



HANDSFREE

R5

Vehicle Technology.

**PRODUCT
CATALOGUE
2021**





HANDSFREE
R5

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HANDSFREE GROUP

...the future of Critical Communications is here

We are a specialist single-point destination supporting first response clients including Police, Fire Services and Ambulance with adaptable vehicle technology solutions. Handsfree Group successfully support our emergency service clients in the supply and installation of critical communications, fixed vehicle device (FVD) technology solutions, tracking, telematics and safety equipment.

Specialist installations

Our expert team supply and install the latest market leading emergency vehicle technology on-site and also through our specialist vehicle installation centre, a high spec purpose built 12,000 sq ft workshop facility. We are a single-point destination supporting emergency service clients with a wide range of critical communications, safety and fixed vehicle device solutions (FVD) along with Datalive Tracking and Telematics solutions. Our installation team has over 15 years specialist international emergency service experience. Handsfree Group installers are FITAS accredited and work to the highest FCS 1362 industry standards. Our dedicated expert team offer full coverage across the UK, USA and Ireland. Given our experience serving the Police, Fire and Ambulance services, we know how to handle both bespoke and standard vehicle installations of critical vehicle communication, safety and security solutions.

CODE:
R5-INSTALLKIT



Contents

R5-CU
Control Unit



R5-UI570
5.7-inch User Interface Panel



R5-PTT-Button
PTT Button
Basic button with 2M wire



R5-MIC
R5 PTT Microphone



R5-SPK-10W
10-Watt Interior Loudspeaker



R5-CU-UI-5M
R5 Core Unit to User Interface Cable 5M



R5-CU-A-5M
R5 Core Unit to Audio Cable 5M



R5-CU-IO-5M
R5 Core Unit to IO Cable 5M





R5 USER INTERFACE

R5 5.7" User Interface Panel

HANDSFREE | **CODE:**
R5-UI570

- 5.7" Touch Screen
- Programmable Hot Keys, Siren, & Lighting Control, Talk Group Select Operational Status, Messages
- Rugged, built for harsh environments.
- 1.8mm Gorilla Glass
- Dedicated buttons for PTT & other standard controls
- Sunlight readable display
- Emergency, volume, brightness hard key controls
- AMPS mounting Solution.



R5 7" User Interface Panel

HANDSFREE | **CODE:**
R5-UI70

- 7" Touch Screen
- Programmable Hot Keys, Siren, & Lighting Control, Talk Group Select Operational Status, Messages
- Rugged, built for harsh environments.
- 1.8mm Gorilla Glass
- Dedicated buttons for PTT & other standard controls
- Sunlight readable display
- Emergency, volume, brightness hard key controls
- AMPS mounting Solution.



OEM Integrated System

HANDSFREE | **CODE:**
OEM

- Improves driver safety
- Optimises control of vehicle systems
- Aids compliance with vehicle use legislation
- Reduces cost by simpler equipment integration
- Increases de-fleeting resale value of the vehicle
- Emergency, volume, brightness hard key controls



* Product currently under development. Ask for further details

R5 CONTROL UNIT

R5 Control Unit

HANDSFREE | **CODE:**
R5-CU

The R5 Core Unit houses the systems CPU, Wireless Connection, and System interfaces. The versatile functionality of the R5 Core Unit includes CAN, RS232, 2 x USB, GPIO, and 2 x Ethernet interfaces providing downstream connection to vehicle-specific accessories such as Kodiak PTT devices. When paired with the R5 User Interface, the R5 Core Unit functions as a WIFI hot spot, LTE, and GPS module, which continues to operate effectively at high vehicle speeds. The R5 Core Unit utilises a Qualcomm chipset and runs the Android 10 operating system, providing Airware integration and ensuring the system is fully compatible with the latest end-user applications.

