



MCD 5000 DESKSET SYSTEM -

DESKSET USER TRAINING

MOTOROLA SOLUTIONS



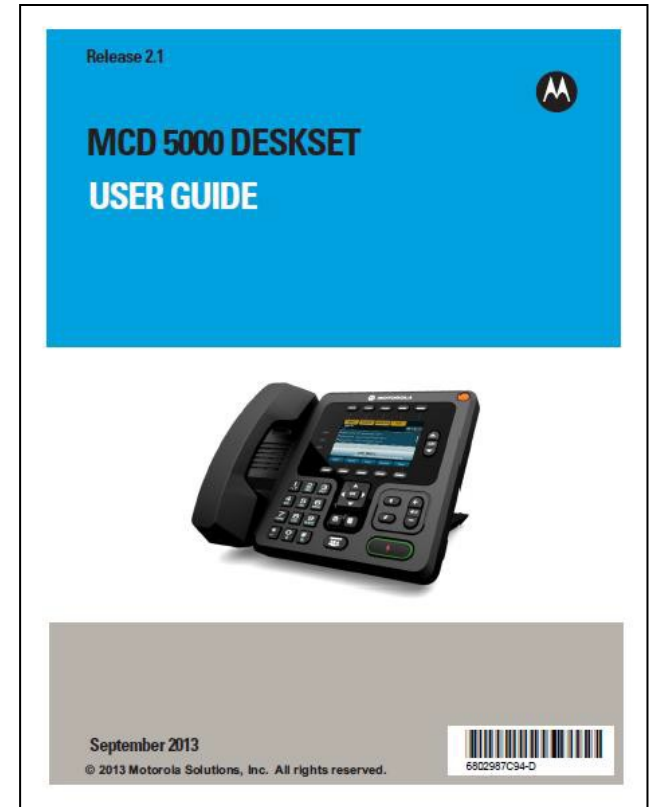
MCD 5000 DESKSET SYSTEM TRAINING TOPICS:



Training Topics:

- Understanding Buttons and Hardware
- Basic Operations
- Main Screen Overview
- Audio Controls
- Making Radio Calls Outbound from Deskset

* NOTE: Additions added in R02.01.00



MCD 5000 DESKSET

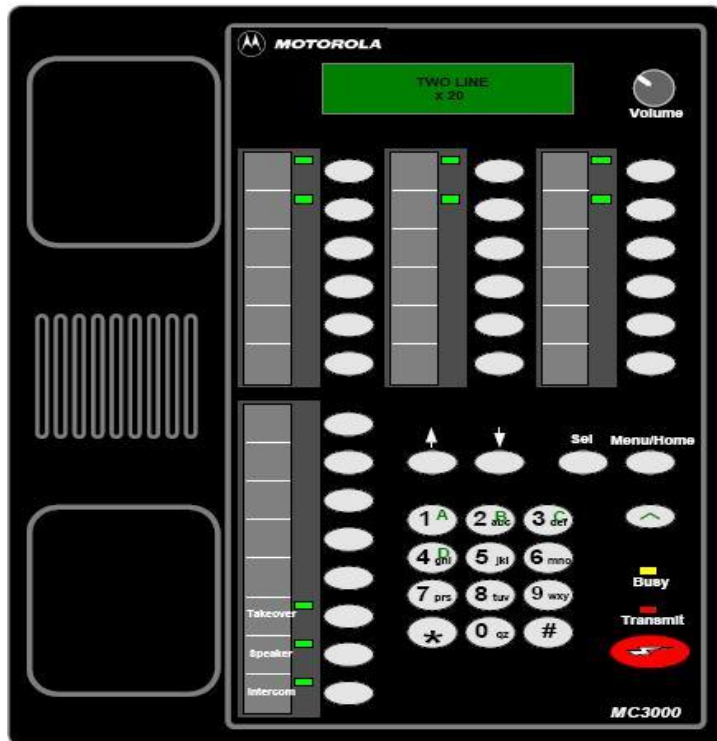
UNDERSTANDING BUTTONS & HARDWARE



MC3000 vs. MCD 5000 DESKSET



MC3000 DESKSET



MCD 5000 DESKSET



MCD 5000 DESKSET - TOP VIEW



MCD 5000 DESKSET - TOP VIEW



1. HANDSET WITH BUILT IN PTT BUTTON

For audio transmit and receive, with a microphone in the mouthpiece and an audio speaker in the earpiece and a built-in PTT.

2. INTERNAL SPEAKER

For hands-free public audio receive.

3. INTERNAL MICROPHONE

For hands-free audio transmit.

4. TRANSMIT BUTTON

For transmitting on the radio channel.



MCD 5000 DESKSET - TOP VIEW



10. SPEAKER BUTTON

Toggles the internal speaker on or off allowing the deskset user to turn on the internal speaker as additional audio source to the headset or the handset.

8. VOLUME CONTROL

Increases or decreases received audio volume for the handset, speaker phone, or headset (depending upon which is currently active).

9. ALL MUTE BUTTON

Toggles the mute on or off allowing the deskset user to mute all received audio. Pressing any button will remove the deskset from "All Mute" state.

18. BASE INTERCOM BUTTON & LED

Toggles the Base Intercom on or off allowing direct communication between parallel MCD 5000 deskset users that are connected to the same radio in the system without transmitting over the radio channel.



MCD 5000 DESKSET - TOP VIEW



5. TRANSMIT LED

Indicates that the deskset is transmitting on the radio channel.

6. BUSY LED

Indicates that another deskset is using the radio channel.

7. RECEIVER INDICATOR

Indicates that the deskset is receiving on the radio channel.



MCD 5000 DESKSET - TOP VIEW



- 14. **COLORED LCD DISPLAY**
Large and easy to read LCD screen for displaying radio messages, radio icons, soft keys and VU meter readings.
- 19. **DESKSET MENU SOFT KEYS**
Programmable buttons for deskset “specific” (not radio) functions.
- 15. **RADIO SOFT KEYS**
Radio programmable buttons or radio soft keys.



