MC SERIES
Deskset Controllers

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Pictured from left to right are the MC2000 Advanced Model which includes Tone Paging and MDC1200 signaling, the MC2500 Multi-channel Model, and the MC1000 Basic Model.

PRODUCT OVERVIEW

The MC Series Desktop Controllers allow remote access to the functions of a compatible station (base station, repeater, or control station). All MC Series Controllers are compatible with conventional , tone, DC and E&M conventional radio systems and also LTR trunking systems. (LTR functionality is dependant on the MC model and radio used.)

STANDARD FEATURES

► Multiple models for various applications
  • Extended Local Control for controlling an on site station up to 1000 feet away
  • Tone or DC Remote Control for controlling a station over 600 ohm telephone lines

► Multiple control points allow up to 10 units to operate in parallel

► Internal microphone, intercom, and speaker for convenient operation

► Push-to-talk (PTT) handset for private communications

► Monitor switch for monitoring channel activity before transmitting

► Similar configuration and design features allow for smooth transitions between dispatch solutions

MC1000 BASIC MODEL (NON-SIGNALING) FEATURES

FOR LOCAL CONTROL MODELS

- ► Single Frequency Station Control
- ► Push-to-Talk Handset
- ► Speaker
- ► Speaker on/off (receive audio is heard through handset and speaker simultaneously)
- ► Volume Control
- ► Full Duplex Capability
- ► Internal Mic (for use without handset)
- ► Transmit Button with LED
- ► Monitor Button

- ► Front panel programmable (easy setup – no RSS required for Basic models)
- ► Intercom between MC1000 units or to properly equipped station
- ► Operator cross mute
- ► 10 max. in parallel
- ► Parallel Operator Busy Indication
- ► 120V AC - 60Hz Power Supply
- ► Wall mountable

FOR TONE AND DC CONTROL MODELS ONLY IN ADDITION TO LOCAL FEATURES

- ► 4 Frequency Station Control
- ► 2 or 4-Wire Audio
- ► Takeover/Line Select allows a supervisory unit to override other parallel units or allows connection of two base stations for back-up control where one station is active at any one time.

MC2000 ADVANCED MODEL (SIGNALING) FEATURES

- ► **All MC1000 Basic Model features plus:**
- ► 110/220V AC 50/60 Hz Power Supply
- ► Parallel Status (Tone model only)..................................Each deskset operator knows the selected frequency and status.
- ► Programmable Voice Delay..User can speak immediately after pressing PTT or Transmit bar without clipped words.
- ► Deskmic compatible..Allows another choice of audio accessory
- ► MDC1200 Signaling and Paging...................................Operator can selectively signal pagers, portables, or mobile radios.
  Supports the following: (E/D; E = Encode, D = Decode)
  - • PTT Unit ID (E/D) ....Displays unit ID of caller (250 aliases).
  - • Voice Selective Call (E/D) ....Permits selective communication with an individual or group.
  - • Call Alert/Short Call Alert (E/D) ....Informs the user to call-in by sending a "page" to their portable or mobile.
  - • Status Message (D)..Displays "S01/M02".
  - • Radio Enable/Disable (E)...Allows operator to remotely enable and disable a lost or stolen portable, for example.
  - • Radio Check (E)...Console operator can determine if a radio is on the air and within range without disturbing the radio user.
  - • Emergency Alarm (D)..Flashing display, audible tone, and an output for external alarms can alert the console operator of emergency situations
  - • Recent User Stack..Allows last nine records to be stored for review at a later time.
  - • RS232 Printer Port..Allows RSS programming via computer or the logging of MDC1200 inbound/outbound message activity for permanent record keeping on a serial printer.

MC2000 ADVANCED MODEL (SIGNALING) FEATURES (cont'd)

- ► Paging Encoder ....Allows you to selectively call a pager, portable, or mobile unit without tying up the radio channel with too much voice traffic and eliminating the need to purchase a stand alone encoder. The following schemes are supported: 2 Tone, Quick_Call I & II, DTMF, 5 Tone, 6 Tone, GE99, NEC5, NEC6, Reach 1+1, Pulse and custom page via aliasing.
- ► 18 Programmable Buttons ....Allows for deskset flexibility. Button usage may include single button paging, fast access to paging or MDC1200 type functions, alert tone (choice of 3), frequency selection, speaker mute, relay control and wildcards.
- ► Frequency Control ....16 Frequency Control (Tone) and 4 Frequency Control (DC) with alias names
- ► DTMF Decode...Allow ANI (Automatic Number Identification) or selective call mode of operation
- ► Securenet Capable (Coded/Clear) ....Allows coded or clear modes of operation on Motorola secure equipped stations
- ► RSS Programming Required.........................Customize the of the console to fit customer requirements and ease use of operation.
- ► External connectors.....................................For power, RSS/printing, base station connections, and deskmic
- ► 2 line X 20 character backlit display ....Displays important, easy to read info to the operator such as channel status, alias names, emergency ID's, VU meter and user ID's.