- R5 Core Unit
- ESN PTT
- Mobile Network Technology LTE
- Kodiak PPT
- Voice Calling
- GPS technology
- Multiple or Second Screen
- In Vehicle high speed WIFI hot spot
- Bluetooth connected devices.
- Direct Mode (Device to Device) Airwave Integration
- CAN
- Ethernet x 2
- RS232
- USB 3.0
- USB 2.0 x 2
- GPIO x 8





R5 10 W Speaker

HANDSFREE | **CODE:**
R5-SPK-10W



Loudspeaker optimised for interference-free voice transmission. It seamlessly integrates into the system that comprises the complete R5 emergency services network solution.

- Rugged plastic housing
- Frequency range optimized for radio communication.
- High power – 10 Watt
- Solid retaining bracket made of metal.

R5 5W Amplified Speaker

HANDSFREE | **CODE:**
R5-SPK-5W-AMP



- Loudspeaker with integrated amplifier
- Car and HGV supply ready (12 V and 24 V)
- Low power consumption
- Small design for easy and space saving installation
- Frequency range optimized for radio communication

R5 4W Amplified Speaker

HANDSFREE | **CODE:**
R5-SPK-4W



- Rugged plastic housing
- Small design for easy installation
- Frequency range optimized for radio communication
- Solid retaining bracket made of metal

R5 Surface Mount Microphone

HANDSFREE | **CODE:**
R5-MIC



R5 microphones are designed to fit any vehicle for optimum performance and an inconspicuous presence. Advanced technology means the device has omni-directional noise reduction with anti-vibration mountings.

- Electret microphone capsule with directional effect
- Small discrete design
- Thin and flexible cable for easy installation in vehicles
- Integrated microphone pre-amplifier
- 3M cable length

R5 Snap-in Microphone

HANDSFREE | **CODE:**
R5-MIC-SP



R5 microphones are designed to fit within the trim of the vehicle for optimum performance and an inconspicuous presence. Advanced technology means the device has omni-directional noise reduction with anti-vibration mountings.

- Electret microphone capsule
- With directional effect
- Solid plastic housing
- Microphone pre-amplifier
- 3M cable length



R5 PTT Handset & Cradle

HANDSFREE | **CODE:**
R5-HSET



R5 Handset with cradle and PTT button as feature. These handsets are an exceptional addition to the R5 Emergency Services Network Solution.

- Elegant design and excellent surface feel
Ideal for installations with limited space

- Large PTT button on the underside (easy handling for right and left-handed users)
- Dynamic earpiece
- Noise-compensating microphone capsule
- Wear-free hook recognition with magnetic contact

R5 Rugged Screen PTT Handset

HANDSFREE | **CODE:**
R5-HSET-EVO-RUGGED



- Well proven design
- Large voltage range (5 V to 35 V)
- 2.4" colour graphic display
- Adjustment of display brightness
- Full numeric keypad
- PTT button on the side
- Emergency Button Facility
- Dynamic ear capsule
- Electret microphone capsule with noise reduction
- Wear-free hook function

R5 PTT Screen Handset

HANDSFREE | **CODE:**
R5-HSET-PTT-KP-DISP



- Elegant design and excellent surface feel
Ideal for installations with limited space
- Large PTT button on the underside (easy handling for right and left-handed users)
- Dynamic earpiece
- Noise-compensating microphone capsule
- Wear-free hook recognition with magnetic contact

R5 PTT Button

HANDSFREE | **CODE:**
R5-PTT-BUTTON



- Perfect for specialty vehicles
- Long life switch contact
- Flexible positioning for bespoke vehicle use

R5 Gooseneck PTT Button

HANDSFREE | **CODE:**
R5-STALK



- Rugged housing with gooseneck
- Position for improved ergonomics
- Perfect for specialty vehicles
- Long life switch contact

R5 Action Foot Pedal

HANDSFREE | **CODE:**
R5-PEDAL



- Robust version, suitable for all applications
- For applications using equipment and instruments
- 3m connection cable with 6.3 mm plug
- Dimensions: 80 x 33 x 92 mm

R5 Desktop PTT Microphone

HANDSFREE | **CODE:**
R5-MIC-DESK



- Rugged metal housing
- Dynamic high noise cancelling gooseneck microphone with strong directional effect
- Extremely durable double switching contact



