

Bike Mounting and Power Parts

2427 One part bike power lead, fitted as standard to Super Pro Automatic, optional for Logic



2430 Optional **SYSTEM SIDE** of a two-part power lead (with a 9 pin connector to red 5 pin plug)



2431 Optional **SYSTEM SIDE** of a special two-part power lead (with a 9 pin connector to red 5 pin plug) (plus additional 12 volt output for GPS etc)



2429 Optional **BIKE SIDE** of a two-part power lead (with red 5 pin socket)



2432 Optional **BIKE SIDE** of a special two-part power lead (with red 5 pin socket) plus handlebar mounted push-to-talk/VOX control switch (provides rider-to-passenger privacy by disabling the VOX transmit mode). Also used to manually transmit when the phone input disables the VOX transmit mode



2437 Remote switched direct battery connection (fused/relay)

2439 In-line 12 volt noise filter

It is **very important** that you fully read and understand all of these instructions before installation and use.

These parts are designed for domestic motorcycle use.

ONE PART bike power lead

(typically used with bike mounted systems)

Part 2427

One part 12 volt bike power lead (fitted as standard to the Super Pro Automatic but optional for the portable Logic system). The white 9 pin connection plugs internally into the system and the free ends are for connection to the bikes ignition switched fused power supply. See bike fitting tips on pages 3-5.



Connecting Part 2427 to a Logic system

Remove the battery cover and all the batteries, and connect the power leads 9 pin white plug into the white socket in the battery compartment. You will notice a small breakaway tab at the bottom edge of the case which normally aligns with the slot in the battery cover. Please carefully break this tab off to provide an exit point for the power lead. Replace the battery cover.



Connecting Part 2427 to a Super Pro Automatic system

Remove the two Posi-drive screws from the base (non label side) turn the control unit over (label side up) and then carefully lift the lid off while holding the cables and front panel down. With the lid removed un-plug the original power lead and then connect the new power leads 9 pin white plug into the white socket (marked as POWER on the circuit board). Remember to position the new power lead into the front panel slot and then replace the lid, turn over and replace the two screws.



Optional TWO-PART split bike power leads with in-line connectors

(typically used for multiple bikes or remote mounting in a tank bag etc.)

Part 2430

Optional **SYSTEM SIDE** of a **two-part 12 volt bike power lead**. The white 9 pin connector plugs internally into the system (the same as Part 2427 does above) and the red 5 pin plug connects to the red socket of a Part 2429 or 2432.



Fits to bike side part

Part 2431

Optional **SYSTEM SIDE** of a **Special two part 12 volt bike power lead**, which is similar to Part 2430 but also has a 12 volt power outlet that allows you to remote power additional 12 volt devices in your tank-bag (such as a GPS etc). Like Part 2430 this lead must be used with Part 2429 or 2432.



Fits to bike side part

Part 2429

Optional **BIKE SIDE** of a two-part 12 volt power lead, ideal for use when remote mounting and bike powering a Logic or Super Pro Automatic system. The lead comes with a red 5 pin socket (for use with Part 2430 or 2431) and free ends for connection to the bikes ignition switched fused power supply. See fitting tips below. If you fit one of these leads to each bike, you can move your system between bikes (if your system is fitted with a Part 2430 or 2431).

Fits to system side part



Part 2432

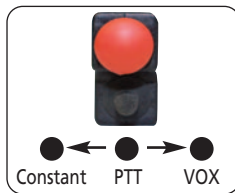
Optional **BIKE SIDE** of a Special two-part 12 volt power lead, similar to Part 2429 but also has the added benefits of a handlebar mounted press-to-talk and 3 position toggle switch for; constant transmit, push-to-talk and VOX modes (when using a bike to bike transceiver). The power/PTT/VOX lead comes with a red socket to connect to Part 2430 or 2431 and free ends for connection to the bikes ignition switched fused power supply. See fitting tips below.

Fits to system side part



Tie-wraps are included to fix the PTT control switch to the bikes left handlebar and to secure the cables to the bike. (if you fit one of these leads to each bike, you can move your system (with Part 2430 or 2431 fitted) between bikes.

