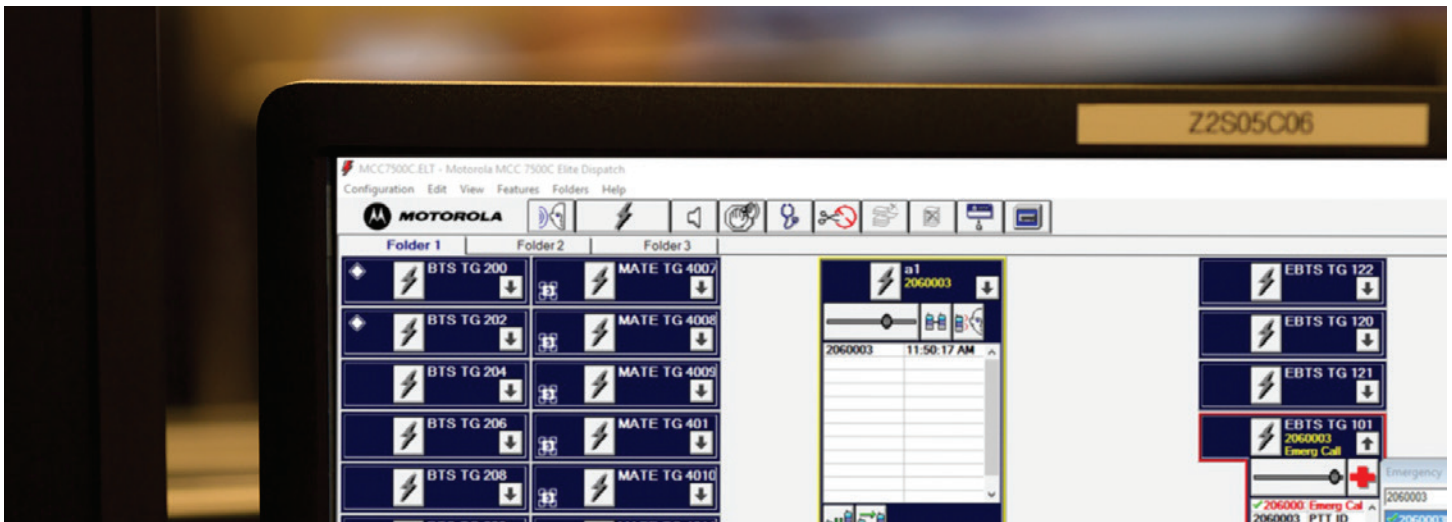**MOTOROLA** *SOLUTIONS*

DIMETRA MCC 7500 IP DISPATCH CONSOLE

Turn your dispatch center into an information pipeline, on which first responders can rely on for the intelligence they need. The TETRA standard-based MCC 7500 IP Dispatch Console enables effective and reliable dispatching capabilities on your DIMETRA system. Keep your first responders connected and informed when it matters most with the MCC 7500 IP Dispatch Console. For organisation that operate in an environment which requires end-to-end encryption the MCC 7500 Secure would be the ideal solution as it provides encrypted dispatching communications.

THE RIGHT INFORMATION, RIGHT AWAY

The connected world gives your agency access to more information than they've ever had before. This information can prove crucial to first responders in identifying and neutralising threats to themselves and others before a situation escalates and results in tragedy. However, with the explosion of available data comes the increasingly difficult task of managing and communicating information.

The MCC 7500 console offers dispatchers integration capabilities to reach across multiple applications and resources, helping to coordinate a response and provide the necessary mission-critical intelligence to ensure the safety of your first responders.

Multiple delivery options are available including, voice and tone, that connects dispatches to responders across your DIMETRA network. These delivery options help ensure your dispatch center can provide the right information, right away.

