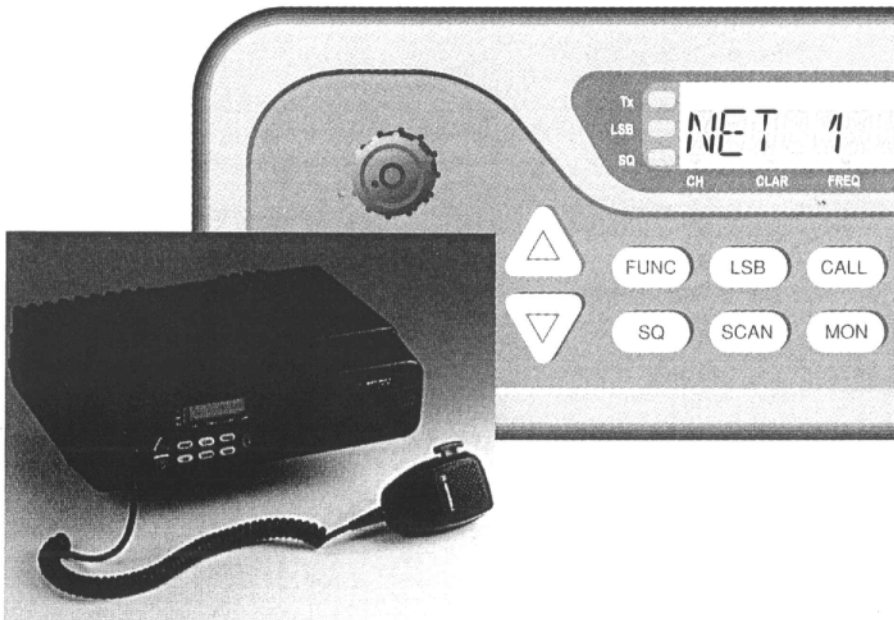




**MICOM-2**  
**HF-SSB Transceiver**  
**Digital Selective Calling Option**  
**based on FS-1045A**



*User's Guide*

68P02950C95-O

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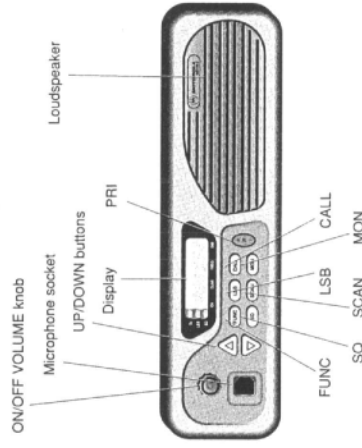
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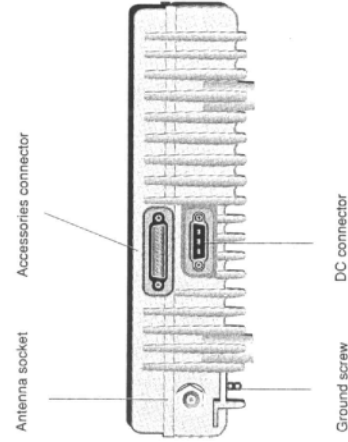
## Digital Selective Calling Quick Reference Card

### Transceiver Controls



- PRI button** Terminates each temporary activity, or sets station to priority channel, or starts an "AllCall" in SelCall mode.
- MON button** Mutes/unmutes the speaker.
- CALL button** Transmits a SelCall call.
- SCAN button** Scans the preprogrammed channels in a chosen group or SelCall net.
- LSB button** Enables/disables lower sideband operation.
- SQ button** Activates/deactivates the squelch algorithm.
- FUNC button** Changes cyclically between the operating modes.
- UP/DOWN** Scrolls up/down the parameters of the mode displayed.

### Transceiver Rear Panel



### Operating Modes

The FUNC button changes cyclically between:

- CH** Displays the selected working channel.
- CLAR** Displays the deviation (measured in Hertz) from the nominal frequency.
- FREQ** Displays the operating frequency.
- DIM** In this mode, you can adjust the level of display illumination.
- NB (optional)** Activates/deactivates the noise blanker mode, provided your station model includes this option.

### Status Annunciators

- CLR** Indicates a frequency deviation.
- NB** Indicates the Noise Blanker is activated.
- Speaker icon** Indicates an alert; the busy tone is active.
- Speaker icon with slash** Indicates that the speaker is operating.
- Speaker icon with 'R'** Indicates the presence of recorded calls in the caller stack.