MCD 5000 DESKSET - TOP VIEW



- 16. CHANNEL SELECTOR
MODE UP / MODE DOWN**
For moving up/down through deskset or radio menu mode, channels or functions that appear on the LCD.
- 11. NAVIGATION KEYS**
For browsing through menus.
- 17. NUMERIC & ALPHANUMERIC KEYPAD**
For emulating the keypad of the radio and entering numbers/letters to operate the deskset.
- 20. HOME BUTTON**
Emulates the “Home Key” on a given radio.
- 13. MENU BUTTON**
Toggles upper soft keys between “Deskset Home Screen” and “Emulated Radio Screen”



MCD 5000 DESKSET - TOP VIEW



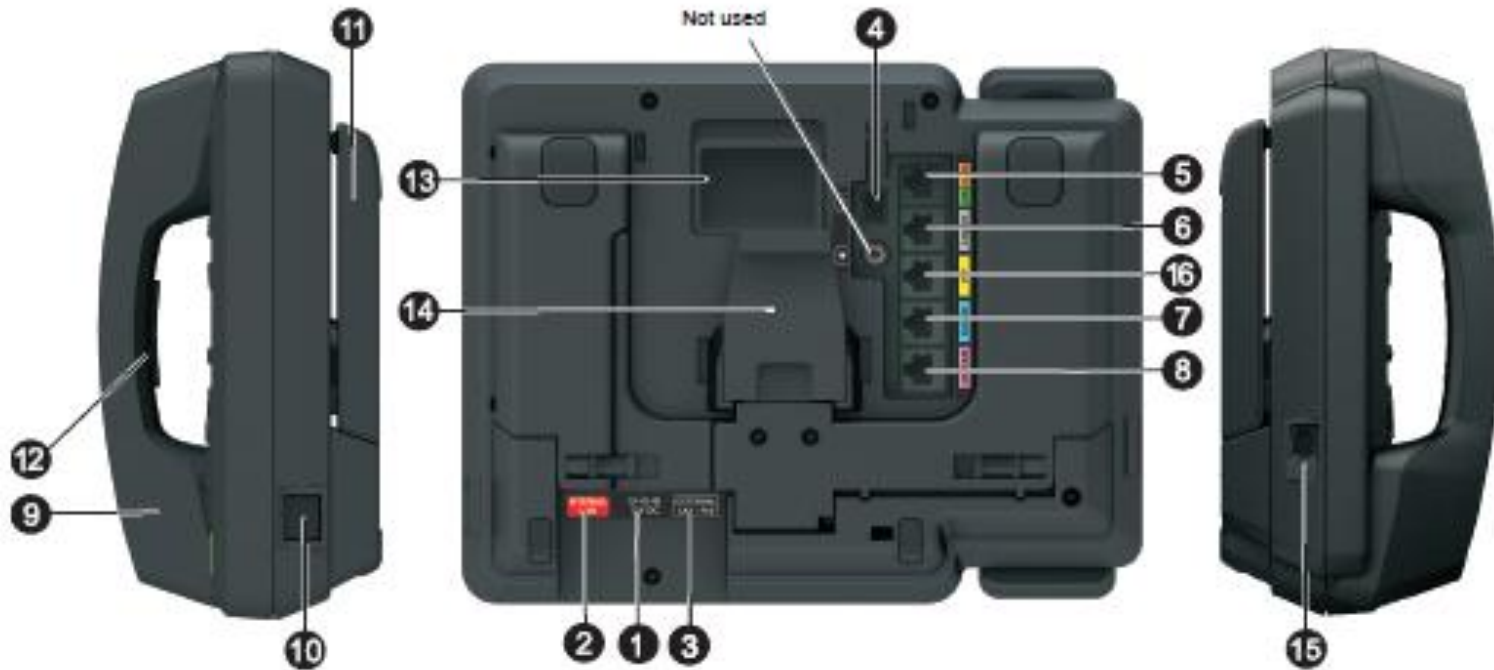
12. EMERGENCY BUTTON

For activating an Emergency Outbound function from the deskset. Emergency Alert is sent to all parallel MCD 5000 Desksets connected to the same radio.



MCD 5000 DESKSET

BOTTOM & SIDE VIEW



- | | |
|---|--|
| 1 12V DC (A type connector) | 9 HANDSET |
| 2 INTERNAL LAN (RJ45) | 10 MMI – RS-232 CONNECTION TO HYPER TERMINAL(RJ45) |
| 3 EXTERNAL LAN-PoE (RJ45) | 11 FOOTSTAND |
| 4 FOOTSWITCH (3 PIN KK Molex connector) | 12 PTT BUTTON |
| 5 DESKMIC/HEADSET JACKBOX (RJ45) | 13 FOOTSTAND RELEASE LATCH |
| 6 LOGGER (RJ45) | 14 CABLE HOLDER |
| 7 RADIO COMM (RJ45) | 15 HANDSET PORT (RJ22) |
| 8 RADIO 4W E&M (RJ45) | 16 VIP PORT |

MCD 5000 DESKSET

BASIC OPERATIONS



TIPS FOR USING THE DESKSET KEYPAD



Keypad Characters UPPER case



Number of Times Key is Pressed				
Key	1	2	3	4
	.	,	?	
	A	B	C	
	D	E	F	
	G	H	I	
	J	K	L	
	M	N	O	
	P	Q	R	S
	T	U	V	
	W	X	Y	Z
	Toggle between mixed case mode, uppercase mode, and lowercase mode.			
	Space			
	Toggle between numeric and letter mode.			

TIPS FOR USING THE DESKSET KEYPAD



Keypad Characters lower Case



Number of Times Key is Pressed

Key	1	2	3	4
1 .,?	.	,	?	
2 ABC	a	b	c	
3 DEF	d	e	f	
4 GHI	g	h	i	
5 JKL	j	k	l	
6 MNO	m	n	o	
7 PQRS	p	q	r	s
8 TUV	t	u	v	
9 WXYZ	w	x	y	z
0 ☐	Toggle between mixed case mode, uppercase mode, and lowercase mode.			
* ☐	Space			
# ☐	Toggle between numeric and letter mode.			

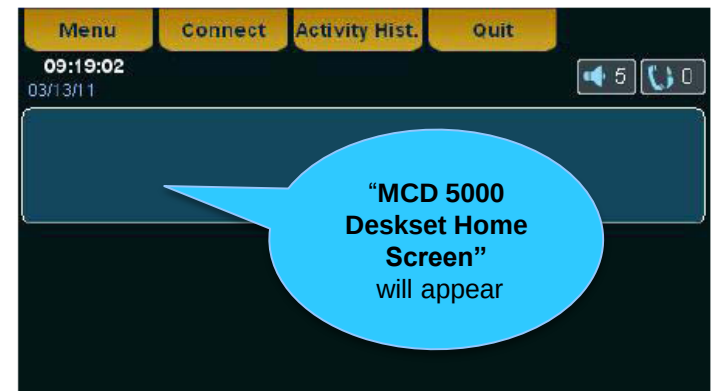
HOW TO LOG INTO THE MCD 5000 DESKSET ...



STEP	PROCEDURE
1	On the “Login” screen, enter your User Name and PIN. <i>Use Backspace to correct typing errors.</i> IMPORTANT NOTE: Upon three consecutive unsuccessful entry trials, the MCD 5000 Deskset locks for predetermined period of five minutes (default values).
2	Press the [Login] soft key button or press the [OK] button 



Press and release
“Login”



HOW TO LOGOFF THE MCD 5000 DESKSET ...