EASE OF USE MAKES FOR MORE EFFECTIVE SUPPORT

Give your dispatchers the tools they need to effectively and effortlessly feed crucial intelligence to responders in the field. The MCC 7500 console provides dispatchers with an intuitive means to organise resources, coordinate a response and communicate valuable information. Its familiar interface, which emulates the legacy Centracom graphic user interface (GUI) look and functionality, allows dispatchers to quickly adapt to a new system with a short learning curve and minimal training.

Purpose-designed workflows with minimal click-throughs, critical resource information displays and contextual right-click menus are just some of the features that can help your dispatch operation become more streamlined and effective, and your dispatchers more efficient and productive.

THE INTELLIGENCE YOU NEED, EVERY TIME, ALL THE TIME

First responders rely heavily on dispatch for support. They need to be confident that your team can always offer the right information and coordination when an emergency arises. The inherent reliability and security of the DIMETRA system ensures first responders and dispatchers stay connected with best-in-class audio quality.

For peace of mind that the right information always gets through, rely on our smart voice prioritization and intelligent audio routing capabilities at your dispatch positions. Furthermore, continuous link and resource polling gives your dispatchers the confidence that once connected they stay connected.

SCALE UP YOUR SYSTEM, NOT YOUR COSTS

If your agency is like most others, money is tight for you right now. The MCC7500 console helps keep your costs down with flexible servicing options. That means less purpose-built hardware for you to buy and maintain, with additional savings on the space and electricity needed to run the system. The software-based system, managed from a centralised, single point of contact, reduces the time and skills needed for updates while the scalable platform lets your system grow as much or as little as you need. The MCC 7500 console can be deployed incrementally as it can interoperate within legacy console systems, giving you even more installation flexibility.

LEVERAGE A SHARED SYSTEM

With agency partitioning, organisations can take advantage of a shared system while ensuring security and control of agency data and operating procedures. Secure partitions protect agency data from access or alteration by other agencies sharing the same system. Individual agencies have their own security credentials and maintain control over their own dispatch console resources.

CLEAR AND SECURE OFFERINGS AVAILABLE

The DIMETRA MCC 7500 IP Dispatch Console comes in either clear or secure versions: MCC 7500C and MCC 7500S. Both provide robust dispatching capabilities while only the secure version (MCC 7500S) offers end-to-end encryption of all voice and data communications. The MCC 7500S ensures your sensitive information is never compromised. The following sections provide an overview of the components and descriptions of each of the two offerings.

MCC 7500C CONSOLE OPERATOR POSITION

The MCC 7500C console operator positions connect directly to the radio system's IP transport network without gateways or interface boxes. Audio processing and switching for dispatch is performed within each software-based operator position, without the need of additional centralised electronics. The MCC 7500C consoles function as integrated components of the entire radio system, enabling full participation in system level features such as agency partitioning.

The dispatch position hardware consists of a monitor, personal computer with soundcard, keyboard and mouse, speakers, and audio accessories.

The MCC 7500C console does not require separate configuration or performance management equipment. The console system is configured and managed by the radio system's configuration manager, fault manager and performance reporting applications providing the user with a single point for configuration and managing the entire radio system.
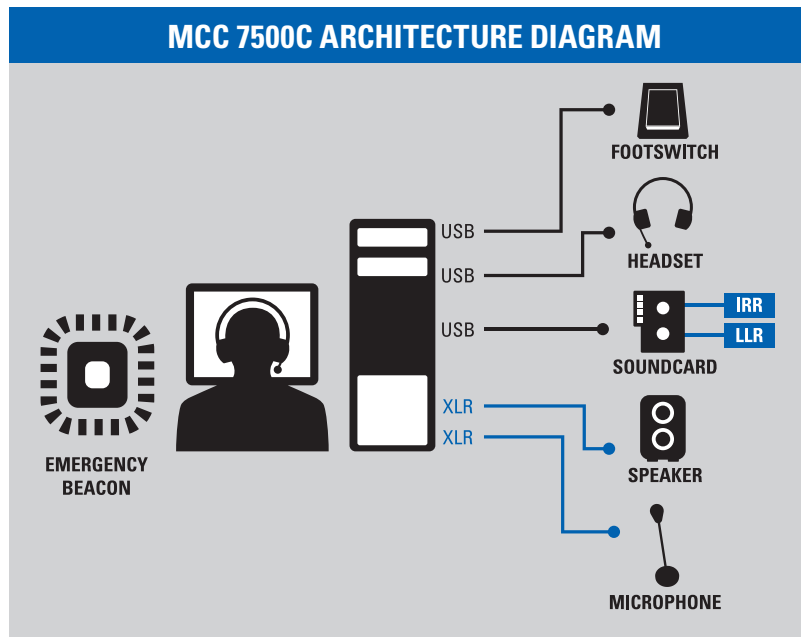
CONVENTIONAL GATEWAY