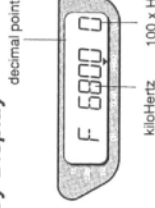
### Alert Tone Indications

- Valid button press:** When enabled via the RSS, sounds beep to indicate that the command is accepted.
- PTT release:** When enabled via the RSS, sounds beep at the remote station to indicate that the PTT button was released.
- Quick Call** Call the most recently called SelCall station.

### LED Indications

- LED Color** Indicates Transmission.
- Tx Red** The station operates in LSB mode.
- LSB Orange** The squelch is activated.
- SQ Yellow**

### Frequency Display





## Operating Instructions

### To Turn the Radio On

- Turn the ON/OFF VOLUME knob to the right until it clicks.
- The display shows SELF TEST for about 3 seconds.
- The last working mode, CH or SCAN, is displayed.

### To Turn the SelCall Option On/Off

- Display DIM mode and keep pressing the FUNC button for about 3 seconds. The baud rate is displayed.
- Press the FUNC button again till SELC OFF or SELC ON appears on the display.
- Press the scroll button to SELC ON or SELC OFF

### To Scan SelCall Nets

- Make sure that SelCall option is ON.
- Press the SCAN button. The display shows the last scanned net.
- Press Scroll to scan a different net.
- Press SCAN or PRI to stop scanning.

### To Transmit an AllCall

- Make sure that the transmit AllCall net option is enabled.
- Press the PRI button until "T ALCALL" is displayed (about 3 seconds).

### To Transmit a Net Call from SelCall Scan Mode

- Press the CALL button and scroll for the required channel.
- Press the CALL button. The last called address displayed. Scroll for the required net address.
- Press the CALL button to initiate a net call.

### To Transmit an Individual Call from SelCall Scan Mode

- Press the CALL button and scroll for the required channel.
- Press the CALL button. The last called address is displayed. Scroll for the required address.
- Press the CALL button to initiate an individual call.

### To Transmit a Net Call from SelCall Channel Mode

- In SelCall channel mode net call parameters are "NET 1" parameters.
- Press the CALL button. The last called address displayed. Scroll for the required net address.
- Press the CALL button to initiate a net call on 1 current channel.

### To Transmit an Individual Call from SelCall Channel Mode

- Press the CALL button. The last called address is displayed. Scroll for the required address.
- Press the CALL button to initiate an individual call on the current channel.

### To Accept Received Net/Individual Call

- Press any button or PTT button.
- Press PRI to rescan the current net.

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**MOTOROLA**  
Land Mobile Products Sector

# MICOM-2

## HF-SSB Transceiver

### Digital Selective Calling Option

based on FS-1045A

User's Guide

68P02950C95-O  
April, 1997

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## Glossary

<b>HF</b>	High Frequency
<b>LED</b>	Light Emitting Diode
<b>LSB</b>	Lower Side Band
<b>RSS</b>	Radio Service Software
<b>Rx</b>	Receive
<b>SQ</b>	Squelch
<b>Tx</b>	Transmit
<b>USB</b>	Upper Side Band

## Performance Specifications

A unique Motorola design, and interoperable with FS-1045 and MIL-STD-188/141A.

Option for MICOM-2 station

No. of channels in a system	Up to 100
No. of networks	Up to 5 (operated one at a time)
Number of channels in a network	Up to 100
Characters per address	Up to 15, alphanumeric
Transmission rate	375 BPS
Modulation rate	125 Baud
Scan rate (receive)	5 channels/sec. or 2 channels/sec.
Link set-up time (for most likely channel)	13.7 sec (for 5 channels and a 6-character address)
Link set-up time	4.4 sec (for 1 channel and a 3-character address)
Signaling scheme	8 ARY FSK
Data integrity protection	<ul style="list-style-type: none"><li>- Majority voting per repetition</li><li>- Interleaving</li><li>- Extended Golay error detection &amp; correction code</li></ul>
Alert tone	ON/OFF
Calling station address display	Upon reception of a call
Storage of last received 10 unique addresses (caller stack)	In successive order
Types of calls	<ul style="list-style-type: none"><li>- Individual call</li><li>- Net call</li><li>- All call</li></ul>

