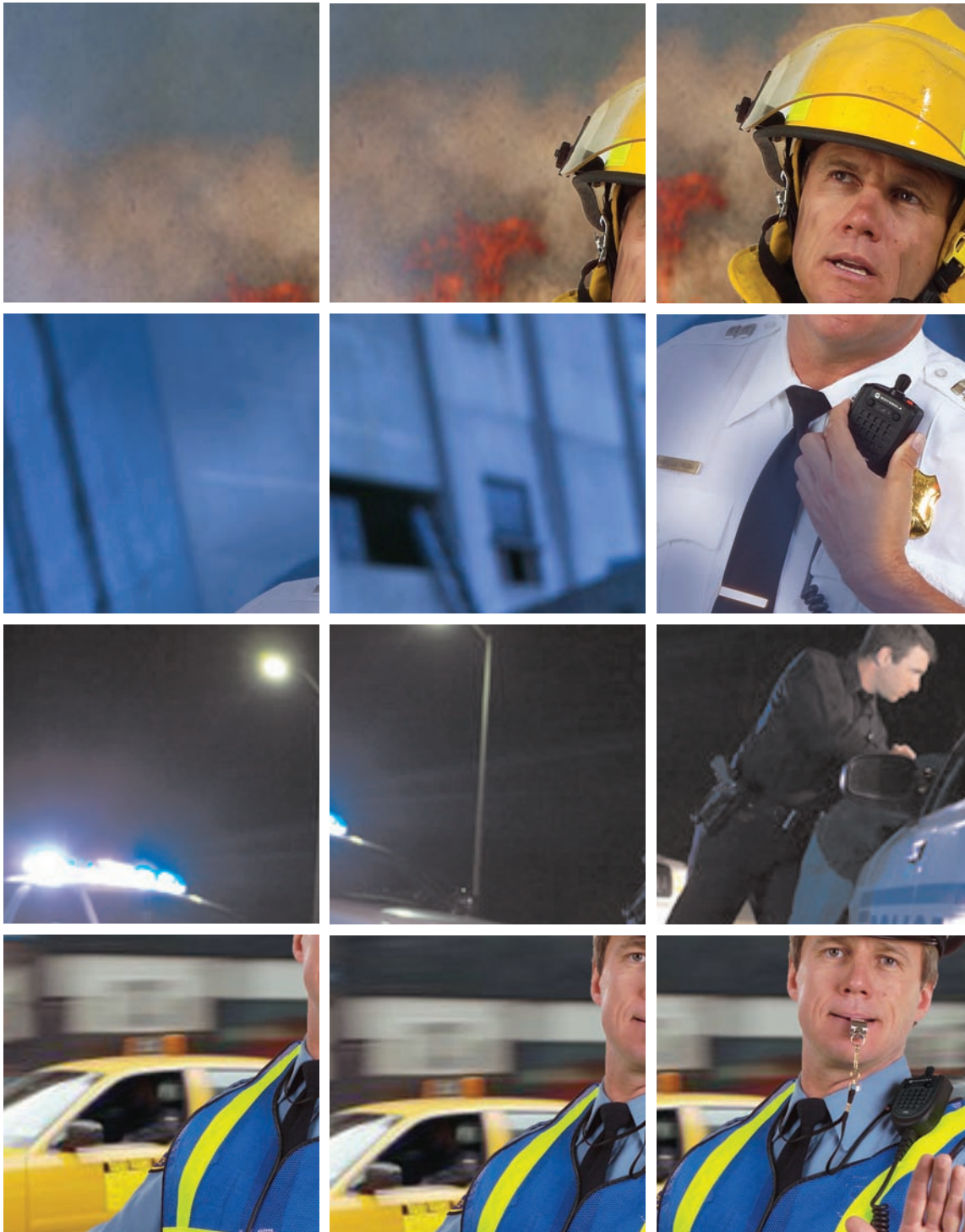


# Motorola GPS Remote Speaker Microphone

For XTS 5000 Portable Two-way Radios



Announcing...  
ASTRO® 25  
Personnel  
Location  
Tracking For  
Enhanced  
Personnel  
Safety

# Now dispatchers can locate public safety professionals outdoors, virtually anywhere in the field.

*Spend more time on mission-critical communications — and less time having to ask “what’s your location?”*

Safety and efficiency are right on the mark when dispatchers know precisely where everyone is located. With the new Global Positioning Satellite (GPS) Remote Speaker Microphone (RSM), XTS 5000 portable two-way radio users can be automatically tracked by satellite throughout North America.

Now dispatchers can send whoever is closest to each occurrence, speeding response time and improving staff management. And in dangerous or life-threatening situations, dispatchers can keep close watch on everyone’s position for greater security — including on-foot patrols and out-of-vehicle officers.

