

Introduction

"Voice Commander" is a Speech Dialog System that provides natural human interface for users to communicate seamlessly with mobile devices. Through Voice Commander, users can make phone calls, look up contact info, launch program or check for calendars.

It contains the following features.

- Eyes-free and Hands-free voice command & control.
- Speaker-Independent speech recognition technology, no training is required.
- Ease of use conversational UI.
- "Personal Voice Tag" and "Digit Model Adaptation" to enhance the usability.

Getting Started

You can find "Voice Commander" and "Voice Commander Setting" in the "Start" > "Programs" > "Voice Commander" folder, their functions are as below.

Voice Commander: The main program that does voice name dialing, show contact and start applications.

Voice Commander Settings: The configuration program that helps user to customize commands and helps user to personalize the digit model by adaptation.

"Voice Commander" can be activated via:

- 1. Tap "Start" > "Programs" > "Voice Commander".
- 2. Voice Commander Button: We have already set "Hold Dial Key" as Voice Commander button in the Advance Setting page. You can also set your own Voice Commander button via "Start" > "Settings" > "Buttons"

"Attention": The recognition accuracy could be affected while using the voice commander under noisy environment.

Voice Name Dialing

User can use "Voice Commander" to execute name dialing.

Usage: Call <Contact> at <Home/Work/Mobile>

Example 1: <Call Contact>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Call Call Michael Archer"
- 4. System: "Call Michael Archer work, is it correct?"
- 5. User: "Yes"
- 6. System: "Dialing"



Example 2: <Call Contact at home>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Call Mary Smith at home"
- 4. System: "Call Mary Smith home, is it correct?"
- 5. User: "Yes"
- 6. System: "Dialing"

Example 3: <Call a Contact with more than one phone number>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Call Alex Jordan"
- 4. System: "Call Alex Jordan, home, work, mobile or cancel?"
- 5. User: "Home"6. System: "Dialing"

Example 4: <Two contacts with the same pronunciation, for example: Halley Johnson and Haley Johnson>

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "Call Halley Johnson"
- d. System: "More than one Halley Johnson, please select " (User can select the contact intended to call.)

Note:

- Voice Commander will automatically maintain a maximum of 2000 contacts in the recognition database. To change this setting, refer to "Contacts" Setting Page."
- If the command can not be recognized, Voice Commander will prompt "Please say again". This situation could happen under the noisy environment, or when user says command before Voice Commander starts recording. After hearing the prompt "Say Command", user is suggested to wait 1~2 seconds to speak the command.
- The recognizable contact length is 48 characters. For those exceed 48 characters will be ignored.

Voice Find Contact

User can use "Voice Commander" to look up contact information.

Usage: Find <Contact> at <Home/Work/Mobile>

Example 1: <Contact query>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Find Mary Smith"
- 4. System: "Mary Smith home 0229109088"



Example 2: <Find a specific number>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Find Michael Archer at work"
- 4. System: Michael Archer, work, 0229109088

Example 3: <Queried number does not exist>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Find Michael Archer at home"
- 4. System: "Michael Archer has no home number"

Example 4: <Two contacts with the same pronunciation, for example: Halley Johnson and Haley Johnson>

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Find Halley Johnson at work"
- 4. System: "More than one Halley Johnson, please select" (System will show both Halley Johnson and Haley Johnson for user to select.)

Voice Digit Dial

User can say telephone number directly to dial

Usage: Digit dial

Example:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User:"Digit Dial"
- 4. System: "Say number"
- 5. User: "0229109088"
 - (read clearly)
- 6. System: "0229109088. Confirm, Cancel, Redial?"
- 7. User : "Confirm"

 System : "Dialing"

 User : "Cancel"

System: "Say Command"

User: "Redial"

System: "Say number"

Note: To improve the accuracy of the digit dialer, user can do digit model adaptation by tapping "Menu" > "Settings" on "Voice Commander" main level, or launch "Voice Commander Settings", go to "Digit Trainer" setting page.



Voice Redial

User can use "Voice Commander" to do phone dialer control.

Usage: Redial

Example:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User:"Redial"
- 4. System: "Call Mary Smith at home, is it correct?"
- 5. User: "Yes"
- 6. System: "Dialing"

Voice Callback

User can use "Voice Commander" to do phone dialer control.