MC2500 MULTI-CHANNEL MODEL FEATURES

- ► **All MC2000 Advanced Model features plus:**
- ► 4 channel control ....Controls up to 4 radios or base stations, the first channel can be Tone or DC control.
- ► Individual channel select and instant transmit
- ► Unselect speaker connector ....Allows connection of unselect speaker to separate audio for ease of operation
- ► Individual volume control.............................Each of the 4 channels can have individual volume controls
- ► All mute...Mutes audio on the unselected channels
- ► Dedicated logging recorder output...............Fixed 600 ohm output (no keying tones) with all audio summed for recording.
- ► Radio Patch ....All four channels can be patched together
- ► Multi-Select ....All four channels can be selected and transmitted on simultaneously
- ► Multi-tasking..Allows for multiple operations simultaneously

ACCESSORIES

FOR EXTENDED LOCAL CONTROL

- ► Junction Box connects up to six local desksets to the station. When 7-10 desksets are operating in parallel, two junction boxes are required.
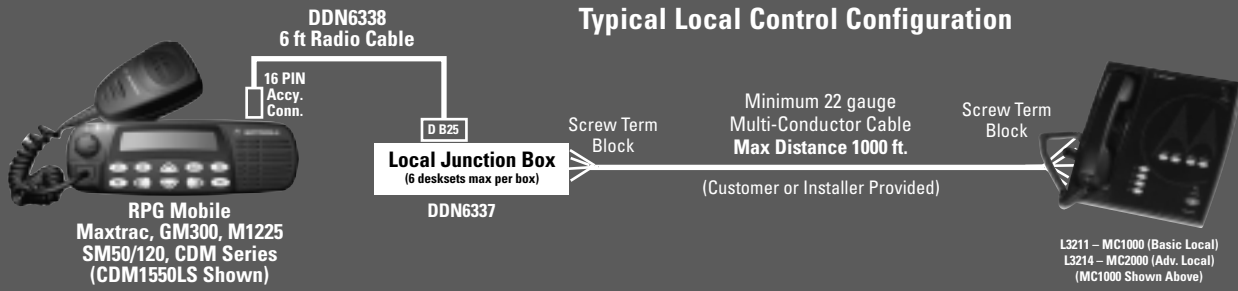
TONE AND DC REMOTE CONTROL ADAPTERS

Tone and DC Remote Adapters allow local control base stations to be controlled via a Tone of DC Remote Deskset. Each adapter will accept up to 10 desksets.
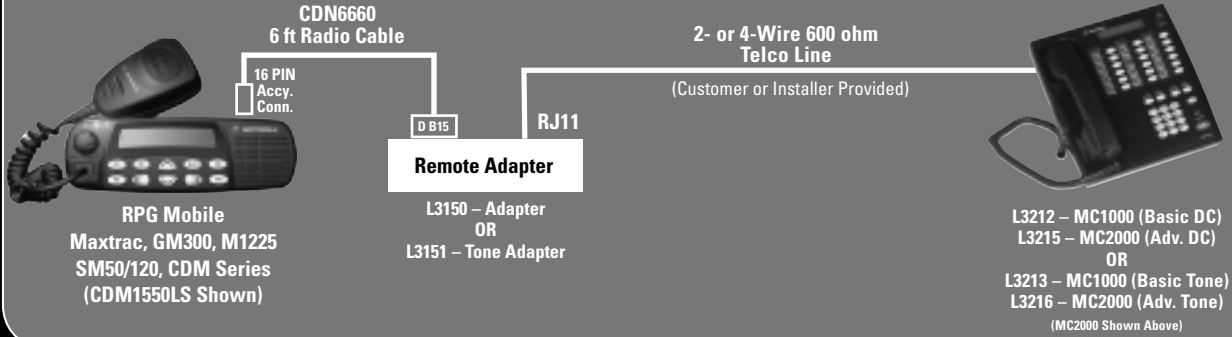
STANDARD FEATURES