When in VOX mode either rider or passenger can automatically transmit the bike to bike radio just by speaking. When in PTT mode rider and passenger can have private conversations without the VOX transmitting the bike to bike radio. The PTT button allows the rider to transmit at any time, even when the phone automatically disables the VOX transmit mode. Constant transmit mode is usually only used by professional rider training instructors for providing running commentaries to students. Note; some radios are designed to automatically stop transmitting after a preset time. Some radios can have this function switched off, and some do not have this function. Please check with your radio instruction manual.



BEFORE CONNECTING PART 2427, 2429 OR 2432 TO YOUR BIKE

Having read your system instruction manual completely and checked any questions with your dealer, you should now be ready to trial fit and power your main control hub and test to ensure it is completely free from any electrical interference.

Before fully installing the main control hub unit on your bike (or in a tank bag etc), carefully think it through. There are many ways in which you can install your system but there is usually only one way which is best for you and/or your bike. It is easy to get carried away and do a complete installation only to then find problems at the end and not know the cause or how to resolve them. If you follow these instructions carefully you should avoid (or find and cure) any problems during the installation, meaning you only need to do it once.

Please note; the main control hub unit is splash resistant; it is designed not to be completely sealed so as to allow it to breathe. It is however internally protected from damp and the odd splash, so please consider its location carefully in order to help prevent excessive water contamination. For example, do not position it where water will be forced in under pressure, such as in the front of the bikes faring, or under a wheel arch/mud guard etc. Look for locations, say under the seat or in a tank bag or wherever you are sure it will not get soaking wet. Of course reasonable care should also be taken when washing the bike, especially if you use a jet wash. You may cover the control box with a bag etc when washing, but remove the bag afterwards to ensure the unit can breathe or you may cause damage if it is allowed to build up excessive condensation. If you do not feel you can position the main control unit where it will not get excessively wet, please ask your dealer about the optional water protector cover.

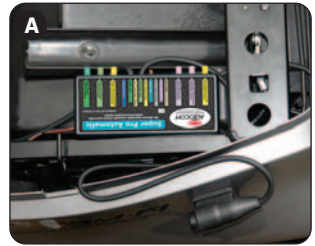
TRIAL FIT AND CHECK THE MAIN CONTROL HUB UNIT

Position the main control hub unit where you think you would prefer it to go. Then trial fit the headset leads, plus any other audio interface leads (and audio devices) to make sure they will all reach and connect together, and adjust as required. Think about cable lengths and where they will run, trying to **avoid any sharp edges or seat pressure points/catches where cables may get trapped or crushed, and areas of potential electrical interference such as spark plugs and HT lead/coils, and the voltage regulator** (normally a metal finned box bolted to the bikes frame) and **areas of high heat such as engine and exhaust systems**. Check with your dealer or our website www.autocom.co.uk for specific bike installation tips.

Mounting the main control unit under the seat (as most people do) is normally near the rear light cluster in the tail unit and fixed down with Velcro to stop it sliding about and also making it easy to remove for access if required **(A)**. The riders lead (longest) will typically come along the bikes frame and out between the seat and tank, between the riders legs **(B)**. If required you can use an optional straight headset extension lead so that it will reach under the tank and then come out near to the front of the tank/headstock area. The rider will use a headset extension leads (supplied in Pro kits, optional for Logic) to connect between the riders headset and the bike mounted riders socket. The passenger lead will normally exit near to the rear of the seat, (often close to the passenger grab handle where fitted) **(C)** and the passenger will require a headset extension lead to connect between the helmet headset and bike (supplied in Pro kits, optional for Logic).

Mounting the main control box in a tank bag, using one of the optional two part bike power leads with in-line red connectors, the riders lead will easily reach directly from the unit in the tank-bag to the rider's headset, without needing to use an extension lead. The passenger's headset will normally connect via an extension lead (supplied in Pro kits) directly to the main unit's passenger lead, with it just hanging out of the tank bag. Or you may prefer to use an optional straight 2000mm headset extension lead that connects to the units passengers lead (hanging just outside of the front of the tank bag, near the headstock, next to the power lead connector) which runs under the bikes tank and seat and then exits by the rear of the seat (near to the grab handle where fitted) **(C)** so that the passenger can use a headset extension lead to connect from their helmet to their on-bike socket. Please ask your dealer about optional headset extension leads and various two part power leads that are available if required.

