Warranty

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

All Autocom products are warranted for a period of 12 months from the date of original purchase, to the original purchaser, from an authorised Autocom retailer, against faulty materials or workmanship, subject to the goods being used only as stated, and only for the purpose as described in the instruction manuals.

No manufacturer's warranty applies to the 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 manufacture'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, 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, an inspection, testing and return postage and packing charge will be payable.

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 effect your statutory rights.

PLEASE CONTACT YOUR SUPPLIER OR AUTOCOM FOR ANY FURTHER HELP OR INFORMATION.

We service what we sell

USA Distributor. Top Gear, NY 12159. USA.	Tel: 518 449 8677 www.autocomamerica.com
German Distributor. Green Frog and JF Motor Sport.	Tel: +49 6002 911331 www.jfmotorsport.de
Netherlands & Belgium Distributor. Splash Design.	Tel: +31 413 389089 www.splashdesign.nl
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Australian Distributor. Bluerim Pty Ltd.	Tel: 1800 003 078 www.bluerim.com.au

If you need support in any country not listed, please contact Autocom UK

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Email: enquiries@autocom.co.uk Website: http://www.autocom.co.uk

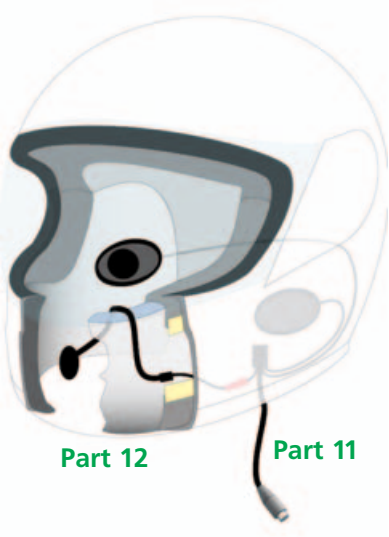
Kit 3 (Active-7-Smart)

Expandable rider system

Which includes **Kit 4**,
Part 24 and
Part 50

INSTRUCTION MANUAL & WARRANTY

Included in these instructions are how to fit headset **Kit 4** and:
Parts 11, Parts 12, Parts 13, Parts 14 and Parts 43



Part 12 **Part 11**

It is VERY IMPORTANT that you fully read & understand ALL of these instructions before installation and use.

These parts are designed **ONLY** for use with Autocom domestic motorcycle communication systems.

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Active-7-Smart SAFETY FIRST.

It is very important to properly set up and use these products as designed. Please do not make any modifications or try to use these products with any non recommended products or in any other way than described. **DO NOT CUT OR MODIFY YOUR HELMETS**.

It is common sense and **the law in some countries** that the rider of a vehicle be in control at all times, which includes the ability to hear other road users warnings. As such the rider should not have the music volume so loud as to prevent this. **SAFETY** should always be your first priority and is ultimately the responsibility of the rider. When mounting the Active-7-Smart to your bike, make sure that the quick release connectors are free to easily release in the event of an emergency. Do not fix or tape them together. You should set the VOX and/or make any other adjustments while stationary, never while in motion. Always focus your attention to the riding and safety and do not use the Active-7-Smart in such a way as to interfere with this. The added ability to communicate with your fellow riders can improve safety, so become familiar with using the system to provide warnings etc. Follow the instructions carefully and if in doubt consult your supplier.

The Active-7-Smart is splash resistant. **NOTE:** In order to allow it to vent the unit is not completely waterproof and so reasonable care should be used to protect it. When mounted on a bike it will normally sit under the back seat, near to the brake light. Avoid mounting it in places like the front fairing or by the wheels where water may be forced in at high speeds, or direct spray from jet washers, (cover with plastic bag then remove afterwards such that the product can breathe).

YOU MUST NOT connect/power your Active-7-Smart directly across your bike battery, as this could lead to severe damage and a risk of fire/burns etc. If you have any doubts you should contact a qualified auto electrician. Autocom headsets are unique and must be set up and used correctly. Please refer to the headset section.

Some types of earplugs can be used, however as a guide, those that attenuate about 20dB or less usually work best. Many others that attenuate much more than this can impair sound quality and level.

Unplug any accessory leads from the intercom if they are not being used, as they can encourage any airborne interference to be picked up and amplified. Try to keep the phone and/or transceiver as far away from the Active-7-Smart and other electrical devices as possible. Note some digital phone may cause undesirable interference.