Usage: Callback

Example:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Callback"
- 4. System: "Call Mary Smith at home, is it correct?"
- 5. User: "Yes"
- 6. System: "Dialing"

Voice Start Application

User can use "Voice Commander" to start applications in the start menu.

Usage: Start < Application >

Example 1:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Start calendar"
- 4. System: "Go to Calendar" (Calendar will be launched)

Example 2:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Start MSN Messenger"
- 4. System: "Go to MSN Messenger" (Pocket MSN will be launched)



Today's / Tomorrow's / This week's appointments

User can use "Voice Commander" to do Calendar Query

Usage: Today's / Tomorrow's / This week's appointments

Example: <There are 3 appointments today>

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "Today's appointment"
- d. System: "You have 3 appointments"
- e. Press Voice Commander Button during calendar reading. System: "Please say Previous, Next, Repeat, or Abort."
- f. User: "Next"
- g. System will read next appointment.

Note 1: User can say Previous, Next, Repeat, or Abort to control calendar reading.

Note 2: System will only play the new appointments. The expired ones will be ignored.

SMS

Example : <There are 3 unread SMS>

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "Read SMS"
- d. System: "You have 3 SMS"
- e. Press Voice Commander Button during SMS reading. System: "Please say Previous, Next, Repeat or Abort"
- f. User: "Next"
- g. System will read next SMS.

Note: User can say Previous, Next, Repeat, or Abort to control SMS reading.

What time is it

User can use "Voice Commander" to do time query.

Usage: What time is it?

Example:

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "What time is it?"
- d. System: "The time is 3 p.m."



Call History

User can use "Voice Commander" to look up call history.

Usage: Call History

Example:

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "Call History"
- d. System: "Call history"
- e. System shows Call History page.

Voice Play Music

User can use "Voice Commander" to play music files.

Usage: Play < Music File>

Example 1 : <Play a specific music file>

- a. Press the Voice Commander Button.
- b. System: "Say command"
- c. User: "Play The Moment"
- d. System: "The Moment"
- e. Windows Media starts to play "The Moment".

Example 2 :< Play all music files>

- a. Press the Voice Commander Button.
- b. System: "Say command"
- c. User: "Play music"
- d. System: "Play music"
- e. Windows Media starts to play all music files.

Example 3 : <User wants to play other music file during playing>

- a. Press the Voice Commander Button.
- b. System: "Say command"
- c. User:"Next"
- d. System: "Next"
- e. Windows Media starts to play next music file.

Example 4 :< Pause or resume during music playing>

- a. Press the Voice Commander Button.
- b. System: "Say command"
- c. User:"Pause"
- d. System will pause music playing.



Note:

- User can say "Pause" or "Resume" to control music playing. The command "Resume" only works when the Windows Media is running.
- The commands "Previous" and "Next" only work when playing all music files
- Voice Commander only support media files with .mp3 and .wma format.
- Voice Commander supports the music files in the following folders:
 - Playlists or Media files synched by Active Sync.
 - "My Documents" and its subfolder
 - SD card and its subfolders.

What can I say

User can say "What can I say" to check Voice Commander help file.

Usage: What can I say

Example:

- a. Press the Voice Commander Button
- b. System: "Say command"
- c. User: "What can I say"
- d. Voice Commander display its help file.

The help file can also be displayed by tapping the "Voice Commander" main level's "Menu" > "Help" to open the help file.

Goodbye

User can say "Goodbye" to quit "Voice Commander".

Usage: Goodbye

Example:

- 1. Press the Voice Commander Button
- 2. System: "Say command"
- 3. User: "Goodbye"
- 4. System: "Goodbye"
- 5. Voice Commander will be terminated.

"Voice Commander" can be also terminated manually by tapping "Menu" > "Exit". Note that goodbye will not be accepted during voice digit dialing operation.

Note: "Voice Commander" will be automatically terminated after 10 seconds' silence.



"Voice Commander Settings" main functions

"Voice Commander Settings" helps user to personalize the system.

There are five major functions. They are "Contacts", "Application", "Music", "Digit Trainer" and "Advanced Settings".

"Voice Commander Settings", there are two different ways to start it:

- Tap "Start" > "Settings" > "Personal" > "Voice Commander Settings"
- On "Voice Commander" main level, tap"Menu" > "Settings"

"Contacts" Setting Page

After launching the "Voice Commander Settings", tap the "Contacts" setting page .This page will list all names in the device's contact database and SIM card. When a new contact is created, the system will automatically update the recognition database.