The Conventional Channel Gateway (CCGW) enables both analog and digital channels to interface with MCC 7500C consoles with no need for a separate hardware network and channel banks. Conventional calls are transported between the dispatch operator positions and CCGWs on the same IP network as trunked calls.

A CCGW provides 2-wire and 4-wire analog ports for analog channels, V.24 ports for older conventional channels and IP connectivity for current architecture. Enhanced digital control of consolettes can be achieved by using a combination of analogue and V.24 ports. CCGW's are available in two capacities. The standard density CCGW supports up to eight "port based" channels and up to sixteen "IP based" channels for a total of twenty four channels. The high density CCGW supports up to sixteen "port based" channels and up to sixteen "IP based" channels for a total of thirty two channels.

ARCHIVING INTERFACE SERVER (AIS)

The AIS is a digital logging interface, comprised of a personal computer. Audio and call control information is sent across the IP network between the AIS and logging recorder. A distributed IP architecture allows components to be located where needed for quickest maintenance or resolution of issues ensuring the best connectivity.

MCC 7500C ARCHITECTURE DIAGRAM

FOOTSWITCH

USB — HEADSET

USB

USB — SOUNDCARD — IRR / LLR

XLR — SPEAKER
XLR

EMERGENCY BEACON

MICROPHONE

MCC 7500 SECURE COMPONENTS OVERVIEW

The MCC 7500S includes all of the same features and functionality as the MCC7500C with the addition of the items below.
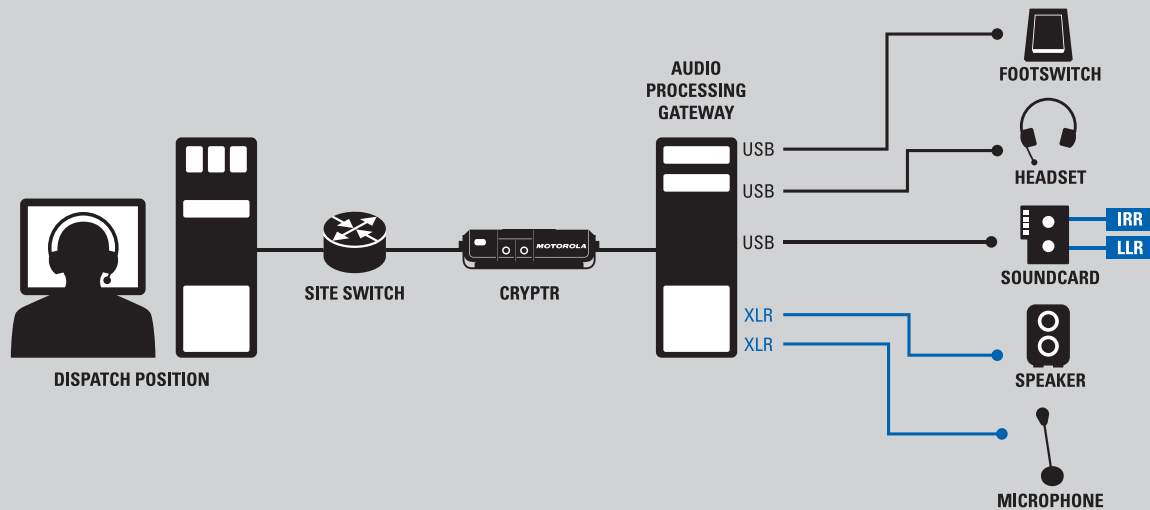
MCC 7500S CONSOLE OPERATOR POSITION MCC 7500S console operator positions connect directly to the radio system's IP transport network without gateways or interface boxes. Audio processing and switching for dispatch is performed within each software-based operator position, without the need of additional centralised electronics. The end-to-end encrypted MCC 75000S Dispatch Console runs the Centracom dispatch application software and comprises the following equipment.

