

OVERVIEW

Message Waiting When station B calls station A but station A is busy or out and does not answer, the message waiting can be registered to station A by pressing the MW (Message Waiting) button or by entering the cancel access code while hearing busy tone or ringing. The MW button flashes on station A informing the user of the incoming call.

Even if the call is transferred to another destination by Call Forward or Station Hunting, MW is registered to the first dialed destination.

- When the first dialed destination is a Prime Directory Number (PDN), Message Waiting is indicated to the MW button for each station provided on the IPT station.
- When the first dialed destination is a Phantom DN (PhDN), Message Waiting is indicated to the MW button associated with the PhDN.
- When the first dialed destination is Phantom DN and no MW button is associated with the Phantom DN, Message Waiting is indicated to the MW button for each station provided on the owner station.

In other words, if there is no PhDN message waiting button set on the user station, the fixed MW button of the PhDN owner station will flash if a message is set for the PhDN.

In any case, Message Waiting is indicated only to the MW button on the owner station. For example, even if Phantom DN is shared by two or more stations (Multiple Appearance), Message Waiting is indicated to the station that has the ownership of that Phantom DN and is not indicated to other stations.

When the MW button flashing on station A is pressed, the contents of the registered message waiting (the caller) is indicated and the caller is called back depending on the type of Message Waiting.

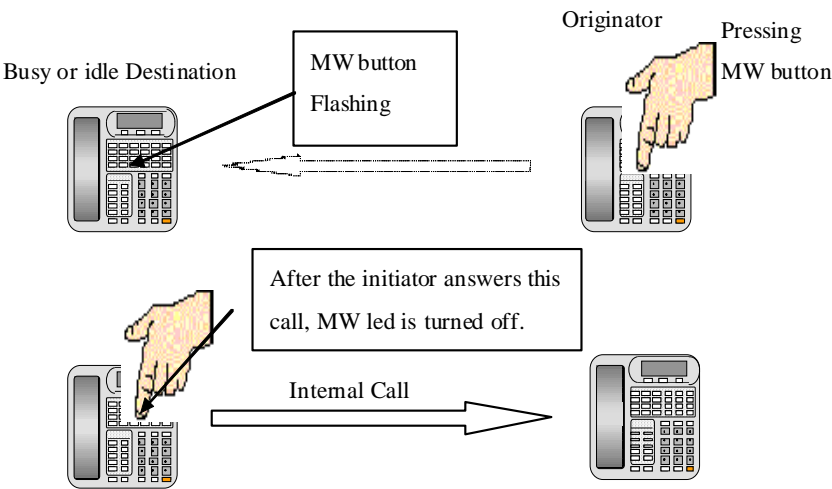
Message Waiting: Two Types.

1. Station Message Waiting

This is a general message waiting service. When the extension station is busy or doesn't answer, the message waiting is registered. When the MW button is pressed on the message waiting called station, the message waiting caller station can be called.

2. Voice Mail Message Waiting

This is the service to inform the voice mail unit connected to the system where the stored voice message comes in to the station. The voice mail unit registers this message. When the MW button is pressed on the message waiting called station, the voice mail unit is called and VM-ID is sent after the voice mail unit answers.



The MW button for each station or Phantom DN message waiting button normally receives one message waiting from Voice Mail and three other messages waiting.

Voice Mail Message Waiting is positioned to the highest priority (the head) on the message waiting queue of the called station and it is counted as one message waiting even if it is registered many times. This is the same for other messages waiting. When the message waiting is registered several times from the same caller station, the previous registration is overwritten and counted as one message waiting.

The system refers the display DN according to the Directory Number Presentation on determining whether the Message Waiting is registered by the same station or not. If more than one Voice Mail system, with a different display DN, registers the Message Waiting, they are treated as individual Message Waiting registrations. In this case, 2 Message Waiting information occupies the space for the Station Message.

Voice Mail Message
Station Message
Station Message
Station Message

Each message waiting queue consists of one area for the Voice Mail Message and three areas for Station Messages. These messages are viewed in a cyclic manner at the receiver station.

MW Registration (Station Message Waiting, Voice Mail Message Waiting)

Registration of Station Message

**Registration After Calling
The Station**

While calling the destination station, during voice calling, or when the destination station is busy or on Do Not Disturb, the Message is registered by any of the following methods.