Requires clear view of sky with no obstructions for optimal GPS coverage. GPS operation may be limited in buildings, tunnels, parking garages and areas with heavy tree coverage.

## **HMN4080A GPS Remote Speaker Microphone**

Compatible with ASTRO® XTS 5000\* Digital Portable Radio (Models I, II, III, and Ruggedized).

\* XTS 5000 radios must have a radio host code of R06.01.00 or later and Customer Programming Software (CPS) version R06.00.00 or later.



## Features:

- 16-position Channel Selector Knob
- Emergency Button
- 2 Programmable Buttons
- Full-range Volume Control
- Fully Submersible Housing\*

## Supports the following GPS position update triggers to the radio user:

- Local Position Update  
Location information can be shown to the user on the XTS 5000 radio display. Requires the XTS 5000 portable radio (Model II and III).

## Supports the following GPS position update triggers to the Dispatcher:

### Radio User Initiated\*\*

- Location Request Upon Radio Power-On
- Emergency Alarm Location Request
- Emergency Push-to-Talk Location Request

### Dispatcher Initiated\*\*

- Location Polling
- Periodic Location Request
- Distance-Based Location Request

\* Housing is fully submersible when used with a Ruggedized XTS 5000 radio. The head is submersible when used with a standard XTS 5000 radio model.

\*\* Requires an ASTRO® 25 Integrated Voice and Data System with components including:

- ASTRO Presence Notifier Application (RVN4198)
- ASTRO Location Application Developers Kit (RVN5030)
- A Location Application that supports Motorola's Location Request / Response Protocol (LRRP) and interfaces to Motorola's Presence Notifier Application in order to obtain location data from the radio.



# specifications

## Microphone

Microphone Type:	Omnidirectional
Sensitivity:	-42dBV +/- 2dBV with 1KHz, 94dB source

## Speaker

Diameter:	45mm
Output Power:	.5W at rated audio
Output Level:	90dB typical, 600Hz - 3000Hz, at rated audio, at 30cm from RSM
Earphone Jack:	Not available.
Frequency Response:	300Hz - 3500Hz
Distortion (THD):	<5% at 1kHz
Dimensions:	16 channels in radio operating zone, zone control on radio.

## RSM Body

Dimensions:	62mm(W) x 87.5mm(L) x 43mm(D) with Clothing Clip
Weight:	229 Grams
Case Material:	Flame Resistant Polycarbonate

## Controls

Channel Change Knob:	16 Position, 18mm tall.
Channel Change Control:	Control from both RSM and radio.
Volume Control:	Volume Up/Down Buttons on face of RSM.
Volume Control Levels:	Seven levels, max to min volume; feedback tone when receive audio not present.
Orange Emergency Button:	Located on top surface, activates radio Emergency Button.
Side Programmable Buttons:	Located on side surface, activates radio Side Buttons.

## Power

Power Source:	Lithium Ion 890mAh battery in the RSM is charged from the radio battery through the radio side connector.
Radio Current Drain:	25mA: radio battery life impact 10-16% @ 5-5-90 duty cycle based on one triggered request every 60 seconds.

## Cable Assembly

Flex Life:	100,000 Cycles
Pull Strength:	40 Lbs, Minimum Tensile, In-Line Case Material: Flame Retardant Polycarbonate

## Environmental

Operating Temperature:	-30 degrees to +60 degrees C
Storage Temperature:	-55 degrees to +85 degrees C
Thermal Shock:	-57 degrees to +80 degrees C
Humidity:	90%-95% RH @ 50 degrees C for 8 hours.
Rain:	MIL810F, Method 506.4, Procedure 1, Category 3
Immersion:	MIL810E Method 512.3, Procedure 1
Salt / Fog:	MIL810E, Method 509.3, Procedure 1
Dust:	MIL810E, Method 510.3, Procedure 1
Vibration:	MIL810E, Method 514.4, Procedure 1, Category 10
Mechanical Shock:	MIL810E, Method 516.4, Procedure 1
Impact (grill):	130 gm steel ball, 100 cm
ESD:	IEC 801-2
IP Rating:	IP55

## GPS Specifications

Simultaneous Satellites:	12
Mode of Operation:	Autonomous (Non-Assisted) GPS
GPS Antenna:	PIFA style antenna integrated into GPS RSM
Sensitivity:	-138dBm
Accuracy:	15 meter (50%); 25 meter (95%)
Cold Start:	< 90 seconds
Warm Start:	< 40 seconds
Hot Start:	2-4 seconds
Periodic Update:	Information Age Typical 20-45 Seconds

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**TTY PHONE:** 1-866-522-5210

**US FEDERAL GOVERNMENT:** 1-800-826-1913

**FAX:** 1-800-622-6210

**MOTOROLA ONLINE USERS:** <http://motorola.com/businessonline>

*For more information, please call:*



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ACCY-RSM-GPS

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