## Model Complements

### FVN4526A Digital Selective Calling RSS

0102706k99	Digital Selective Calling radio service software
6802950C90	MICOM-2, HF-SSB Transceiver, Digital Selective Calling option, based on FS-1045A, Radio Service Software User's Guide
0102703k65	RSS cable

### S222A MICOM-2 Digital Selective Calling Option

6802950C95	MICOM-2, HF-SSB Transceiver, Digital Selective Calling option, based on FS-1045A, User's Guide
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### Field Retrofit Kit FLN2471A

6802950C95	MICOM-2, HF-SSB Transceiver, Digital Selective Calling option, based on FS-1045A, User's Guide
0102703k65	RSS cable

## Introduction

This manual describes the optional Selective Calling (SelCall) feature of the MICOM-2 radio. For operational instructions related to the MICOM-2 radio, see *MICOM-2 HF-SSB Transceiver, Owner's Manual*, Motorola publication number 68P02941C60-O.

The built-in selective calling feature of the MICOM-2 transceiver enables the user to call a specific station or a group of stations operating in a network. An extra "AllCall" feature is provided to allow calls to all SelCall stations in a network.

The SelCall feature supports inter-operability as determined in the Federal Standard (FS) 1045A and MIL-STD-188-141A.

Motorola's selective calling networks offer unique advantages that significantly reduce operational inconveniences derived from the nature of HF channels. Selective calling networks also provide greater efficiency and reliability in communications. Each station has its individual self address and up to five network addresses. An address may consist of up to 15 alphanumeric characters.

Selective calling offers a convenient method for incorporating Motorola MICOM-2 HF stations into Motorola ALE networks and with all station types that follow the inter-operability requirements of FS-1045A and MIL-STD-188-141A.

A number of advanced data transmission techniques ensure reliable and efficient communication that meet the MIL-STD-188-141A and FS-1045A. These are:

- a. 8-ARY frequency shift keying (FSK) modulation with eight orthogonal tones, one tone (symbol) at a time. Each tone represents three bits of data. The tones are transmitted at a rate of 125 tones per second (8 msec per tone), which yields an effective transmission rate of 375 bits per second.
- b. Combined use of extended Golay forward error detection and correction, and time interleaving.
- c. Transmitting SelCall messages three times, thereby enabling majority vote by the receiver.

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## Operating Instructions

This chapter provides operational instructions for the SelCall option. It assumes that the operator is familiar with the operation of MICOM-2 radio. For instructions, see *MICOM-2 HF-SSB Transceiver, Owner's Manual*, Motorola publication number 68P02941C60-O.

### **SelCall Terms**

This chapter provides a general overview of the selective call features that are available in a MICOM-2 equipped with the SelCall option.

#### **SelCall Networks**

The SelCall network is a set of up to 100 programmable channels, and up to 16 optional members (a member is a SelCall station address). Each network has an assigned name (network address). The SelCall station may be a member of up to 5 networks. Therefore, each station has one (individual) address and up to 5 network addresses.

Each of the 100 programmable channels can be programmed to operate in every network. One of the channels can be programmed to be an AllCall channel (not necessarily the same as the priority channel in station mode).

#### **Address Directory**

Each SelCall station has a directory that contains the addresses of all the stations in the system. The directory can hold up to 100 addresses which are listed in numeric order, from 0 to 9, and in alphabetic order, from A to Z.

#### **Individual Calls**

An operator selects the address and the channel in the network for the called station. SelCall then tunes the station to the channel. After a 2-sec. "checking free channel" period, SelCall transmits the call. This launches a procedure involving the exchange of messages between the stations to determine whether a link can be established.

The procedure consists of:

1. The calling station transmits a stop scan message, its own address, and the address of the called station.
2. The response of the called station.



3. The acknowledgment of the calling station.

**AllCall**

SelCall issues a special call when the PRI button is pressed until the display shows T ALLCALL.

**NOTE**

The function of this button differs in SelCall mode and in channel mode.

This "AllCall" stops SelCall scanning in all the stations in the network. The stations displays flash between F xxxxxx - ALL CALL, where xxxxxx is the first 6 characters of the calling station address.



At the calling station, LINK blinks on the display after the link is established.

**Net Calls**

A net is usually organized and managed with prior knowledge of participating members, including their capabilities, requirements, locations, and necessary connections. A net call allows for an efficient and almost simultaneous contact with multiple, prearranged (net) stations, through a common address.