- Press the MW button
- Dial 7 (Refer to Dial For Quick Launch.)

When one of these operations is performed, the Message is registered on the called station and the MW button flashes red. The caller station lights up the MW button (red on) and displays the registration of the message on the LCD. Success Tone (ST) is sent to the caller station. When the caller station goes idle (hand up handset or by pressing the speaker button), the MW button turns off but the LCD remains on.

When the MW button is pressed or 7 is dialed while hearing ST, the registered MW is reset. The the caller and called station's MW button LED and LCD goes off. Busy Tone (BT) is sent to the caller station, and a message can be re-sent when 7 is dialed again.

When the caller terminal is a SIP terminal or an analog terminal connecting to gateway, no MW registering or canceling is provided even if the terminal sets SIP inband mode.

When the maximum of four stations are registered on the MW button of the called station no more messages can be registered or when no MW button or lamp is provided on the called station, pressing the MW button or dialing 7 is ignored.

**Registration of Voice
Mail Message**

Registration after calling the station:

- Dial 8 (Refer to Dial For Quick Launch.)

The operations on the caller and called stations are the same as (1).

Registration without calling the station:

- OFF-HOOK + VM-MW registration code + Called station DN (PDN or PhDN)

When MW can be registered after checking the VM-MW code and the destination DN number, Success Tone is sent for one second and then Quite Tone is sent. If a non-existing DN number is specified, Reorder Tone (fast busy) is sent.

**MW display (Station
Message Waiting, Voice
Mail Message Waiting)**

When a message waiting is registered, the message waiting button on the receiver's station is lit in steady red. Moreover, when a user goes off-hook or presses the speaker button to make a call, the stuttered tone is provided instead of the regular dial tone.

In case of IPT with LCD, Message Waiting is displayed on the lower line of the LCD. When the SCROLL button is pressed while more than one message is registered, the Message Waiting display changes sequentially. When Message Waiting for each station first displays, Message Waiting associated with the PhDN displays sequentially in

numerical order of MW buttons. When the SCROLL button is pressed after the last Message Waiting displays, the display returns to the first Message Waiting.

When the station is busy with a conversation, the Message Waiting display disappears, but when the station becomes idle, the first message (Message Waiting with the highest priority and peculiar to the station) displays again when the station becomes idle.

The sender of the message waiting also gets an indication that the message has been sent, in the upper line of the LCD. This display clears when the station moves from an idle state to a busy state or when there is another display with a higher priority than the message waiting.

However, the display resumes when the station goes back to an idle state and there is no higher priority display. At the outset, the most recent message waiting is displayed. Each time the SCROLL button is pressed, the display changes to the next latest message. When the sent message displays on the upper line of the LCD and the received message displays on the lower line of the LCD, the PAGE button allows a user to select which line to scroll.

Answer MW (Station
Message Waiting, Voice
Mail Message Waiting)

When any MW button is pressed while the Message Waiting to call back displays, the DN line button corresponding to that message is seized and the system can be called back. Regardless of which MW button is pressed, if the Message Waiting was registered to the PDN, then it is used. If the Message Waiting was registered to a PhDN, then that PhDN is seized. Even in the case that the Message Waiting for the PhDN is registered to the MW button of PDN because there is no MW button associated with the PhDN, the PhDN where the registration was attempted is seized. When the DN button is busy and cannot be seized, pressing the MW button is ignored.

When the message waiting is retrieved, the message waiting sender's PDN is called back. If the message waiting sender uses the Directory Number Presentation feature, the call back occurs to the presented DN.

A station with no LCD or not displaying the Message Waiting cannot select and call back Message Waiting. To answer Message Waiting, press the MW button or dial the MW answering access code. When the MW button is pressed, the Message Waiting with the highest priority is called back. When the MW answering access code is entered, and the Message Waiting from Voice Mail exists, it is answered. If Message Waiting from Voice Mail does not exist, the oldest message is answered. If no Message Waiting pertinent to the station exists, the Message Waiting associated with the PhDN is searched in numerical order of MW buttons and the first detected Message Waiting is answered.

