YAESU
The radio

ADMS-10
Instruction Manual

The ADMS-10 software provides convenient editing of the FT-70DR/DE memory channel frequencies, channel information and alpha tags, using a personal computer. Also the transceiver parameters and the setup menu items may be edited and configured easily from the computer keyboard.

Important Notice

Be sure to read before installing the latest version of ADMS-10

Data files (********.ft70d) saved on the PC with ADMS-10 Ver. 1.0.0.3 or earlier cannot be opened with the new version of ADMS-10.

● **To update the data files on the PC:**
Before installing the latest version of ADMS-10, always read the data files and export them to csv files. See "**Be sure to read the FT-70D transceiver data before using ADMS-10**" (Page 11) for detailed instructions.

● **To create a new data files on the PC:**
This procedure is not required. After installing the latest version of ADMS-10, read the data from the radio and save a new data file to the PC.

YAESU MUSEN CO., LTD.

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Introduction

The ADMS-10 programming software uses a Personal Computer to quickly enter and save the FT-70DR/DE memory channel frequencies and data. Also, the many menu settings may be adapted for individual operating preferences. All of the information is saved. The setting data can be imported from the FT-70DR/DE and edited setting data can be transferred to the FT-70DR/DE.

❒ Edit the frequencies, memory names, squelch settings, repeater settings, transmit power, etc. that is related to the VFO, memory channels, preset memory channels, and the HOME channel, etc.
❒ Edit the Memory bank and bank link setting
❒ Configure the various set mode menu options on the computer monitor screen
❒ Use the handy editing functions, such as search, copy, move and paste

About this manual

This manual contains symbols and conventions to call attention to important information.

Symbols	Description
!	This icon indicates cautions and alerts the user should be aware of.
i	This icon indicates helpful notes, tips and information.
📖	This icon indicates other pages containing relevant information.

Important Notes

Before downloading this software, please read the "Important Notes" carefully.

- Copyrights and all other intellectual property rights for the software, as well as the software manual, are the property of YAESU MUSEN CO., LTD.

- The revision, modification, reverse engineering, and decompiling of this software is prohibited. Redistribution, transfer, and resale of downloaded files are also prohibited.

- Do not resell the software or manuals.

- All responsibility for the use of this software lies with the customer. Yaesu cannot be held responsible in any way for any damages or losses, which may be incurred by the customer as a result of using this software.

To use the ADMS-10 programmer, the software application must first be installed onto the computer. Read this manual thoroughly and install the software.

System Requirements

Supported Operating Systems

Microsoft® Windows® 11
Microsoft® Windows® 10
Microsoft® Windows® 8.1

CPU

The performance of the CPU must satisfy the operating system requirements.

RAM (System Memory)

The capacity of the RAM (system memory) must be more than sufficient to satisfy the operating system requirements.

HDD (Hard Disk)

The capacity of the HDD must be more than sufficient to satisfy the operating system requirements.
In addition to the memory space required to run the operating system, about 50 MB or more of additional memory space is required to run the program.

Cable

USB cable supplied with FT-70D

Necessary PC peripheral interfaces

USB port (USB 1.1 / USB 2.0)

Trademarks

Microsoft®, Windows®, Windows® 8.1, Windows® 10, Windows® 11 are registered trademarks in the United States and other countries.

The flow of a setup of ADMS-10

The procedure when using ADMS-10 for the first time is as follows:

> **ADMS-10 Programming Software Installation (📖 7 page)**
>
> ↓
>
> **Activating the ADMS-10 Programming Software (📖 8 page)**
>
> ↓
>
> **Connecting the FT-70DR/DE with a PC (📖 8 page)**
>
> ↓
>
> **Installing the driver software (📖 10 page)**
>
> ↓
>
> **Explanation of ADMS-10 operation (📖 12 page)**

Procedures for changing data files on a computer

Important Notice
Be sure to read before installing the latest version of ADMS-10

Data files (********.ft70d) saved on the PC with ADMS-10 Ver.1.0.0.3 or earlier are not compatible with ADMS-10 Ver.1.0.1.0 or later and cannot be read with the latest version of ADMS-10. To continue using the data files saved on the PC, they must be updated according to the following procedure before installing the latest version of ADMS-10. For FT-70DR/DE, memory channel data saved in data files can be converted, but set mode settings cannot be converted.

Open the data files with ADMS-10 Ver. 1.0.0.3 or earlier and export the files as csv files

1. Double-click the [**FT-70D ADMS-10 EXP**] icon on the desktop to start ADMS-10 Ver. 1.0.0.3 or earlier.
2. Refer to "**Be sure to read the FT-70D transceiver data before using ADMS-10**" (Page 11), and read the data from FT-70D transceiver, using the USB cable supplied with the FT-70D.
3. Click [**Open**] in the "**File**" menu to display the "**Open**" dialog box.
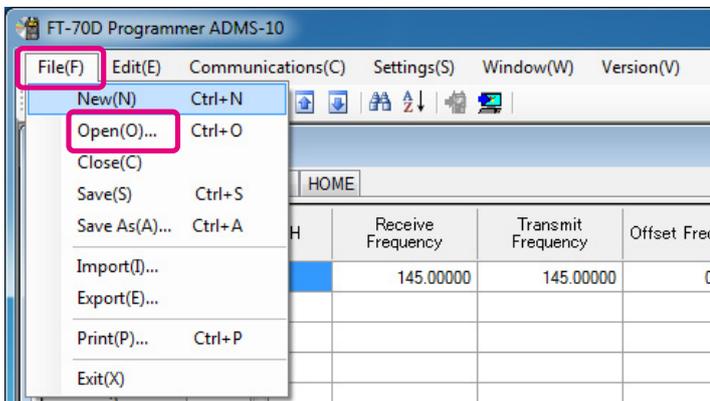

