
About BarMate

BarMate is a wireless system that allows guests to request bar service with the press of a button. The wireless device sends a request for service signal to a nearby bar. Service is then provided by a waiter/waitress. After providing prompt service, the waiter/waitress clears the signal indicating the guest has been served.

The BarMate system is designed to be scalable, flexible, and accurate for any resort environment.

How BarMate works

To request service, a guest presses a button on a Service Request Device (SRD), which sends a signal to the Management Centre (MC) or the Master Management Centre (MMC), usually located at the bar or refreshment area to request service. The Management Centre consists of a Gateway and a touchscreen personal computer (PC) running BarMate software. A Waiter will identify the location of the guest using the BarMate software, and promptly respond to the guest requesting service. An LED will illuminate on the SRD to help identify the guest requesting service. After responding to a guest's request for service, the Waiter clears the signal on the SRD to indicate the guest has received the requested service. Clearing the signal will switch the LED on the SRD off and send relevant service data (date and time service request was fulfilled) to the Management Centre.

Wireless communications between the SRD and the Gateway are managed by the Service Area Manager (SAM), inconspicuous devices located between the SRDs and the MC to manage wireless communication traffic between devices and assist with identifying the guests' location.

System description

The following diagram illustrates the BarMate System. A description of system components follows.

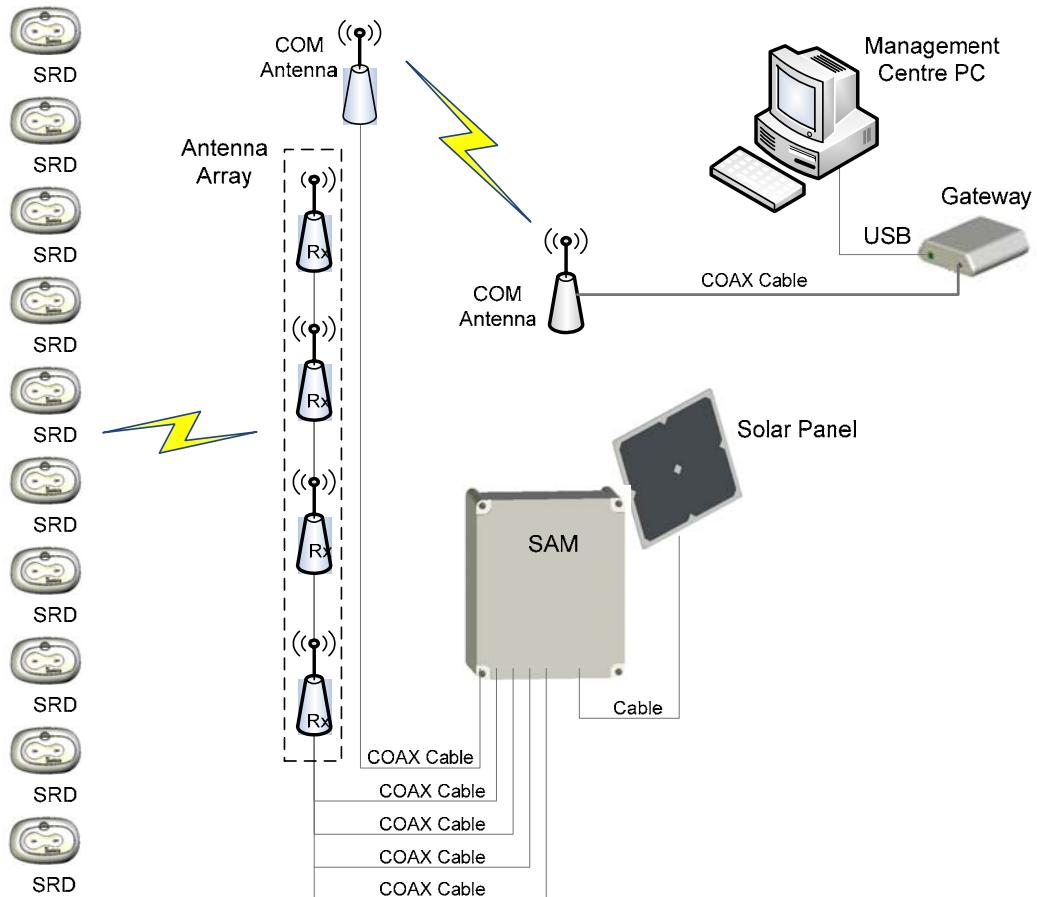


Figure 1: System Block Diagram.

Technical description of system components

The BarMate system sends and receives data using multiple devices. Each device is described below.

Service Request Device (SRD) – A push button device that Transmits (TX) and Receives (RX) a signal to and from the Service Area Manager (SAM). An LED (Light Emitted Device) illuminates on the SRD, indicating service request. The illuminated LED identifies the guest requesting service and also lets the guest know the SRD is active. This is a battery powered, wireless device that attaches to a surface, typically on a sun lounger.

Service Area Manager (SAM) – A device that manages service requests from SRDs. The SAM transmits and receives signals to and from SRDs using the Antenna Array. The SAM also uses a COM antenna to transmit and receive signals between the SAM and the Gateway. The SAM is powered with a battery that can be recharged using a solar panel and cable. For environmental protection against outdoor elements, the SAM shell (box casing) is a NEMA 4 rated enclosure.

Antenna Array – Composed of four antennas that connect to a SAM. The array transmits and receives signals between SRDs and a SAM. The array locates the SRD requesting service by triangulation.

COM Antennas – Connect to the SAM and to the Gateway (one antenna for each device) by coaxial cable. The COM antennas transmit and receive signals between the Gateway and the SAM.

Solar Panel – Connects to the SAM to recharge the battery.

Gateway – Communicates wirelessly with one or more SAMs using a COM antenna. The Gateway is part of the Management Centre (MC) and connects to the MC computer using a USB cable. The COM antenna attaches to the Gateway with a coaxial cable.

Management Centre (MC) – Composed of a Gateway and a touchscreen computer running the BarMate software. The MC is usually located in the bar area, and provides the interface between the BarMate system and the site's wait staff. A site may have multiple MCs. The MC computer connects to the Gateway with a USB cable.

Master Management Center (MMC) – Like the MC, the MMC is composed of a Gateway and a touchscreen computer running the BarMate software. At sites that have multiple MCs, the MMC routes messages between MCs as required. The MMC can also function as an interface between the BarMate System and the site's wait staff.

BarMate software

The BarMate software runs on the MC or MMC computer. The BarMate software enables waiters to identify the location of guests requesting service and to indicate when the guest has been served. The BarMate software enables Administrators to manage and assign waiters at specific MC locations.