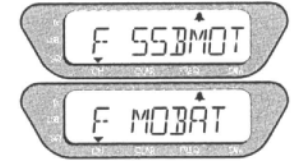
This transmission includes a stop scan message, the address of the calling station, and the network address. Each member station in the net responds according to its preset time slot. The calling station acknowledges the call if at least one member has responded.

**The Caller Stack**

The caller stack stores information of unanswered calls. The stack can store up to 10 calls. An additional (unanswered) call pushes out of the stack the first call that came in. An address is recorded in the stack only once even if the caller makes repeated unanswered calls. You can return calls to stations registered in the stack.

**Displaying an Address**

Because the display (control head) of the MICOM-2 radio can show up to 8 characters, longer addresses are truncated. For example, if the station address is SSBMOTOROLA, the display shows F SSBMOT. An address like MOBAT is displayed fully.



It is recommended not to use addresses that are identical in their first 8 characters, like MOTOROLA1, MOTOROLA2, and so on. All of them will appear identical (MOTOROLA) on the display.

A net name is like any other SelCall station name but the display shows the net number instead of the name.

The display string follows the format Net x where x is the net number.



For example, if the net address is ENGINEERS and the net number is 5, then NET 5 will be seen on the control head display, instead of the full name.

If there are no addresses to display, the display shows NO ADDR.



## Turning the Station On

When a MICOM-2 equipped with the SelCall option is turned on, it starts in one of the following modes (the last active mode):

- Channel Mode : SelCall is not active. Same as MICOM-2 without the SelCall option.
- SelCall channel mode: SelCall is active in channel mode.
- Scan mode: SelCall is not active. Same as MICOM-2 without the SelCall option.
- SelCall Scan Mode: SelCall is active in scan mode.

### Activating/Deactivating the SelCall Option

To enter SelCall on/off mode:

1. Set the station to CH mode.
2. Press the FUNC button until DIMMER is displayed.



3. Keep pressing the FUNC button for 3 seconds. The baud rate is displayed.



4. Press the FUNC button until the station enters SelCall on/off mode.

If the current SelCall status is ON, the display should show SELC ON.



If the current SelCall status is OFF, the display should show SELC OFF.



5. Press the scroll keys to activate/deactivate SelCall. The display shows the selected SelCall state.
6. Press MON to view the SelCall self address.

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7. To exit SelCall on/off mode:
  - Alternate display time-out passes.
  - Press FUNC button or the PRI button.

### Receiving a SelCall Call

When the station receives a SelCall link request, press one of the PTTs or one of the buttons to receive the call. If you fail to respond to the link request, the link is automatically released after the Accept Link TOT (see *SelCall Parameters*).

### Transmitting Individual Calls or Net Calls

An individual call is a call directed to a specific SelCall station and a net call is a call directed to a group of SelCall stations on the net. A SelCall station can initiate both types of calls while operating in scan mode or in channel mode.

#### To make an individual SelCall call while in SelCall scan mode:

1. Press the CALL button and scroll for the required channel.
2. Press the CALL button. The last called address (if any) is displayed.
3. Scroll for the required address. For details about the order in which addresses appear, see *Scrolling Addresses* later in this chapter.
4. Press the CALL button to initiate the individual call.



#### To make an individual SelCall call while in SelCall channel mode:

1. Press the CALL button. The last called address is displayed.
2. Scroll for the required address. For details about the order in which addresses appear, see *Scrolling Addresses* later in this chapter.

3. Press the CALL button to initiate an individual call on the current channel.

#### To make a net call while in SelCall scan mode:

1. Press the CALL button and scroll for the required channel.
2. Press the CALL button. The last called address is displayed.
3. Scroll for the required net address - NET x.



4. Press the CALL button to initiate a net call.

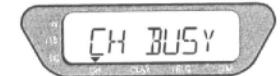
#### To make a net call while in SelCall channel mode:

1. Press the CALL button. The last called address is displayed.
2. Scroll for the required net address.
3. Press the CALL button to initiate a net call on the current channel.

### NOTES

Before transmitting, the station checks whether the channel is free (no other station is currently transmitting). If it is, the TX LED lights, allowing you to transmit.