CALL CONTROL ENTITY The Call Control Entity (CCE) is a PC which provides the call control functionality for the end to end encrypted console, including providing the Centracom GUI interface.
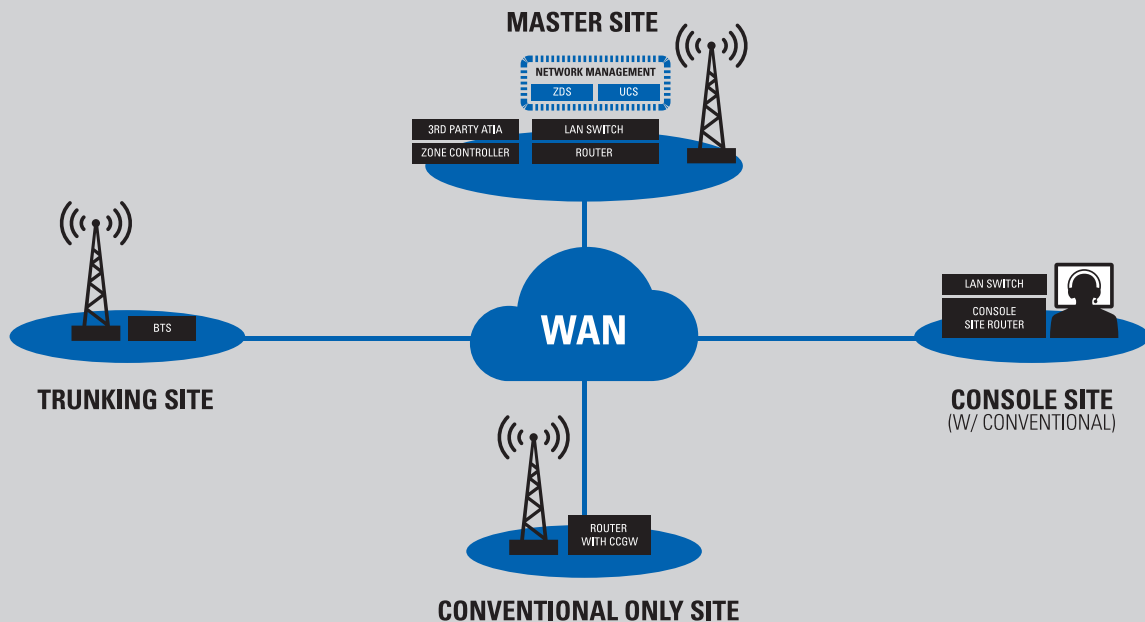
AUDIO PROCESSING ENTITY The Audio Processing Entity (APE) provides the audio interfaces i.e. microphone, loudspeakers, and analogue logging output for the dispatch position.

CRYPTR The CRYPTR is a standalone device that is Ethernet connected which performs encryption, as well as, decryption of audio for the MCC7500S.