STEP	PROCEDURE
1	Press the [Menu Key] button to return to the “MCD 5000 Deskset Home” screen. (NOTE: Orange upper soft keys appear on top line of screen)
2	Press the [Quit] soft key button – the “Lock/Logoff” screen is displayed.
3	Press the [Logoff] soft key button.



Press
“Menu Key”
Button



Press and
release “Quit”



Press and
release
“Logoff”

HOW TO LOCK THE MCD 5000 DESKSET ...



STEP	PROCEDURE
1	Press the [Menu Key] button to return to the “MCD 5000 Deskset Home” screen. (NOTE: Orange upper soft keys appear on top line of screen)
2	Press the [Quit] soft key button – the “Lock/Logoff” screen is displayed.
3	Press the [Lock] soft key button.



Press
“Menu Key
Button”



Press and
release “Quit”



Press and
release
“Lock”

HOW TO UNLOCK THE MCD 5000 DESKSET ...



STEP	PROCEDURE
1	On the “Unlock” screen, enter User Name and PIN .
2	Press the [Unlock] soft key button or press the [OK] button 



Enter
User Name
and PIN

Press and
release
“Unlock”

Press
“OK”
button



“MCD 5000
Deskset Home
Screen”
will appear



HOW TO CHANGE LOGIN PIN OF MCD 5000 DESKSET ...



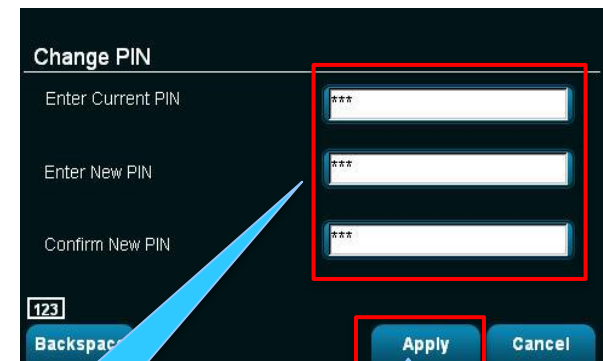
STEP	PROCEDURE
1	From the “MCD 5000 Deskset Home” screen, press the [Quit] soft key button – the “Lock/Logoff “ screen is displayed.
2	Press the [Change PIN] – the “Change PIN” screen is displayed.
3	Use the Navigation Keys to move between entry fields and enter the following: Current PIN, New PIN, and Confirm New PIN NOTE: PIN must include 4 to 15 numeric characters.
4	Press the [Apply] soft key button – the “Lock/Logoff” screen is displayed.



Press and
release
“Quit”



Press and
release
“Change PIN”



Press and
release
“Apply”

MCD 5000 DESKSET

MAIN SCREEN OVERVIEW



MCD 5000 DESKSET USER INTERFACE OVERVIEW



MAIN SCREEN COMPONENTS...

TOP HALF OF SCREEN

- Deskset Soft-Keys Menu
- Deskset Status Bar
- Deskset Activity Log

BOTTOM HALF OF SCREEN

- Emulated Radio LCD Display
- Emulated Radio Soft-Keys



Top Half

Bottom
Half





MCD 5000 DESKSET HOME SCREEN

- Deskset Soft Keys

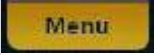
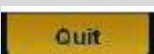


MCD 5000 DESKSET HOME SCREEN

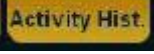
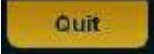
SOFT KEY BUTTONS



Soft-Key Buttons:

	Menu
	Connect
	Activity History
	Logoff



Soft-Key Buttons	Dedicated soft-key buttons to manage the MCD 5000 Deskset.
	Menu - used for setting the MCD 5000 Deskset.
	Connect - used to connect or disconnect the MCD 5000 Deskset to a radio.
	Activity Hist. - used to display a history log of the MCD 5000 Deskset and system activity.
	Quit - used to Lock the Deskset when not used, Logoff when the operator is replaced, Update information on the Deskset and change user PIN.



MCD 5000 DESKSET SOFT KEY BUTTONS

- Menu



MCD 5000 DESKSET HOME SCREEN

SOFT KEY BUTTONS – MENU SETTINGS



Soft-Key Buttons:

Menu	Menu
Connect	Connect
Activity Hist.	Activity History
Quit	Logoff



Menu	Menu - used for setting the MCD 5000 Deskset.
Time and Date	Set the current time, time zone and date.
Display	Adjust the brightness and contrast of the MCD 5000 Deskset.
Local	Set the following activities: Autolock timeout, Turn off monitor after a period of time, show/hide the activity log on deskset home screen.
Performance	Displays network statistics and system performance of the MCD 5000 Deskset.
VIP	Vehicle Interface Port (VIP) screen shows real-time status of all VIP inputs and output lines connected to the MCD 5000 Deskset or radios connected to the MCD 5000 Deskset System. The VIP lines are set in the MCD 5000 Configuration Tool (CT).
Versions	Display the current versions of the MCD 5000 Deskset.

MCD 5000 DESKSET HOME SCREEN

SOFT KEY BUTTONS – MENU SETTINGS



Screen: Time and Date

Time: 10:28:33

Time Zone: < (GMT) Western Europe Time >

Date: 02/16/11

Date Format: < MM/DD/YY >

Time Format: < 24 Hours >

Backspace Apply Cancel

Screen: Display Settings

Display Settings

Brightness: [Slider]

Contrast: [Slider]

Default Apply Cancel

Screen: Local Settings

Local Settings

Autolock timeout: < never >

Turn off monitor: < never >

Activity Log: < show >

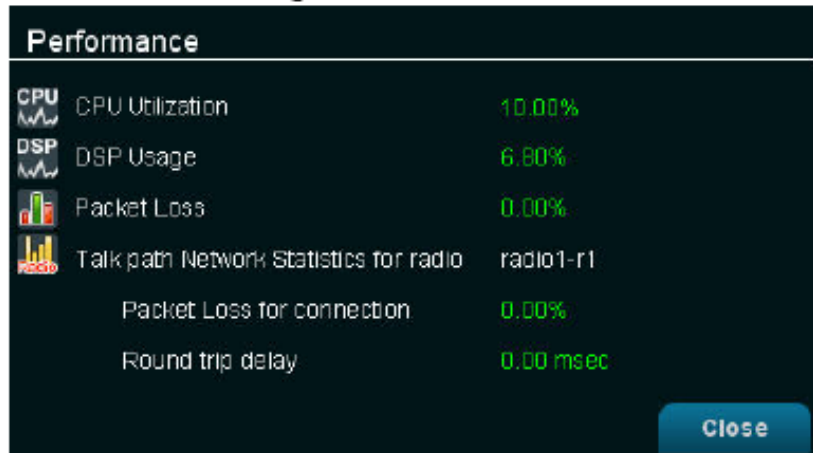
Default Apply Cancel

MCD 5000 DESKSET HOME SCREEN

SOFT KEY BUTTONS – MENU SETTINGS



Screen: Performance



Screen: VIP

Deskset **Radio**

VIP I/O lines for the Deskset

Port #	Resource name	Type	Signal	Active	State
1	Workstation1	Input	High Speed Mute	Low	On
2	Workstation1	Output	APXMP 1	High	Off
3	Workstation1	Output	APXMP 2	Low	Off
4	Workstation1	Output	APXMP 3	Low	Off

