



MOBILE, FLEXIBLE, MISSION CRITICAL VoIP DISPATCH CONSOLE

# ASTRO® 25 MCC 7100 IP DISPATCH CONSOLE

Today's dynamic command and control environments demand communication capabilities that can be deployed at a moment's notice, anytime, anywhere. As a fixed or mobile solution, the MCC 7100 IP Dispatch Console eliminates traditional technology barriers to deliver the flexible, interoperable communications you demand.

Take command of situations from virtually anywhere. The MCC 7100 Console uses wired or wireless networks to establish Project 25 (P25) encrypted voice communications with trunked and conventional radios, when and where you need them most. Use the portable MCC 7100 Console to quickly expand your mobile work force communications for on the spot coordination during special events, for disaster management, in back-up facilities and to increase temporary dispatch capacity. Equip senior staff with the ability to easily monitor and initiate communications from their office, on the road or in remote locations.

With this new flexibility and mobility, dispatchers in the field no longer have to juggle multiple portable radios for communications. Instead, a laptop PC equipped with the MCC 7100 Console provides full dispatch control with firewall secured protection into the ASTRO<sup>®</sup> 25 network.

## EASY TO USE, FLEXIBLE, AND CUSTOMIZABLE USER INTERFACE

To help reduce training needs, increase adoption rates and keep dispatch practices consistent, the MCC 7100 IP Dispatch Console uses the familiar MCC 7500 IP Dispatch Console graphical user interface (GUI) with easily recognized icons and graphics based on Microsoft Windows<sup>®</sup>.

The customizable GUI allows you to layout screen resources with color, size and placement choices organized by agency, shift or other criteria in order to build the user interface according to your individual or organization specifications.

Trunked and conventional radio channels are customizable with various controls, such as; patch setup and tear down, frequency select, coded/clear select and individual volume control, based on user preferences. Per-channel controls can be fully or partially shown, or hidden to save space on the screen.

Because mission critical voice is dependent on the state of the network in use, the MCC 7100 Console includes a Network Status Indicator to provide the user with constant real time feedback about network conditions affecting communication performance.

Busy users quickly respond to missed calls by simply clicking on an entry in the Activity Log and selecting transmit. The display information such as the number of calls and date and time specifics are customizable to fit the needs of the individual user.

To support full customization of the GUI or integration with 3rd party applications, an available Software Development Kit (SDK) provides access to all console functionality.



Tailor the MCC 7100 Console to your needs with the customizable user interface

## **KEY INTEROPERABILITY FEATURES**

## Works in Parallel with MCC 7500 IP Dispatch Consoles

The ASTRO® 25 console system may consist exclusively of MCC 7100 Consoles or operate in parallel with MCC 7500 Consoles. Both share the same GUI and can have the same selected resources with cross muting supported between the two.

## Agency Partitioning Delivers Sharing and Cost Savings

With Agency Partitioning, multiple agencies can share a system to gain interoperability and cost savings benefits, and still maintain control of their own channels, encryption keys, configuration and more.

## **Console Alias Manager Gives Local Control**

The MKM 7000 Console Alias Manager is an available option on the MCC 7100 Console that allows agencies to locally manage their radio unit IDs. Different agencies sharing the system can manage their radio Unit ID aliases independently and autonomously. Users easily differentiate between "their" radio users and "other" radio users by using more generic aliases for the "other" users.

## **Ensure Emergency Transmissions Get Priority**

Transmit Priority Levels provide an orderly and consistent method for ensuring that higher priority transmissions are able to takeover resources from lower priority transmissions.

10000000

2:00:56 Pt

#### **Create Communications Interoperability**

MCC 7100 Console users patch communications between trunked and/or conventional radios that are normally unable to communicate with each other. Patched radio users see the ID or alias of the other patched radio(s), as opposed to that of the console. This minimizes confusion and the need for the user to intervene in the call. Patches are automatically reestablished if interrupted so that users stay focused on continuing operations.