If the channel is engaged, the control head displays CH BUSY for 30 seconds, and the busy tone is heard (if the Alert parameter was set to YES; see *SelCall Parameters*). After this period the station returns its previous working mode. You can stop the busy tone by pressing any button or one of the radio's PTT.



### Scrolling Addresses

When you start to scroll the addresses, the first address that appears on the display is the address to which you directed your most recent call — the last address that the station tried to link to.

The order in which addresses are brought into view depend on the scrolling button you use.

When you SCROLL UP, addresses appear in the following order:

1. Last called address.
2. First incoming call station address stored in the stack (see *Using the Stack* later in this chapter). Each button press shows the subsequent address registered in the stack, in FIFO order.
3. Last- or currently-used net address.
4. The member addresses of the currently-used net — from first to last.
5. Station addresses stored in the directory, in lexical order — from 0 to 9, and from A to Z.
6. Another button press returns you to the first address in the stack (step 2 in flow description below).



When you SCROLL DOWN, addresses appear in the following order:

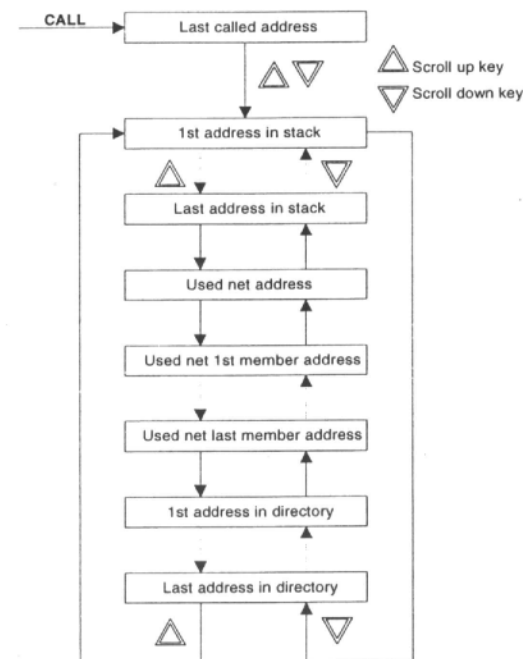
1. Last called address.
2. First incoming call station address stored in the stack.
3. Station addresses stored in the directory, in reversed lexical order — from Z to A, and from 9 to 0.
4. The member addresses of the currently-used net — from last to first.
5. Last- or currently- used net address.
6. Station addresses in the stack — from the last through the second.
7. Another button press returns you to the first address in the stack (step 2 above).

#### NOTES

1. The address scrolling process is cyclical — the operator can keep pressing the scrolling buttons until the desired address is shown on the display.
2. If there is no address to display at a specific step, the scrolling process moves to the next step.

3. The display shows the first 8 characters of the SelCall address.
4. Addresses can be fast-scrolled by pressing the scroll button continually. The scrolling rate is four addresses per second.

The following chart depicts the reading order during address scrolling.



#### Transmitting a Quick Call

A quick call is a call that is initiated by double-clicking the MIC PTT. The destination can be either the last station the current station tried to establish a SelCall link with, or the address currently displayed on the control head. In Scan mode the channel is also saved for quick calls.

Whether or not your station can make quick calls is a programmable feature. You can make quick calls if the Quick PTT Call parameter is set to ON (see *SelCall Parameters*).

### Quick-Calling the Most Recent Address

During a call, the station saves the latest destination information as the "quick call" address. When the user double-clicks the **MIC PTT**, the radio automatically directs the call to that address.

Obviously, the first time the station moves to one of the SelCall modes (channel or scan), a quick call is not possible as no "most recent" station data exists yet. If the user nevertheless double-clicks the **MIC PTT**:

- In SelCall channel mode, the station enters the regular transmission mode (as if the **MIC PTT** was pressed once).
- In SelCall scan mode nothing happens.

### Quick-Calling the Displayed Address

Both in SelCall channel and scan mode, you can quickly transmit to the address displayed in the control head by double-clicking the **MIC PTT**. In this case the destination address will be the displayed address, and the quick call channel number will be the selected or the current working channel. This call saves the call parameters as the "most recent" address.

### Transmitting an AllCall

An AllCall is a SelCall broadcast message. It is used by a SelCall station to establish a connection with all other stations.

This is a programmable feature (see *SelCall Parameters*) and the SelCall station may be set to receive or ignore both outgoing (Transmit) or incoming (Receive) AllCalls. For example, a SelCall station may receive AllCalls but may not initiate one.