Close

Screen: Versions

Versions

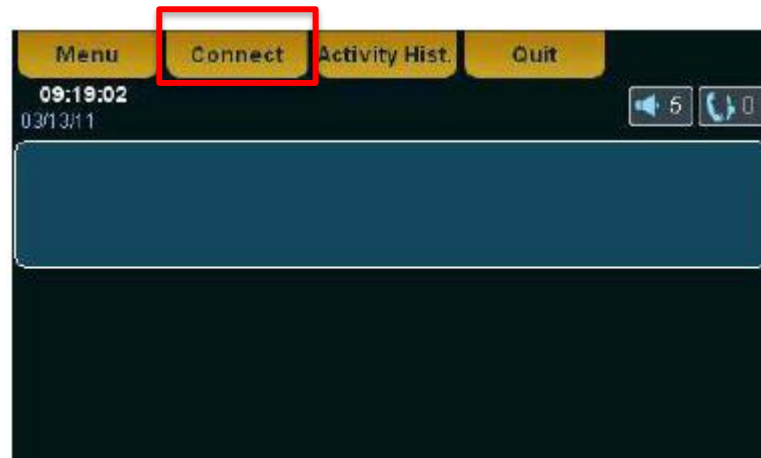
BSP Version:	1.0/0	BSP Date:	Feb 6 2011, 17:43:32
App Version:	1.0/mrd5	App Date:	Feb 8 2011, 16:06:30
DSP Version:	1.0.0	DSP Date:	Jan 16 2011, 18:00:30
GUI Version:	1.0	GUI Date:	Feb 10 2011, 17:00:00
DB Version:	1.0	Internal LAN:	Internal LAN Isolation
IP Address:	10.55.66.77		

Close



MCD 5000 DESKSET SOFT KEY BUTTONS

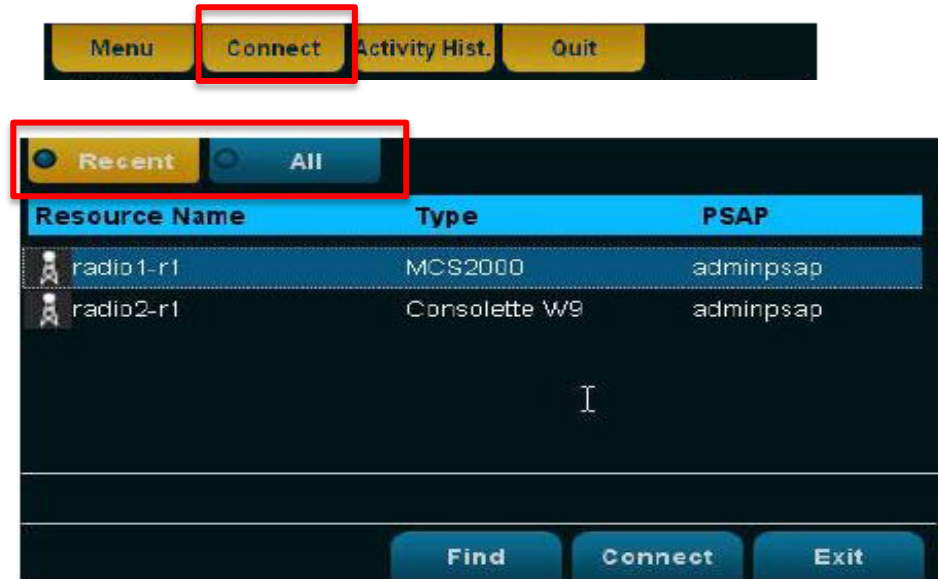
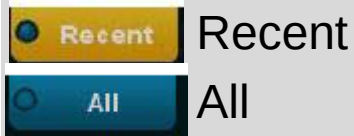
- Connect



MCD 5000 DESKSET SOFT KEY BUTTON CONNECT



Soft-Key Buttons:

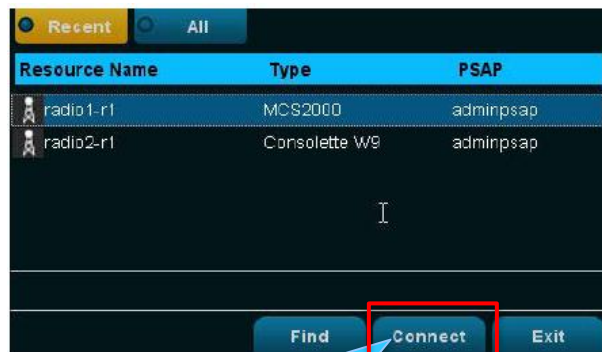
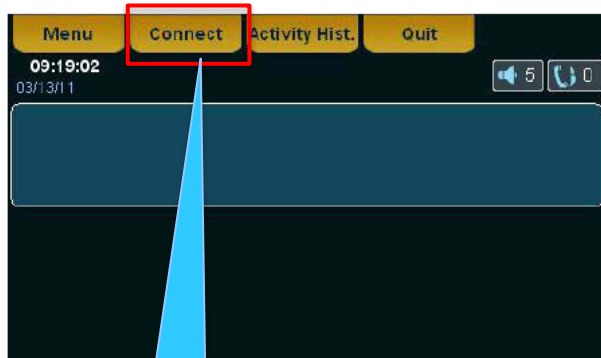


Soft-Key Buttons	Connect Folders – only radios with access permissions can be used. Radio List is sorted by the Resource Name (Radio Name) in ascending alphabet order.
	Recent – up to 20 last used radios will be shown to the deskset user.
	All – list all radio resources assigned to the deskset user.

CONNECT TO A RADIO ...