When you have checked and concluded where you want to mount the main control hub unit, including running both headset leads, power lead and any audio leads etc, you can now connect the power lead to the bike and test/move if required before finally using some Velcro and tie-wraps to fix in place.



Top Tips

Where you route the cables along the frame of the bike etc, secure them as required using tie wraps. **Care should be taken to ensure that the cables cannot fall into the chain, wheel or foul the steering etc, or be trapped or crushed by the seat or body panels.** If required use some hard packing strips either side of the cables to prevent damaging the cables at pressure points such as where the cables come from under the seat between the tank and body panels etc, if required bond the packing strips in place but only after you are sure of the final location. Avoid any sharp angles or edges, which may damage or cut the cables.

Pay particular attention to the seat locking mechanism, which, if fouled could cause problems with removing the seat. When using tie wraps please be careful not to over tighten them, **taking extra care to avoid brake-lines, breathers, overflow pipes etc.** and when you cut the surplus off any tie wraps remember to cut it short and square so that it reduces any sharp edges that may scratch you when servicing or washing the bike.

CONNECTING TO YOUR BIKE'S FUSED 12 VOLT SWITCHED SUPPLY

Always connect the **BLACK (negative)** wire directly to the battery negative terminal using the crimped eyelet supplied, as this is the best earth on the bike. **Not using the battery earth/NEGATIVE is the most likely cause for electrical interference issues.**

Connect the **RED (Positive)** wire to a recommended, switched ignition fused supply (**5 amps maximum, unless you fit an additional in-line fuse of between 3 and 5 amps**). Ask your bike supplier if they know of any recommended accessory power points on the bike, or consult your bikes handbook, but only use this for the positive supply.

Typical places to find an **ignition switched fused supply** are the **positive feed to the tail lights**, or **rear brake light switch**. Ask your bike dealer if you are not completely sure. Please note that you can split the red and black power cable as required and cut them to length but don't do this until you make the final installation/connection, remember that you may need to move the system to a better location to avoid electrical noise after testing, or perhaps someday onto another bike, so leave plenty of spare power lead neatly coiled up and secured with a tie-wrap so that it can never fall onto the exhaust or back wheel/chain etc.

Do not connect to the brake light circuit if your bike has ABS braking and/or a brake light failure warning system (consult your bike supplier/ manufacturer for approval before connecting to any ABS brake light circuit or bikes that have CANbus).

If connection to the brake light supply circuit or rear tail light is not recommended, please use some other recommended fused/ignition switched 12 volt supply. **Always solder** the positive joint wherever possible as this provides a more professional and reliable connection. **Do not use quick connectors like scotch-locks etc. These are nearly always unreliable and most bike manufacturers condemn their use, which may also affect the bikes warranty.**

You will notice the fitting kit (Supplied with Super Pro, optional for Logic) includes items which will assist in installation (e.g. tie wraps, insulation amalgamating tape to cover the soldered positive joint, (again don't use this for the pre-install test) a crimp type eyelet for connection to battery negative terminal, Velcro to fix the control box and if required also speakers into helmet). For added safety and protection the system has **reverse polarity protection**, which means that it reduces the risk of damage if you accidentally wire the power lead the wrong way around, however, the unit will not function unless wired correctly.

TEST THE PRE-INSTALLATION FOR ANY ELECTRICAL NOISE, AND MOVE PARTS IF REQUIRED BEFORE FIXING

Connect a headset/speaker harness to the main control hubs riders lead, DO NOT connect the boom microphones, or any other audio interface leads to the main control hub.

Set the rider and passenger master volume controls FULLY anti-clockwise (to their lowest levels). Set all the other controls on the front panel to their central positions (so that the pointers on the end of the knobs point to their corresponding pointers on the label)

Start the bike in a well ventilated area, after checking that no parts will fall off onto a hot exhaust etc. Hold the headset speakers firmly and directly over both ear holes (noting the centre of each speaker is slightly offset in the plastic housings) and listen carefully for any electrical interference through the speakers. HT (sparkplug/leads and coils etc) may induce a rapid tick, tick, tick noise which changes with engine RPM. Alternator noise if heard is normally a higher frequency constant whine, which again changes with engine RPM, so try to vary the engine RPM while listening carefully through the speakers for any induced electrical noise. It should be completely clean and in which case you can now turn the rider's volume control fully clockwise (FULL VOLUME) and do the same test again, it should be completely clean. Now do the same tests using the passenger headset to again prove it is complete clear of any electrical interference. It is very unlikely that you will hear any electrical interference while doing these tests, but if you do you should carefully move the lead/s about, one at a time, and/or the main control hub unit, while still listening to the speakers with the engine running at varying RPM, to identify which part is picking up the noise and then move it to a clean noise free location.