4. Select the existing saved data file (********.ft70d), and click the [**Open**] button.
5. Click [**Export**] in the "**File**" menu.
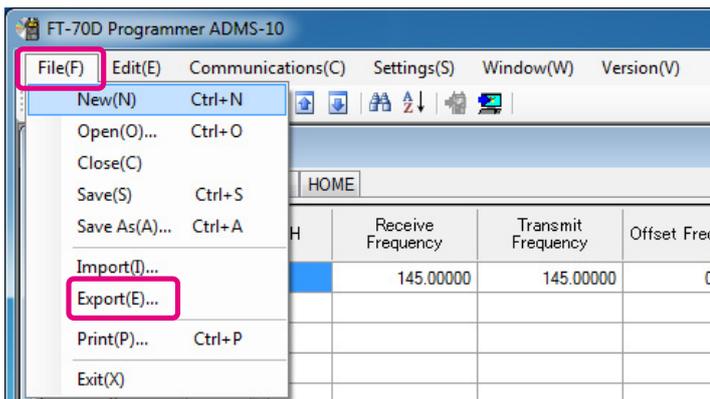
6. Select a destination folder anywhere on the PC.

> ⚠ If there are multiple data files on the PC, save each file with a different name. Do not change the file name extension (********.csv).

7. Click [**Save**].
   Repeat the above steps if there are multiple data files on the PC.
8. Exit the ADMS-10 software.

Install the latest version of ADMS-10

1. Refer to "Setup of the ADMS-10" (Page 7) to install the latest version of ADMS-10.

   The ADMS-10 software currently installed on the PC will be uninstalled automatically.

Import the csv files using the latest version of ADMS-10

1. To open the ADMS-10 software, double-click the [**FT-70D ADMS-10 EXP**] icon on the computer desktop.

2. Click [**Import**] in the "**File**" menu.
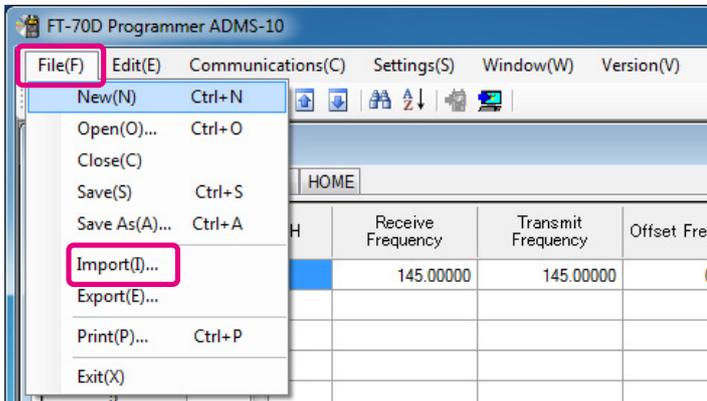
3. Click [**Save AS**] in the "**File**" menu to display the "Save As" dialog box.
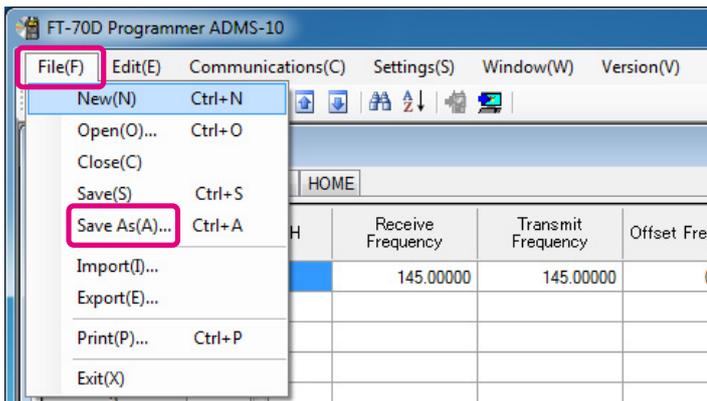
4. Select a destination folder anywhere on the PC.

   ⚠ If there are multiple data files on the PC, save each file with a different name. Do not change the file name extension (********.ft70d).

5. Repeat the above steps if there are multiple data files on the PC.

   This completes the change of data files.

Setup of the ADMS-10

Preparation

❏ Download the ADMS-10 software from the Yaesu Website for details (http://www.yaesu.com/).
❏ Download the ADMS-10 Programming Software to the same folder, and extract the downloaded zip file.

ADMS-10 Programming Software Installation

1. Start up the computer as an "Administrator" user.

2. Double-click the [**setup.exe**] in the same folder that contains the unzip files.

   When the [.NET Frameworks install] dialog box opens, follow the on-screen instructions to install FT-70D ADMS-10 EXP software.