STEP	PROCEDURE
1	From the “MCD 5000 Deskset Home” screen press the [Connect] soft key button.
2	Press the [Recent] soft key button to view the recently used radios or press the [All] soft key button to view all radio resources.
3	Select radio to connect to: Use the Navigation Keys to select a radio from the list. Press the [Connect] soft key button. To search for a radio , press the [Find] soft key button and enter in a prefix of the radio. The list selection will automatically select radio by inserted prefix. To connect the select radio, press the [OK] button of the Navigation Keys or press the [Connect] soft key button.
4	Result: Emulated Radio Screen is displayed.



DISCONNECTING FROM A RADIO ...



STEP	PROCEDURE
1	From the “Emulated Radio” screen press the [Disconnect] soft key button.

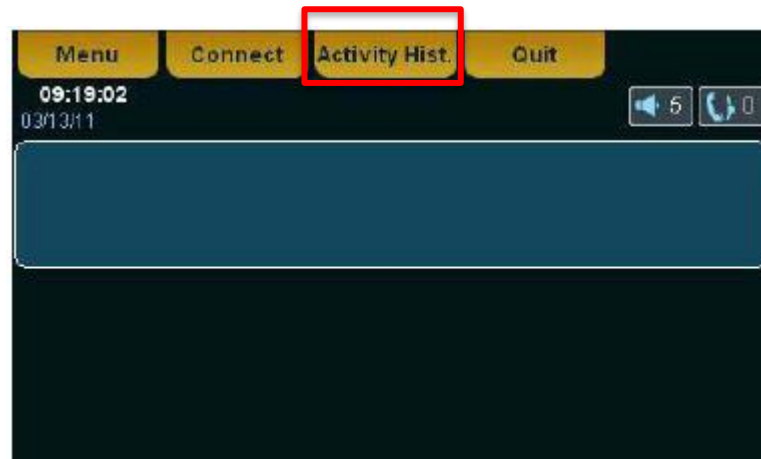


Press and
release
“Disconnect”



MCD 5000 DESKSET SOFT KEY BUTTONS

- Activity Hist.

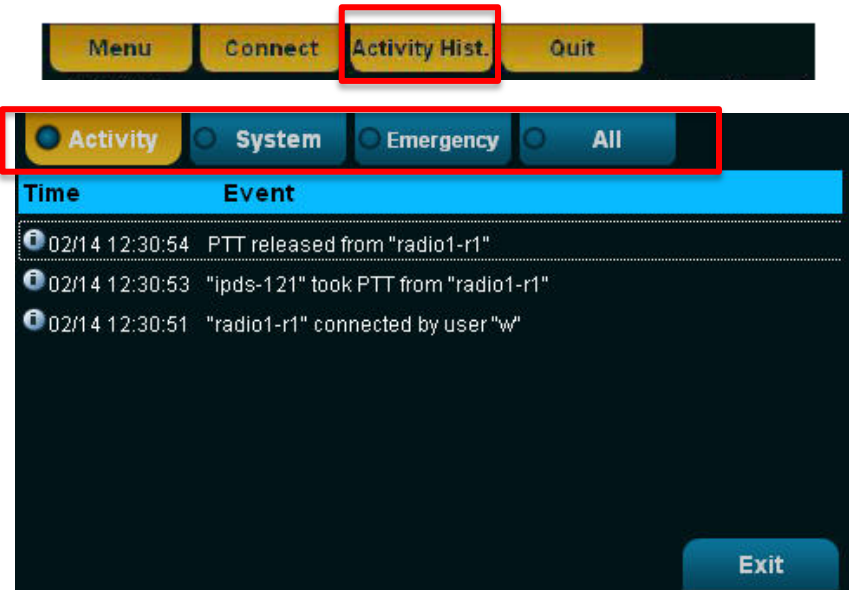


MCD 5000 DESKSET SOFT KEY BUTTON ACTIVITY HIST.



Log Categories:

- ☒ Activity
- ☐ System
- ☐ Emergency
- ☐ All

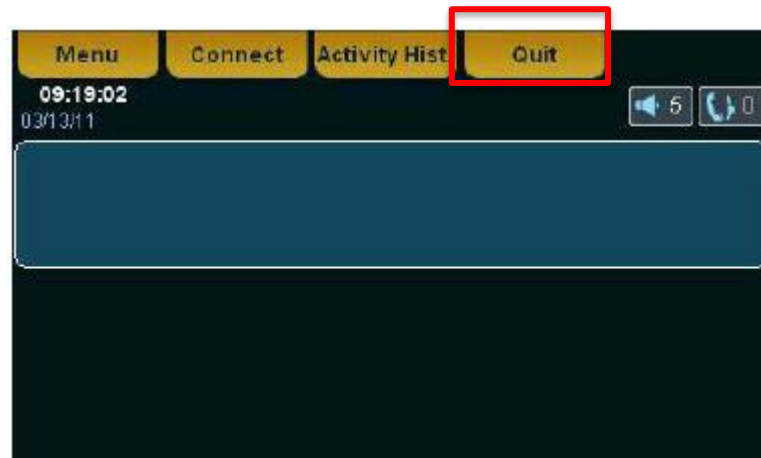


Soft-Key Buttons	Activity Hist.– stores and display up to 100 occurrence & activity entries. Each occurrence includes, event type marked by icon, time of event and source information.
☒ Activity	Activity – Logs recorded activity of all MCD 5000 Desksets connected to the same radio.
☐ System	System – Log of MCD 5000 Deskset system events.
☐ Emergency	Emergency – Log of all inbound and outbound emergency alarms.
☐ All	All – Log that contains all list combined for: Activity, System and Emergency.



MCD 5000 DESKSET SOFT KEY BUTTONS

- Quit



MCD 5000 DESKSET SOFT KEY BUTTON QUIT

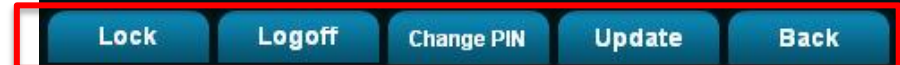


MCD 5000 Mode Functions:

-  Lock
-  Logoff
-  Change PIN
-  Update
-  Back



User John John is logged in
Login date is 25 Mar 2010



Mode Functions	Quit – screen will open up window with deskset mode functions:
	Lock – Locks the MCD 5000 Deskset to prevent access by other users when the deskset is temporarily not in use.
	Logoff –Closes the current MCD 5000 Deskset session and returns the MCD 5000 Deskset to the “Login” screen.
	Change PIN – Allows the deskset user to change their log-in PIN.
	Update – Updates the radio resources information (list of radios) connected to the MCD 5000 Deskset and returns to the “MCD 5000 Deskset Home” screen.
	Back – Brings the user back to previous screen.



