WIRELESS DISPATCH EVERYWHERE

APX™ 7500 MULTIBAND CONSOLETTE

Racing to an emergency or repairing a power outage, every moment matters as you mount a response. The right control station can make all the difference in making sure communications are clear, continuous and coordinated – across multiple users, agencies and miles.

The APX™ 7500 Consolette is the ideal complement to your dispatch console. It’s the low cost, mid-power RF control station for the ASTRO® 25 system when you want a wireless dispatch solution. Plus, you can use it as an emergency backup station when infrastructure is off-line or for wireless access to different system types for increased interoperability between agencies.

CONNECT WITH CONFIDENCE

Designed for the APX 7500 mid power series and O5 control head, the APX 7500 Consolette combines forward-thinking technology with time-tested functionality. Project 25 Phase 2 technology delivers twice the voice capacity so you can add more users without adding more frequencies or infrastructure. And its multiband operation assures seamless interoperability – so you can talk with confidence from a squad car or desk station, a job site across town or an incident in the next county.

MIGRATE AT YOUR OWN PACE

The APX 7500 Consolette is backwards and forwards compatible, developed to meet current P25 standards and future-ready to support new technology and data applications. Now you can achieve your interoperability objectives—whether upgrading an existing system or designing a new one—based on your dollars and deadlines.

BUILT FOR THE TOUGHEST TASKS

Innovative design and skillful engineering make the APX 7500 Consolette a tireless performer. It can be easily serviced or programmed without removing the lid and the robust metal housing assures extra durability. An integrated front panel numeric keypad on the APX 7500 Consolette gives you fast access to radio controls. And it meets stringent FCC and UL certifications for exceptional safety.

ROBUST AND MISSION-READY

When a power loss occurs, count on the automatic battery revert to connect your people 24/7. All you need is a DC source, such as a marine battery, to switch over automatically and keep communications going strong.

Rich in features, the APX 7500 Consolette gives you easy access to contact information with one unified call list and the largest number of interface connections to a wide variety of consoles and desk sets. What’s more, an ACIM wireless interface provides back-up dispatch if your console’s link to the ASTRO 25 trunked system is ever lost.
APX 7500 MULTIBAND CONSOLETT

STANDARD FEATURES
Available in 700-800 MHz, VHF, UHF R1, and UHF R2 bands
Up to 2000 Channels
Optional multiband operation
Trunking Standards supported:
- Clear or digitally encrypted ASTRO® 25 Trunked Operation
- Capable of SmartZone®, SmartZone Omnilink, SmartNet®
Analog MDC-1200 and Digital APCO P25
Conventional System Configurations
Narrow and wide bandwidth digital receiver
(6.25 kHz equivalent/12.5 kHz/30 kHz/25 kHz)*
Embedded digital signaling (ASTRO and ASTRO 25)
Integrated Encryption Hardware
Seamless wideband scan
Intelligent lighting
Radio profiles
Unified Call List
Tone remote control
ACIM/CCGW interface including:
- ID decode
- Call alert encode
Interfaces supported:
- Recorder
- Wireline
- Vehicle Interface Port
- Crosspatch
- Headsets (2)**
110/220VAC operation with battery revert capability
VU Meter and Clock
Expansion Slot Standard

2 configurations available:
- Full featured front panel
- Limited front panel

Customer Programming Software:
- Utilizes Windows 7, XP and Vista
- Supports USB Communications
- Built-in FLASHport™ support

OPTIONAL FEATURES:
Enhanced Encryption Software Options
Programming over Project 25 (POP25)
Text Messaging
Over the Air Rekeying (OTAR)
Extended Dispatch Operation including:
  - Emergency Alarm ACK Encode
  - Radio Inhibit/Uninhibit Encode
  - Radio Monitor Encode
  - Radio Check Encode
  - Status Query Encode
  - Status Query Response Decode
  - Status Update Decode
  - Message Update Decode

** Available on full featured models only.

O5 CONTROL HEAD FEATURES
Tri-color LCD display
- 4 lines: 2 lines text (14 characters), 1 line icons, 1 line soft menu keys
- 3 x 6 keypad microphone accessory with 3 programmable soft keys
- 5 programmable soft key buttons and 5 scroll-through menus with up to 24 programmable soft keys

AUXILIARY DISPLAY FEATURES
LCD display
3 soft menu buttons to activate or control the following Consolette features:
- Clock
- Volume Units Meter (VU)
- Crosspatch Linking
- Auxiliary Controls/VIP Activation
- Over-the-air Audible TX Alert Tones

*Per the FCC Narrowbanding rules, new products (APX7500 UHFR1 with UHFR2 Mid Power combination AND UHFR1 High Power with 700/800 MHz combination) submitted for FCC certification after January 1, 2011 are restricted from being granted certification at 25KHz for United States – State & Local Markets only.

