



MOTOROLA MCC 5500

Dispatch Console



The Motorola MCC 5500 GUI is a Windows® XP application. The GUI provides a flexible and intuitive front end to the Motorola MCC 5500 Dispatch Console.

FEATURES

Flexible Graphical USER Interface

- Microsoft based application
- Utilizes pull-down menus, drag-and-drop, tool-tips.
- Intuitive icons
- Resize windows and icons

Enhanced Monitoring Capabilities

- Automatic monitoring and testing of system components
- Generate statistical reports
- Log Dispatcher Operations

Industry Standards

- Microsoft Windows XP OS
- Standard Ethernet LAN
- Standard PC, Monitor and Accessories
- Touchscreen

Integrated Resources

- Single application to control Radio, Telephone and Paging operations
- Single operator PC for IRR and Telemetry control

Multiple System Support

- Stat-Alert™
- ASTRO™
- Wireless Interface for other systems

Multiple Paging Formats Including

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

The Motorola MCC 5500 Dispatch Console provides fully functioned dispatch capabilities for Conventional radio systems. With integrated paging and telephony your dispatch team can effectively manage all resources at your disposal. With its flexible GUI the MCC 5500 Dispatch Console gives you the capability to customize the look and feel for your operation. The MCC 5500 Dispatch Console includes a TDM

switch (CES), utilizing a distributed architecture, and an audio unit (CAB) at the operator position. Comprehensive diagnostics and automatic switching allow for a fully redundant and self-healing solution. The MCC 5500 Dispatch Console is part of the family of Motorola integrated Control Room applications, providing a co-ordinated approach to effective resource management.

SPECIFICATION SHEET

MOTOROLA MCC 5500
Dispatch Console

The MCC 5500 dispatch console solution consists of the following:

MCC 5500 Dispatch Console Operator Position

The MCC 5500 dispatch console operator position is the interface between the dispatcher and the console system. Each dispatch console operator position consists of PC, dispatch application software, Console Audio Box (CAB), and operator accessories. The operation is controlled via a mouse and/or touch screen monitor. It provides a means for a dispatcher to communicate with field units and telephone caller. It also allows dispatchers to control and monitor multiple channels of radio activity, patch various channels together, and send pages. Each operator position is connected to a CAB and Console Electronic Shelf (CES).

Dispatch Application Software

The MCC 5500 dispatch application software program features an intuitive, easy-to-use Graphical User Interface (GUI) that runs under the Microsoft Windows® XP operating system utilizing the industry standard PC platform. The GUI is extremely flexible and can be tailored to both operational and dispatcher needs making dispatching simple and intuitive. The layout and colors of the GUI can be tailored to any given operation and can be configured on a per operator basis.

Console Audio Box (CAB)

The CAB provides the interface between the MCC 5500 dispatcher PC and CES. It is the connections point for the operator accessories. There is one CAB for each console position.

Console Electronics Shelf (CES)

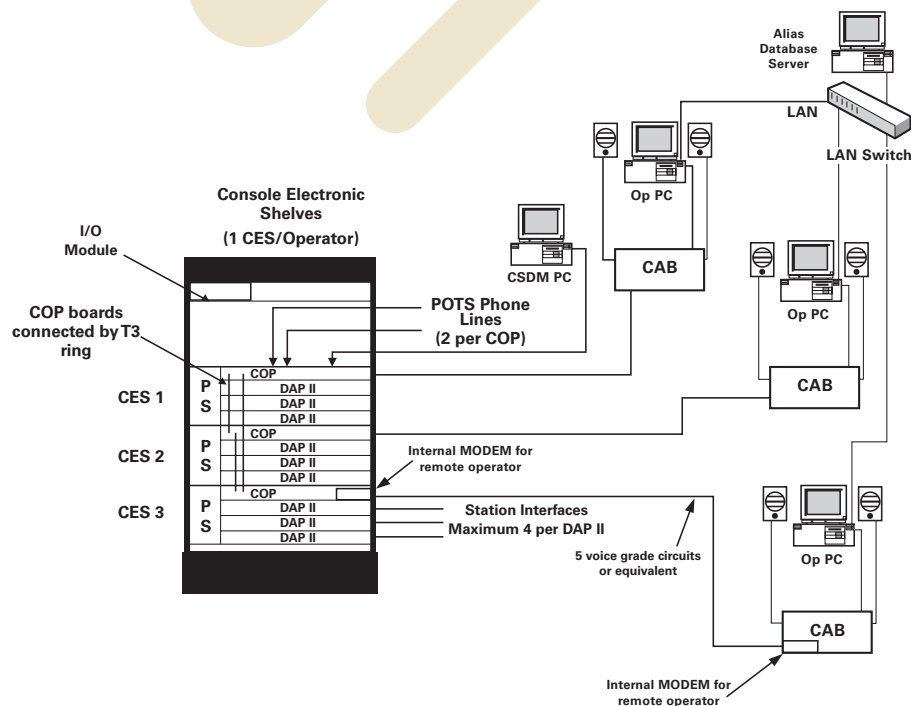
The CES consists of a console processor (COP) module to manage communications and digital audio processor (DAP) modules to interface external analog circuits. The modules facilitate communications between console operators, radio channels, voice recorders, and any other external devices connected to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

Console System Database Manager (CSDM)

The CSDM is a powerful configuration and maintenance tool for the MCC 5500 dispatch console and is a requirement for every customer site. The CSDM is used to configure a MCC 5500 dispatch console system, to access the configuration database, to upgrade software, to monitor the system, and to troubleshoot console problems. It also provides extensive on-line help. The CSDM program is located on a dedicated PC that runs the Windows XP operating system. The CSDM terminal is located in the backroom.