## **Protect Sensitive Communications**

Encryption and decryption services within each position enable users to fully participate in secure communications while keeping sensitive, vital information completely encrypted between the MCC 7100 Console dispatcher and radio users.

Users can connect with agencies that have different encryption configurations without any manual intervention or delay. Up to twenty calls using up to three different algorithms and multiple secure keys can be supported simultaneously.

To help reduce stress and potential errors when managing encrypted audio situations, indicators and alerts are provided when the console mode does not match that of a received call, as well as when a patch or multi-select group is being set up between a mix of clear and secure channels. Both Software and Hardware Encryption is available for AES, DES-OFB and ADP encryption algorithms.

The added security of tamper resistant FIPs 140-2 approved key storage is exclusively supported for laptop users with Hardware Key Management. The Hardware Key Management system is fully compliant with KVL keyloading and Over the Ethernet Keying (OTEK).

## **SOLUTION COMPONENTS**

## MCC 7100 Console Positions

The MCC 7100 Console connects directly to the radio system's IP transport network without gateways or interface boxes. Vocoding and encryption are performed within each software-based operator position. MCC 7100 Consoles function as integrated components of the total radio system without additional centralized electronics.

The MCC 7100 Console position can be comprised of a laptop computer with just a headset, or operate with a traditional desktop computer and monitor with a keyboard, mouse / trackball / touchscreen, up to 8 assignable speakers, and audio accessories.

### **Audio Accessories**

Commercially available USB connected accessories that have been tested for optimal audio quality are supported.

## Compatibility

The MCC 7100 IP Dispatch Console software requires Microsoft Windows<sup>®</sup> 7 operating system. For users who need to conduct dispatch activity and business on a single computer, Microsoft Office is also approved for installation.

MCC 7100 Console is also compatible with Motorola FSA 4000 Fire Station Alerting and ASTRO 25 Advanced Messaging Solution.



## **Channel Capacity Licenses**

Channel capacity licenses are available for 5, 10, 15 or 20 encrypted or unencrypted voice streams (channels). The MCC 7100 Console supports up to 60 monitored resources. The console can be configured to shed active channels and substitute monitored channels depending on customer criteria.

Capacity licenses are issued for the life of the product and continue in force when the system is upgraded.

## **Remote Operation**

Full dispatch capability is provided when operating outside of the ASTRO 25 Network. The MCC 7100 Console supports firewall controlled access for up to 10 channels into the secure ASTRO 25 network from the Customer Enterprise Network (CEN). For remote access with additional security, virtual private network (VPN) access is also supported through the CEN.

#### SPECIFICATIONS

| System Compatibility  | ASTR0® 25 7.11 and 7.13   |   |
|---|---|---|
| Vocoder Algorithms Supported  | AMBE, (IMBE is compatible with AMBE), G.728 (for Analog Conventional) |   |
| Encryption Algorithms Supported   | AES (256bit), DES-OFB, ADP (Advanced Digital Privacy)                 |   |
| MCC 7100 IP Dispatch Console<br>Capacities                                    | Console Resides on the ASTRO 25 network                               | Console Resides outside the ASTRO 25 network              |
| Simultaneous Audio Sessions per<br>Console                                    | 5, 10,15 or 20 license options  | 5 or 10 license options                                   |
| Bandwidth Requirement per<br>Channel  | 35 kbps   | 35 kbps   |
| Simultaneous Encryption/<br>Decryption Sessions per Secure<br>Capable Console | 5, 10,15 or 20  | 5 or 10   |
| Multi-Select Groups per Dispatch<br>Console                                   | Up to 3<br>(with up to 20 Members per Multi-Select group)             | Up to 3<br>(with up to 10 Members per Multi-Select group) |
| Patch Groups per Dispatch Console   | Up to 4 (with 8 members per patch group)                              | Up to 2 (with 4 members per patch group)                  |
| Monitored Resources per Dispatch  | Up to 60  | Up to 30  |

Console

## www.motorolasolutions.com/caribbean/astro

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