At the end of an AllCall, the SelCall station automatically returns to its previous working mode.

### Receiving an AllCall

If SelCall is set to receive AllCalls, it does the following when it receives one:

- Stops SelCall scanning
- Unmutes the speaker.

### Transmitting an AllCall

If SelCall is set to issue AllCalls press the **PRI** button for 3 seconds. The SelCall station initiates the link process.



In SelCall channel mode, the call is performed on the current channel.

In SelCall scan mode: if an AllCall channel has been defined, then the call is performed on that channel. If no AllCall channel has been defined, the call is performed on the first scanned channel of the net.

At the calling station, **LINK** blinks on the display after the link is established.



### Alert Tone

The SelCall station may generate an alert tone when it establishes a link. The alert tone is a programmable feature. See *SelCall*.

If the alert tone is programmed to **ON**, the following takes place as soon as the SelCall station detects an incoming call:

- The alert icon (bell) is seen on the display.
- The SelCall station produces the alert tone.

The SelCall station automatically stops the alert tone in one of the following cases:

- The user pressed one of the station buttons or one of the radio's **PTTs** (accept a link request).
- The operator failed to respond to a link request within 30 seconds from the time the SelCall station received the call.
- The remote station accepted the link request and transmitted the **MON Ack.** message.

When the alert tone stops the alert icon (bell) goes off and the blinking of the displayed information stops. The external alarm signal goes off.

### Busy Tone

If the alert tone feature is active, the calling SelCall station generates a busy tone if the called party is busy or if the selected channel is not free. This is true only in individual calls.

The calling SelCall station stops the busy tone in one of the following cases:

- The user pressed one of the station buttons or one of the PTTs.
- The busy tone time-out elapsed (30 seconds).

### **SelCall Scan Mode**

This section reviews the operation and capabilities of the scan mode under SelCall.

#### **Scan Tuning**

If a tuner or a power amplifier is connected to the station, and the station is set to SelCall scan mode, the tuner moves to bypass mode.

#### **Starting, Stopping, and Resuming the Scan Mode**

Scanning can be started or stopped by pressing the SCAN button. Each SCAN button press toggles between the two operating modes: SelCall channel mode and SelCall scan mode.

When you stop scanning, the station moves to SelCall channel mode.

Also, the station stops scanning automatically when it detects an incoming SelCall call. The SelCall station saves the scan mode as the last working mode. Then it moves to SelCall channel mode and stays in the last scanned channel.

If the last working mode, while in link, was SelCall scan mode, the station automatically resumes scanning after the link is disconnected.

#### **PTT while Scanning**

While the station is in SelCall scan mode the PTT is disabled. Only a quick call can be transmitted if it is enabled. The radio PTTs are automatically enabled when a SelCall link is established.

#### **Scan Display**

In SelCall scan mode, the station displays the active net number and the number of the currently scanned channel. The displayed string follows the format NETy xxx, where:

y stands for the number of the active net.



xxx stands for the currently scanned channel number (1 to 100).

#### **Changing the Active Net**

The active net changes when you press one of the scrolling buttons.

### **Using the Stack**

The caller stack stores information about unanswered calls. The stack entry contains the self address of the calling SelCall station.

An address is recorded in the stack only once even if the caller makes repeated unanswered calls.

The stack is arranged in FIFO order; the first address that entered the stack is also the first that the operator sees on the display.

The stack icon blinks when at least one SelCall address is registered in the stack. When the user displays the first unseen calling address on the stack, the stack icon is displayed. The icon is automatically turned off after the stack was browsed.

An address is taken out of the stack in one of the following ways:

- When an operator returns a call to a station registered in the caller stack, the corresponding address is erased from the stack.
- The stack is full and a new address comes in. The stack stores up to 10 addresses. The eleventh call pushes the oldest address out of the stack.

### **Monitoring the Speaker**

In SelCall channel or scan mode, you can switch the speaker on and off, using the MON button. Each MON button press toggles between the two states.

The speaker status is indicated through the "speaker" icon (the leftmost icon on the display). The icon appears when the speaker is on and disappears when it is turned off.

After the SelCall station approves the link it unmutes the speaker. When the SelCall station terminates the link, speaker status is restored to its pre-link state.

SelCall mutes the speaker when it moves to scan mode.

