

1. INTRODUCTION

The NEXT DUO is a digital, microprocessor-controlled MW / PIR detector that can be adapted to the size of the protected area by use of a **model selector**. A different digital signal processing (DSP) is used upon selection of each model, thus optimizing both PIR and MW performance within the protected area.

The PIR section of the NEXT DUO employs a cylindrical lens with uniform detection sensitivity beginning at 0.5 m (1.8 ft) away from the detector up to a distance of 12 meters (40 ft). Advanced **True Motion Recognition™** algorithm (patented) allows the NEXT DUO to distinguish between the true motion of an intruder and any other disturbances which cause false alarms.

A Test input permits switching the detector to the walk test mode remotely without removing the front cover. An on-board motion event jumper determines whether 1 or 2 consecutive motion events would trigger an alarm.

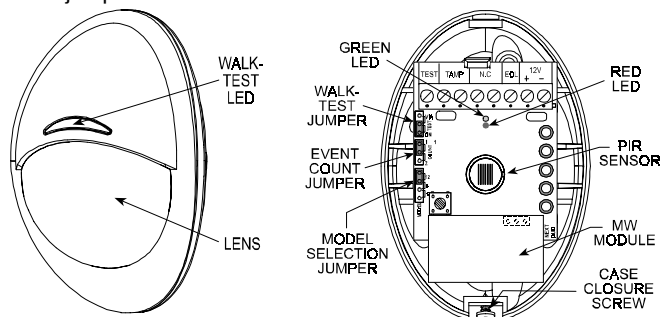


Figure 1. General View

Figure 2. Inside View

2. SPECIFICATIONS

Selectable Models: Models covering 6, 9 and 12 meters (20, 30 and 40 ft), selected upon installation

Input Voltage: 9 to 16 VDC

Current Drain: About 20 mA @ 12 VDC

PIR SECTION (see Figure 3)

Lens Data

No. of Curtain Beams: 9 + 5

Max. Coverage: 12 x 12 m (40 x 40 ft) / 90°

Tripping Indication: Indicator lights ORANGE for about 3 sec.

MW SECTION

Oscillator Type: Microstrip, DRO-stabilized

Frequency: 2.45 GHz

Detection Range: Up to 12 m

Tripping Indication: Indicator lights GREEN for about 3 sec.

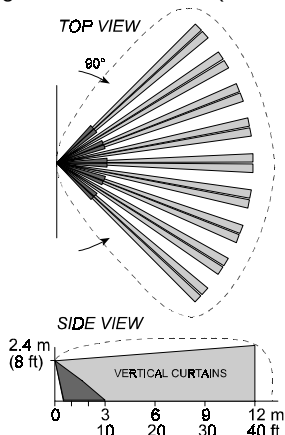


Figure 3. Maximum Coverage Pattern

ALARM and TAMPER

Alarm Output: Solid-state relay, N.C., up to 100 mA / 30 V, ~30 Ω internal resistance. Circuit opens for 2-3 seconds upon alarm.

Alarm Indication: Indicator lights RED for about 3 seconds.

Event Counter: Selectable, 1 or 2 motion events

Tamper Contacts: Normally closed, 50 mA resistive / 30 VDC

MOUNTING

Surface or corner, at the height of 1.8 to 2.4 m (6 to 8 ft)

Note: Base allows single-sided corner mount at 45° to wall.

ACCESSORIES:

BR-1: Surface mounted swivel bracket, adjustable 30° down and 45° left/45° right.

BR-2: BR-1 with a corner adapter

BR-3: BR-1 with a ceiling adapter

ENVIRONMENTAL

Operating Temperature: -10°C to 50°C (14°F to 122°F)

Storage Temperature: -20°C to 60°C (-4°F to 140°F)

RFI Protection: Greater than 20 V/m (20 MHz to 1000 MHz)

PHYSICAL

Size (H x W x D): 94.5 x 63.5 x 49.0 mm (3-11/16 x 2-1/2 x 1-15/16")

Weight: Approximately 50 g (1-3/4 oz)