When the MW button is pressed at the dial tone state (which follows going off-hook or pressing the speaker button) the Message Waiting for that MW button with the most priority is selected and called back.

Cancel MW (Station
Message Waiting, Voice
Mail Message Waiting)

Message Waiting is canceled by the following methods.

1. The caller station resets in the process of registering Message Waiting.

Refer to Message Waiting registration.

2. The caller station talks with the called station.

When the message-sending station talks with the message-receiving station by the call-back by Message Waiting or by ordinary dialing, Message Waiting is automatically canceled.

If Message Waiting is associated to a PhDN, the PhDN button must be used to make the conversation. In case of Message Waiting for each station, the PDN must be used to make the conversation.

As to Voice Mail Message Waiting, even if the Voice Mail unit makes conversation with the called station, Message Waiting may not be canceled by the program setting.

3. The called station dials the Message Waiting Canceling access code.

Going off-hook or pressing the extension button and dialing the received Message Waiting canceling access code cancels the last displayed MW and the user hears Success Tone after operating the SCROLL softkey to display the Message Waiting to cancel. Even if it is not canceled, Success Tone is sent.

4. The caller station dials the Message Waiting Canceling access code.

To reset the registered MW from the caller station, seize the extension button and dial the sent Message Waiting canceling access code with the called station's DN (PDN or PhDN).

When the Message Waiting is canceled or when the Message Waiting to be canceled does not exist, Success Tone is sent. When the Message Waiting to be canceled exists but it is not canceled due to any reason, Reorder Tone is sent.

Message Waiting

Any station and most voice mail devices can turn on a message waiting indicator for a designated IP5000-series telephone. This feature can be disabled in station programming.

LED Indication

Message waiting lights can be activated when a voice mail message has been left or they can be turned on by a calling station. The station user can retrieve messages by pressing the button next to the message waiting light or by dialing an access code from a standard telephone.

The telephone main **Msg** light indicates a message is waiting for the telephone PDN. Up to four PhDNs per telephone can also have individual MW LEDs assigned to flexible buttons.

Stutter Dial Tone

Stutter dial tone is also used to indicate a message is waiting or that your telephone is in the DND mode. When a station user goes off-hook, two different available stuttered dial tones indicate whether a Message Waiting (MW) or DND condition exists.

- The MW-stutter dial tone indicates a message is waiting for the station.
- DND-stutter dial tone indicates DND is set at the station. (DND provides a fast busy tone burst as stutter dial tone.)

If both conditions exist simultaneously, the MW-stutter dial tone has priority. This is very valuable to station users that do not have a MW Light Emitting Diode (LED) or **DND** button LED on their telephone.

Users can disable (in programming) stutter dial tone for message waiting and when in the DND mode. If stutter dial tone is disabled, they will hear a normal dial tone when off-hook.

Message Waiting

Message Waiting is shown on the **Msg** button which flashes red when there are messages waiting. The waiting message indicators can come from the voice mail system or they can be internal messages sent from other extensions.

The messages from other extensions are notifications that someone has called your extension and wants you to call them back.

An extension can receive up to three Message Waiting indications, one additional indicator will always be reserved for the voice mail system.

Note: If there are Phantom DN's (PhDNs) programmed on an extension, each PhDN can receive up to three message waiting indicators.

Responding to a Lit Msg LED

1. Press the Red flashing **Msg** button. The telephone will dial the message source (the voice mail or another extension). See Note below.
2. When the call is finished, hang up and the message waiting indicator will clear.
3. If the Msg LED continues to flash, there are additional messages to check, repeat steps 1-2.
Voice mail devices have a short delay in turning off the message waiting indicators.
4. To manually turn off the Msg LED, press your extension button, then enter #409. Repeat this sequence until all the messages are cleared.

Notes:

- If there is a + on the LCD, press the **Next** Soft Key to scroll through the messages sent to that extension.
- To see who has sent you messages, or to retrieve the messages, press the flashing **Msg** button.

Turning On/Off MW LED on Another Extension

When an extension is called, the calling party can choose to send a message to the called party. This is a notification to say that a call has been missed and the calling party would like to be called back.

By sending a message to another extension you turn on their Msg LED.