3. The dialog box shown at the right, will open. Click the [**Next**] button.
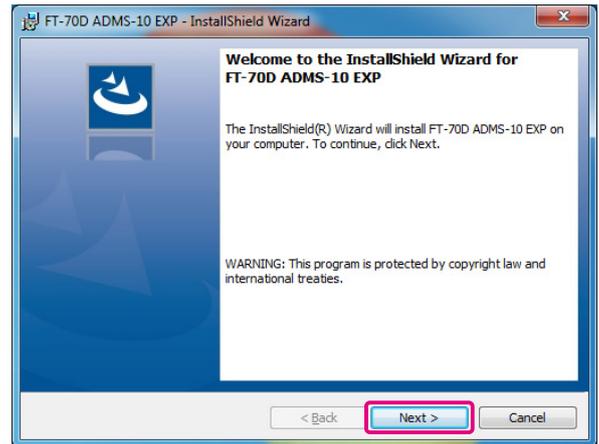
4. Select the folder to install the FT-70D ADMS-10 EXP software, then click the [**Next**] button.

5. Click the [**Install**] button.
   • When the "User Account Control" dialog box opens, click the [Yes] button.

6. When the installation is finished, the dialog box shown at the right will open. Click the [**Finish**] button, to complete the installation of the software.
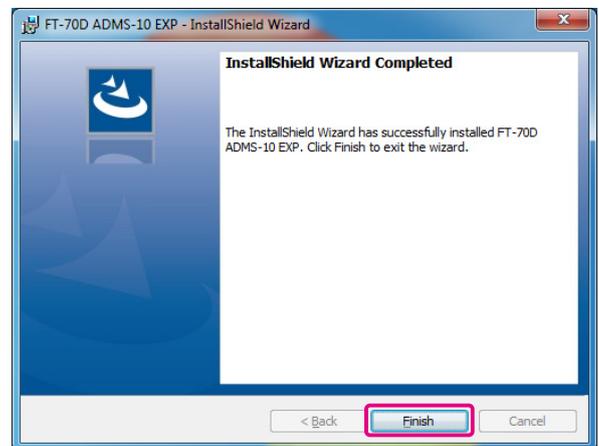
Uninstalling ADMS-10

The procedure to manually uninstall ADMS-10 is shown below for the purpose of explanation.

1. Disconnect the USB Cable from the computer.

2. Click the [**Start**] button and then click [**Settings**].

3. Click [**Yaesu Musen**].

4. Right click [**FT-70D ADMS-10 EXP**] and then click [**Uninstall**].

   • When the "User Account Control" dialog box opens, click the [Yes] button.
   • Uninstallation of the software will commence. The uninstall procedure ends with this.

Execute ADMS-10

To open the ADMS-10 software, double-click the [**FT-70D ADMS-10 EXP**] icon on the computer desktop.

● **To close the ADMS-10 software**
Click [**Exit**] in the [**File**] menu to close the ADMS-10.

Connecting the FT-70DR/DE to a computer

1. Remove the battery pack.
2. Connect the AC adaptor to a wall outlet.
3. Insert the DC connector to the FT-70DR/DE EXT DC IN jack.
   • "**EXT DC**" or "**CHG ERR**" appears on the display.

With removed battery pack

AC adapter (supplied accessory)

EXT DC IN Jack
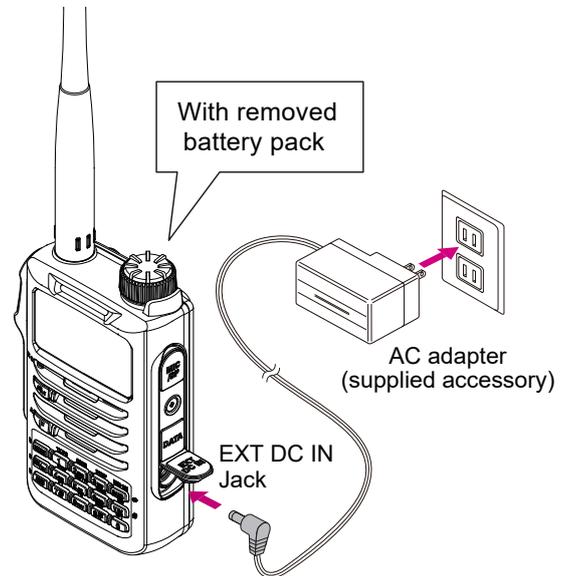
4. Press and hold the Power switch to turn the transceiver **ON**.
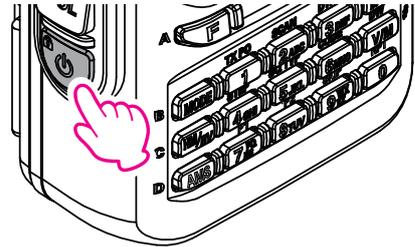
5. Remove the AC adaptor plug, with the transceiver ON.
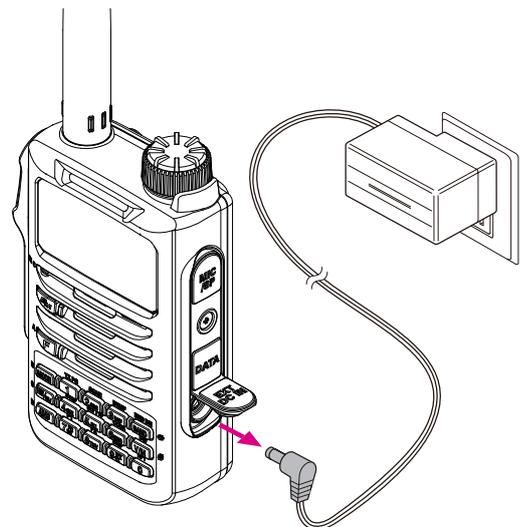
6. Use the supplied USB cable to connect the FT-70DR/DE DATA jack to the USB connector of the PC.
   <u>Insert the USB cable connector into the DATA jack until a clicking sound is heard.</u>