When using any device that transmits such as a phone or bike-to-bike radios, it is essential to check with your bike manufacturer/supplier that it is safe to do so. Some bikes can be affected by such transmissions, in particular those with ABS or other computer controlled systems.

Some other vendor's equipment such as personal stereo/CD players, phones and transceivers may work better than others. Please check with your supplier for advice about Autocom accessories and the compatibility of any other equipment before using it with this product.

Some bikes may radiate interference. A noisy alternator may cause a whining sound related to engine speed, while a ticking sound relative to engine speed may be caused by a noisy HT ignition system spark plugs/leads. If you experience any such noises, please contact you supplier for advice.

Practice makes perfect and it's much easier to practice while close together and not riding and worrying about other things going on.

VOX, or voice activation, gives you several advantages. Apart from turning the microphones off when you are not speaking. The VOX can automatically mute the music or make your transceiver transmit when you speak, giving you hands free and safer operation.

Correct VOX settings will make all the difference to a flowing two way conversation (one way at a time with bike-bike) as the higher the VOX setting the quicker the switching off of the microphones which allows for faster return transmissions. To help get reliable speech with the highest VOX setting one **MUST** set up and use the microphones loud spot. Speaker positioning is also very important as with the speakers out of position the sound level will be much lower, this will tend to make you turn the transceivers receive volume up and if too loud it will cause VOX bounce to warn you that something is wrong and protect the speakers. VOX bounce is where the VOX switches in and out during conversation normally because the incoming speech is set too loud (normally associated with excessive transceiver volume, to compensate for incorrect speaker positioning or over attenuating earplugs) To test this hold the speakers over your ears, turn the transceiver volume down and slowly turn it back up to a comfortable level, then the VOX should not bounce.

Typical problems are due to misunderstanding the importance of correct setting up; some users turn the VOX setting too low (clockwise) to compensate for not properly using the microphone loud spot. With the VOX set too low the microphone may accidentally switch on at higher speeds, causing your transceiver to transmit, which of course you don't want to happen when trying to receive a transmission from the other bike.

Obviously the faster you go the more likely the helmet noise is to false trigger the VOX, which can cause you to have break-up in conversations, but with a correct (higher anticlockwise) VOX setting, which is easily activated when using the microphone **LOUD SPOT**, you will avoid false VOX operations at higher speeds

With correctly positioned speakers you will find you can turn the transceiver receive volume down, which will avoid VOX bounce.

With practice your radio discipline will get better and you will avoid clipping the first part of the sentence by using a key word such as OK, then educate the other users to not return comments until you have said OVER, Plus then also allow a one or two second delay to allow your transceiver to switch back to receive before they return the speech, remembering that they must start with a keyword or OK and again end with OVER.

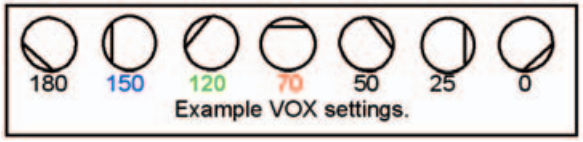
DO NOT increase the transceiver, phone or music volume levels to compensate for incorrectly positioned speakers, as doing so will impair quality and performance and may cause distortion and/or damage to the speakers.

A wind/draft excluder is sometimes fitted under the chin of some helmets, which can help reduce wind pick-up, thus allowing for lower VOX settings. Some helmets have a chin vents that blow straight through, as well as sending some of the air to the inside of the visor. By blocking/taping the inside chin vent it helps prevent wind blowing on the back of the microphone, allowing for a lower VOX setting and can also improve visor de-misting.

Earplugs. Depending on how well you set the speaker positioning and use the microphone loud spot will depend on how much sound level you will have at the ears. Extreme ear plugs, or earplugs that have high attenuation levels will make it hard to hear even the best set-up, but low to average attenuation earplugs will work reasonably well if your installation and use is good. Remember that for each decibel or dB of attenuation you effectively halve the sound, so if its very good to start with you can afford to reduce it some. We recommend that you do not use earplugs with more than 20dB attenuation, as much above this will be likely to cause you to want more volume, which you cannot have. Remember it is already set to the optimum level.

By finding and using the microphone loud spot and projecting your voice through the microphone, you can easily operate a much higher VOX setting. This is because the critical loud spot produces far more sound, which is required to give a very good signal-to-noise ratio. Moving the microphone just 2-3mm away from the loud spot can considerably reduce sound, and make it much harder to activate a higher VOX setting. The temptation is to turn the VOX control clockwise to make it easier to talk to, but you must not do this. You must understand and use the LOUD SPOT.