- ► LED Indicators for Power, Line PTT and Monitor
- ► 16 Function Tone Decode (Tone Model Only)
- ► Optional 4-Wire Audio
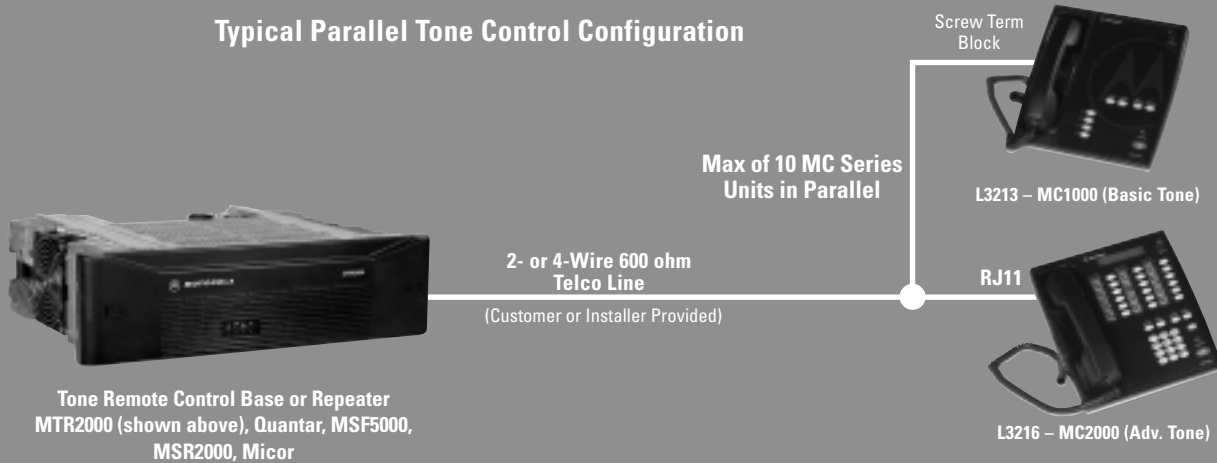- ► Optional 110V or 220V AC Power Supply
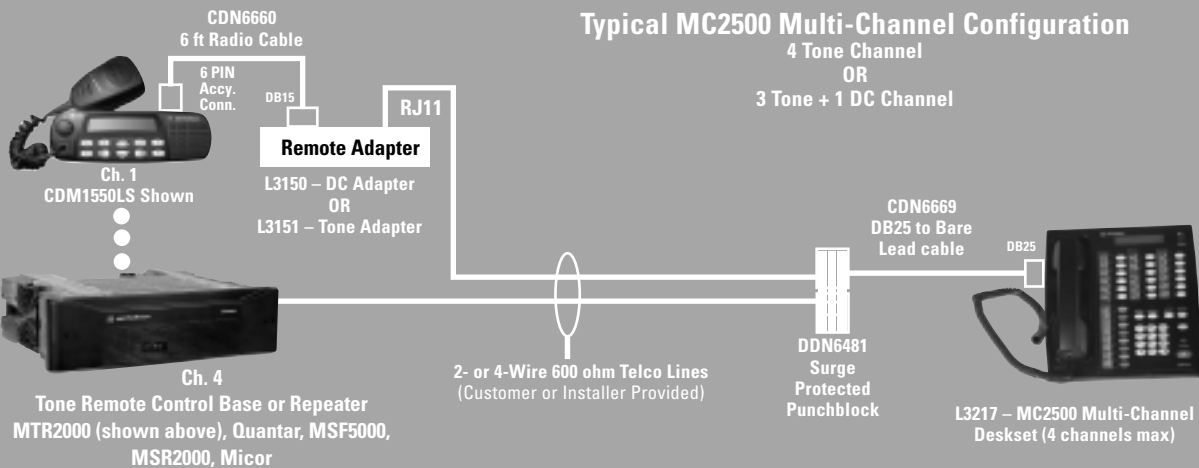
Typical Local Control Configuration

DDN6338
6 ft Radio Cable

16 PIN
Accy.
Conn.

D B25

Local Junction Box
(6 desksets max per box)

DDN6337

Screw Term
Block

Minimum 22 gauge
Multi-Conductor Cable
Max Distance 1000 ft.