To the USB connector of the PC
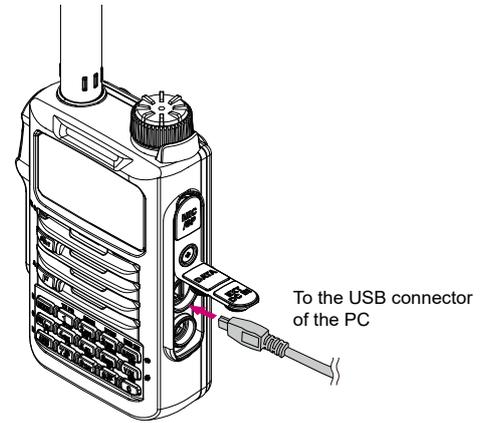
7. Press and hold in the [**AMS**] key while inserting the DC connector of the AC adapter into the FT-70/DR/DE EXT DC IN jack.
   • "ADMS" appeasr on the display.
   • Connecting to the PC is finished.
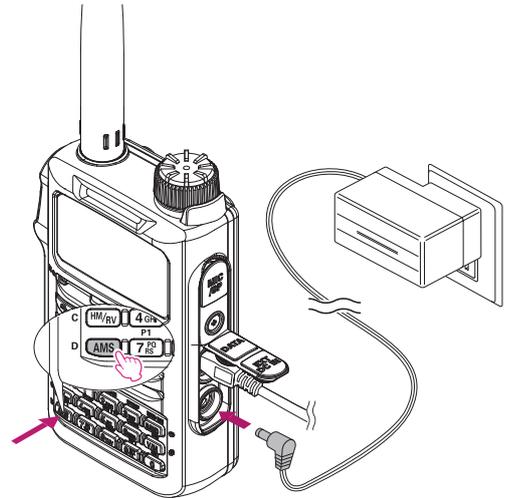
Installing the Driver Software

When a computer is connected with FT-70DR/DE for the first time, it is necessary to install driver software on the PC.