Always speak positively through the microphone. Most first time users will try the intercom in the house and of course when you are in a quiet location you will naturally talk quietly, especially when you hear your own voice through the ear pieces, this tends to make you talk even quieter, until you get used to it. With the VOX set as described above you will find it difficult to keep the microphone's on unless you try hard, using the loud spot helps. Once you take the intercom out on the bike and put yourself in the noisy conditions within a helmet, you will naturally talk a lot louder and find the system naturally much easier to operate. Once you have discovered the principles, you will be able to properly set the VOX control to suit your riding speeds/helmets/bike. It is a good idea to properly set the VOX to a speed of about 20+mph more than you normally ride at.



Example VOX settings.

This allows for overtaking and head winds etc. So if, for example, you normally ride at 50mph you should test and set up the VOX so that it does not turn the microphone's on at 70+mph. If you ride with a passenger then you need to set the VOX with both rider and passenger headsets in use. Get to the desired speed (when and were is safe to do so) and if the microphones switch on, without speech, then you need to set the VOX higher (by turning the VOX pre-set towards anticlockwise) Note: When the VOX knob is **flat/ horizontal/parallel to the label it will be set for about 60-70mph. With the flat vertical to the left of the knob it will be set for about 150+mph. fully anticlockwise 180+mph.** Fully clockwise and the microphones will be on all the time. **Therefore somewhere between horizontally flat and vertical to the left is where the VOX should normally be set to suit typical speeds.**
This of course depends on your helmet noise.

Incorrect VOX settings will cause the music to keep muting and/or bike-to-bike radio to keep transmitting, cutting out any received transmissions, so a correctly set VOX is very important.

Using transceivers, setting the VOX and radio use

It is to be expected for some first time users to have some difficulties, although it seems quite simple, and it is, there are some tricks it getting it right, so lets go through a few pointers. Before riding, set the system up on the bikes and practice some radio disciplines. It can help if you practice on one bike while listening on the other transceiver with the volume turned up and the leads unplugged from the side so that the transceiver speaker works. Someone else can talk back to you on the other transceiver by pressing the PTT button on the side of the transceiver. If they listen carefully they will hear the short delay after you finish speaking and before your VOX switches off and you stop transmitting. It is important that you understand this VOX delay, as it is pointless trying to transmit back to someone else if they are still transmitting. One has to have a short VOX delay so that the system reliably stays on during normal speech, which may have short pauses and you don't want a transceiver bouncing between transmit and receive, with the small losses of speech that you get in between.

When you first speak you need to draw out the first word or use a key word to get things going. I always use "OK when you get to the lights take a left, OVER" I always use OK at the start of a conversation because although the VOX is instant, transceivers have to go from standby to transmit and also standby to receive, the other end. So there is a ½ second or so delay. DON'T TURN LEFT may come over as TURN LEFT, so its good practice to use a key work like OK then say what you want such as OK, DON'T TURN LEFT. Its also good practice to say OVER when you have finished speaking, as if after saying OK TURN LEFT the other person replied with OK, OK, they may well have transmitted over you trying to say something like AND THEN TAKE THE NEXT RIGHT. Of course if you wait to hear OVER before giving a reply you can help avoid this, but even a well seasoned user will occasionally jam, which is when two people transmit at the same time.

ACTIVE-7-SMART INSTALLATION

Four simple steps to getting started

1. Read the manual, and think it through.
2. Fit the main box under the seat, plan all lead routes and make power connections.
3. Install headset/s.
4. Test and set up, adjust if required.

The unit has four leads

1 Red and black power lead.
1 lead with black 7-pin socket, 47" (1200mm long) for use by the rider.
1 lead with black 7-pin socket, 33" (850mm long) for use by the passenger.
1 lead with grey 5-pin socket, 15" (400mm long) (Aux.1) for connecting to optional accessories, such as a bike-to-bike transceiver. Note: A special Y lead can be plugged into the passenger lead for a third headset. (Sidecar).

The front panel sockets are for optional stereo music, mobile phone, as marked. The two black shafts are the voice activated (VOX) pre-set control and the speech volume control, as marked.

How to install the Active-7-Smart to your bike

Before installing your Active-7-Smart, carefully think it through. Typically the box will sit under the seat, near to the tail light cluster. Ideally you want to mount the box using velcro or double sided tape, where it will least get soaking wet and away from electrical interference, such as HT leads or regulator (normally a metal finned box) and areas of high heat such as the exhaust system. Trial fit the box and plan your lead routes. Temporarily connect the power (see power lead connection below) and use a headset to listen for any electrical interference with the engine running at various RPM. If you are happy with the clarity of sound you can continue with the installation. If not, try different cable and/or box locations until you are satisfied that no electrical interference is picked up or heard.

