack help prevent full discharge. However, it is vitally important to ensure that the Battery Pack is fully charged before long term storage and fully recharged at least every six months thereafter. Fully discharged batteries are not covered by our warranty.

Keis Heat Controllers

All Keis Heated Vests, Bodywarmers and Jackets (excluding the leisure J801) are supplied out of the box with a 'link wire' in place of a heat controller, and deliver full power. Optional On/Off switch and Heat Controllers (Heavy-Duty or 'Light-Duty Inline') are available to provide control according to your specific use and/or the conditions.

How to use the Keis Heavy-Duty and 'Light-Duty Inline' Heat Controller

Note the 'Light-Duty Inline' controller is only for use with Keis Inner Gloves or Insoles. The Heavy-Duty controller is suitable for Keis Vests, Bodywarmers, and Jackets. When the Heavy-Duty controller is used with the Vest, Bodywarmer or Jacket the 'link wire' situated in the Controller Pocket should be removed and replaced with the Heavy-Duty controller. The Controller Pocket is designed to store the Heavy-Duty controller when a desired setting has been selected.



Keis Heavy-Duty Heat Controller

- When the clothing (or accessories) are first connected to the power source, all the LEDs on the Heat Controller will flash for about 2 seconds, and then appear blank (no lights illuminating).
- TO SWITCH ON: Pressing and holding the button for about one second will switch the Heat Controller on, defaulting to the Hi setting (Red), or the MAX setting (blue) - for the Inline controller.
- Pressing the button again will scroll through the Med (Amber) and Low (Green) settings and back to Hi.
- TO SWITCH OFF: Press and hold the button for approx 2 seconds. The Heat Controller lights will switch off, confirming that the garment is now off.
- Ensure the controller is kept dry at all times.



Keis Heat Controller built into the Keis Heated Armoured Gloves



Keis Heat Controller built into the Keis Heated Trousers



Keis Heavy-Duty Heat Controller plugged into a Keis Heated Vest, Bodywarmer or Jacket

Keis Warranties

The Keis range of heated garments is made to an extremely high standard, using quality materials. As such we are confident in providing the following warranties:

- LIFETIME WARRANTY on all heating elements.
- 2-Year warranty on all the other materials.
- 180-Day warranty on Keis Portable Batteries.

Visit the Keis website for a list of International distributors, or dealers, in your country or region.

Visit the 'Warranties' page on the Keis website to find out how to register your garments.

Designs and specifications in this manual can change without notice.

www.keisapparel.com

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