Questions and Answers

3M™ Scott™ Vision C5 Facepiece with Radio Direct Interface

Question
How is the Vision C5 facepiece with radio direct interface different from other fireground communication systems?

Answer
Utilizing proprietary noise suppression algorithms, a mask communications unit (MCU) transmits the SCBA user’s voice directly into the field radio audio path to deliver clear, intelligible outgoing radio communications.

Incoming field radio voice communications are routed to an integrated bone conduction headphone to enhance the user’s hearing and understanding of incoming two-way radio communications.

Question
How does the integrated bone conduction headphone work?

Answer
System transducers send mini vibrations through the skull bone and deliver sound directly to the inner ear, bypassing the eardrum.

Question
How does the Vision C5 facepiece with radio direct interface operate with a field radio?

Answer
The Vision C5 facepiece with radio direct interface utilizes a MCU equipped with a Bluetooth® radio to provide direct wireless communications with compatible Bluetooth wireless technology enabled field radios and matching remote speaker microphones. Push-to-talk (PTT) operation of the MCU microphone is controlled by the field radio or remote speaker microphone PTT button, providing users with a familiar, easy-to-use operation interface. Incoming field radio voice communication audio can be routed to the integrated bone conduction headphone, field radio system speakers, or remote speaker to address the specific needs of the user.

Question
Which handheld field radios and remote speaker microphones can be used with the Vision C5 facepiece with radio direct interface?

Answer
The Vision C5 facepiece with radio direct interface is compatible for use with the Motorola® APX series handheld field radios with matching APX series remote speaker microphones and Harris XL series handheld field radios with matching XL series remote speaker microphones. There are specific firmware versions required for the field radio for full system operation; these are available from your the field radio manufacturers authorized service technician. Support for additional handheld field radios and matching remote speaker microphones will be announced when available.

Question
Are there specific radio configuration settings required for operating the field radio and remote speaker microphone with the Vision C5 facepiece with radio direct interface?

Answer
Yes, specific radio code plug configuration settings are recommended for optimizing the operation and performance of the field radio and remote speaker microphone, when used with the Vision C5 facepiece with radio direct interface. Please refer to the radio specific configuration instructions for the Vision C5 facepiece with radio direct interface. These settings will need to be configured by the field radio manufacturer authorized service technician.

Question
How do I pair a handheld field radio with the Vision C5 facepiece with radio direct interface?

Answer
An initial Bluetooth pairing procedure is used to establish and maintain the wireless communications link between the facepiece and radio. The initial Bluetooth pairing process is intuitive and can be completed in 20 seconds or less. Please refer to the Vision C5 facepiece with radio direct interface user instructions for the initial pairing procedure.

Question
Is it necessary to pair the Vision C5 facepiece with radio direct interface and handheld field radio prior to each use?

Answer
No. After initial pairing, the facepiece ID is stored in the handheld field radio, enabling automatic re-pairing when the facepiece and field radio are both powered on.

Question
How do you power on the Vision C5 facepiece with radio direct interface?

Answer
The Vision C5 facepiece with radio direct interface incorporates a single button, providing a simple, intuitive operation for powering on/off electronics.
Question
Does the Vision C5 facepiece with radio direct interface require the user to be on air to use the radio direct interface communications system?

Answer
No. The Vision C5 facepiece with radio direct interface provides active communications when transitioning between tactical (on air) and non-tactical (off air) operations.

Question
Is the Vision C5 facepiece with radio direct interface equipped with an automatic power-off feature?

Answer
Yes. The Vision C5 facepiece with radio direct interface utilizes proprietary breath detect algorithms to detect when a user is breathing through a regulator. The facepiece will automatically power off when the system does not detect breathing for a preset time. The preset time is configurable by the end-user using the mobile application. The default setting is 20 minutes.

Question
Does the Vision C5 facepiece with radio direct interface provide voice prompts when configured with the bone conduction headphone?

Answer
Yes. The Vision C5 facepiece with radio direct interface provides verbal notification of changing system conditions when configured with the bone conduction headphone. Automated voice prompts include system power status, battery level, and Bluetooth connection status.

Question
Is there a volume adjustment for incoming radio communications?

Answer
Yes. When configured with the bone conduction headphone, the Vision C5 facepiece with radio direct interface includes a volume control switch that allows adjustments based on hearing acuity and environmental conditions.

Question
What type of battery is used with the Vision C5 facepiece with radio direct interface?

Answer
The Vision C5 facepiece with radio direct interface is powered by an intrinsically safe, rechargeable lithium-ion battery.

Question
Can a standard Vision C5 facepiece be upgraded in the field to add radio direct interface?

Answer
Yes. A field install kit is available for customers to add radio direct interface to a standard Vision C5 facepiece. The RDI field install kit must be installed by an authorized service technician.

Question
What is the battery run-time for the Vision C5 facepiece with radio direct interface?

Answer
A fully charged battery is designed to deliver up to 15 hours of continuous run-time.

Question
Does the Vision C5 facepiece with radio direct interface come with a spare battery?

Answer
No. A single, rechargeable lithium-ion battery is included with the Vision C5 facepiece with radio direct interface. An optional spare battery is available at the time of purchase.

Question
How do I charge the battery on the Vision C5 facepiece with radio direct interface?

Answer
A 2-bay charger is available and may be used in a vehicle mount or desktop configuration and will charge two batteries simultaneously.

Question
Can I connect multiple chargers together?

Answer
Yes. Multiple chargers may be connected (i.e. daisy-chain) to expand charging capabilities, while providing a simplified installation. The charger may be installed using a hard-wired connection to the vehicle or an AC/DC adapter.

Question
Is the Vision C5 facepiece with radio direct interface configurable using a mobile application?

Answer
Yes. An iOS® or Android™ compatible mobile application is available for modifying settings by the user. The mobile application is available through the 3M Software Download Portal and will require authorization by an administrator before it can be used.

Question
Is the Vision C5 facepiece with radio direct interface built and tested to withstand the rigors of firefighting environments and use?

Answer
Yes. The Vision C5 facepiece with radio direct interface is a purpose-built solution designed to meet the rigorous demands and environmental conditions commonly found on the fireground. All devices are tested and certified to meet the NFPA 1981, 2018 edition standard for voice intelligibility, heat and flame resistance, water and dust ingress protection, impact resistance, vibration resistance, and intrinsic safety.

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