MCD 5000 DESKSET HOME SCREEN

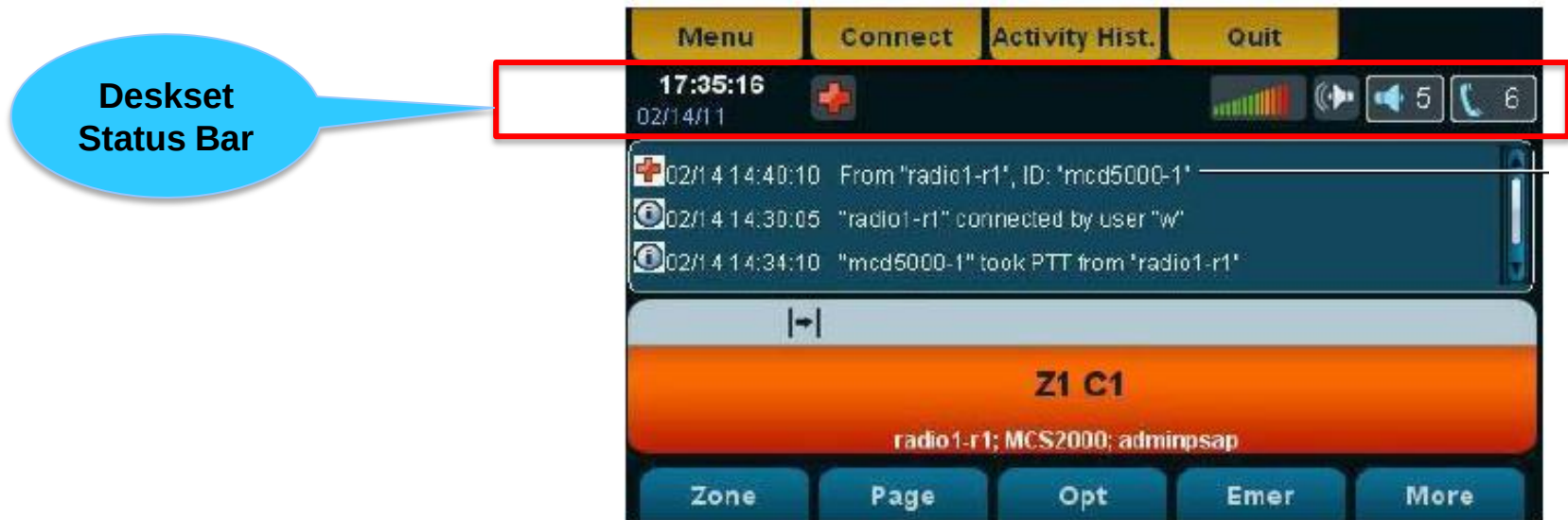
- Deskset Status Bar



MCD 5000 DESKSET STATUS BAR



- MCD 5000 Deskset Status Bar displays
 - Time and Date
 - Deskset / System Status Icons
 - VU Meter
 - Output Sound Indicators



STATUS BAR ICONS



Misc Indicators



Activity History Log contains at least one new System event.
This icon cleared after “Activity History” window is opened.

VU Meter



VU Meter TX – virtual volume level transmitted from the MCD 5000 Deskset to the radio.

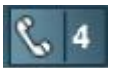


VU Meter RX – virtual volume level received by the MCD 5000 Deskset from the radio.

Active Device & Volume Display



Speaker – Current volume level of the internal speaker of the deskset.



Handset – Current volume level of the handset earpiece of the deskset.



Headset – Current volume level of the headset connected to the deskset.

STATUS BAR ICONS



Emergency Alarm – Initiated from Field Radio



Emergency Alarm was **initiated from a field radio**.



Emergency Alarm initiated from a field radio was **acknowledged** by a MCD 5000 Deskset user.

Emergency Alarm – Initiated from MCD 5000 Deskset User



Emergency Alarm was **initiated from MCD 5000 Deskset**.



Emergency Alarm initiated from MCD 5000 Deskset was **acknowledged** by a MCD 5000 Deskset user.

Supervisor Mode



Shown on Supervisor's deskset - after the "Supervisor" button is pressed to indicate Supervisor mode ON



Shown on Supervisor's deskset – when "Supervisor" mode is turned ON and Supervisor press PTT



Shown on other User's desksets connected to the same radio with supervisor – indicated radio was taken over by Supervisor

STATUS BAR ICONS



CPU / DSP Load Indicators



MCD 5000 Deskset System warning or MCD 5000 Deskset medium CPU load indication (75%).



MCD 5000 Deskset CPU critical alarm (90%).

Packet Loss Indicators



MCD 5000 Deskset packet loss alert (5%).

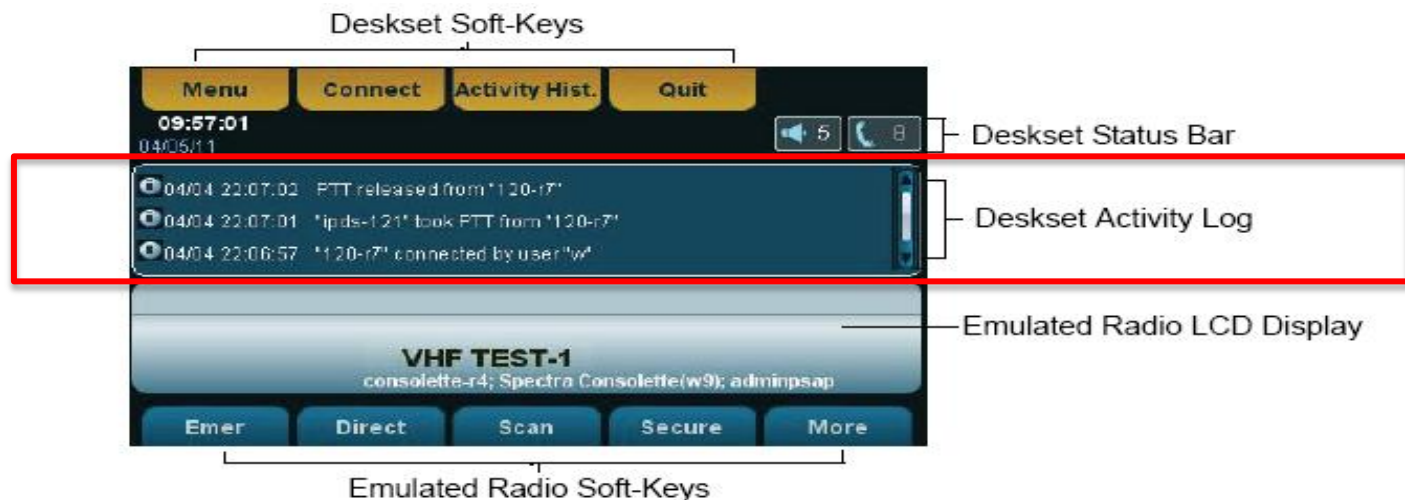


MCD 5000 Deskset high packet loss alert (20%).



