

Home Curfew RF Monitoring System – Operational Description

BU3000 Home Curfew RF (Radio Frequency) Monitoring systems is a monitoring tool designed to provide remote supervision of an offender's compliance with his home detention scheduled.

The system is comprised of a personal transmitter tag worn around the offender's ankle. This tag transmits RF signals to the Home Curfew unit. The home curfew unit identifies these signals and acknowledges whether the offender is present or absent from the home curfew location. When identifying the offender as absent from the monitored location the system classifies the offender as being in violation of his curfew schedule and reports these violations as well as other status indications to the back-end system via cellular or landline communication protocols. The unit is also equipped with various tamper indicators such as power disconnect and tilt detection, which are also reported to the back-end system and logged for the protocol.

This device is a dual channel operating in the 433.92Mhz frequency each with its antenna. One channel is with antenna connector connected to vertical off-the-shelf helical antenna, the second channel is with horizontal soldered F antenna.

Both channels are always in receive mode, transmission is only as reply to received message using the channel that received the message with the strongest signal.