Typically the riders lead will come out between the seat and tank, and the passenger lead near to the rear of the seat, often close to the passenger grab handles where fitted. If required, use some hard packing strips either side of the cables, to prevent damaging the cables at any pressure points, such as where the cables come from under the seat between the tank or body panels. 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. Where you route the cables along the frame of the bike etc, secure them as required using cable 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. 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 care to avoid brake-lines, breathers, overflow pipes etc.

Connecting the power leads

Normally you will connect our **black (negative)** wire directly to the battery negative terminal using a crimped eyelet and solder the joint, then connect our **red (positive)** wire to a recommended, switched ignition, fused supply, such as the positive feed to the tail lights, or rear brake light switch, but always ask your dealer if you are not completely sure. Please note that you can split the red and black power cable as required and cut it to length before making the connection. **IT IS IMPORTANT** not to connect to your bikes brake light circuit if your bike has **ABS braking and/or a brake light failure warning system** (consult your bike manufacturer//supplier for approval before connecting to any ABS brake light circuit). If connection to the brake light circuit is not recommended, please use some other recommended fused/ignition switched 12 volt supply, such as the rear light live feed or any other recommended point. ALWAYS solder joints wherever possible, as this provides a more professional and reliable connection. Avoid crimped or mechanical joints unless they are soldered. DO NOT USE quick connectors such as Scotch-Locks etc. There are nearly always unreliable and, most bike manufacturers condemn their use, which may affect the warranty. NOTE: You may require some other fitting parts that are not included with the kit, i.e. Tie wraps, solder, tape, etc. Most of these consumable parts are available in our Bike Fitting Kit, Part Number 150 (BFK-U). For further assistance please contact your nearest Autocom dealer.

For added safety and protection the Active-7-Smart has reverse polarity protection, which means that it reduces any risk of damage if you accidentally wire the power lead the wrong way around, however, the unit will not function unless wired correctly. The Active-7-Smart also has short circuit and thermal overload protection. This means that the unit will automatically shut down in the event of being overloaded. i.e. incorrect transceiver used or improper connections.

Once you have installed the main unit to the bike, you can then install your headset/s. Please see page 5.

Main operation, set-up and use

The standard factory setting for both speech volume and VOX are with the flats on the control shafts horizontal in relation to the label side of the box, per the picture on the front cover.

The voice activated (VOX) pre-set control does the following:

1 Turns the microphones off when you are not speaking, when set correctly. i.e. not too low (too far clockwise).

2 **Mutes the optional music** about 50% when you speak, unless set too high (too far clockwise). NOTE: If the music does not mute when you speak, it is because the VOX is too high and so you cannot operate it, **OR** the VOX is too low, in which case the microphones are already on and the music is already muted.

The key to easy operation is understanding and using the microphone loud spot. With this understood and used properly you can set the VOX control to about 60-70% (so that the flat is between horizontal and almost vertical to the left). This will effectively give you a VOX setting for about 120-150mph, ensuring that the wind should never accidentally turn the microphone/s on. BUT the only way your voice will produce enough energy to activate such a high VOX setting is if you understand and use the microphone loud spot. The boom microphone has a critical loud spot, which the systems are tuned to and so this loud spot must be understood and used properly, especially with our voice-activated systems (VOX).

With the headsets correctly installed and used as per the instructions, speak positively into the microphones and you should hear your own voice through the speakers, as well as being heard by the other person. If not, you either need to adjust the VOX control to a lower setting (clockwise), adjust the volume control, speak more positively or reposition the microphone/speakers (see headset section). Please note that with the VOX control turned all the way clockwise, the microphones will be on all the time. With the VOX turned too far anticlockwise it will be hard to operate the microphones unless you use the microphone loud spot. Finding the best VOX position takes a little Practice and time, as does getting used to hearing your own voice (side tone). Once you have set it correctly and become used to using the system you will find that it will perform effectively and reliably.

The Active-7-Smart volume control

The Active's volume control is for speech only as all other inputs are adjustable at source.

Taking care when connecting or disconnecting the headsets to the Active-7-Smart leads will ensure many years of reliable operation. There is a flat on each connector to help you with alignment.