MCD 5000 DESKSET HOME SCREEN

- Deskset Activity Log



MCD 5000 DESKSET ACTIVITY LOG



- **Displays up to 15 recent MCD 5000 Deskset and system occurrence.**
- **Each occurrence includes:**
 - Type of occurrence marked by an icon, date & time of event, source information
- **Occurrence sources maybe received by:**
 - MCD 5000 Deskset(s)
 - Field Radio(s)
 - MCD 5000 Deskset System
 - Configuration Tool
- **Activity Log on the “Deskset Home” screen can be shown or hidden**
 - Configured locally at the MCD 5000 Deskset (local setting screen)

ACTIVITY LOG ICONS



Misc. Indicators

	General Information
	Radio connected to the MCD 5000 Deskset

Emergency Alarm – Initiated from Field Radio

	Emergency Alarm was initiated from a field radio .
	Emergency Alarm initiated from a field radio was acknowledged by a MCD 5000 Deskset user.

Emergency Alarm – Initiated from MCD 5000 Deskset User

	Emergency Alarm was initiated from MCD 5000 Deskset .
	Emergency Alarm initiated from MCD 5000 Deskset was acknowledged by a MCD 5000 Deskset user.
	Emergency Alarm initiated from MCD 5000 Deskset was cleared by a MCD 5000 Deskset user.

ACTIVITY LOG ICONS



CPU / DSP Load Indicators



MCD 5000 Deskset System warning or MCD 5000 Deskset medium CPU load indication (75%).



MCD 5000 Deskset CPU critical alarm (90%).

Packet Loss Indicators



MCD 5000 Deskset packet loss alert (5%).

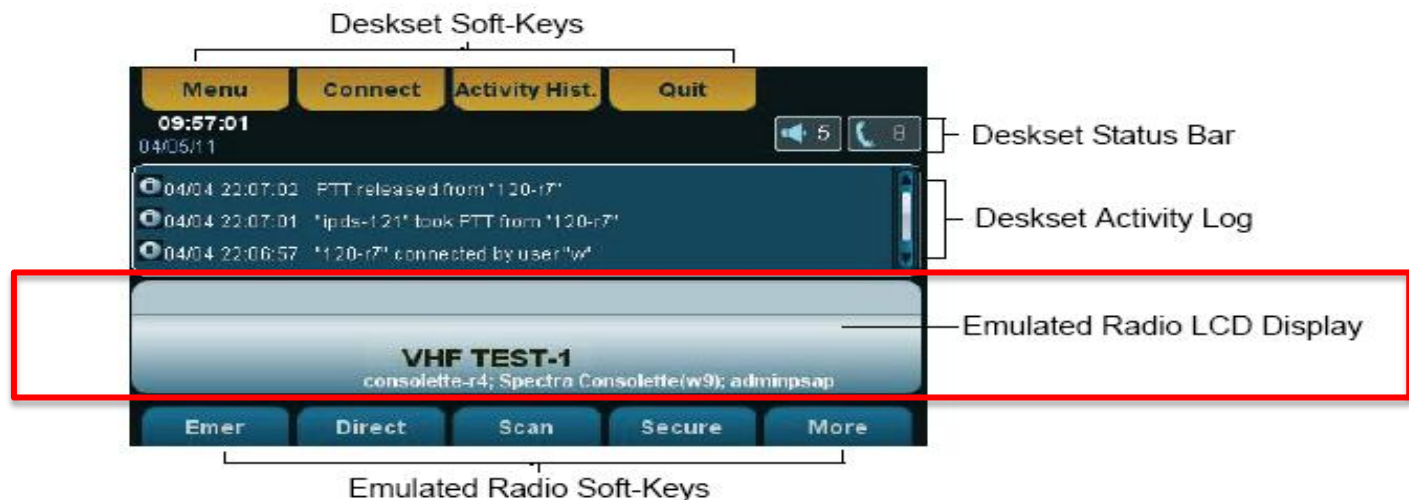


MCD 5000 Deskset high packet loss alert (20%).



MCD 5000 DESKSET HOME SCREEN

- Emulated Radio LCD Display



EMULATED RADIO LCD SCREEN



Blue Background - Default



Grey with Amber Cross – Connection Problem



Amber Background – Incoming Emergency



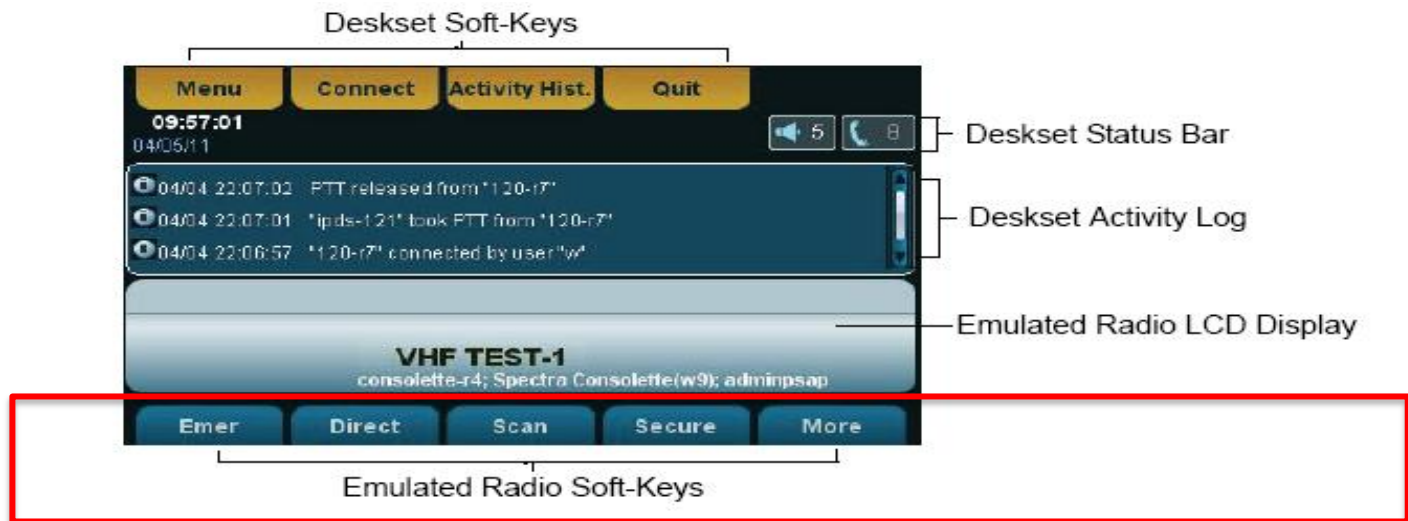
Yellow Background – Emergency Acknowledged





