Operation Theory – Transmitter - Model 42996

Model 42996 Thermostat RF transmitter operates the associated receiver/thermostat by means of a pulse modulated radio/frequency signal operating at 350 MHz. The transmitter's two buttons permit the user to adjust the temperature setting up or down. A four-position DIP switch permits the user to encode the signal for one of 16 possible combinations.

MKR 10.00 msec ATTEN 10 dB + 20 dB REF Ø.Ø dBm -70.90 dBm Address Bits: Temperature Direction: 1Ø dB/ Switch Closed = Long Up = Short / Long Switch Open = Short Down = Long / Short SWEEP TIME 20.0 msec A.M. hal M WAL HANNALMANNY 4.75 100 1 2 3 4 5 7 8 9 10 12 13 6 11 CENTER 349.940 000 MHz SPAN Ø Hz RES BW 1 MHz (1) VBW 3 MHz SWP 20.0 msec

The signal pattern consists of a series of long or short pulses as follows:

The duration of each pulse, along with the period between the bursts, is detailed in the test report.

The antenna is integrated and not adjustable or detachable by the user. Output power and frequency are fixed and not adjustable by the user.