1. Dial an internal extension. You may hear ringing or busy tone.
2. Press **Msg** or **7**. The Msg LED flashes red on the called telephone. At your telephone, the Msg LED lights steady red and the LCD shows the station number where the Message Waiting light was sent.
3. If you decide to cancel the Message Waiting light at this point, press **Msg** or **7** again while ring-over tone is playing and the light will cancel. If you want to cancel the message later, call the telephone where you set the message and press **7** twice.
4. Press **Spkr**. Your Msg LED turns Off. The Msg LED on the called telephone flashes until the called party presses the flashing **Msg** button which calls you back.
5. Turn off the Message LED.

The two ways to turn Off a Message LED are:

Method 1

1. Press **#64** plus the extension number that has the message light set.
2. Press **Spkr** or hang up to end the call.

Method 2

1. Dial the extension that has the Message LED.
2. Press **77**.
3. Press **Spkr** or hang up to release your telephone.

PROGRAMMING

- | | |
|--|---|
| Station Assignment | <ol style="list-style-type: none">1. Click on Station > Station Assignment.2. Check the Station to be programmed.3. Click on Edit icon.4. Select Show Advance Configuration.5. Enable/Disable MW/DND Dial Tone.6. Enable/Disable Activate Message Waiting.7. Click on Save icon. |
| Optional: Modify Message Waiting Codes | <ol style="list-style-type: none">1. Click on System > Flexible Access Codes.2. Click the access code to be changed.3. Click on Delete.4. Confirm the deletion of the code. |
| Add New Flexible Access Code. | <ol style="list-style-type: none">1. Click on New.2. Enter the code.3. Select the feature from the drop down.4. Click on Save icon. |
| Voice Mail Data | <ol style="list-style-type: none">1. Click on System > Voice Mail Data.2. Select the setting for Cancellation Method for VM MW.<ul style="list-style-type: none">• Access Code Cancel will remove the message waiting indication only when VM sends the command after all new messages are played.• Auto and access code cancel will cause the light to go out as soon as the station connects to the voice mail.3. Click on Save icon. |

CAPACITY

Each MW button can receive MW of four calls maximum (one dedicated to Voice Mail Message and three for Station Messages).

The maximum number of Sent Message Waiting that can be displayed on the sender's station is 30.

The number of Total Message Waiting buttons for a PhDN in the system is 192 (MW button memory is dedicated to each PDN).

The total number of MW buttons in the system is 1191 (The number of stations - 1+ the number of PhDN MW).

AVAILABILITY

Message Waiting can be registered from the extension (IPT, standard telephone, attendant console).

Message Waiting can be received by IPT, attendant console and standard telephone with a MW lamp.

Station/Line	Descriptions
IPT	Can set and cancel MW for the destination. Can receive MW.
Soft IPT	Can set and cancel MW for the destination. Can receive MW.
IP Attendant	Can set and cancel MW for the destination. Can receive MW.
SIP compliant station	Can receive MW as the called party.
SLT (via FXS Gateway)	Can receive MW as the called party if gateway can convert to MW for SLT.
IPedge Net	Can set and cancel MW for the destination in the remote node.
Voice Mail - MAS	Can set and cancel MW.
Voice Mail - SIP	Can set and cancel MW.

RESTRICTION

Setting is impossible while hearing Reorder Tone (fast busy) after finishing the call with the destination station.

The Message Waiting call back is treated as an ordinal call to which Call Forward or Do Not Disturb are applicable.

The SLT user cannot use a Message Waiting Service provided by the PSTN. (IPedge or gateway does not transmit a Message Waiting ON/OFF signal from CO to SLT even if the user subscribes to PSTN's MW Service.)

HARDWARE

No additional hardware is necessary for this feature.

