

*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.

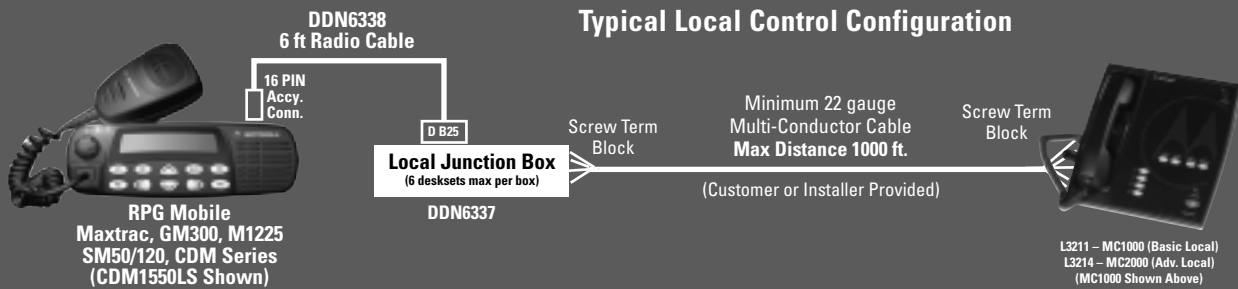
### **TONE AND DC REMOTE CONTROL ADAPTERS**

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

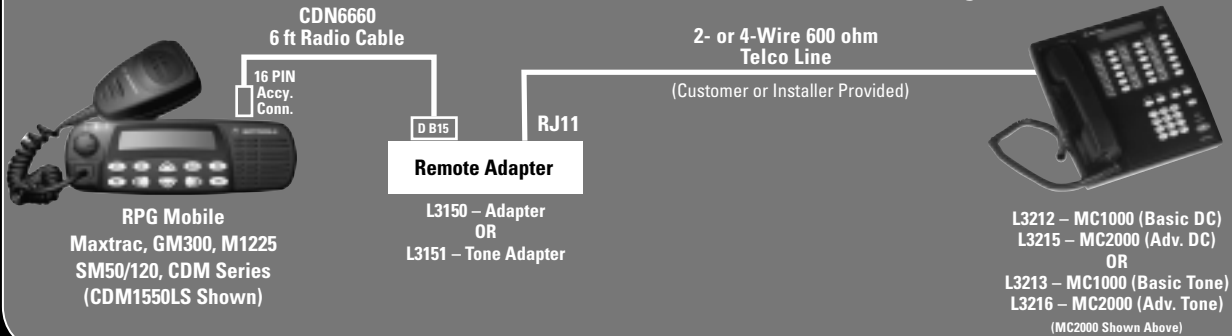
#### **STANDARD FEATURES**

- ▶ 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



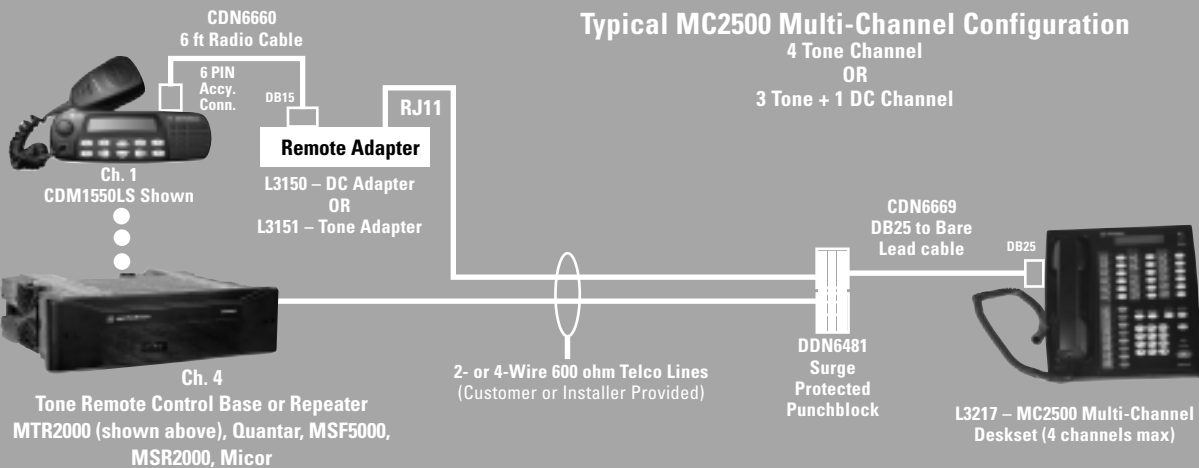
### Typical Mobile in a Tray Tone or DC Remote Control Configuration



### Typical Parallel Tone Control Configuration



### Typical MC2500 Multi-Channel Configuration



## 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
<b>Dimension</b>	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)		
<b>Weight</b>	Maximum 3.75 lb. (1.7 kg)		
<b>Temperature Range</b>	0 degrees C to 50 degrees C		
<b>Humidity</b>	95% at 50 degrees C (non-condensing)		
<b>Power Input:</b>			
MC1000 Models	+12Vdc/1A max		
MC2000 Models	+12Vdc/2.5A Max		
MC2500 Models	+12Vdc/1A, -12Vdc/0.2A, +5Vdc/2A		
<b>Frequency Response</b>	300 to 3300 Hz +3, -3 dB @ less than 3% distortion		
<b>Hum and Noise</b>	45 dB below rated output at any port		
<b>Audio Distortion</b>	Less than 3% THD		
<b>Audio Output to Speaker</b>	.8 W (1W peak)		
<b>Line Impedance</b>	600 or 10K Ohm, or differential		
<b>Receive Audio Input</b>	300mv AC	Adjustable from -30 to +11 dBm	
<b>Transmit Audio Output</b>	80mv AC	Adjustable from -30 to +11 dBm	
<b>Maximum Number of Desksets</b>	10 in Parallel		
<b>Control Functions (Maximum):</b>			
MC1000 Models	PTT + Monitor	4 Freq Select + Monitor	4 Freq Select + Monitor
MC2000 Models	PTT + Monitor	4 Freq Select + Monitor	15 Freq Select + Monitor
MC2500 Models		4 Freq Select + Monitor	15 Freq Select + Monitor
<b>Number of Radios:</b>			
MC1000 and MC2000 Models	1	1	1
MC2500 Models		1 Max	4 Max
<b>Outputs and Inputs:</b>			
PTT Relay	Form C dry closure. 150 mA, 60 VDC non-inductive load.		
Monitor/Aux Outputs	Form C dry closure. 150 mA, 60 VDC non-inductive load.		
Aux Inputs	Opto-coupled inputs, 5K Ohms impedance, 5 to 20 MA input current, unbalanced.		
<b>Recorder Port (MC2500 only)</b>	Nominal ouput -10dBm @ 600 Ohm		
<b>Auxiliary/Paging Input (MC2500 only)</b>	Nominal ouput -10dBm, balanced 600 Ohm input		
<b>All Mute (MC2500 only)</b>	-24 dB or full muting of unselected channels, timer programmable 1 to 255 seconds or infinite durations.		

### Your Distributor/Dealer:



**Communication Specialists Ltd. Unit 20, Murrell Green Business Park,  
London Road, Hook, Hampshire. RG27 9GR United Kingdom**  
**Tel. +44(0)1256766600      Fax. +44(0)1256766500**  
**www.comm-spec.com      info@comm-spec.co.uk**

