K-980MCW

Pet-Immune PowerCode Wireless PIR Detector



Installation Instructions

1. INTRODUCTION

The K-980MCW is a pet-immune, fully supervised ultra low-current wireless PIR that incorporates a PowerCode transmitter. Both transmitter and detector circuits are powered by an on-board, long life 3.6 V Lithium battery.

As a pet immune motion detector, the K-980MCW utilizes TSI™ (Target Specific Imaging) technology that ensures immunity to pets weighing up to 36 kg (80 lb).

As a supervised wireless detector, the K-980MCW has a 24-bit ID code, randomly selected in the factory from over 16 million possible combinations. Compatible PowerCode receivers are designed to "learn" specific IDs and respond only to them.

Following detection of a human intruder, the K-980MCW triggers the on-board transmitter which transmits its specific PowerCode ID followed by an alarm signal and status designators for tampering and battery condition. Alarm and other data are thus forwarded to the alarm control panel or to a head-end computer, depending on the type of system in which the detector is used.

After triggering the transmitter, the K-980MCW inhibits itself to save battery power. The detector reverts to the ready state 2

minutes after the last movement has been detected. An LED/ WALK-TEST jumper is used to override the 2-minute rearm timer during walk testing.

Since messages transmitted by the K-980MCW might collide with messages transmitted by other PowerCode transmitters, an anticollision transmission sequence is used.

A programmable pulse counter is included in the unit for maximum immunity against false alarms.

A periodic test transmission for supervision purposes takes place automatically once an hour. The receiver is thus informed that the particular detector is taking an active part in the wireless network.



Figure 1. General View

2. SPECIFICATIONS

OPTICAL

Max. Coverage Range: 12 x 12 m (40 x 40 ft) / 90° Pet Immunity: Animals weighing up to 36 kg (80 lb).

Vertical Adjustment: 3-position adjustment scale: 1.8 m (6 ft),

2.1 m (7 ft) and 2.4 m (8 ft).

ELECTRICAL

Battery Type: 3.6 Volt lithium thionyl chloride (LiSOCl₂) battery,

size 1/2AA, Tadiran TL-5902 or equivalent.

Nominal Battery Capacity: 1.2 Ah Standby Current Drain: 0.015 mA.

Transmit Current Drain: 9.5 mA (including LED)

Battery Life (with LED on)

@ 10 transmissions per day: about 7 years

@ 50 transmissions per day: about 5 years

LED: Lights for 2 seconds upon transmission and upon motion detection in the walk test mode.

Detector: Dual-element low-noise pyroelectric sensor. **Pulse Counter:** Programmable to 1, 3 or 5 pulses.

Rearm Timer: 2 minutes after the last alarm; timer disabled in the walk test mode.

WIRELESS

Frequency (MHz): 315, 404, 418, 433.92 or other frequencies according to local requirements.

Transmission Sequence: 3 data bursts at variable intervals within 3 seconds.

Encoding: 24-bit ID, over 16 million possible combinations.

Total Message Length: 36 bits

Battery Supervision: Automatic reporting of low-battery status with each alarm and with periodic autotest.

Tamper Alert: Reported at 3-minute intervals, until the tamper switch is restored.

ENVIRONMENTAL

Operating Temperature: -10° to 50°C (14° to 122°F). Storage Temperature: -20° to 60°C (-4°F to 140°F).

RFI Protection: > 30 V/m up to 1000 MHz

Compliance with Standards: FCC Part 15, ETS300-220 and MPT1349

PHYSICAL

Size (H x W x D): 117 x 65 x 47 mm (4-5/8 x 2-9/16 x 1-7/8 in.).

Color: White.

Weight: 97 g (3.4 oz) without bracket. 112 g (4 oz) with bracket.