MCD 5000 DESKSET HOME SCREEN

- Emulated Radio Soft Keys



EMULATED RADIO SCREEN UNIQUE PER RADIO TYPE



Emulated Radio Screen on the MCD 5000 Deskset
is unique per radio type the deskset is currently connected to:

RADIO TYPE

ASTRO SB9600 Radios

- ASTRO Consolettes (W9 Control Head)
- CDM 1550 Radios
- MCS 2000 Model III Control Station



SB9600 Radios:
ASTRO W9 Consolettes
CDM 1550 Family
MCS 2000 (Model III)

APX 7500 Consolette



Direct Connection to 2 or 4 wire TRC devices



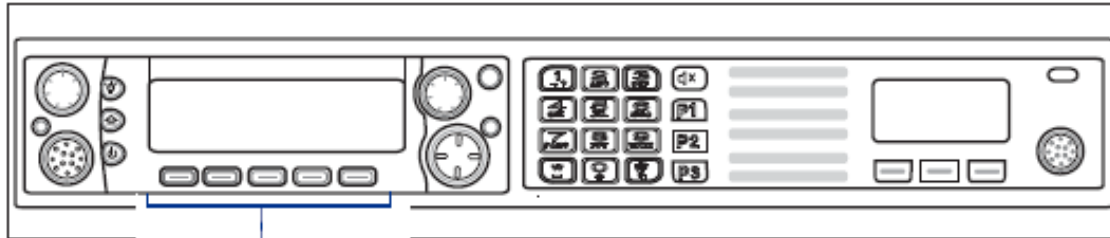
**TRC station or
repeater (Quantar,
MTR), DIU 2 or 4
wire, or Tone
Remote Adapter**
* Quantar Shown

Dimetra Mobile Radios (MTM5400 & MTM800E) interface on a TETRA Radio System



Dimetra Mobiles:
MTM5400
MTM800E

APX 7500 CONSOLETTTE EMULATED RADIO SCREEN



NOTE

The function keys on the APX 7500 Consolette are emulated by row of Soft-Keys shown at the bottom of the Emulated Radio Screen.



Text Message Mode Soft-Key



Text Message

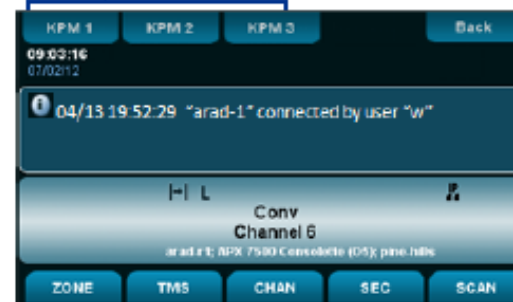
Note that the text line that shows the radio resource name, type and location will not show in this screen.

Keypad Microphone
KPM Keys



NOTE

When the Radio Func soft-key on the Emulated Radio Screen is pressed, the three emulated Keypad Microphone (KPM) soft-keys are shown. The soft-keys are configured via the APX 7500 Consolette.



EMULATED RADIO SOFT KEYS

APX 7500 CONSOLETTTE



**APX 7500
Consolette
function keys
emulated on the
MCD 5000 Deskset**



MCD 5000 DESKSET

AUDIO CONTROLS



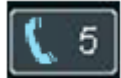
HOW TO ADJUST AUDIO VOLUME ...



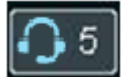
- Volume can be adjusted for the following speakers:



Internal Speaker (hands-free speaker)



Handset Earpiece



Headset Earpiece

- For the currently active devices:
 - When user presses **[+/- keys]** on the **Volume Control Button**, volume numeric value (0-16) near each active device is adjusted.



Press
“+” or “-”
on the volume
control



VU METER INDICATORS



VU Meter TX



VU Meter RX



HOW TO TURN ON / OFF INTERNAL SPEAKER OF MCD 5000 DESKSET ...



STEP	PROCEDURE
1	In order to turn on/off internal speaker, press and release the [Speaker] button 



HOW TO MUTE / UNMUTE THE MCD 5000 DESKSET ...



To Mute the Deskset:

STEP	PROCEDURE
1	Press and release the [All Mute] button  Result: The LED inside the All Mute Button turns red indicating Mute.

To Unmute the Deskset:

STEP	PROCEDURE
1	Press and release any button on the deskset, or place the handset on-hook/off-hook.

Note: The **Mute/Un-Mute** action is also available when headset is used and when handset is off-hook.



MCD 5000 DESKSET

RADIO CALLS OUTBOUND FROM DESKSET



HOW TO TRANSMIT USING MCD 5000 HANDSET (HANDSET “OFF-HOOK”)



STEP	PROCEDURE
1	Lift the handset (off-hook).
2	Press and hold the PTT Button in the middle of the handset. <i>Result: The “Transmit LED” turns on while the PTT Button is pushed.</i>
3	Speak into the mouthpiece while pressing the PTT Button .
4	Release the PTT Button to end transmission. <i>Result: The “Transmit LED” turns off when the PTT Button is released.</i>



HOW TO TRANSMIT USING MCD 5000 HANDSET (HANDSET “OFF-HOOK” & INTERNAL SPEAKER ENABLED)



STEP	PROCEDURE
1	Lift the handset (off-hook).
2	To enable the internal speaker with the handset off-hook, press the Speaker Button once. <i>Result: The “Speaker LED” turns on.</i>
2	Press and hold the PTT Button in the middle of the handset. <i>Result: The “Transmit LED” turns on while the PTT Button is pushed.</i>
3	Speak into the mouthpiece while pressing the PTT Button .
4	Release the PTT Button to end transmission and allow audio from the internal speaker. <i>Result: The “Transmit LED” turns off when the PTT Button is released.</i>
5	To disable the internal speaker with the handset off-hook, press the Speaker Button again. <i>Result: The “Speaker LED” turns off.</i>



HOW TO TRANSMIT USING TRANSMIT BUTTON (HANDSET “ON-HOOK”)



STEP	PROCEDURE
1	Ensure that the handset is on-hook (in the handset rest).
2	Press and hold the Transmit Button while speaking in the direction of the internal speaker. <i>Result: The “Transmit LED” turns on while the Transmit Button is pushed.</i>
3	Release the Transmit Button to end transmission and to listen to a response from the internal speaker. <i>Result: The “Transmit LED” turns off when the Transmit Button is released.</i>



MCD 5000 DESKSET SYSTEM



POWERFUL AND FLEXIBLE VoIP SOLUTION