

INTERCOMMS

Has Bluetooth made cables redundant? Check out our surprise results as we go in search of the best rider-pillion communication system

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HOW WE DID IT

Limits of the test

We wanted to answer one simple question: which is the best on-board communications system for a rider and pillion? We weren't looking for bike-to-bike ability, so we excluded radio-based systems. And although many of the systems on test have other functions, we focused on their rider-pillion comms ability.

The testers

Brother- and sister-in-law John Cundiff and Trudi Cole were chosen from the RIDE Power database because they use intercoms while doing huge touring mileages with their partners.

The test bikes

We used 2008 Honda ST1300 Pan Europeans. While one was being used to test one system, the other was being set up for the next test. We chose Honda's trusty Pan because it's one of the most likely bikes to be used with a rider-to-pillion intercom on tour.

The helmets

We used Arai Viper helmets. While one pair were being worn in a test the other pair were being set up for the next test. Arai Vipers were used because their linings clip in and out, making system fitting much easier, and they're a popular touring choice.

'Ease of use' score

How easy was it to fit the headset into the helmet? If a system needed wiring into the bike's loom, how easy was that? In the case of Bluetooth systems, how easy was it to pair them? Testers noted everything from interference to in-use volume adjustment.

'Clarity' score

Intercoms were tested for clarity at 30mph, 50mph and 70mph+. Our pillion wore earplugs, our rider didn't.

'Comfort' score

Covers earpiece and mic comfort, plus bulkiness and lead length.

EXPERT TIPS

Fitting

Remove the cheek pads and place the speakers between the polystyrene lining and pad. Wires should be tucked into the gaps in the interior. Cutting or removing the polystyrene lining will affect its performance in a crash.

Power source

Intercoms are either battery powered or bike powered. Batteries have to be regularly charged or replaced. Bike-powered intercoms need a connector wiring to the bike's electrics, usually to a circuit that's switched on with the ignition, not the battery - that would leave the connector live all the time.



WHAT THE JARGON MEANS

VOX switches

Voice-operated switches that allow you to be heard as soon as you start speaking. VOX should either have some adjustment to cope with wind noise at different speeds, or shouldn't be so sensitive that wind noise will switch it on. If the VOX system isn't sensitive enough, you'll need to shout to open up a line of communication and then it may switch off mid-sentence if you don't maintain that

volume. Depending on set-up and system quality, you may have to start each utterance with a random word or cough to switch the VOX on.

Leaded systems

Coiled leads are more convenient than straight leads as there aren't yards of wire to tuck in, yet they will open out and stretch when required. All connectors should be secure so they don't disconnect accidentally.

Bluetooth systems

These have the advantage of no wires. They are powered by their own batteries, but these will need to be charged frequently. Bluetooth intercoms also allow mobile phones to be answered while riding.

Speakers

Two speakers, one per ear, give much better clarity than one. Speakers should be comfortable and easy to fit.

Microphones

Sophisticated microphones block wind noise and produce clear speech. Poor-quality microphones pick up as much wind noise as speech, making it difficult for the listener to understand. Microphone booms should bend to enable the microphone to be positioned just touching the lips as this is where best clarity is achieved. Some helmets are better suited to housing a microphone than others.

OVERALL
27/30
RATINGAutocom Active-Duo
£200

Contact: www.autocom.co.uk or 01926 431249

1 TESTER'S NOTES: This is well designed, well made equipment that fits the needs of motorcyclists superbly.

The headset is comfortable and fitted neatly and easily inside the Arai lids. All the hardware is robust, the downside of which is that the thick cables mean you need big jacket pockets. But it's worth it for the fantastic performance.

It took a while to set up the VOX correctly using the tiny adjustment screw inside the battery compartment, but once done communication was crystal-clear at all speeds, with zero wind noise - the noise-cancelling microphone did its job well.

A Bluetooth dongle is available separately for £50 extra to enable use with a mobile phone. Mobile phone communication was crystal-clear too, as was music.

The Active-Duo automatically mutes the music while you're speaking or receiving calls. Phone capability is not confined to the rider - the pillion can make or receive calls just as easily.

The system can be run from a 9V battery or from the bike.