1. Connect the FT-70DR/DE to the PC (Refer to the "**Connecting the FT-70DR/DE to a computer**" (Page 8)).

2. Execute the ADMS-10 Refer to the "**Execute ADMS-10**" (Page 8)).

3. From the menu bar, select [**Communications**] menu, and then click on the [**COM port Settings**].
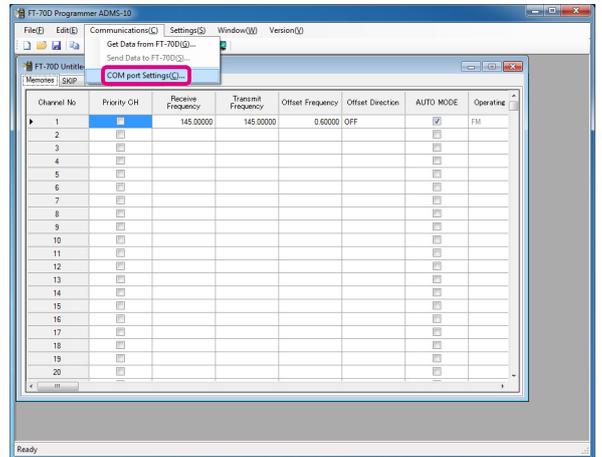
4. Click the [**Device Manager**] button.
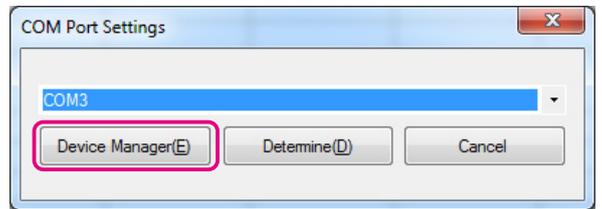
5. Under "Other devices" right-click [**Unknown device**], then click the [**Update Driver**].
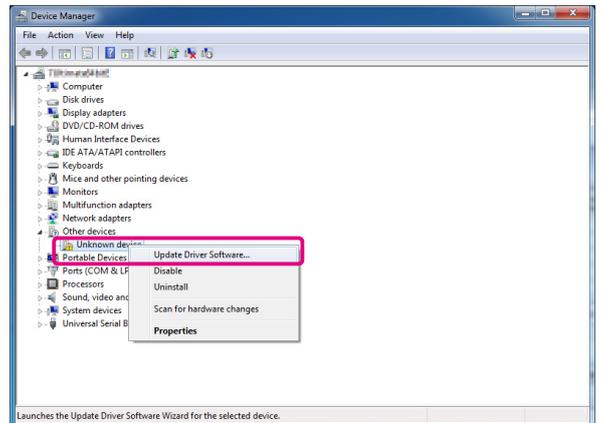
6. Click [**Browse my computer for driver software**].
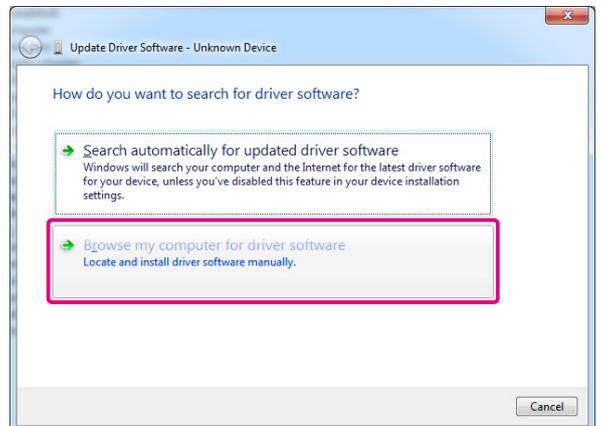
7. Click the [**Browse**] button, then select the folder in which the extracted download file was saved when in installing the ADMS-10 software, and then click the [**Next**] button.
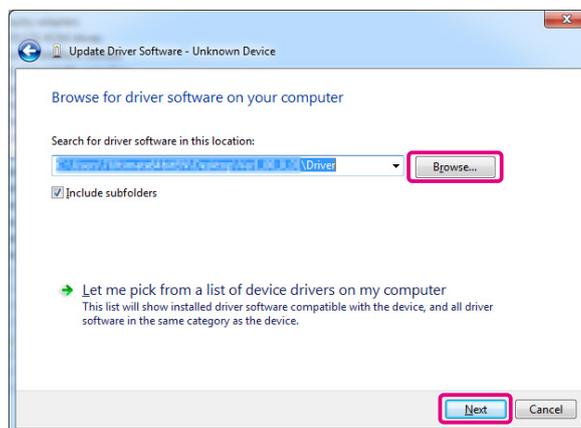
8. Click the [**Close**] button when the screen illustrated at the right is displayed.
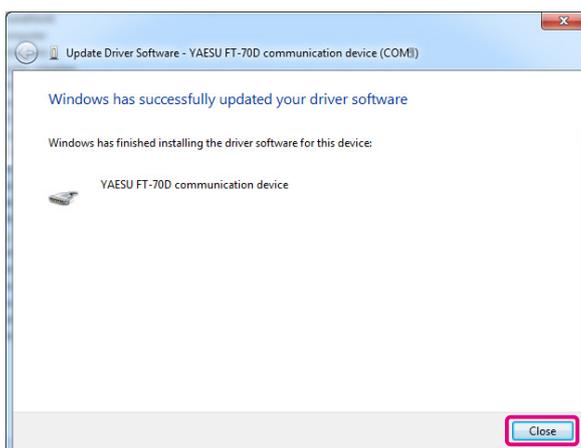
9. Check that "**FT-70D communication device (COMxx)**" appears under "**Ports (COM & LPT)**".
   • When displayed , the driver update has been completed successfully. If not displayed, try again from step 1.
   • "XX" refers to a port number. Write down the port number.

10. Close the ADMS-10 and then execute the ADSM-10 once again.

11. From the menu bar, select "**Communications**" menu, then click [**COM port Settings**], then select the port number written down in step 9.
   To finish the installation, close the ADMS-10, and turn **OFF** the FT-70DR/DE, then disconnect the cables.

Be sure to read the FT-70D transceiver data before using ADMS-10

It is necessary to read the data information from the FT-70D transceiver first. If the transceiver information is not read, it will not be possible to load the saved file or transfer the data to the transceiver, the information must be read from the transceiver using the following procedure before editing the data with the ADMS-10 software.

1. Connect the FT-70DR/DE to the PC using the supplied USB Cable.

2. Refer to "**Connecting the FT-70DR/DE to a computer**" (Page 8) to set the COM port to which the FT-70DR/DE is connected.