FEATURE INTERACTION

Automatic Call Distribution	It is impossible to register Message Waiting for the pilot number of Automatic Call Distribution.
Back Light	When IPT in Synchronized mode receives or cancels Message Waiting, Backlight will turn on because the LCD is changed.
Basic Survivability	The Message Waiting state in the old server is not succeeded to the new server.
Call Forward, System Call Forward	Independently of the forwarding times and forwarding results by Call Forward, Message Waiting is registered to the dialed destination.
Call Monitor	<p>It is not supported to set Message Waiting from call monitoring party to the caller during monitoring.</p> <p>Other parties can set Message Waiting for call monitoring party.</p>
Call Transfer Immediate	The transferred party can invoke the Message Waiting feature after the call transfer is complete.
Call Transfer With Camp On	The transferred party hearing Ring Back Tone can register Message Waiting after invoking Call Transfer With Camp On feature.
Cancel Button	Message Waiting is not canceled even if the MW registration party presses the Cancel button after Message Waiting is activated.
Conferencing	Message Waiting can be set on the conference participants.
Directory Number Presentation	When Voice Mail selects any ports and registers Message Waiting, the Directory Number Presentation feature data is appropriately set up so that the call back is made to the hunting pilot of the voice mail no matter which port is used. Without this setting, the system recognizes the Messages Waiting made from different port as different ones.
DND/ Busy Override	The DND/ Busy Override feature is not applied because the Do Not Disturb feature does not affect the Message Waiting feature.
Do Not Disturb	Even if the received station sets DND, Message Waiting can be registered.

Emergency Call/Overflow	<p>The originator cannot register Message Waiting in an originating Emergency Call.</p> <p>Message Waiting cannot be registered after the forwarding call by Overflow is started because the Attendant may be the dialed station.</p>
Enhanced 911 (E911 Interface)	<p>The originator cannot set Message Waiting to Internal Notification.</p>
Executive Override	<p>When Executive Override is activated, a conference talk occurs and it is impossible to register Message Waiting in this state.</p>
Exclusive Hold	<p>Message Waiting can be registered while hearing either Busy Tone or Camped on when the caller originates to the line in exclusive hold.</p>
External ACD	<p>A call diverted from ACD behaves the same as IPT after terminating to the agent.</p> <p>Registering Message Waiting for the pilot number of Automatic Call Distribution is not supported.</p>
Group Paging/Emergency Page	<p>The paging invoking station hears Busy Tone if all paged stations are busy, but it cannot set Message Waiting.</p> <p>It is possible to set Message Waiting to the paged station when the call is terminated to the paged station during paging, and the MW button on the paged station blinks.</p>
IP Phone User Mobility	<p>Message Waiting is not canceled even if the DN of either the registering or registered station is logged out. Message Waiting is still activated after log in.</p>
LCD Shift Button	<p>Each feature button can be set on both the fore side and the hidden side.</p> <p>The service using LED continues even though it is not indicated while on the hidden side.</p>
Line Hold	<p>Since a held party by Line Hold feature is treated as a talking state, Message waiting can be set after the other party calls the held party.</p>
Lost Call Treatment	<p>Message Waiting cannot be invoked during Lost Call termination. Thus, pressing the MW button is ignored during Lost Call termination.</p>
Make Busy	<p>Message Waiting cannot be registered on the station in make busy mode.</p>

Manual Voice Recording	<p>Message Waiting can be set on the station that is using the Voice Recording feature.</p> <p>After Voice recording is finished, the Voice Mail device sends the signal "Message exists" to the system for the station associated with VM-ID. The system invokes the Message Waiting feature to flash the MW button of the station or the line.</p> <p>The system supports Message Waiting answering on the station set to Message Waiting from the Voice Mail device. It connects to the Voice Mail device and plays the contents recorded by Voice Recording.</p>
Multiple Appearance	<p>Registration of Message Waiting is done only for the owner station.</p> <p>Canceling a Station Message Waiting automatically by calling back is only if the registered owner station and MW registering station start talking.</p> <p>Secondary appearance line buttons ring following the setting of Ringing Assignment the same as an ordinal call when called back by the Message Waiting feature.</p>
Multiple Calling	<p>Message Waiting can be applied when calling the MCP No. from an extension.</p> <p>Message Waiting is set up to the station of the head of the destination listing that was set up with the MCP No.</p>
Multiple Directory Number	<p>When a Message Waiting is registered from one of Multiple Directory Number buttons, the call back destination is determined according to the Directory Number Presentation data. By setting up this data appropriately, the Message Waiting made from any of these buttons are treated as identical messages.</p>
Off-hook Call Announce, Handset-OCA, Hands Free Answer Back	<p>It is possible to register Message Waiting by activating Off-hook Call Announce, Handset Off-hook Call Announce, or Hands Free Answer Back after dialing the extension digits.</p> <p>It is impossible to register the message after the terminating extension station answers.</p> <p>It is also impossible to activate these features even if the message is canceled after registering.</p>
Off-hook Camp On	<p>Message Waiting can be registered even if the caller station hears Ring Back Tone by Off-hook Camp On.</p>