** Available on full featured models only.
**TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Frequency Range/Bandsplits</th>
<th>700 MHz</th>
<th>800 MHz</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 MHz - 806 MHz</td>
<td>784-776 MHz</td>
<td>806-824 MHz</td>
<td>863-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
</tr>
<tr>
<td>794-806 MHz</td>
<td>794-806 MHz</td>
<td>851-870 MHz</td>
<td>863-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>30/25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Rated RF Output Power Adj.</td>
<td>10-30 Watts</td>
<td>10-35 Watts</td>
<td>10-50 Watts</td>
<td>10-40 Watts</td>
<td>10-45 Watts (450-512 MHz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10-25 Watts (512-520 MHz)</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>±0.00015 %</td>
<td>±0.00015 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
</tr>
<tr>
<td>Modulation Limiting</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz / ±4 kHz (NPSPAC) / ±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
</tr>
<tr>
<td>Modulation Fidelity (C4FM) 12.5 kHz Digital Channel</td>
<td>±2.9 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
</tr>
<tr>
<td>Emissions</td>
<td>Conducted+ −70/−85 dB</td>
<td>Conducted+ −70 dB</td>
<td>Radiated+ −20/−50 dB</td>
<td>Conducted+ −85 dB</td>
<td>Conducted+ −20 dBm+</td>
</tr>
<tr>
<td>Audio Response</td>
<td>+1, −3 dB (EIA)</td>
<td>+1, −3 dB (EIA)</td>
<td>+1, −3 dB (EIA)</td>
<td>+1, −3 dB (EIA)</td>
<td>+1, −3 dB (EIA)</td>
</tr>
<tr>
<td>FM Hum &amp; Noise</td>
<td>−40 dB</td>
<td>−40 dB</td>
<td>−40 dB</td>
<td>−40 dB</td>
<td>−40 dB</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
</tr>
</tbody>
</table>

**RECEIVER – TYPICAL PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Frequency Range/Bandsplits</th>
<th>700 MHz</th>
<th>800 MHz</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>784-776 MHz</td>
<td>851-870 MHz</td>
<td>863-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
<td></td>
</tr>
<tr>
<td>794-806 MHz</td>
<td>851-870 MHz</td>
<td>863-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
<td></td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>30/25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Audio Output Power at 3% distortion</td>
<td>2.5W++</td>
<td>2.5W++</td>
<td>2.5W++</td>
<td>2.5W++</td>
<td>2.5W++</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>±0.00015 %</td>
<td>±0.00015 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
</tr>
<tr>
<td>Analog Sensitivity</td>
<td>12 dB SINAD</td>
<td>0.25 μV</td>
<td>0.25 μV</td>
<td>Pre-Amp 0.2 μV</td>
<td>Pre-Amp 0.2 μV</td>
</tr>
<tr>
<td>Digital Sensitivity</td>
<td>1% BER</td>
<td>0.3 μV</td>
<td>0.3 μV</td>
<td>0.2 μV</td>
<td>0.2 μV</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>80 dB</td>
<td>80 dB</td>
<td>68 dB</td>
<td>80 dB</td>
<td>80 dB</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>90 dB</td>
<td>90 dB</td>
<td>90 dB</td>
<td>90 dB</td>
<td>90 dB</td>
</tr>
<tr>
<td>Audio Distortion at rated</td>
<td>3.00 %</td>
<td>3.00 %</td>
<td>3.00 %</td>
<td>3.00 %</td>
<td>3.00 %</td>
</tr>
<tr>
<td>Selectivity</td>
<td>25 kHz</td>
<td>80 dB</td>
<td>80 dB</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>12.5 kHz</td>
<td>65 dB</td>
<td>65 dB</td>
<td>70 dB</td>
<td>70 dB</td>
</tr>
<tr>
<td></td>
<td>30 kHz</td>
<td>---</td>
<td>---</td>
<td>90 dB</td>
<td>---</td>
</tr>
</tbody>
</table>
ENCRYPTION

**Supported Encryption Algorithms**
- ADP, AES, DES, DES-XL, DES-OFB, DVP-XL

**Encryption Algorithm Capacity**
- 8

**Encryption Keys per Radio**
- Module capable of storing 1024 keys. Programmable for 128 Common Key Reference (CKR) or 16 Physical Identifier (PID)

**Encryption Frame Re-sync Interval**
- P25 CAI 300 mSec

**Encryption Keying**
- Key Loader

**Synchronization**
- XL – Counter Addressing
- OFB – Output Feedback

**Vector Generator**
- National Institute of Standards and Technology (NIST) approved random number generator

**Encryption Type**
- Digital

**Key Storage**
- Tamper protected volatile or non-volatile memory

**Key Erasure**
- Keyboard command and tamper detection

**Standards**
- FIPS 140-2 Level 3
- FIPS 187

ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature**
- -30ºC / +60ºC

**Storage Temperature**
- -40ºC / +85ºC

**Humidity**
- 95% relative humidity

**ESD**
- IEC 61000-4-2

**Duty Cycle**
- EIA/TIA Intermittent Duty Cycle

FCC TYPE ACCEPTANCE ID

**FCC ID**
- A2492FT5858
- A2492FT3824
- A2492FT7037
- A2492FT7047
- A2492FT4895
- A2492FT4894
- A2492FT7043
- A2492FT4904
- A2492FT4896
- A2492FT7044

**BAND AND POWER LEVEL**
- 10-35 Watts (764-870 MHz)
- 10-50 Watts (136-174 MHz)
- 10-40 Watts (380-470 MHz)
- 10-45 Watts (450-520 MHz)
- 10-40 Watts (485-512 MHz)
- 10-25 Watts (512-520 MHz)

For more information about how to interoperate without boundaries, visit motorolasolutions.com/apx