When you have done this and are happy with the location of the main control hub unit, headset leads and power leads, you can **switch the engine off** and Velcro the main control hub unit into place, tie-wrap the headset leads and power lead neatly in place, **double checking to avoid any problems areas as mentioned before.**

Once you have tested the system and confirmed there is no electrical noise, you can proceed with connecting any other audio devices, checking each one for electrical interference as they are installed, and moving if required.

Part 2437 • DIRECT BATTERY CONNECTION WITH BUILT-IN 3 AMP FUSE AND RELAY REMOTE SWITCHING

(for use between other autocom power leads and the bikes power supply. Designed to help reduce electrical noise that is diagnosed as coming up the power line, on some noisy/old bikes)

ONLY for use with bikes that are negative earth (or negative frame). These instructions are based on negative earth bikes only. DO NOT use this part if your bike has positive to frame.

When 12 volts power is supplied to the remote trigger wire it switches a (normally open) relay so that power is remote switched to your system (normally via the ignition key on/off supply) the benefit of this is that by powering your Autocom system directly from the bikes battery you ensure that the power supplied is as clean and electrical noise free as possible. It also means that the power required for switching the remote trigger is very low (less than 50mA).

WARNING; extreme caution must be used when working with bike batteries, due to the very high current capacity of the battery, which if shorted; between the battery terminals, or between the battery positive terminal and ground (the bike frame etc) there is a very high risk of burns, fire or explosion. Most batteries contain acid which could boil and the resulting fumes can be toxic or explode if the battery is shorted. Most batteries require a screwdriver or spanner to remove/connect terminals to the battery terminals/post, and these most **ONLY** touch the battery terminal and no other metal parts on the bike or battery. Ideally you should use tools that are insulated to help prevent accidental short circuit. If in **ANY** doubt please consult your bike dealer.

Some bikes batteries are very close to other metallic parts such as the bikes framework, which are normally connected to the bikes negative terminal, and so to help prevent the risk of shorting the positive terminal/wires to the frame etc it is often safer to remove all the battery negative connections first, before working on the positive terminal. When you have completed any work on the positive terminal you can reconnect the negative wires.

Top Tips

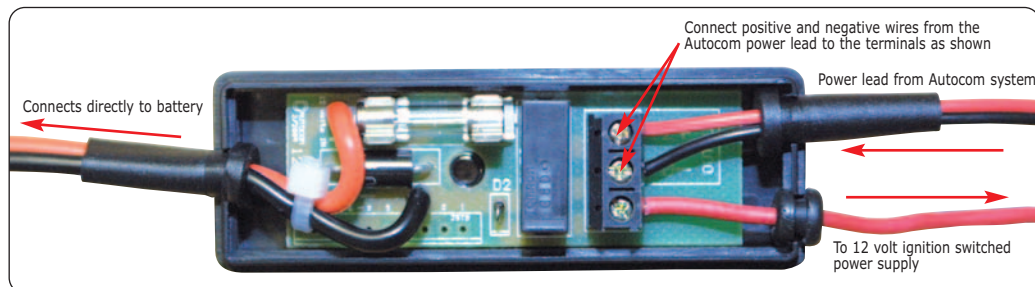
Always ensure the bikes ignition is switched off before working on the battery. Please also note that if you disconnect the bikes battery, you make have to reset clocks and/or on-bike stereo systems that have security codes. Please make sure that you have the security code ready to reset the stereo system once battery power is reconnected.

Connect the **black** power lead directly to the bikes **battery negative terminal**.

Connect the **red** power lead directly to the bikes **battery positive terminal**.

Connect the red 12 volt trigger wire to a suitable ignition switched fused supply. See page 5

Connect your Autocom system power lead directly to the positive and negative screw terminals inside the box. Attach with Velcro or tie-wrap the box securely to the bike making sure that the power leads are not trapped or pinched by the seat or any panels etc.