Alias Database Manager (ADM) Server (optional)

The ADM is a program for managing centralized server-based access to Caller ID aliases. The ADM provides simple aliasing of radio unit IDs, status members and message numbers. The ADM is an optional component and not included in all architectures. The ADM program is located on a separate PC Server that runs on Windows 2003 operating system. A network is required to operate ADM using standard networking techniques.



SPECIFICATION SHEET

MOTOROLA MCC 5500
Dispatch Console

PHYSICAL SPECIFICATIONS

| | | |
|----------------------------------|---|--|
| Dimensions (H x W x D) | CAB | 2.75 x 16.75 x 13.00 inches (70 mm x 425 mm x 330 mm) [+4 in (100 mm) for cabling] |
| | CES | 7 x 17 x 16 inches (175 mm x 430 mm x 405 mm) [+4 in (100 mm) for cabling] |
| | I/O Shelf | 1.75 x 17.625 x 8 inches (44 mm x 448 mm x 200 mm) [+4 in (100 mm) for cabling] |
| Weight | CAB | Max. 11 lb. (5 kg) |
| | CES | Max. 25 lb. (11.5 kg) |
| | I/O Shelf | Max. 7.5 lb. (3.4 kg) |
| Temperature Range | CAB and Speaker | 41° to 104°F (5° C to +40° C) |
| | CES | 32° to 122°F (0° C to +50° C) |
| | I/O Shelf | 32° to 122°F (0° C to +50° C) |
| Humidity | 95% at 122°F (50°C) (non-condensing) | |
| Control Type | 32-bit Microprocessor | |
| Audio Switch Type | Time Division Multiplexing (TDM) | |
| Voice Digitization | 64 Kb μ LAW PCM | |
| Electrostatic Discharge Immunity | 15KV on all exposed operator control areas At 14KV 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 3300 Hz +1 -3dB @ less than 2% distortion |
| Hum and Noise | 65 dB below rated output at any port |
| CrossTalk | Less than -65 dB at 0 dB 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 |

SPECIFICATION SHEET

MOTOROLA MCC 5500
Dispatch Console

BASE STATION CONTROLS

| | |
|-----------------|---|
| Channel Control | Each channel can be separately configured for E&M, Tone, DC or ASTRO DIU control, or any of four types of mobile radios: CDM1550 LS+, Consolette W9, MCS 2000 III, or MTM700. |
| Tone Control | Function tone in the 300 to 3300 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 increments) Max loop resistance including base station termination; 10K ohms |
| PTT Relay | Form A dry closures 150 mA max, or 60 V DC 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 ohms |

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 ohms |

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 |
| 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-ohms |
| Aux./Paging Input | Adjustable from -60 to +11 dBm, balanced 600-ohm 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 current setting or full muting of unselected channels with timer programmable from 1 to 120 seconds or for infinite duration |

STATUS OUTPUTS AND INPUTS - GENERAL I/O MODULE (I/O BOX)

| | |
|-------------------|--|
| 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 |

SPECIFICATION SHEET

MOTOROLA MCC 5500
Dispatch Console

POWER SUPPLY (CAB) CONSOLE AUDIO BOX (CAB) SPECIFICATIONS

| | |
|------------------|--|
| AC Input Voltage | 110-240 VAC, 1.6 A max. |
| Input Frequency | 50/60 Hz, ± 3 Hz |
| Power Output | 48 W max. |
| DC Outputs | +12 VDC @ 4 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 @ 230VAC |
| 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 2nd edition 1991 + A1, A2, A3, A4 EN 60950: 1992 + A1, A2, A3, A4, A11 |
| EMC Emissions & Immunity | EN 55022: 1998 + A1, A2 EN 55024: 1998 + A1, A2 EN 6100-6-1:2001 EN 61000-4-2 EN 61000-4-3 ENV 50204 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 1999/5/EEC |

SPECIFICATION SHEET

MOTOROLA MCC 5500
Dispatch Console

MCC SERIES ACCESSORIES SPECIFICATIONS

Speaker

| | |
|------------------------|--|
| Dimensions (H x W x D) | Without bracket: 4.9 x 4 x 3.5 inches (124 mm x 102 mm x 89 mm) With bracket: 4.9 x 4 x 5.8 inches (124 mm x 102 mm x 146 mm) |
| Weight | 9.7 lb (0.3 kg) |
| Power Input | Add 0.05 Amps per speaker to CAB power Input at 120VAC |
| Thermal Output | 15 BTU/Hr (maximum), 8 BTU/Hr (typical) |

Headset Jack

| | |
|------------------------|---|
| Dimensions (H x W x D) | 1.6 x 5 x 6 inches (41 mm x 127 mm x 152 mm) |
| Weight | 1.2 lb (0.5g) |
| Power Input | Negligible |
| Thermal Output | Negligible |

Microphone

| | |
|------------------------|--|
| Dimensions (H x W x D) | Gooseneck at 90°: 4.5 x 4.8 x 6.6 inches (114 mm x 121 mm x 168 mm) Gooseneck at 180°: 21.8 x 4.8 x 6.6 inches (552 mm x 121 mm x 168 mm) |
| Weight | 24 lb (1.1 kg) |
| Power Input | Negligible |
| Thermal Output | 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 MSel) |
| 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 |



MOTOROLA

Motorola, Inc. 1301 E. Algonquin Road, Schaumburg, Illinois 60196 U.S.A. www.motorola.com/governmentandenterprise 1-800-367-2346

MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office. Microsoft and Windows are registered trademarks of Microsoft Corporation; and Windows XP is a trademark of Microsoft Corporation. All other product or service names are the property of their registered owners. © Motorola, Inc. 2007 (0709)
All rights reserved.

R3-13-2007C