A check box will be shown in front of each name

- When a box is checked, means the contact can be recognized normally.
- When a box is unchecked, means the contact is not in the recognition range.
- When a box is grayed and can't be checked, means the name contains some unrecognizable characters, such as symbols or marks. User can build a voice tag to enable it.

The default recognition database is limited to 2,000 contacts. User can check the leading check boxes of the contacts exceeding 2,000 items to enable additional entries.

OPlay

Tap <Play> button to hear the pronunciation of this item.

OVoice tag

User can record a voice tag for selected contacts to enhance "Voice Commander" usability and accuracy. A trailing lip icon represents voice tag built.

Example: Record a voice tag for "Michael Archer" as "Sweet Heart"

- 1. Launch "Voice Commander Settings" go to "Contacts" setting page
- 2. Select " Michael Archer "
- 3. Tap "Build" button
- 4. Say "Sweet Heart" after hearing "Beep"
- 5. Say "Sweet Heart" again after hearing "Beep".
- 6. System will now build the recorded voice tag.
- 7. The system will playback to confirm the voice tag has been created successfully, and a voice tag icon will appear at right side of "Michael Archer"

Note:

- User can rebuild the voice tag by tapping the "Build" button again.
- User can delete the voice tag by tapping the "Delete" button.



"Application" Setting Page

After running "Voice Commander Settings", tap "Application". The setting page will list all the applications installed in the "Start" menu. When a new application installed, the system will automatically update the recognition database

A check box will be shown in front of each name.

- When a box is checked, means the application can be recognized normally.
- When a box is unchecked, means the recognition is not in the recognition range.
- When a box is grayed and can't be checked, means the application name contains some unrecognizable characters, such as symbols or marks. User can build a voice tag to enable it.

OPlay

Tap <Play> button to hear the pronunciation of this item.

OVoice tag

User can record a voice tag for selected application to enhance "Voice Commander" usability and accuracy. A trailing lip icon represents voice tag built.

Example: Record a voice tag for "MSN Messenger" as "Chat room".

- 1. Launch "Voice Commander Settings", tap "Application" setting page
- 2. Tap "MSN Messenger"
- 3. Tap "Build" button
- 4. Say "Chat room" after hearing "Beep"
- 5. Repeat "Chat room" after hearing "Beep"
- 6. Repeat "Chat room" again after hearing "Beep".
- 7. The system will playback to confirm the voice tag has been created successfully, and a voice tag icon will appear at right side of "MSN Messenger"

Note:

- User can rebuild the voice tag by tapping the "Build" button again.
- User can delete the voice tag by tapping the "Delete" button.

"Music" Setting Page

After running "Voice Command setting" tap "Music" page. The setting page will list music file names, found in the device. When user downloads a media file, the system will automatically add it into its control

A check box will be shown in front of each name

- When a box is checked, means the music file can be recognized normally.
- When a box is unchecked, means the music file is not in the recognition range.
- when a box is grayed and can't be checked, means the name can't be recognized and needs to build a voice label to be recognized properly.

When the contacts name to appear a design of voice label, expression the voice label has existed.



OPlay

Select to hear the pronunciation of this item.

OVoice tag

User can record voice tag for selected music file to enhance "Voice Commander" usability and accuracy. A trailing lip icon represents voice tag built

Example: Record a voice tag for "Hotel California" as "Hotel"

- a. Open "Voice command Settings", select "Music" setting page.
- b. Click on "Hotel California"
- c. Click on "create" button besides the voice tag.
- d. Say "Hotel" after hearing "Beep"
- e. Repeat "Hotel" after hearing "Beep".
- f. The system will playback to confirm the voice tag has been created successfully, and a voice tag icon will appear at right side of "Hotel California".

Note:

- User can rebuild the voice tag by tapping the "Build" button again.
- User can delete the voice tag by tapping the "Delete" button.

"Digit Trainer" Setting Page

After running "Voice Commander Settings", Through "Digit Training", user can train personal digit model to improve the accuracy of digit dialing.

In this page you will find 10 digit strings, each string contains 6 digits.