Correct headset installation and use is critical for comfort and ease of use. Please read, understand and follow the headset instructions carefully. It is not unusual for the first time users to misunderstand how important this is, or to find it difficult to solve on their own. As such, we recommend that you consult your supplier for assistance.

Positioning of the two high quality speakers is critical for maximum performance and sound quality, especially when using earplugs. Some earplugs can over attenuate the systems sound, especially if the microphones and/or speakers are not correctly positioned or used as designed.

ADDITIONAL INFORMATION AND SETTING UP TIPS

Basic principle of an intercom system and why Autocom is different

The basic principle of an intercom is a microphone, amplifier and speaker. (Of course the phone and transceiver are just wireless extensions of the system, which interface into the main control box along with other inputs such as music). The microphone picks up the sound of your voice and the amplifier amplifies it to the speakers. The problem with basic systems is that the microphone also picks up all the helmet noise and amplify it to your ears, adding to the helmet noise, making it much louder, resulting in the need for more amplification to hear the speech. Having a volume control to be able to turn this up also turns up the unwanted amplified helmet noise. Catch 22, and why we do not fit a volume control. Our systems are set to the optimum level and so adjustments won't help other than to compensate for incorrect set-up and use, resulting in poor performance.

The fact is that you need a very special microphone combined with specially designed filters and speakers that are all tuned and matched to the system. (A race car cannot win races with just the best engine alone, it also needs the best brakes, chassis, tyres and of course the all important driver. We have designed and provided all but the good driver bit, and so now all we need do is help you understand how to set-up and use our systems properly.

Remember, if a microphone can pick up the sound of your voice when it is away from your mouth then of course it can also pick up any sound in between, i.e. helmet noise. Therefore one cannot expect a system to work at higher speeds if the microphones can pick your voice up when they are away from the mouth.

Autocom's high tech microphones effectively do not pick up any sound, or very little, when away from your mouth and so if not used correctly they can effectively cut out the sound of the users voice along with the undesirable helmet noise that they are designed not to pick up. The solution is to find and use the microphone's **LOUD SPOT**, as everything's been carefully balanced and tuned to this. See the headset section for more on this.

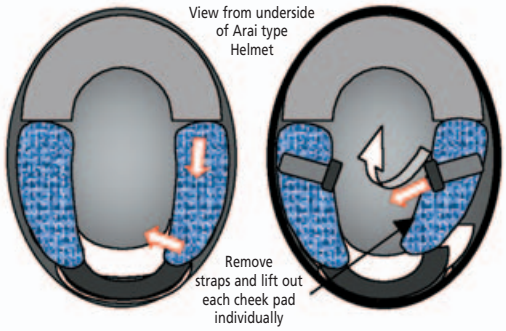
Obviously if you want the best sound out of the speakers you also need to get them directly over your ears, as if you were holding them there. This helps provide the speaker sound directly to the ears, in front of the helmet noise. Moving the speakers away from the ears allows the powerful helmet noise to over power the speaker sound.

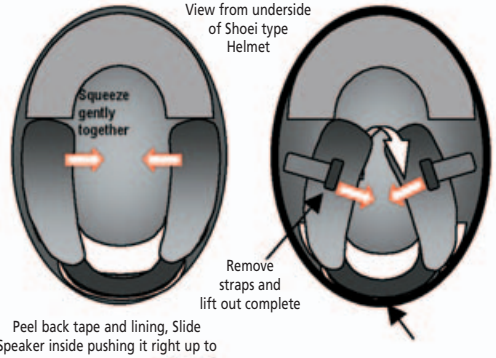
You should test the system out of the helmet before installation, with speech (using the microphone loud spot) and preferably also with good quality music so that you have a good understanding of just how good it can be at its best. If it then does not sound as good after installation, you need to adjust the microphone and/or speakers to suit. You will find that when set-up and used this way it is extremely good, although slight losses can be expected in a helmet, especially at higher speeds/noise.

The microphone and speaker positioning is the key to getting the best performance out of the system.

VOX and microphones settings; (using Active-7-Smart)
Plug the boom microphone into the main headset speaker loom and plug this into the rider's lead of the Active-7-Smart (longest lead) ensuring that the Active-7-Smart is properly powered.