R5 PTT Motorcycle Button

CODE:
R5-MOTO-PTT-BRK



- Fitted with bracket to attach to handlebars
- Long life switch contact
- Flexible positioning for bespoke vehicle use

R5 Wired Intercom System

CODE:
R5-MOTO-ICOM



- Noise cancelling microphone (IP67 waterproof)
- Allows clear communication at speeds up to 180 km/h
- Suitable for a range of helmets
- Microphone (waterproof), two loudspeakers, coiled cable and Nexus jack plug
- Compatible with PTT-units with a Nexus socket
- Mounting bracket

R5 Bluetooth Intercom


CODE:
R5-MOTO-BT



- Bluetooth intercom up to v4.1
- Advanced Noise Control™
- Eight-way intercom
- Group intercom
- Universal Intercom™
- Water resistant
- Remote control

R5 Wallen Antenna

CODE:
R5-ANT-MOTORCYCLE




- High Performance ESN LTE & Wi-Fi Antenna
- MIMO Multi-Concentric Radiators
- 2xLTE + 2xBT/Dual-Band Wi-Fi + 1x GPS/GNSS
- 800/900/1800/1900/2100/2600*1 + 2400/5400*1
- <1.5:1 at Zf
- 00W
- 1.2M 100 Type Dual-Screened*2
- 2xSMA LTE, 2xFAKRA WiFi, 1xFAKRA GPS*3 *

* Cable set not included

R5 Motorcycle Wired Remote Control

CODE:
R5-REM-MOTO-C-WIRED




R5 Remote Control button panel. These are extremely rugged and reliable standing up to the most strenuous handling conditions.

- Versatile for ease of use
- Reliable and rugged button
- Perfect for motorcycle use whilst wearing gloves
- Long life switch contact
- Positionally mounted

R5 Wired Remote Control Button

CODE:
R5-REM-V-C-WIRED



R5 Wired Remote Control button. These are extremely rugged and reliable standing up to the most strenuous handling conditions.

- Versatile for ease of use
- Reliable and rugged button
- Long life switch contact
- Positionally mounted

* Product may change in appearance from that shown.



R5 Pump Bay Terminal

HANDSFREE | **CODE:**
R5-PBVT



R5 Pump Bay Voice Terminals can be installed in the pump bay of a fire engine, providing an additional control point for Fire & Rescue teams. Rugged and simple to use with an intuitive interface. Robust and durable for extreme environmental conditions and rough handling. High acoustic quality, it seamlessly integrates into the system that comprises the complete R5 emergency services network solution.

- Enables communication at key areas of vehicle
- Integrates with existing systems
- Durable cables
- IP67 Enclosure Box with RTS indicator
- IP54 Interface Box in Cab
- IP54 Control Switch in Cab
- Fist Mic included with PBVT
- 24 W Loud Speaker Included with PBVT

R5 PMVT Fist Mic

HANDSFREE | **CODE:**
R5-FIST



- Electret microphone capsule, integrated
- Class-D amplifier
- Solid plastic housing, plus 3m curly chord
- Protection class IP67
- PTT button, emergency button and one button for toggling the volume level
- LED for displaying the selected volume level and the emergency function (detachable)
- 360° rotating clip
- Headphone jack (3.5 mm jack with thread)

R5 PBVT Loud Speaker

HANDSFREE | **CODE:**
R5-SPK-25W-IP



- Rugged flame-resistant plastic housing
- Very compact design
- High sound output
- Protection class IP65
- Salt fog resistant
- Horn loudspeaker with cable
- Customized plugs
- 8 Ohm and 16 Ohm version
- 25W Output
- For mobile and fixed radio systems

R5 Fist Mic

HANDSFREE | **CODE:**
R5-FIST



R5 FIST MIC or remote speaker microphone with amplifier and three buttons. Rugged, versatile with PTT and emergency button for ease of use, these fist microphones are an exceptional addition to the R5 Emergency Services Network Solution.