(Customer or Installer Provided)

Screw Term
Block

RPG Mobile
Maxtrac, GM300, M1225
SM50/120, CDM Series
(CDM1550LS Shown)

L3211 – MC1000 (Basic Local)
L3214 – MC2000 (Adv. Local)
(MC1000 Shown Above)

Typical Mobile in a Tray
Tone or DC Remote Control Configuration

CDN6660
6 ft Radio Cable

16 PIN
Accy.
Conn.

D B15

Remote Adapter

RJ11

2- or 4-Wire 600 ohm
Telco Line

(Customer or Installer Provided)

RPG Mobile
Maxtrac, GM300, M1225
SM50/120, CDM Series
(CDM1550LS Shown)

L3150 – Adapter
OR
L3151 – Tone Adapter

L3212 – MC1000 (Basic DC)
L3215 – MC2000 (Adv. DC)
OR
L3213 – MC1000 (Basic Tone)
L3216 – MC2000 (Adv. Tone)
(MC2000 Shown Above)

Typical Parallel Tone Control Configuration

Screw Term
Block

Max of 10 MC Series
Units in Parallel

L3213 – MC1000 (Basic Tone)

2- or 4-Wire 600 ohm
Telco Line

(Customer or Installer Provided)

RJ11

Tone Remote Control Base or Repeater
MTR2000 (shown above), Quantar, MSF5000,
MSR2000, Micor

L3216 – MC2000 (Adv. Tone)

Typical MC2500 Multi-Channel Configuration

CDN6660
6 ft Radio Cable

6 PIN
Accy.
Conn.

DB15

RJ11

Remote Adapter

4 Tone Channel
OR
3 Tone + 1 DC Channel

Ch. 1
CDM1550LS Shown

L3150 – DC Adapter
OR
L3151 – Tone Adapter

CDN6669
DB25 to Bare
Lead cable

DB25

Ch. 4
Tone Remote Control Base or Repeater
MTR2000 (shown above), Quantar, MSF5000,
MSR2000, Micor

2- or 4-Wire 600 ohm Telco Lines
(Customer or Installer Provided)

DDN6481
Surge
Protected
Punchblock

L3217 – MC2500 Multi-Channel
Deskset (4 channels max)

SPECIFICATIONS		
Local Deskset **MC1000 - L3211** **MC2000 - L3214**	**DC Remote Deskset** **MC1000 - L3212** **MC2000 - L3215** **MC2500 - L3217**	**Tone Remote Deskset** **MC1000 - L3213** **MC2000 - L3216** **MC2500 - L3217**
Dimension	3.75" H x 8.5" W x 9.9" D (9.53 cm H x 21.59 cm W x 25.14 cm D)	
Weight	Maximum 3.75 lb. (1.7 kg)	
Temperature Range	0 degrees C to 50 degrees C	
Humidity	95% at 50 degrees C (non-condensing)	

Power Input:
  MC1000 Models
  MC2000 Models
  MC2500 Models
	+12Vdc/1A max
	+12Vdc/2.5A Max
	+12Vdc/1A, -12Vdc/0.2A, +5Vdc/2A	

Frequency Response	300 to 3300 Hz +3, -3 dB @ less than 3% distortion	
Hum and Noise	45 dB below rated output at any port	
Audio Distortion	Less than 3% THD	
Audio Output to Speaker	.8 W (1W peak)	
Line Impedance	600 or 10K Ohm, or differential	
Receive Audio Input	300mv AC	Adjustable from -30 to +11 dBm
Transmit Audio Output	80mv AC	Adjustable from -30 to +11 dBm
Maximum Number of Desksets	10 in Parallel	

Control Functions (Maximum):
  MC1000 Models
  MC2000 Models
  MC2500 Models
	PTT + Monitor
	PTT + Monitor
		4 Freq Select + Monitor
		4 Freq Select + Monitor
		4 Freq Select + Monitor
			4 Freq Select + Monitor
			15 Freq Select + Monitor
			15 Freq Select + Monitor

Number of Radios:
  MC1000 and MC2000 Models
  MC2500 Models
	1	1
		1 Max
			1
			4 Max

Outputs and Inputs:
  PTT Relay
  Monitor/Aux Outputs
  Aux Inputs
	Form C dry closure. 150 mA, 60 VDC non-inductive load.
	Form C dry closure. 150 mA, 60 VDC non-inductive load.
	Opto-coupled inputs, 5K Ohms impedance, 5 to 20 MA input current, unbalanced.	

Recorder Port (MC2500 only)	Nominal ouput -10dBm @ 600 Ohm	
Auxiliary/Paging Input **(MC2500 only)**	Nominal ouput -10dBm, balanced 600 Ohm input	
All Mute (MC2500 only)	-24 dB or full muting of unselected channels, timer programmable 1 to 255 seconds or infinite durations.	

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