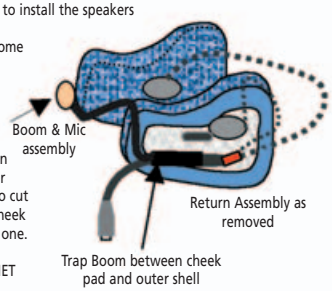
Set the VOX to about ¾ anticlockwise, (with the flat vertical, to the left of the knob). This is a high VOX setting for speeds of typically up to 150+ mph using a full-face helmet. Position the microphone so that it is touching your lips and project your voice through it in a positive manner, as if to someone 20 ft (6-7 meters) away. You will discover that by carefully moving the microphone about while speaking you will find a more sensitive spot where it is loudest and easiest to operate the high VOX setting. We call this the '**LOUD SPOT**' (don't worry if the speech breaks up as the VOX is set deliberately very high to help discover a principle).

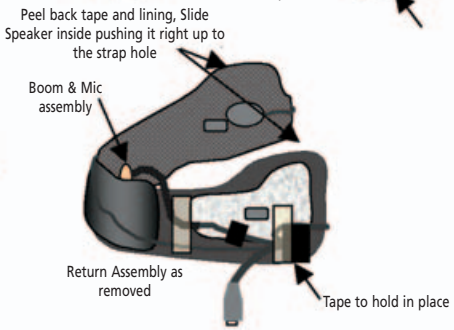




The fabric is either taped or elasticated over the polystyrene and so it is easy to install the speakers behind the lining.
Note that the wire should come out of the speaker towards the back of the helmet.

When replacing the cheek pads trap the boom between the outer shell and the inner cheek pad taking care not to cut the speaker wire with the cheek pads plastic tongue if it has one. Tape or glue if required.
DO NOT MODIFY THE HELMET





NOTE that you may need to re-position the speakers to suit

BMW SYSTEM 4 Helmet Installation

Remove neck collar by pulling the back of the collar away from the helmet and slide both side guides out from retaining locators. Detach velcroed flaps (Marked 'A' below) to expose the polystyrene ear cups.

Thread boom (Microphone first) under the chin strap but over the opened velcroed flaps (A).

Locate speakers just below the polystyrene ear indents under the velcroed flaps (B).

Neatly tuck speaker cable under lining around the back of the helmet and below the neck collar retaining groove, out of sight (C).

Position headset down lead along the outer edge of the helmet under the velcroed flap. This may require addition velcro to ensure security.

Close the velcroed flaps and tidy.

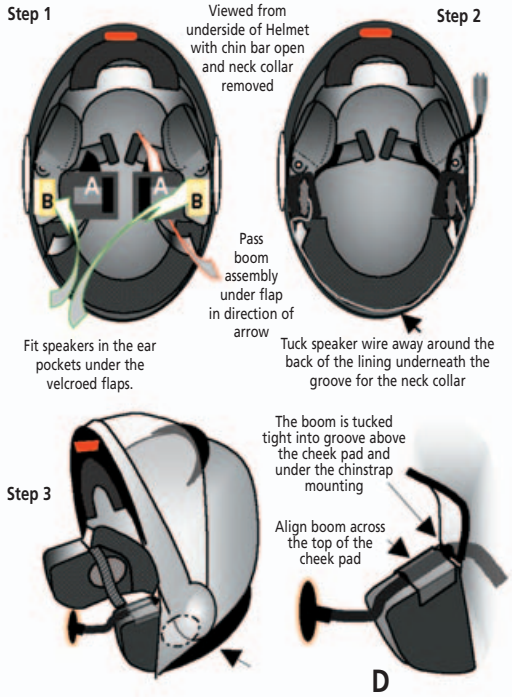
Push the thin section of boom into the joint between the skull and cheek lining, under the chin strap. Locate the boom across the top of left hand cheek pad forming it to follow it's contours.

Hold boom down firmly and secure in place with velcro or a suitable sticky backed material (D).

Form boom so that microphone is situated in-front of and just touching the centre of your mouth.

Check that down lead and boom are well secured and wires are tidily tucked away. CAREFULLY check the opening and closing of the front of the helmet does not snag the boom or down lead.

Test the headset and reposition microphone and speakers if required. Refit neck collar. Please note that due to the design of this helmet, positioning of the speakers is limited and as such it may not be possible to position the speakers directly in line with your ears. If this is the case one cannot expect the sound to be good when using earplugs.



HEADSET INSTALLATION

Autocom helmet headsets are designed in two parts

1 Main headset loom & plug-in speakers (Part 11. HS7-U2)
2 Choice of plug-in booms (Parts 12, 13, 14) Plug in boom microphones.

Main headset stereo speaker loom.