- Electret microphone capsule, integrated
- Class-D amplifier

- Solid plastic housing
- Protection class IP67
- PTT button, emergency button and one button for toggling the volume level
- LED for displaying the selected volume level and the emergency function (detachable)
- 360° rotating clip
- Headphone jack (3.5 mm jack with thread)

R5 Bluetooth Fist Mic

HANDSFREE | **CODE:**
R5-FIST-BT



R5 BLUETOOTH FIST MIC or remote speaker microphone with amplifier and three buttons. Rugged, versatile with PTT and emergency button for ease of use, these fist microphones are an exceptional addition to the R5 Emergency Services Network Solution.

- Electret microphone capsule, integrated
- Class-D amplifier

- Solid plastic housing
- Protection class IP67
- PTT button, emergency button and one button for toggling the volume level
- LED for displaying the selected volume level and the emergency function (detachable)
- 360° rotating clip
- Bluetooth connection



R5 UI Bracket & Mount

CODE:
R5-UI-BRK

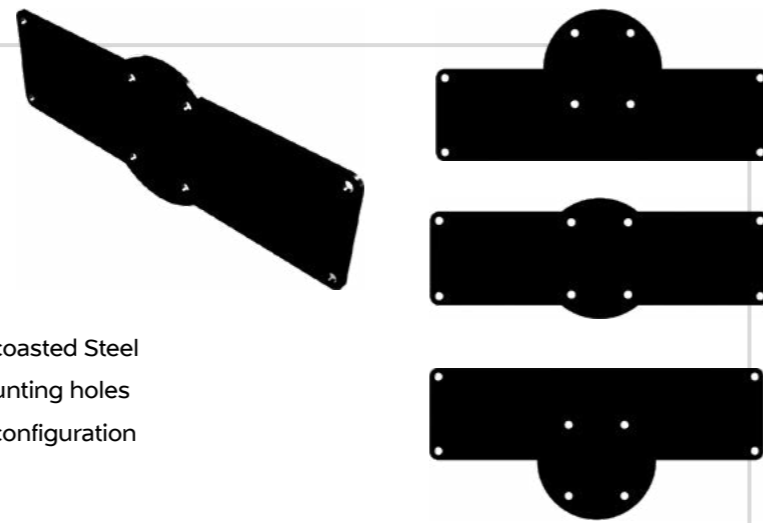
- Round Mounting Plates Holds up to 6 lbs / 2.8 kg under vibration
- Joiner allows for effortless rotation of mounted devices
- Weight 0.64kg, Height 5.99cm, Width 8.08cm, length 11.18cm
- Quick release system
- Modular system



R5 UI Panel Bracket Angled

CODE:
R5-UI-BRK-A

- Vehicle specific application 2.5mm thick Powder coated Steel
- Pre drilled holes for ease of installation AMPS mounting holes
- Robust & Modular design Available in 90 degree configuration



PANORAMA ANTENNAS

R5 LTE/GPS/WiFi Batwing Antenna 3m

CODE:
R5-ANT-BAT-3M-P

- Covert/Discrete internal antenna
- Up to 5-in-1 solution
- MiMo LTE product with distinctive BAT design
- 4G/5G LTE MiMo covering 617-6000MHz
- SiSo or 2x2 MiMo WiFi
- Active GPS/GNSS with advanced B13/14 filtering
- For mounting on or under any conductive surface
- Provides robust in-vehicle connectivity
- Discreet covert antenna



* Cables not included

R5 LTE/GPS/WiFi Dome Antenna 3/5m

CODE:
R5-ANT-DOME-3M-P
R5-ANT-DOME-5M-P

- Designed for latest generation LTE Cat 18/20 routers and devices
- Low profile antenna with up to 11 functions in 1
- 4x4 MiMo 4G/5G LTE cellular, Optional GPS/ GNSS & optional MiMo 2.4/7.2GHz in one housing
- Kits with extension cables available for a range of LTE routers