Follow the steps to train person digit model:

- a. Tap the "Record" button, start reading first string after hearing single "Beep".
- b. When finished, system will playback the recorded voice and ask for confirmation.
- c. If the utterance is correct and clear, select "Yes". System will move into next digit string for recording
- d. If the utterance is incorrect, select "No". System will stay at the current string for recording again.
- e. During recording, user can select "Cancel" to stop.
- f. After finishing the recording of 10 digit strings, select "Done" to confirm the adapted model or select "Remove All" to delete the adapted model and re-train.

"Digit Setting" Setting Page

With "Digit Setting", user can set valid phone number lengths to improve digit recognition accuracy. User can change the default settings based on the local telecom requirement. User can also select "No constraint" check box to disable this limitation, though with the trade off of increased errors caused by surrounding noises.

Note: The maximum phone number length is 18 digits.



"Advanced Settings" Setting Page

Sensitivity Setting

Set the voice recognition sensitivity

- Sensitive: makes the recognizer easier to return a recognition result, whenever there is an utterance detected. This setting is used in environment with stationary noises, such as in a car, a bus or a factory.
- Normal: this setting is used in most environments.
- Accurate: when selected, the recognizer will become very strict in responding to user's voice commands. This is to reduce misunderstanding calls or actions that could be triggered by unrelated voices issued by surrounding people.

OVoice Commander Button

User can choose "Hold Dial Key", "Hold Volume Up Key" or "Hold Volume Down Key" as Voice Commander button.

Note: Due to the difference between manufacturers' settings, some devices might not support the hotkey setting in Cyberon Voice Commander Settings.

ODo not launch Cyberon Voice Commander by BT hands free button

User can tick this item to disable the function that launch Cyberon Voice Commander by pressing the button on BT hands-free if necessary.

Note: Due to the difference between manufacturers' settings, some devices might not support to operate Cyberon Voice Commander by BT hands-free.

"Register" Page

After running "Cyberon Voice Commander" , user can register via entering the Serial Number in "Menu" > "Register".

- **Register when device can connect to Internet:** Enter the Serial Number directly.
- **Register when device cannot connect to Internet:** After entering the Serial Number, system will show the Authorization Code, please enter the Authorization Code on http://www.cyberon.com.tw/cvc.php to get the Activation Key, then back to your phone and enter the Activation Key in "Menu" > "Activate" page.



FAQ

- Question: I want to make a call to my friend Andy Miller, but I'm tired of manual reading.
 What do I need to know if I just want to make phone calls?
 Answer: Make sure you have Andy Miller's name and phone number in the contact database.
 Press the Voice Commander Button "Call Andy Miller". The system will guide you through it then.
- Question: I add a new contact person but it is not recognized? Answer:
 - 1. The system only recognizes English words and characters or digits. Any symbols or marks will be ignored. Still, you can make a voice tag for these items.
 - 2. When the number of contact persons exceeds 2000 entries, system will not recognize the exceeding items, until activated manually by the user.
 - 3. To have a look at the status of the contact person's voice command attributes, please go to "Voice Commander Settings" 's "Contacts" setting page.
- Question: I have recorded a voice tag for my friend last month, but I forgot what I have recorded then. Do I need to redo the recording?
 Answer: No! Just go to the "Start" > "Settings" > "Personal">"Voice Commander settings" > "Contacts" page, select the item and tap the "Play" button.
- Question: I have done digit training today, but I found that the accuracy is worse than before, what do I do now?
 Answer: You can retry the digit training again in a "quiet" place. And if it still doesn't help, disable the adapted model and use the default one. To disable the adapted model, go to "Voice Commander Settings" 's "Digit Trainer" page and uncheck the "Use adapted model". Or just tap the "Remove All" button to remove the model. It will save you some memory this way.
- Question: I accidentally activated the "Voice Commander", how can I abort it? Answer: Say "Goodbye".
- Question: I would like to dial a number by saying it, how do I do it?

 Answer: If you are using this program at the first time, please go to "Digit Trainer" page in the setting program, and then follow its instruction to train the voice recognition system in a quiet place. You will only need to do the adaptation once. And after that, you can simply say "Digit dial", and say the number after the prompt.
- Question: What can I say to play a music file?
 Answer: To play "Hotel California.mp3" file, you can say "play Hotel California". If the music file name is "01- Hotel California.mp3", you will need to say "play zero one Hotel California". Note that the Voice Commander only recognizes music files of types .mp3 and .wma.

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