Plug-in boom microphone Parts 14, 13 & 12 (top to bottom)

These headsets are not designed to work with ½ helmets (Chip style)

There are too many different helmets to be able to fully describe every possible installation and so these instructions are designed as a basic guide. Please NOTE helmets with straps that go directly over your ears do not lend themselves for a good headset installation, as the speakers have to sit on top or behind the straps, which can make them uncomfortable or reduce sound quality. Some helmets do not lend themselves to be installed as we have shown and may require alternative methods, so please take some time to consider these basic principles and your helmet design before installation. If you are unsure then please contact your supplier or Autocom. If your system is not performing as we claim, it is almost certainly due to incorrect installation and/or use.

Main headset loom (Part 11) (HS7-U2)

This is a twin speaker, stereo headset loom with a short down lead fitted with our 7-pin din plug, for connecting to our systems. It has a small red socket for plugging in a choice of boom microphones. When this product is plugged into the rider's lead of a portable battery powered Pro-7-Sport (Part 4), Easi-7-Advance (Part 2) it activates the battery power.

Before installing your headset you must first listen to it by plugging it into your powered system, then while holding the speakers directly over your ears, either play some music or get someone to speak to you through the system. Doing this is very important to help you to understand what to expect when the speakers are positioned correctly. Moving the speaker's just 5mm (¼") away from the ears, or out of alignment can easily halve the volume and/or reduce the bass, especially when out on the bike when the powerful helmet noise can overwhelm the speaker sound. Correct speaker positioning is essential and you will hear this during this test. Use earplugs during this test if you intend to use them out on the bike, bearing in mind that over attenuating earplugs will impair speaker sound.

Please study the front cover and page 8 illustrations to get the general idea for installing part 11 into your helmet. Also note the illustrations on page 6, which shows correct speaker and microphone positioning.

If required, tape or glue the rubber joint and/or boom to the outer shell or inner lining so that they are secure.

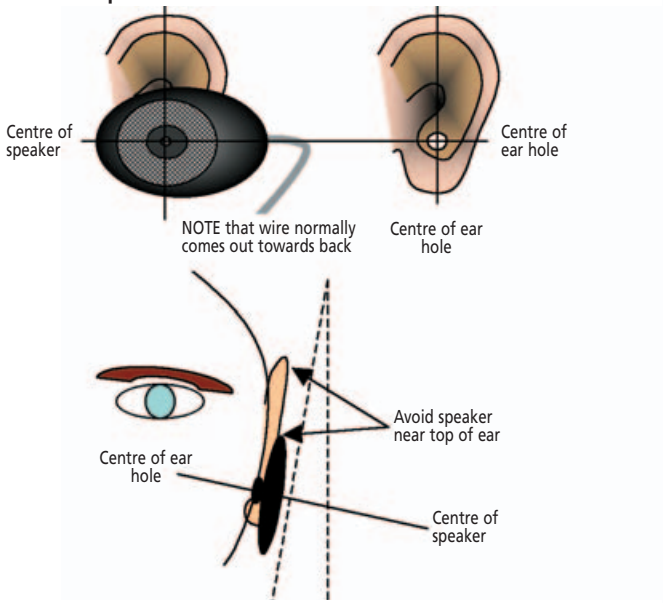
Position the speakers for maximum comfort and performance then tuck the speaker wires into or behind the lining. The small red connector is for plugging in one of our boom microphones (NOT required for AVMS, Part 5). You may find that you need to reposition the speakers, about once a year, due to slight movement that can happen when putting the helmet on and off your head.

Top tips

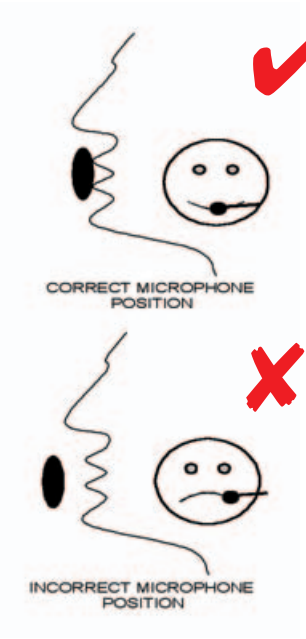
You may need to fine-tune the speakers positioning several times before finding the optimum position for comfort and performance. Start with the speaker's low, so as to avoid pressure to the top of the ear and slowly move them up until you find the optimum position. Try to position the speakers behind the helmet fabric if possible (on top of the polystyrene). Pack the speakers out to your ears with foam if required. A slight angle out towards the top edge of the speakers (as shown on page 6) can help with comfort and performance. Normally the speaker wire will come out towards the back of the helmet.