3. Click [**Get Data from FT-70D**] in the "**Communications**" menu.

4. Click the [**OK**] button.

5. Press the [**BAND**] key on the FT-70DR/DE.

6. The " --**TX**-- " appears on the display and data transfer starts.

7. Click the [**Close**] button.

Explanation of ADMS-14 operation

Display examples

First Screen

This is the first screen to be displayed when starting the ADMS-10 software.
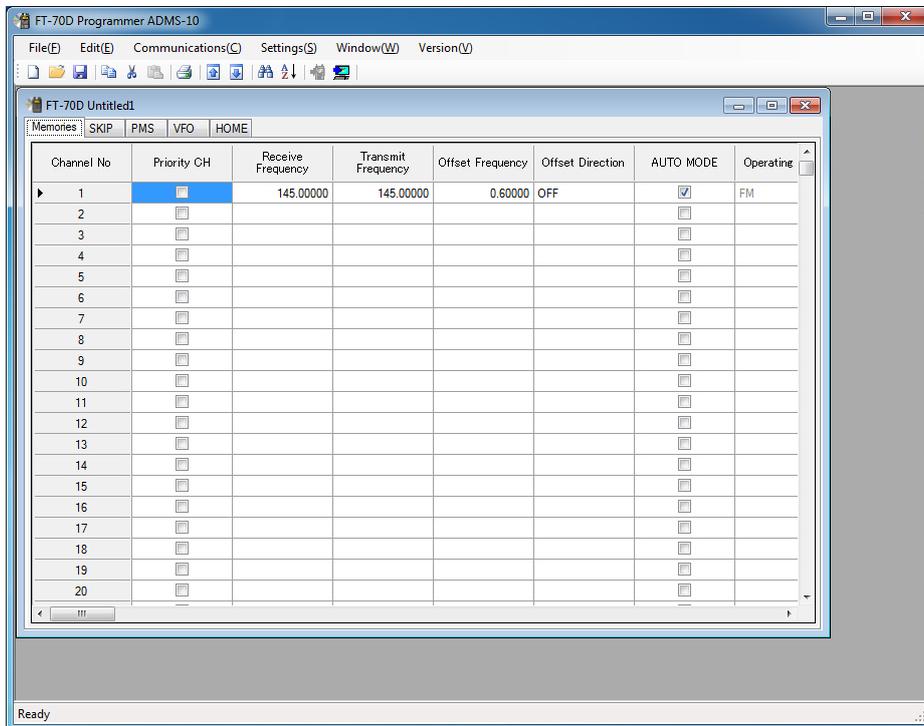
Menu Bar

Click the left mouse button on each Menu in the Menu bar to settings the import/export of the data file, get data form FT-70DR/DE and send data to FT-70DR/DE.

📖 For more details, see "Menu Bar Names and Functions" (Page 14).
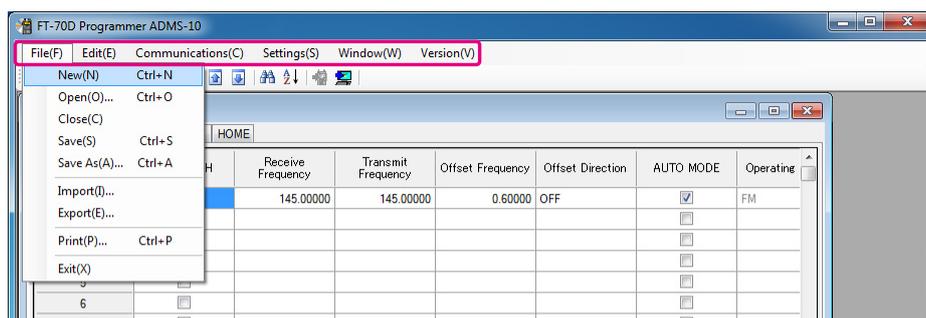
TAB Menu

Click the left mouse button on each TAB in the title bar (PMS, VFO, etc) to display the frequency list of the desired memory channels, VFO and other preset transceiver settings.

📖 For more details, see "Setting the Template Items".
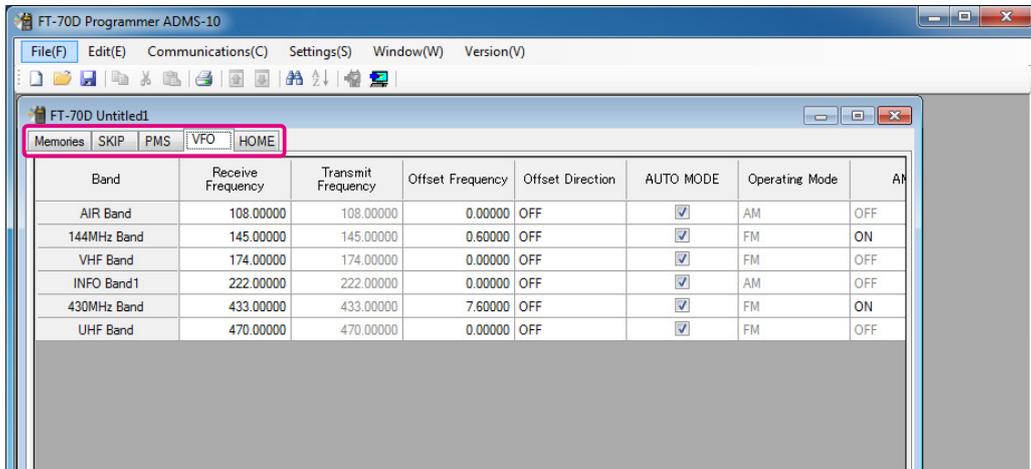
Set mode screen

Basic setting items which are not related to memory channels can be configured from "Set Mode".
Click "Settings" in the "Settings" menu to open the item "Set Mode" window.