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## SelCall Parameters

This chapter is a detailed reference to MICOM-2 configuration parameters that relate to the SelCall option.

### *Net Options*

#### **Net Name**

The *name* is used to initiate/receive a net call. The name can hold up to 15 characters.

The net name must be different from:

- Station self address
- Any name included in the SelCall directory.

#### **Self Address**

The *self address* is used to initiate/receive individual calls. The self address can hold up to 15 characters.

The self address is identical in all nets which ensures its uniqueness throughout the nets.

The self address must be different from:

- Any net name
- Any name included in the SelCall directory.

#### **Scan Rate**

The number of channels SelCall scans per second. Valid scan rates are 2 or 5.

#### **Tune Time**

The maximum time the current SelCall station waits for the called station to tune (this is the tune time of the slowest antenna tuner in the net). The tune time is added to the calculated response time.

If the calling station or one of the destination stations are programmed to work with a tuner, then the calling station assumes that all the stations work with a tuner, thereby adding the tune time to the normal response time.

#### **Home Ack.**

Determines whether a SelCall station informs the other SelCall stations that the call has ended.

This parameter has no effect if the Silent parameter has been enabled.

**Mon. Ack.**

Determines whether a SelCall station informs the calling station that it has received the call and that link was established in an individual call.

This parameter has no effect if the Silent parameter has been enabled.

**Silent**

Determines whether a SelCall station acts in silent mode. The silent mode is a mode where the current SelCall station is not allowed to respond to a SelCall transmission.

For a SelCall call in silent mode, the Silent parameter must be set to ON both in the calling and in the called station.

**Master/Slave**

This parameter determines whether the a SelCall station can initiate a net call. A master station is allowed to initiate a net call, while a slave station is not.

**AllCall**

An AllCall is a SelCall broadcast message. It is used by a SelCall station to establish a connection with all other stations.

A station can be set to receive and/or transmit AllCall messages.

**Net Members**

**Member List**

The members are a group of stations that participate in a net call. Each member's address can consists of up to 15 characters.

**NOTES**

- The list can hold up to 16 members.
- The list is arranged via RSS, manually or in alphabetic order.

**Scanned Channels**

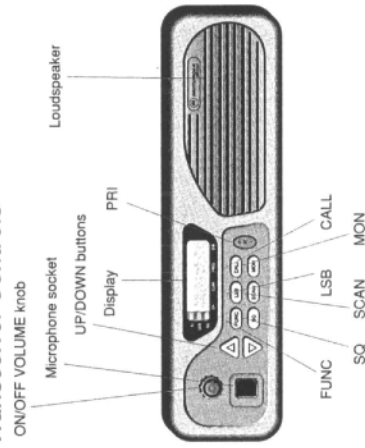
**Scanned Channels**

The channels that are scanned in the net.

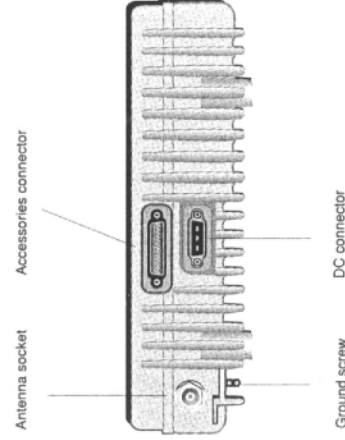
You must program the station's channel using the MICOM-2 RSS before adding channels to the scanned channel list.

**Digital Selective Calling Quick Reference Card**

**Transceiver Controls**



**Transceiver Rear Panel**



- PRI button** Terminates each temporary activity, or sets station to priority channel, or starts an "AllCall" in SelCall mode.
- MON button** Mutes/unmutes the speaker.
- CALL button** Transmits a SelCall call.
- SCAN button** Scans the programmed channels in a chosen group or SelCall net.
- LSB button** Enables/disables lower sideband operation.
- SQ button** Activates/deactivates the squelch algorithm.
- FUNC button** Changes cyclically between the operating modes.
- UP/DOWN** Scrolls up/down the parameters of the mode displayed.

**Status Annunciators**

- CLAR** Indicates a frequency deviation.
- NB** Indicates the Noise Blanker is activated.
- Bell icon** Indicates an alert; the busy tone active.
- Speaker icon** Indicates that the speaker is operating.
- Microphone icon** Indicates the presence of record calls in the caller stack.