RIDE VERDICT



Clarity 9/10
Ease of use 9/10
Comfort 9/10

OVERALL
25/30
RATING

Autocom Easi-Duo £145

Contact: www.autocom.co.uk or 01926 431249

2 TESTER'S NOTES: This is a similar system to the winning Autocom Active-Duo, but minus some features. It isn't supplied with a power lead as standard - it's 9V battery-powered, with a power lead a £5 extra. It has a preset VOX with no adjustment, there's one less socket for music/phone/GPS than the Active-Duo, and it doesn't auto-adjust the music volume down when you speak.

But the fundamentals are the same. Communication between rider and pillion is impressively intelligible at all speeds. It drops one

mark because the consonants S and F were occasionally hard to distinguish.

The headset is identical to the Active-Duo's, so it's equally comfortable and fits well, and it is less bulky as it has one cable fewer than the more expensive set.

RIDE VERDICT



Clarity 8/10
Ease of use 8/10
Comfort 9/10

OVERALL
22/30
RATING

Albrecht AE600 £49.95

Contact: www.alan-uk.com or 01793 882431

3= TESTER'S NOTES: It's cheap and, at first glance, looks it. But this leaded system from Albrecht performed far better than its looks or price led us to expect. The AE600 has a comfortable headset and convenient coiled connection leads. Power is provided by three AAA batteries.

It provided excellent speech clarity at all speeds if the VOX was set for maximum audibility, although the slight disadvantage of using this setting was a rumble of wind noise above 65mph.

A tiny switch makes VOX adjustment on the

move nigh-on impossible, so you need to guess in advance whether the next leg of your trip will involve low-, medium- or high-speed riding.

It can be connected to either an MP3 player or sat nav system via a standard 3.5mm stereo plug. Music was clear up to around 60mph but was then affected by wind-noise.

RIDE VERDICT



Clarity 7/10
Ease of use 6/10
Comfort 9/10

OVERALL
22/30
RATING



Oxford BikeMike4 £99.99

Contact: www.oxprod.com or 01993 862300

3= TESTER'S NOTES: This latest offering from Oxford Products is a leaded system powered by a 9V battery with coiled connection leads. Separate volume controls for rider and pillion are handily positioned half way down the leads for easy adjustment.

The headsets were no more difficult to fit to helmets than other systems here. Speech was clear at up to 80mph, but above this speed there was some distortion and break-up. This must be due to the absence of a VOX – the channel stays open all the time, which is a simple solution and a

generally successful compromise but it allows wind noise to intrude at these higher speeds.

There's a facility to auto-answer incoming calls to your mobile phone. The system can also be used with sat nav, GPS and MP3 music, although watch out for the big leap in volume between music and speech.

RIDE VERDICT

Clarity 6/10
Ease of use 7/10
Comfort 9/10

OVERALL
21/30
RATING



Midland BT2 £245

Contact: www.alan-uk.com or 01793 882431

5= TESTER'S NOTES: Joint best of the Bluetooth units in this test, the BT2 comes with the headsets ready paired.

You need to shout to open up the intercom channel and then wait a couple of seconds before speaking. Adjustment on the go is reasonably easy once you know which button does what, but difficult with winter gloves. There's a slight whistling and you need to talk loudly at low speeds to keep the channel open. Clarity declines above 80mph, although you're still intelligible.

The headset is comfortable, although some of

the wires are tricky to get into the helmet.

There are separate coiled leads for connecting MP3 players, allowing the rider and pillion to listen to separate iPods. Phone calls – with excellent clarity – have a higher priority, and interrupt the music automatically.

RIDE VERDICT

Clarity 7/10
Ease of use 5/10
Comfort 9/10

OVERALL
21/30
RATING



Scala Rider TeamSet £199

Contact: www.motrax.co.uk or 01933 418414

5= TESTER'S NOTES: Like the Midland BT2, this is a Bluetooth system that comes ready paired together.

The main unit clamps to the outside of the helmet, and took us just minutes to fit. The rider can make and receive calls by voice control, which worked well even at high speed, but the pillion unit gets completely cut out.

Volume level may be set manually and adjusted reasonably easily on the go, but it also auto adjusts up and down depending on speed and wind noise.

The microphone needs to be touching your lips, but then the system works OK right up to 80mph. Above that speed, you'll know that the other person has spoken but you'll have no idea what they said.

