FUNCTIONAL. FLEXIBLE. RELIABLE.

MCC 5500 DISPATCH CONSOLE

Designed for reliable, integrated communications, the Motorola MCC 5500 Console provides comprehensive dispatch capabilities for conventional radio systems. With integrated paging and telephony, your dispatchers can efficiently contact and manage all of the resources across your operations. A flexible and easy-to-learn Graphical User Interface (GUI) gives you the ability to customize the needed look and feel specific to your operation, as well as to the unique needs of individual dispatchers.

With comprehensive diagnostics and automatic switching the MCC 5500 Console is a fully redundant and self-healing solution, which also includes a TDM switch with distributed architecture and a console audio box (CAB) at the operator position.

The MCC 5500 Console is a member of the Motorola integrated control room solutions family, providing you with a comprehensive and coordinated approach to effective communications and resource management.

DISPATCH CONSOLE OPERATOR POSITION

Serving as the interface between the dispatcher and the console system, each dispatch console operator position consists of PC, dispatch application software, console audio box (CAB) console electronic shelf (CES) and operator accessories. For ease of use, operations are controlled via a mouse and/or a touch screen monitor, allowing dispatchers to quickly communicate with field units and telephone callers. Dispatchers can also control and monitor multiple radio channels, patch channels together and send pages, consolidating their activities and making your operations safer and more efficient.

MULTIPLE SYSTEM SUPPORT

- Stat-Alert™
- ASTRO®, ASTRO 25
- Wireless interface for other systems
- iDEN (RALP)

DISPATCH APPLICATION SOFTWARE

With an intuitive, easy-to-use GUI, the MCC 5500 Console utilizes the industry standard PC platform of Microsoft® Windows® 7 Professional with SP1 (32 bit) operating system. Our highly flexible GUI is specifically designed for fast-paced, mission critical environments with intuitive icons, pull-down menus and drag-and-drop functionality. This single application controls and centralizes your radio, telephone and paging operations for efficient workflows. Take advantage of the extensive tailoring options to meet both your operational and individual dispatcher needs, making communications simple and intuitive.

CONSOLE AUDIO BOX (CAB)

As the connection point for operator accessories, the CAB provides the interface between the MCC 5500 Console PC position and the console electronics shelf (CES). One CAB is required for each console PC position.

CONSOLE ELECTRONICS SHELF (CES)

For complete integration of communications between console operators, radio channels, voice recorders and any other external devices connected to the console, the CES consists of a console processor (COP) module to manage communications, and digital audio processor (DAP) modules to interface external analog circuits.

ADVANCED MANAGEMENT TOOLS

With our comprehensive system information toolkit, you'll improve analysis and oversight of each operator position. System events are logged continuously so you can extract important data such as average call duration, the number of times a channel is keyed up and call rates by operator or channel. We provide the diagnostics, reports and statistical data you need to make impactful operational decisions.

CONSOLE SYSTEM DATABASE MANAGER (CSDM)

Installed on a dedicated PC running Microsoft Windows 7 Professional with SP1 (32 bit) operating system, the CSDM terminal is a powerful configuration and maintenance tool required for every customer site and is used to:

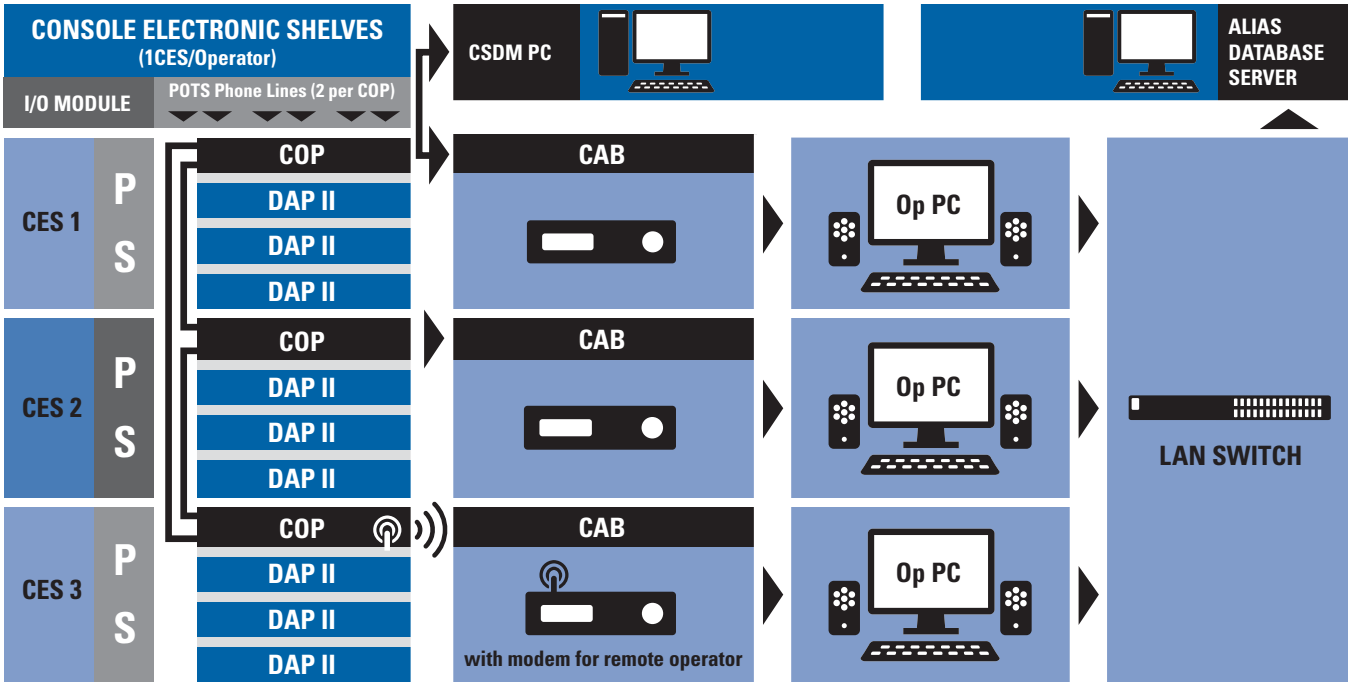
- Configure an MCC 5500 Dispatch Console system
- Access the configuration database
- Upgrade software
- Monitor the system
- Troubleshoot console problems

OPTIONAL ALIAS DATABASE MANAGER (ADM)

Further enhance your communications operations with the simple aliasing of radio unit IDs, status members and message numbers. The ADM program provides centralized server-based access to Caller ID aliases and is installed on a dedicated IP networked server running Windows Server 2008 R2 Standard with SP1 (64 bit). (The ADM is an optional component and is not included in all architectures).

MULTIPLE PAGING FORMATS SUPPORTED INCLUDING:

- 2-Tone
- Quick Call I and II™
- DTMF
- 5/6-Tone
- Custom Formats



PHYSICAL SPECIFICATIONS

Dimensions (H x W x D)	**CAB** 2.75 x 16.75 x 13 in (70 x 425 x 330 mm) [+4 in (100 mm) for cabling] **CES** 7 x 17 x 16 in (175 x 430 x 405 mm) [+4 in (100 mm) for cabling] **I/O Shelf** 1.75 x 17.625 x 8 in (44 x 448 x 200 mm) [+4 in (100 mm) for cabling]
Weight	**CAB** Max. 11 lbs (5 kg) **CES** Max. 25 lbs (11.5 kg) **I/O Shelf** Max. 7.5 lbs (3.4 kg)
Temperature Range	**CAB and Speaker** 41º to 104ºF (5º C to +40º C) **CES** 32º to 122ºF (0º C to +50º C) **I/O Shelf** 32º to 122ºF (0º C to +50º C)
Humidity	95% at 122ºF (50ºC) (non-condensing)
Control Type	32-bit Microprocessor
Audio Switch Type	Time Division Multiplexing (TDM)
Voice Digitization	64 Kb µLAW PCM
Electrostatic Discharge Immunity	15KV on all exposed operator control areas At 4kV operation is not disturbed At 15kV no permanent failures
Line Protection	Fast-acting solid-state surge protection
Memory Protection	Settings preserved in non-volatile memory
Cable Lengths	CAB to CES: 50 ft, 100 ft, up to 4000 ft CAB to PC (USB Cable, A/B connectors) 3 m (max) CSDM Computer Cable: 25 ft

