

Operational Description of Scorebrite Transmitter

The console communicates to the scoreboard only upon activation of one of the key switches. When this occurs, power is instituted to both the RF power amplifier and the digital encryption device. Power to the encryption device is linearly regulated such that the device can measure its own battery voltage, and adds that to the data stream on the RF link. Once the encryption device awakens, it detects a key press, and begins transferring out the data stream of the encrypted key, voltage detection and address assignment.

Data is then modulated onto 315MHz, and transmitted out the antenna based on ASK signaling, such that a "1" is the presence of the carrier, and a "0" is the absence of the carrier.