RIDE VERDICT

Clarity 5/10
Ease of use 7/10
Comfort 9/10

OVERALL
18/30
RATING



Interphone £275

Contact: www.motocomp.com or 0870 034 0283

7 TESTER'S NOTES: This is a comfortable Bluetooth system that works much better with mobile phones than as a means of communication between rider and pillion. It has to be switched manually between the two modes.

It clamps or sticks to the outside of the helmet easily enough, but the mic boom was too short for our Arais so we had to attach alternative stick-on microphones to the chin bars. It's supplied with only one earpiece; twin speakers are available at £34.99.

The volume level auto adjusts depending on speed and wind noise. Once the high-volume feature is enabled it's clear up to around 90mph.

Pairing with a phone is simple enough, but pairing two Interphones is complicated. Phones can be answered using a single word command.

RIDE VERDICT

Clarity 8/10
Ease of use 1/10
Comfort 9/10

OVERALL
18/30
RATING



Oxford BikeMike3 £59.99

Contact: www.oxprod.com or 01993 862300

8 TESTER'S NOTES: This is a simple leaded system that works off a tiny 23A 12V alkaline battery or alternatively may be wired into your bike's electrics. It's easy to fit and comfortable in use.

We found that speech was clear up to 90mph, at which point the wind noise took over.

An extension lead allows the unit to be connected to a music player via a standard 3.5mm jack plug, but changing between music and intercom involves pressing a tiny button on the unit in the rider's pocket. It's fiddly enough for the

rider to do it, and doubly so for the pillion.

The volume control is equally awkward, and there's a huge volume difference between speech and music.

RIDE VERDICT

Clarity 8/10
Ease of use 1/10
Comfort 9/10

OVERALL
15/30
RATING



Chatterbox XBi £279.98

Contact: www.motohaus.com or 01256 704909

9= TESTER'S NOTES: The pairing and set-up instructions for this Bluetooth system are not clear. After five attempts we finally achieved successful set-up by accident.

There are a lot of buttons close together on the side, and it can be difficult to locate the right one when you're wearing gloves.

We found it worked OK up to 40mph, but then you have to shout to be heard. Above 60mph it's virtually impossible to make out what's being shouted. The microphone picks up voices well at low speeds, although there's an echo too.

The earpieces are on the bulky side, but the system was reasonably easy to fit.

The charging units have a two-pin plug and need adaptors for UK three-pin sockets. A stereo Bluetooth adaptor is available separately for music at £37.99.

RIDE VERDICT

Clarity 4/10
Ease of use 4/10
Comfort 7/10

OVERALL
15/30
RATING



MotoSonic 7008H £279.98

Contact: www.kbchelmets.co.uk or 01283 763120

9= TESTER'S NOTES: Pairing the units of this Bluetooth system was a complete nightmare. It took us an hour to do what should be a fairly straightforward task. Once we'd sorted that out and got everything in place, we found the system comfortable to use.

But the priority is very much on the phone and music rather than the intercom aspect. While the pillion could hear little and struggled to make herself heard, phone calls were completely clear. Things got worse as the speed rose. The system picked up interference from the engine, too.

RIDE VERDICT

Clarity 3/10
Ease of use 3/10
Comfort 9/10

? VERDICT

We were expecting a Bluetooth whitewash, but it didn't happen. The Autocom sets, landing Best Buy and Recommended triangles, are streets ahead of anything else here. In fact, our test shows that leaded systems are still top of the tree when it comes to rider-pillion communication. That's usually all they can do – but that's all we wanted.

The bog-basic Albrecht is recommended for putting in a decent performance for only £50. The Oxford BikeMike4 scores just as well but costs double, so doesn't get a triangle.

Our experience so far shows that Bluetooth for rider-pillion intercoms is more trouble than it's

worth. That's not to say it can't be excellent if your priority is using a mobile phone while you're riding. Some Bluetooth sets came ready paired, but others were difficult to set up; all need regular charging.

Thanks to John Cundiff and Trudi Cole for their invaluable input, Honda for the Pan Europeans and Phoenix Distribution for the loan of the Arai Vipers.

Turn over for more on Bluetooth and what it could mean for motorcyclists.

NEXT MONTH: WINTER GLOVES