END-TO-END SPECIFICATION

Frequency Response	300 to 3400 Hz +1 –3 dB @ less than 2% distortion; expect attenuation of generated tones that are outside this range.
Hum and Noise	65 dB below rated output at any
Cross Talk	Less than –65 dB at 0 dBm transmit level
Level Control	Digital AGC (Automatic Gain Control) Gain adjustment performed through Digital Signal Processors (DSPs) Gain will not increase in the presence of noise or absence of voice Constant output (less than 3 dB change) all voice input levels over rated range: Microphone: –60 to –22 dBm Receive line: –60 to +11 dBm

BASE STATION CONTROLS

Channel Control	Each channel can be separately configured for E&M, Tone, DC, iDEN or Conventional ASTRO control, or any of the following types of mobile radios: • CDM1550 LS+ • MCS 2000 III • Conventional ASTRO • APX 7500 Mobile in a Tray (05 Control Head, Remote Mount) • ASTRO W9 Consolettes - ASTRO Spectra Consolette W9 - ASTRO Spectra Plus Consolette W9 - ASTRO Digital XTL 5000 Consolette W9 The following radio types are controlled by the ASTRO DIU (ACIM) protocol: ASTRO Spectra Consolette W7, ASTRO Spectra Plus Consolette W7, ASTRO Digital XTL 5000 Consolette W7, and the APX 7500 Consolette. The following iDEN radios are supported as control stations: i325 and i365IS.
Tone Control	Function tone in the 200 to 3400 Hz range Frequency adjustable in 0.1 Hz increments Total tone duration adjustable from 0 to 60,000 ms in 1 ms increments Guard tone configurable for 2100 Hz, 2175 Hz, 2300 Hz, or 2325 Hz.
DC Control	125 VDC Positive and negative current (0.5 to 12.5 mA in 0.5 mA increments) Max loop resistance including base station termination; 10 kΩ
PTT Relay	Form A dry closures 150 mA max, or 60 VDC max Switching power 3 watts max Maximum distance 200 ft within one building

TRANSMIT LINE OUTPUTS

Line Output	Adjustable from –60 to +11 dBm
Output Impedance	600 Ω or 10 kΩ (high impedance)

RECEIVER LINE INPUTS

Receiver Sensitivity	Adjustable from –60 to +11 dBm
Call Light Sensitivity	Adjustable from –5 to –32 dBm, relative to receive sensitivity
Line Balance	60 dB @ 1004 Hz
Input Impedance	600 Ω

OTHER AUDIO PORTS

Recorder Port (per channel)	Output consist of summed transmit/receive audio of the channel with a high level guard tone (HLGT) filter. Output level is programmable from –60 to 11 dB into 600 Ω
Recorder Port (per console)	Output consists of different sources (select, unselect, telephone, call director, and monitor speaker) and transmit audio of the operator. Fixed nominal output is –10 dBm, into 600 Ω
Aux./Paging Input	Adjustable from –60 to +11 dBm, balanced 600 Ω input

AUDIO CONTROLS

Individual Volume	34 dB range in 15 discrete steps Muting configurable for –24 dB or full mute
All Mute	24 dB below maximum volume setting (15) or full muting of unselected channels with timer programmable from 1 to 120 seconds or for an infinite duration. For volume settings less than 15, the All Mute attenuation gradually decreases to reduce the muting effect. For volume setting of 11 or lower, All Mute has no effect.