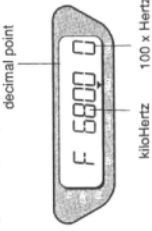
**Alert Tone Indications**

- Valid button press:** When enabled via the RSS, sound beep to indicate that the command accepted.
- PTT release:** When enabled via the RSS, sound beep at the remote station to indicate that the PTT button was released.
- Quick PTT Call** Call the most recently called SelCall station.

**LED Indications**

- LED Color** Indicates Transmission.
- Tx Red** The station operates in LSB mode.
- LSB Orange** The squelch is activated.
- SQ Yellow**

**Frequency Display**



**Operating Modes**

- The FUNC button** changes cyclically between:
  - CH** Displays the selected working channel.
  - CLAR** Displays the deviation (measured in Hertz) from the nominal frequency.
  - FREQ** Displays the operating frequency.
  - DIM** In this mode, you can adjust the level of display illumination.
  - NB (optional)** Activates/deactivates the noise blanker mode, provided your station model includes this option.



## Options Configuration

### PTT Time-out

Determines the duration from the moment a PTT is released and until SelCall disconnects a link.

### External Alarm

Determines whether SelCall activates the station's external alarm switch (accessory connector, pin no. 20) when a call is received. If the parameter is set to YES, the station activates the external alarm device connected to it, when it receives a call.

The station disconnects the external alarm device when the alert tone ends.

### Quick PTT Call

Determines whether a double-PTT press will initiate a call to the last station the station tried to link to, on the last channel the station tried to establish a link.

The quick call is made possible thanks to a feature whereby the station saves the last destination for quick call purposes. When the station detects a double-PTT it retrieves the "quick call" information and directs the call to that station.

### Alert

Determines whether SelCall generates a tone when a call is received.

A calling SelCall station generates a busy tone when it tries to contact a busy station, or when the channel is busy, that is, when another SelCall station is transmitting on the same frequency.

### Auto Address

Determines whether SelCall automatically adds the address of an unknown SelCall station to the directory, during an incoming call.

This parameter has no effect if the directory is full.

### Accept Link TOT

Determines whether SelCall disconnects the link if the PTT is not pressed or no button is pressed within 30 seconds from the moment a call is received.

## Operating Instructions

### Turn the Radio On

Turn the ON/OFF VOLUME knob to the right until 1 clicks.  
The display shows SELF TEST for about 3 seconds.  
The last working mode, CH or SCAN, is displayed.

### Turn the SelCall Option On/Off

Display DIM mode and keep pressing the FUNC button for about 3 seconds. The baud rate is displayed.  
Press the FUNC button again till SELC OFF or SELC ON appears on the display.  
Press the scroll button to SELC ON or SELC OFF.

### Scan SelCall Nets

Make sure that SelCall option is ON.  
Press the SCAN button. The display shows the last scanned net.  
Press Scroll to scan a different net.  
Press SCAN or PRI to stop scanning.

### To Transmit an AllCall

- Make sure that the transmit AllCall net option is enabled.
- Press the PRI button until "T ALCALL" is displayed (about 3 seconds).

### To Transmit a Net Call from SelCall Scan Mode

- Press the CALL button and scroll for the required channel.
- Press the CALL button. The last called address is displayed. Scroll for the required net address.
- Press the CALL button to initiate a net call.

### To Transmit an Individual Call from SelCall Scan Mode

- Press the CALL button and scroll for the required channel.
- Press the CALL button. The last called address is displayed. Scroll for the required address.
- Press the CALL button to initiate an individual call.

### To Transmit a Net Call from SelCall Channel Mode

- In SelCall channel mode net call parameters are "NET 1" parameters.
- Press the CALL button. The last called address is displayed. Scroll for the required net address.
- Press the CALL button to initiate a net call on the current channel.

### To Transmit an Individual Call from SelCall Channel Mode

- Press the CALL button. The last called address is displayed. Scroll for the required address.
- Press the CALL button to initiate an individual call on the current channel.

### To Accept Received Net/Individual Call

- Press any button or PTT button.
- Press PRI to rescan the current net.

When this parameter is set to NO, the station automatically accepts a link request.

If the parameter is set to YES, and the user fails to accept the call, the SelCall station returns to its previous state after 30 seconds (SelCall scan or channel mode). This time cannot be modified.