📖 For more details, see "Settings" (Page 20).
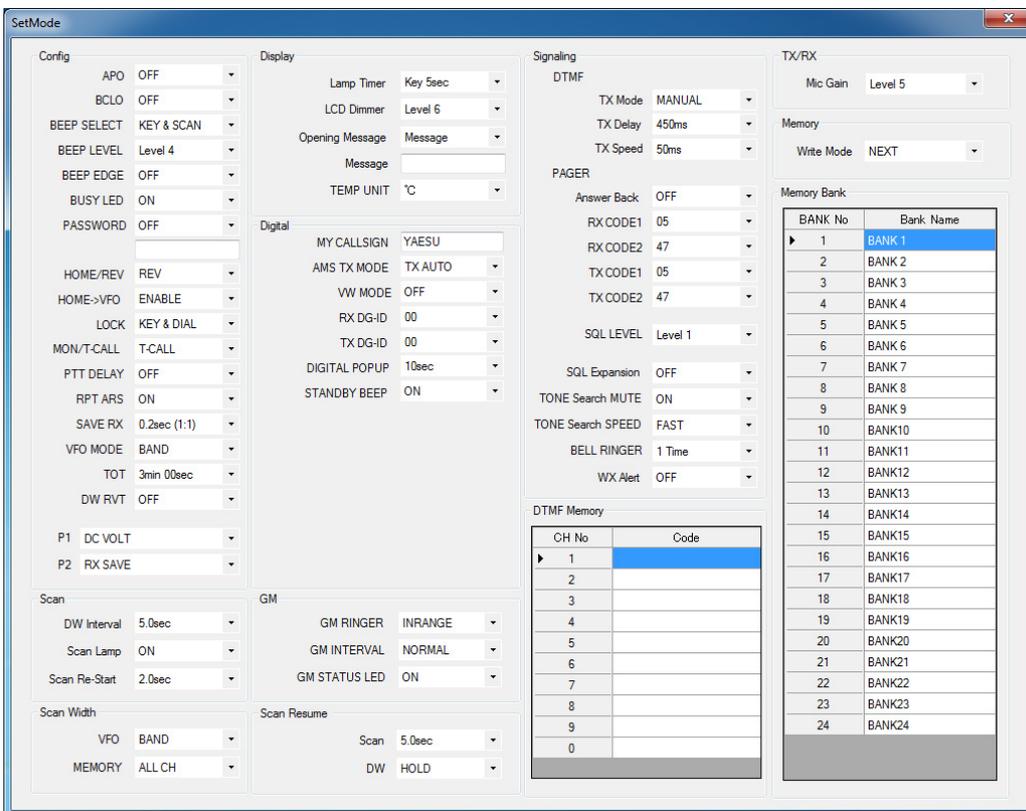
Menu Bar Names and Functions

File
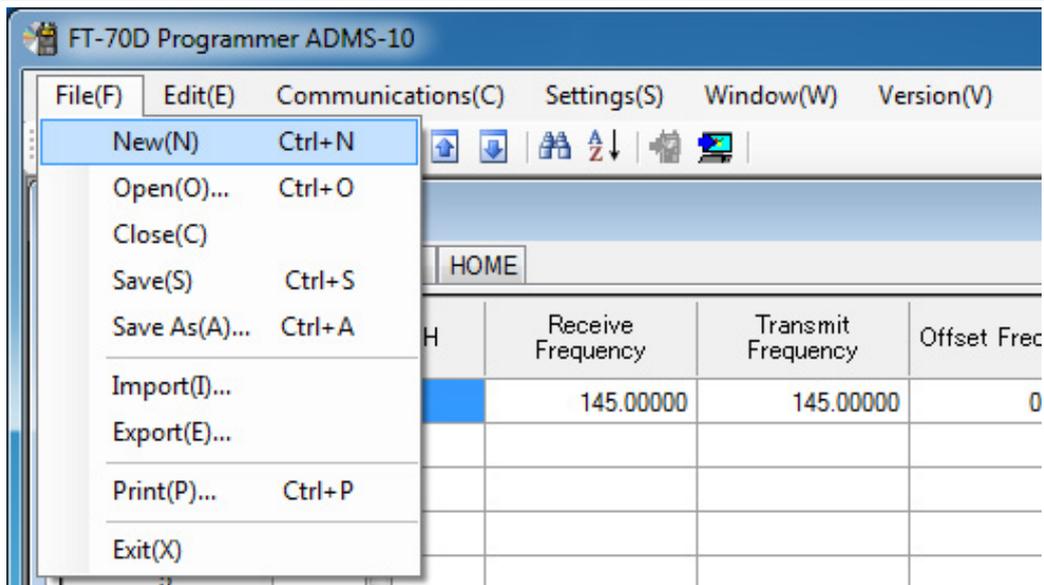
• New
Click the "New" parameter in the "File" menu to open a new configuration file.
Multiple configuration files may be created and opened at the same time.
Standard values are preset for each memory channel, VFO and set mode.

• Open
Click the "Open" parameter in the "File" menu to display the "Open" window.
Select the existing saved template file, and click the "Open" button.

• Close
Close the displayed configuration file by clicking the left mouse button on the "Close" parameter in the "File" menu.

• Save
Click the "Save" configuration in the "File" menu.
To save the present configuration, and overwrite the selected configuration file without changing the file name.

• Save as
Click the "Save As" parameter in the "File" menu.
Specify the file name and destination folder for the selected configuration file and then click the "Save" button to save the file.

• Import with FT-70D format

ADMS-10 data files may be created using a spreadsheet such as Microsoft Excel.

To create a data file for the import of data, save the spreadsheet in the "CSV" comma separated file format. A spreadsheet may be easily created by exporting the template data in the "CSV" format using the ADMS-10 "Export" command. After the "CSV" data has been edited the spreadsheet may be imported back into the ADMS-10 Programmer.

