

**Substantially more advanced than the Personal Role Radio (PRR),  
it remains simple and easy to operate**



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The Soldier System Radio (SSR) Plus has been developed to address the requirements of Future Soldier programs throughout the world and provides the advanced features necessary in this difficult environment. Whilst substantially more advanced than the company's Personal Role Radio (PRR), it remains simple.

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# Advanced Radio Features

## Dual Net Capability

The SSR Plus supports dual net capability, thereby enabling the radio to operate on two nets simultaneously. This enables the infantry soldier to operate on his main operational net, whilst monitoring a second net. Simple intuitive controls allow for rapid switching between nets.

## Common Radio Solution

The SSR Plus has been developed as a common radio solution. All soldiers have the same radio, each configured to meet the requirements of the communications network plan. Network planning tools aid the configuration and control of all radios. The SSR Plus is compatible with a range of Selex ES ancillaries, including the dual net headset with a capability to interface to another combat net radio. Power can be provided by either a rechargeable or primary battery pack for stand alone configuration or via an external or centralised supply.

## Network Enabled

The SSR Plus system design allows the radio to operate on up to 256 different networks (any 16 of which are selectable by the user on the radio). Each of the 256 available networks can support up to 32 full members and an unlimited number of listen-only members. This networking capability is self-generating, self-maintaining, self-healing and does not require the existence of any external infrastructure.

## Integral GPS

Situational awareness is a key capability in the close combat environment. Integrated GPS enables the accurate and timely delivery of positional information to support development of the Own Forces operational picture.

## Priority Voice Interrupt

On a busy channel, urgent voice messages are accommodated by using the voice interrupt feature, which allows a priority user to "interrupt" a talker. This facility can be enabled or disabled on each radio for each network. In effect, this capability provides all the operational advantages of a duplex facility, without the inherent bandwidth and power overheads.

## Range and Coverage: Automatic Relay

Operating in the 350 to 400 MHz radio band, the SSR Plus provides a communication range of greater than 2 km in a rural environment. Where a greater communication range is required or where the communications environment is more complex, the SSR Plus can be set to use an automatic relay mode. In this mode, the network identifies net members who are temporarily out of coverage and automatically re-transmits voice and data messages to them. This provides the network with a self-healing capability when connectivity has been disrupted.

## Ease of Use

Keeping the simplicity of operation established on the PRR has been a key target during the SSR Plus design and development. This has resulted in a radio with the minimum of controls, no lights or displays. The radio does not have any display or keyboard, simply rotary controls for volume and net selection.

## Secure Services

Use of spread spectrum technologies, developed for PRR, coupled with a low transmit power density, ensures that the SSR Plus enjoys the benefits of minimising the probability of transmission detection and interception (Low Probability of Intercept and Low Probability of Detection). Additional security is provided by an inbuilt Advanced Encryption Standard (AES) capability, for both voice and data communications.

## Robust

The SSR Plus uses modern lightweight materials to deliver a significant size and weight benefit, when compared with conventional radio construction methods, whilst maintaining a robust product suitable for the harsh dismounted combat environment. The removable battery pack allows the weight of the radio to be reduced further for systems with a centralised power source.

## Vehicle-Compatible

Based on the operationally proven vehicle installations for PRR, an SSR Plus installation has been developed. This enables dismounted infantry to maintain communications with its supporting vehicles.

## Power Systems

The power efficiency of the SSR Plus combined with the long operational duration of the high capacity Lithium-Ion based rechargeable battery pack ensures a low turnover of batteries for recharging, again minimising support and maintenance costs.

## Cost-Effective Solution

Developed to address the whole-life costs as well as acquisition costs of owning a highly capable radio system, SSR Plus is a cost-effective route to major enhancement of operational capability. The overall cost of ownership is also kept to a minimum, through limiting support and maintenance costs.

## Independent Voice and Data Transmission

Future Soldier Systems place an increased demand on the radio for data services, yet the soldier must always have voice communications available. The SSR Plus addresses this with an independent voice and data capability that allows both the data and the voice traffic to be in operation together. An additional data capability ensures the rapid transfer of positional data, without detrimental effect on the main voice and data traffic.

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All specifications are subject to change without notice

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