R5 LTE/GPS/WiFi Sharkfin Antenna 3m

CODE:
R5-ANT-SRK-3M-P

- Up to 5x 2.4/5.0GHz elements
- Optional GPS/GNSS element with 26dB gain
- Sleek sharkfin housing
- Vehicle Routers & Gateways
- Vehicle-to-Everything (V2X) Communications
- Multimedia & Telematic Solutions
- Up to 4x4 MiMo Compact Antenna Solution
- External mount, SharkFin Automotive OEM styling
- Ideal for reliable high speed real time streaming
- WiFi 6 Ready functioning up to 7.1GHz





SureAntennas

R5 LTE/GPS/WiFi Sandcastle Antenna

HANDSFREE | **CODE:**
R5-ANT-SC-B

- Wideband LTE 2G 3G 4G Elements
- Up to 11 functions in one antenna
- Ultra Wide Bandwidth 700MHz – 6000Mhz
- Optional MiMo Dual Band WiFi/WiMAX
- Low Profile
- Simple single hole installation



* Cables not included

SureAntennas

R5 LTE/GPS/WiFi Mallard Antenna

HANDSFREE | **CODE:**
R5-ANT-MAL-B-S

- Wideband LTE 2G 3G 4G elements
- Ultra Wide bandwidth 700MHz – 6000Mhz
- Low profile OEM styled sharkfin
- Simple single hole installation



* Cables not included

R5 SERVICES SUMMARY

All Services completed by a NPPV 3 cleared FITAS Approved technician who has attended a R5 Fixed Vehicle Device Training

Vehicle Survey

HANDSFREE | **CODE:**
R5-VEH-SURVEY

- Completed by experienced Vehicle Installation Engineer/Manager
- Visit to assess the proposed equipment location and wiring routes
- Vehicle Assessed with the Fleet Manager/UO Representative



* Based on specific vehicle

Vehicle Design

HANDSFREE | **CODE:**
R5-VEH-DESIGN

- Can include decommissioning guidance
- Support with choice of ESN antenna solution
- Completed by experienced Vehicle Installation Engineer/Manager
- Used in conjunction with vehicle survey
- Completed in conjunction with 1st vehicle installation has taken place
- Design drawn up by experienced Technical Author



* Based on specific vehicle

Vehicle Installation

HANDSFREE | **CODE:**
R5-VEH-INSTALL

- Installations completed by Security cleared/FITAS approved technicians
- Installations will be completed in accordance with designs created
- Decommissioning of Airwave equipment optional
- Supported by experienced planning and logistics team
- Installation of R5 Fixed Vehicle Device, wiring and associated



R5 SERVICES SUMMARY

All Services completed by a NPPV 3 cleared FITAS Approved technician who has attended a R5 Fixed Vehicle Device Training

Vehicle Deinstallation

CODE:
R5-VEH-UNINSTALL



- De-Installations completed by Security cleared/FITAS approved technicians
- Decommissioning of Airwave equipment optional
- Supported by experienced planning and logistics team
- De-Installations of R5 Fixed Vehicle Device, wiring and associated accessories
- Secure disposal of decommissioned equipment if required

Vehicle Maintenance/Service

CODE:
R5-VEH-SERVICE



- Onsite support completed by Security cleared/FITAS approved technicians
- 24/7 Next Day or 6 Hr Response time
- Supported by experienced planning and logistics team
- Asset management included

Vehicle Audit

CODE:
R5-VEH-AUDIT



- Installation Audit completed by experienced Vehicle Installation Engineer/Manager
- Self-Audit supported by Mobile Application
- Desktop Audit completed on random selection of installations
- Physical audit completed on request
 - At random installation interval
 - For every project undertaken
 - Yearly by FITAS

HANDSFREE R5

Vehicle Integration

service support and ongoing maintenance



- Survey, Design & Documentation
- Fully managed service capability enabling trouble free transition
- Locally based FITAS accredited, skilled technical engineers
- Fully qualified installer of the latest technology solutions
- UK wide coverage – our engineers come to you
- Comprehensive end to end solutions of quality installation and aftercare

To find out more about R5 installations please call 0161 864 6440 or email r5info@handsfree.co.uk





HANDSFREE

R5

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