

SatRADIO Permanent RST820

The Beam SatRADIO, RST820, provides a satellite to two-way radio interface for use in a vehicle or fixed location over the Iridium satellite system.



Drawing on Beam's expertise in Satellite Communications, the Beam SatRADIO was designed specifically for integrating the Iridium satellite network with 2-way Radio communications.

A terminal that provides for both mobile and fixed installation allows for the SatRADIO to be used in the following applications;

- Emergency Services
- Mining
- Construction
- Defense
- Relief Aid
- Event Management
- Disaster Recovery

Outbound Calling

Simply by using a handheld or fixed 2-way radio on the same frequency as the SatRADIO terminal the user can originate a telephone call over the two way radio interface.

In order to restrict and control access to unauthorised telephone calls the system is designed to require a PIN to be entered on the 2-way unit to allow access to initiate a call.

Inbound Calling

The SatRADIO can also be used for accessing incoming telephone calls from the Iridium network. A two-way radio user connected to the same channel as the base unit will be simply notified of the incoming call by a ring tone sent over the air.

A simple DTMF button press on the 2-way provides easy access to receiving incoming calls.

SatRADIO AutoDIAL Feature

AutoDIAL function will permanently keep the SatRADIO connected to a preconfigured destination thus allowing a virtual radio network to be established.

This AutoDIAL function can be simply activated at the flick of a switch and will maintain connectivity for as long as the switch is activated. The AutoDIAL number can be changed easily either locally or remotely.

Virtual Radio Network

The Intelligence inside the SatRADIO terminal provides the functionality to maintain a virtual radio network over satellite. It's possible for two SatRADIO terminals to call the other which enables access between two locations anywhere on earth.

Once the link over satellite is established the SatRADIO and all its users on that same channel and the called party are then in communication with each other as if being on the same radio network.

There are several options in setting up this call; it can be done via dialing the desired party or by utilizing the AutoDIAL functionality in the SatRADIO terminal.

Radio Integration

The Beam SatRADIO interface can be easily connected and integrated to any two-way radio system. This includes the ability to connect with analog and digital P25 systems.



Push to Talk

As the 2-way radio system is simplex, this requires standard push to talk operation by the parties using the handheld 2-way units, typical of this type of technology. Therefore all parties using the SatRADIO are automatically muted, providing an increase in call quality and ease of communications.



SatRADIO Key Features

- Connect to various 2-way radios
- Can be used with P25 Radios
- Designed specifically for radio network integration
- Uses standard PTT technology
- Supports Analogue & Digital radio handsets
- 11 - 32 V DC power input
- Customised Interface Cables
- Supports Intelligent user handset
- Initiates a Virtual Radio Network
- Supports 1 to many / Many to 1
- Make & Receive Satellite calls
- Autodial functionality
- Fixed / portable applications
- Simple DTMF dialing access
- PIN code secure for Satellite calls

Satellite Calls

The SatRADIO can also be used in standard satellite mode if required. The SatRADIO is supplied with a standard Iridium handset that enables a phone call to be made over the Satellite network bypassing the 2-way radio interface.

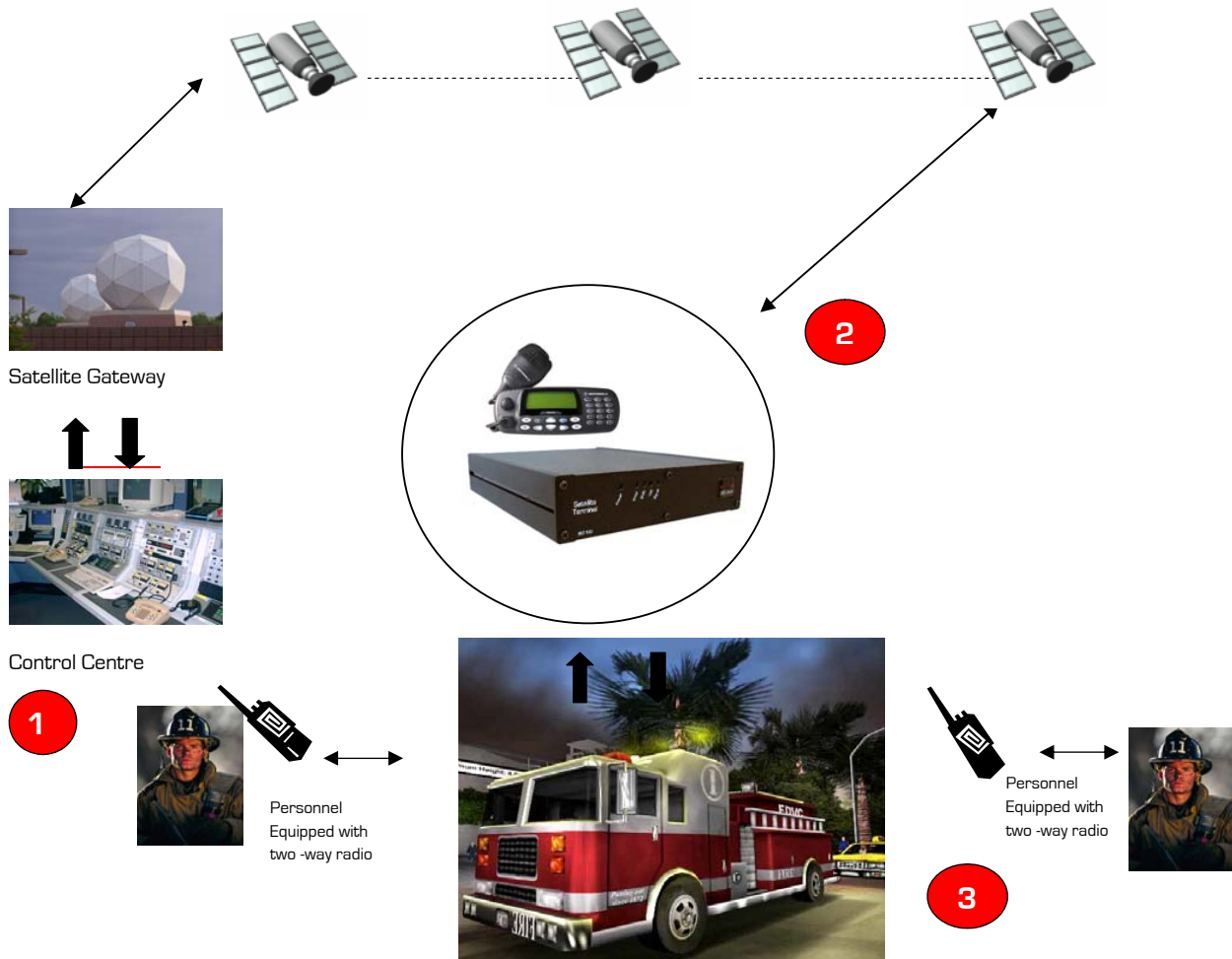


Customisation

The solution can be customised to meet specific requirements and applications. A rapidly deployable portable unit is also available.

System Overview

Through the integration of the Beam SatRADIO terminal with a two-way Radio unit makes it possible to have both redundancy to the radio network back to a control centre whilst also having the ability to make and receive telephone calls over the satellite network.



Operation

1. Call Centre/Dispatch can communicate with any of the field personnel.
2. RST820 is located inside vehicle.
3. Personnel equipped with a two-way radio. Personnel can speak direct with response unit or other personnel in field or in the response vehicle.