MCC 7500S ARCHITECTURE DIAGRAM

MCC 7500 SYSTEM ARCHITECTURE

PORTFOLIO CAPACITIES	MCC 7500 SECURE	MCC 7500 CLEAR
MAXIMUM NUMBER OF RESOURCES ACCESSED	200	200
MAXIMUM NUMBER OF INBOUND SIMULTANEOUS AUDIO STREAMS	8	30
TOTAL NUMBER OF RESOURCES IN ALL PATCH GROUPS PER DISPATCH CONSOLE	48	48
NUMBER OF RESOURCES PER PATCH GROUP	32	32
NUMBER OF PATCH GROUPS PER DISPATCH CONSOLE	16	16
CALL COUNT FOR END TO END ENCRYPTION MCC 7500S DISPATCH CONSOLE	8	0
TRUNKING & CONVENTIONAL TALKGROUPS END TO END ENCRYPTED	71	0
TRUNKING AND CONVENTIONAL TALKGROUPS PER DISPATCH CONSOLE	0	200

SYSTEM COMPATIBILITY

Dimetra System Release 6.0 or later

VOCODER ALGORITHMS SUPPORTED

ACELP, G.728 (For Analog Conventional)

MONITOR REQUIREMENTS

With Mouse or Trackball: 17'' minimum, 20'' recommended

SPEAKER MOUNTING OPTIONS

Desktop, furniture mount, or wall mount (with bracket accessory)

CONNECTIONS

DEVICE	CONNECTOR TYPE
One Desktop Microphone	XLR
Desktop Microphone PTT	USB
Two Headsets	USB
Two Desktop Speakers	XLR
One Local Logging Recorder	XLR
One Radio Instant Recall Recorder	XLR
One Footswitch	USB
Beacon	USB

SPEAKER MOUNTING OPTIONS

Desktop

DISPATCH CONSOLE CABLE LENGTHS

Speaker Cable	2.5 m
Headset Adapter Cable	0.5 m
Headset Cable to Adapter	2.0 m
Microphone Cable	2.0 m
Footswitch Adapter Cable	2.9 m
Footswitch Cable to Adapter	3.0 m
Beacon Cable	1.8 m

SUPPORTED CONSOLE SITE LINK TYPES

Fractional T1/E1, Single T1/ E1, Multiple T1/E1s Redundant and non-redundant versions are supported

SIZE AND WEIGHT

DEVICE	HEIGHT	WIDTH	DEPTH	WEIGHT
Tower PC	447 mm	178 mm	455 mm	11.7 kg
Speaker	226 mm	151 mm	142 mm	3.7 kg
With ISO Pod	242 mm	151 mm	142 mm	3.7 kg
Microphone				
Gooseneck at 90-180 degrees	210 - 420 mm	150 mm	150 mm	2.9 kg
Without XLR connector	210 - 420 mm	150 mm	240 mm	2.9 kg
With XLR connector				
Beacon (no tube)	294 mm	70 mm	70 mm	0.1 kg
Rack Mountable PC (1U) + 35 mm for front handles	43 mm	427 mm	574 mm	12.3 kg

POWER CONSUMPTION AND THERMAL

DEVICE	POWER INPUT	POWER INPUT
Operator PC (loaded)	Max 6A at 100-127 VAC	985 BTUs/hour
Operator PC (loaded)	Max 3A at 200-240 vac	985 BTUs/hour
Speaker Idle	5 VA at any voltage of 100, 110, 220 or 230 VAC	N/A
Speaker Max (full load)	50 VA at any voltage of 100, 110, 220 or 230 VAC	170 BTUs/hour
Desktop Microphone	Negligible	Negligible
Beacon	Negligible	Negligible

CERTIFICATIONS

The various hardware elements of the MCC7500 are certified to meet the requirements for EN, UL, CSA and CE.

Safety	CSA 60950-1-03 EN60950-1 2001	
EMC Immunity	FCC part 15 Class A EN55022 1998 + A1: 2001 + A2:2003 (CISPR-22 Class A)	EN55024+A1:200+A2:2003 EN61000-3-2 2000 EN61000-3-3 1995 +A1:2001
EMC Emissions	International Energy Efficiency Level V	

For more information please visit www.motorolasolutions.com/dispatch

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