The microphone and speaker positioning is the key to getting the best performance out of the system.

Recommended speaker positioning for maximum performance & comfort



Microphone positioning is critical



Choice of plug-in boom microphones (Part 12, 13, 14)

Your supplier should help you decide which boom/s you need. (see page 8 for installation tips)
Part 12 (Boom SPB-UB1) is our most universal boom. Suitable for most full face, open face and flip front helmets.
Part 13 (Boom SPB-LB) is similar to our part 12 but is slightly longer for some open face or very large helmets.
Part 14 (Boom SPB-FF) is a short boom designed to Velcro into the helmets chin bar (Front Fit) This is sometimes useful in some flip front helmets and some full face helmets, but not normally suitable for open face helmets.

These booms MUST have an optional part 43 (OFCK) fitted if used in an open face helmet. See page 7. Replacement (consumable) foam speaker covers (Part 40) are available from your dealer. If your helmet has deep ear indentations and you need to pack your speakers out our optional Foam Speaker Pads, Part 45 (¼") & Part 46 (½") are available from your dealer.

It is very important to set up and use the microphone correctly. The Microphone has, what we call a critical **LOUD SPOT**. The system is tuned to this loud spot and so it is important that you understand and use it properly. Not using the loud spot will reduce sound considerably. Testing the system before installation will help you to find and use the loud spot. The best way to do this is by holding the microphone against your lips, dead centre, and powering your voice through it, as if to someone 15-20 feet away. Listen to the receiving headset and you will hear how important it is to position and use the microphone correctly. The correct position is where it sounds the loudest (the loud spot).

Top tips

The loud spot is the position of the microphone relative to your lips and the way you shape your mouth when talking into the microphone. Pucker your lips when talking, as if kissing the microphone, and then carefully move the microphone about, while talking or making a continuous tone, to find the point where your voice is the loudest. This is the microphone loud spot that the systems are tuned to.

Wherever possible you should try to fit the boom 12, as shown in the illustrations, behind the cheek pad. Where it is not possible to do this, you may have to consider boom 13. Ask your supplier for more advice.

The microphone is mounted on the end of a stiff flexible boom so that you can carefully position it close, if not just touching your lips. In order for it to stay in place it is best to wedge or tape the boom between the outer shell of the helmet and the inner cheek pad so that the right amount of boom comes up between the outer shell and inner cheek/chin bar area, into the visor area and then bends down at about 45 degrees so that the microphone is dead centre to you lips.

You may find that when moving the helmet on or off your head for the first few times that the microphone/boom catches your nose and so by slightly twisting the helmet while putting it on or off your head it will help to avoid this.

Avoid pressure directly to the front and back of the microphone covers. To move or adjust the microphone, please hold it by the outer edges or rubber neck, making sure that the beige side of the fabric sits flat against your lips, then fine tune the positioning for the critical loud spot.

The microphone fabric is likely to become contaminated in time due to damp, dust, lipstick etc. if so you need to have it serviced by an Autocom trained dealer. Failure to do so may result in partial sound loss. These covers are considered consumable parts and so should be expected to need servicing every one to three years.

Part 43. Open face conversion kit (OFCK) MUST be fitted to the microphone when used in any Open-face style motorcycle helmets

The purpose of the kit is to act as a wind guard, preventing direct windblast onto the microphone, which may cause false activation of the VOX circuitry. It may also be used in other helmets where the microphones are exposed to windblast, such as some flip-front helmets or the BMW System 4 helmets that can be used as either a flip-front or open face helmet.

Ensure that the microphone fabric is clean and dry (free of lipstick etc), and if not then have it serviced/replaced before fitting the Open Face Conversion Kit. Remove the backing from the self adhesive Velcro pad and apply it to the BLACK side of the microphone fabric. Apply light pressure around the outside edges to ensure that it adheres to the fabric. Avoid squeezing the middle of the front and back covers, as this can cause the microphone to move, which may cause damage to the fine microphone wires.

Carefully cut a small hole in the outer edge of the foam windsock so you can slide the microphone red connector and then boom through it. Carefully position the foam over the fabric microphone covers so that the beige cover part is exposed.

If your foam windsock gets dirty replace it with one of the spare windsocks supplied with this kit. Follow the same procedure after removing any pieces of old tape.

NOTE: The foam windsock is a Hygiene replaceable part, as such it is a consumable part as defined by our warranty agreement with a 60 Day limited warranty.