PC Attendant	<p>Attendant behaves the same as IPT to register Message Waiting to a busy station, call back from the MW registered station to Attendant, and call back to the caller by MW set on Attendant.</p> <p>The system does not support registering Message Waiting for the pilot number of Attendant group.</p>
Phantom DN Button	<p>If a Phantom DN is the registered party of Message Waiting, the MW button associated with the Phantom DN flashes.</p> <p>If the first terminated DN is a Phantom DN and an associated MW button does not exist, the MW button in each station of the owner station flashes.</p> <p>MW cannot register on a Phantom DN if the owner station of the Phantom DN is set.</p>
Private Networking Over IP	<p>If the nodes are connected via IPedge and given common numbers by a Coordinated Numbering Plan. When an extension station calls a station at a remote node or when calling an extension station at a remote node but the station is busy, a Station Message Waiting can be sent. When the voice mail unit connected to a certain node receives the message sent to a certain station at a remote node, Voice Mail Message Waiting can be sent to that station.</p> <p>If the nodes are connected via a non-IPedge and not given common numbers by a Coordinated Numbering Plan, the information about the originator of Message Waiting is not sent to a remote node and Message Waiting cannot be sent.</p> <p>A transit node cannot judge possibility of providing Message Waiting in the network where IPedge and non-IPedge lines coexist. Thus, only when the Message Waiting receiving node receives Message Waiting and the originator's information can be recognized is Message Waiting accepted.</p> <p>The station receiving Message Waiting can view the message and can make callback as well as Message Waiting received at a local node.</p> <p>Message Waiting can be canceled by operating the sending station or the receiving station. Message Waiting can also be reset when the sending station and the receiving station talk to each other via IPedge. In this case, Message Waiting is automatically reset regardless which line button of the sending station and the receiving station is used for conversation.</p> <p>IPT cannot send DTMF tone so that feature cannot be invoked in case the remote node cannot hunt media resources to provide tone.</p> <p>Full IPedge Net, Ring Back Tone on incoming calls must be set to Enabled to use this feature.</p>
Recall Treatment	<p>The transferred or the transferred-to party cannot invoke Message Waiting feature if recall is terminating.</p>

Ring Transfer	The transferred party hearing Ring Back Tone can register Message Waiting after Ring Transfer is completed.
SIP Trunking	Provided if the public trunk supports it.
SIP Extension	<p>A SIP station cannot set Message Waiting in the calling state because it cannot notify pressing dial. However, it is possible in SIP inband mode to set the station in the remote node via IPedge.</p> <p>When Message Waiting is registered, it depends on a station for the indication method of the notified information. (In the case of UIP-200, the indication to LED is performed, but Message Waiting information is not displayed on the LCD.)</p>
Station Hunting	It is impossible to register Message Waiting for the pilot number of Station Hunting. When a member of Station Hunting is dialed, Message Waiting is registered to the dialed extension station regardless of the results of Hunting.
Station to Station Connection	When the received MW answers, the callback is handled as an ordinary internal call.
Tenant Service	IPedge sets different VMID based on Tenant Number (TNN) and the Message Waiting center changes the behavior from TNN in received information.
Universal Call Distribution (UCD)	<p>The system does not support setting Message Waiting to UCD pilot DN.</p> <p>Message Waiting is set on the dialed station regardless of the result of UCD if a UCD member is dialed.</p>
Voice Mail Interface	<p>When Message Waiting is called back for Voice Mail, the station seizes the DN button where the message waiting was registered and the system informs the voice mail of the VM-ID associated with the DN button that is being used. Thus, the VM-ID provided to the voice mail may vary depending on which DN button the message waiting is registered. The sending method is DTMF, depending on the setting of the Voice Mail unit.</p> <p>When Voice Mail Message is registered by dialing "8" or the access code from the port connected to the Voice Mail unit, it is called back by the number defined by Directory Number Presentation.</p>