STATUS OUTPUTS AND INPUTS – CAB AND I/O SHELF

Auxiliary Outputs	Form C dry closures 1 A max. at 24 VDC Switching power 30 watts max Maximum distance 200 ft within one building
Auxiliary Inputs	Opto-coupled inputs High impedance 0.5 to 12 mA input current Maximum distance 200 ft within one building

POWER SUPPLY CONSOLE AUDIO BOX (CAB) SPECIFICATIONS

AC Input Voltage	90-260 VAC, 1.1 A max.
Input Frequency	50/60 Hz, ±3 Hz
Power Output	50 W max.
DC Outputs	+ 12 VDC @ 4.2 A
Agency Approvals	UL (Underwriters Laboratories)
	CSA (Canadian Standards Association)
	CE Mark (Conformité Européene)

POWER SUPPLY (CES) SPECIFICATIONS

AC Input Voltage	120/240 VAC
	9 A @ 115 VAC; 4.5@ 230 VAC
Input Frequency	50/60 Hz, ±3 Hz
Power Output	300 W max.
Agency Approvals	UL (Underwriters Laboratories)
	CSA (Canadian Standards Association)
	CE Mark (Conformité Européene)

POWER SUPPLY (I/O SHELF) SPECIFICATIONS

AC Input Voltage	120/240 VAC, 0.5 A max.
Input Frequency	50/60 Hz, ±3 Hz
Power Output	30 W max.
DC Outputs	+5 VDC, 2.6 A max.
Agency Approvals	UL (Underwriters Laboratories)
	CSA (Canadian Standards Association)
	CE Mark (Conformité Européene)

REGULATORY CERTIFICATIONS

Safety	IEC60950 1:2001
	EN 60950-1: 2001 First Edition
EMC Emissions & Immunity	EN 55022: 1998 + A1:2001, A2:2002
	EN 55024: 1998 + A1:2001, A2:2003
	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 6100-4-11
	EN 61000-3-2:2000
	EN 61000-3-3:1995 + A1:2001
European Council Directives	Provisions of the normatives:
	EMC Directive 89/336/EEC (including amendments)
	Low Voltage Directive 73/23/EEC (amended by 93/68/EEC)
	R&TTE Directive 99/5/EEC

MCC SERIES ACCESSORIES SPECIFICATIONS

Dimensions (H x W x D)	**Speaker** Without bracket: 4.9 in x 4 in x 3.5 in (124 mm x 102 mm x 89 mm) With bracket: 4.9 in x 4 in x 5.8 in (124 mm x 102 mm x 146 mm) **Headset Jack** 1.6 in x 5 in x 6 in (41 mm x 127 mm x 152 mm) **Microphone** Gooseneck at 90°: 4.5 in x 4.8 in x 6.6 in (114 mm x 121 mm x 168 mm) Gooseneck at 180°: 21.8 in x 4.8 in x 6.6 in (552 mm x 121 mm x 168 mm)
Weight	**Speaker** 0.7 lbs (0.3 kg) **Headset Jack** 1.2 lbs (0.5 kg) **Microphone** 2.4 lbs (1.1 kg)
Power Input	**Speaker** Add 0.05 Amps per speaker to CAB power Input at 120 VAC **Headset Jack** Negligible **Microphone** Negligible
Thermal Output	**Speaker** 15 BTU/Hr (maximum), 8 BTU/Hr (typical) **Headset Jack** Negligible **Microphone** Negligible

MCC 5500 DISPATCH CONSOLE CAPACITIES

Operator Positions	Up to 36 operator positions per console system
Channel Capacity	Up to 128 radio channels (sharable)
Central Office (CO) Lines	Up to 2 CO lines per dispatch console position
	Up to 72 CO lines per console system
Multi-Select Groups	Up to 10 Multi-Select groups per dispatch console (with up to 16 radio channel resources per Multi-Select)
Patch Groups	Up to 10 Patch groups per dispatch console (with up to 16 radio channel resources per Patch)
Paging Buttons	Up to 512 Paging buttons (with up to 50 single pages in a group)
General I/O functions	Up to 512 general I/O functions
Speed Dial Aliases	Up to 10,000 Speed Dial Aliases per console

Specifications subject to change without notice. All specifications shown are typical. Dispatch console meets applicable regulatory requirements.

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