Part 2439 • IN-LINE 12 VOLT POWER FILTER

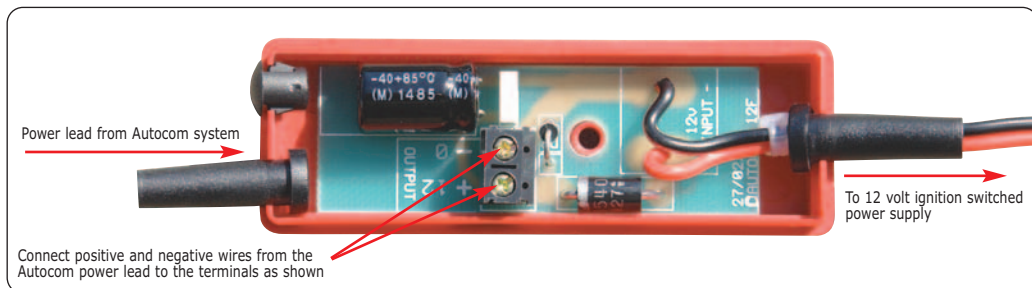
(designed to help reduce electrical noise that is diagnosed as coming up the power line, optionally required for some noisy/old bikes)

If you experience electrical noise such as alternator whine it may be due to a bad earth point or because you are not using proper isolation leads with bike powered audio devices, or in some cases it can be due to excessive electrical noise coming up the power positive lead, and this can often be overcome by moving the positive feed to a cleaner supply point. However, if you cannot find a clean power supply point then using Part 2439 can help to clean up or reduce such noise.

Connect the power of Part 2439 as you would the systems power lead with the negative wire directly to the battery negative terminal, and the positive lead per instructions on page 5.

Connect your systems power lead through the grommet to the screw terminals inside Part 2439 and replace the lid and screw.

The power filter is rated at three amps and so can power your Autocom system plus a recommended bike to bike transceiver, plus a Bluetooth dongle and typical GPS unit, helping to ensure all receive a cleaner 12 volt supply.



SOME OTHER PARTS THAT RELATE TO BIKE MOUNTING/POWERING

2421 Basic bike fitting kit

Includes useful parts such as tie wraps etc to aid bike fitting.



2422 Deluxe fitting kit

As Part 2421, plus 2 rubber socket holders (2 x Part 2425).



2425 Rubber socket holder

Designed to hold the headset sockets for bike mounted systems, after ensuring surfaces are flat, clean and dry. Designed to tear off without damage to the bike in an emergency so that the headset connectors will always pull cleanly apart in a straight line.



2443 Velcro

This type of Velcro is petrol and waterproof and so useful for installing speakers in helmets and for fixing the main control unit and/or other Autocom parts to the bike, after ensuring surfaces are clean and dry.





MANUFACTURERS 12 MONTH WARRANTY

If your supplier has not given advice or demonstrated how to set up or use our products, please check with them before sending any goods back for warranty.

All Autocom products are under warranty for a period of 12 months from the date of original purchase, to the original purchaser, from an authorised Autocom retailer. This warranty covers faulty materials or workmanship, subject to the goods being used only as stated, and only for the purpose as described in the instruction manuals. This does NOT apply to goods where they are used for any other purpose or in any other way than is explained in the instructions. Nor where the goods have been subjected to misuse, neglect or accidental damage, or used with any other vendor's products, including incorrect mechanical or electrical installation, or where the goods have been repaired, modified or altered, without the manufacturer's written authorisation.

The manufacturer's warranty is limited to the goods being returned pre paid to the manufacturer's factory, with the original packaging and the original proof of purchase date. The goods must be intact for our examination.

Where goods are accepted by the manufacturer, under the terms of the warranty Where the manufacturer, under the terms of the warranty, accepts goods, they will be repaired free of charge or replaced (at the option of the manufacturer). Where the goods are returned as faulty and are found not to be, a charge will be payable to cover costs of inspection, testing, packing and return postage.

This warranty does not cover any consumable items such as batteries, replaceable hygiene foam coverings for speakers and microphones, or any other items that are described within the instruction manuals as being a consumable.

The manufacturer's warranty does not affect your statutory rights.

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We service what we make

For details of Autocom's International distributors and support network, please see our website. Please contact your supplier or Autocom for any further help or information.

UK Manufacturer and Distributor