A separate import file is needed for each template.

For example, to import the VFO and memory templates; first, click the "VFO" tab to display the VFO template, then import the VFO (CSV) file; next, click the "Memories" tab to display the "Memory" template; then import the Memory (CSV) file.

> [!] Do not edit the "Check" line at the right side of the completed CSV file.

• Export with FT-70D format

To export the data file in the "CSV" (Comma Separated Values) format.

Click the "Export" parameter in the "File" menu, On the "Save as" screen displayed, specify the directory and file name and save the file.

Type a file name in the bottom box, then click the [**OK**] box.

• Print

To print the current template file data to hard copy, click the "Print" parameter in the "File" menu, the "Print" window will open to enable printing. Set the start line and the end line of the data you want to print, and then click the "Printing" button to start printing.

To change the specific printer settings, go to the Printer properties by clicking the left mouse button on the "Printer setup" button.
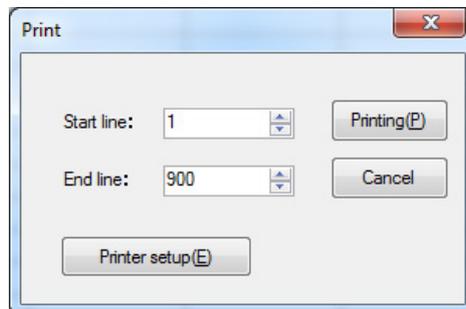
• Exit

To exit the ADMS-10 programmer, click the "Exit" parameter in the "File" menu to close the ADMS-10 software.

If the following pop-up screen appears to confirm saving, follow the on-screen instruction to select the desired button and close the ADMS-10 software.
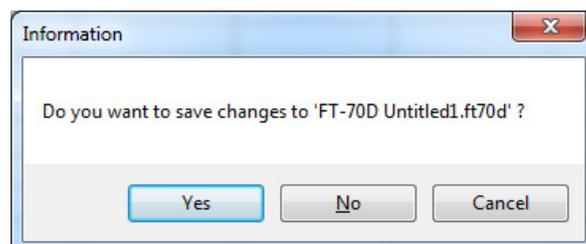
Edit

Click the row to edit, then perform each of the following operations.
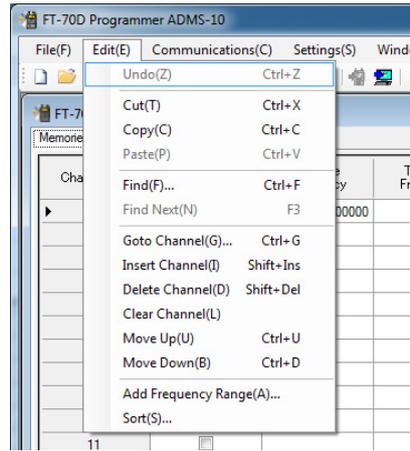
 Cut, copy, and paste operations are not possible for some setting items of each row.

● Undo

To undo the edited data, click the "Undo" parameter in the "Edit" menu.

● Cut

To cut the data of the selected area, click the "Cut" parameter in the "Edit" menu.

● Copy

To copy the data of the selected area to the clipboard, click the "Copy" parameter in the "Edit" menu.

● Paste

To paste the clipboard data to the selected area, click the "Paste" parameter in the "Edit" menu.

● Find

To find a specified text, click the "Find" parameter in the "Edit" menu. The "Find" window will open.
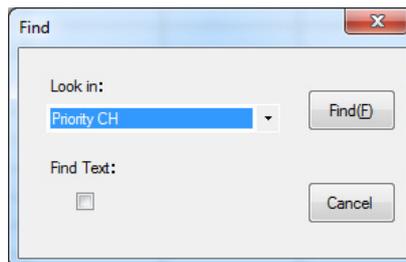
Select the column from the drop down list. Enter the text to search for, and then click the [**Find**] button. The candidate character string found will be highlighted.

• Find Next

Click the "Find Next" parameter in the "Edit" menu to move to the next candidate character string.

• Go to Channel

Move the cursor to the desired channel, click the "Goto Channel" parameter in the "Edit" menu to open the screen where you can specify the channel you want to move to.

Enter the channel number you wish to find, and then click the [**OK**] button.

• Insert Channel

To insert channel data, click "Insert Channel" parameter in the "Edit" menu to create a blank new channel data row under a current cursor. If there are any higher channel numbers with channel data, the higher channel numbers will be displayed after the newly inserted channel number so that the channels are displayed in the ascending order.

Attempting to insert a new channel when highest channel contains data causes the data registered to highest channel to be deleted. "Continue?" will appear. If you agree, click the [**OK**] button.
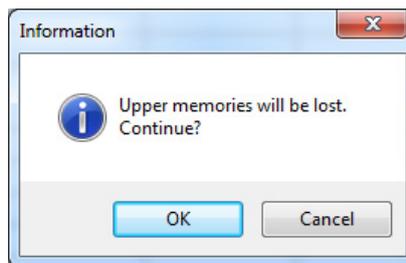
• Delete Channel

To delete the specified range of channel data, click the "Delete Channel" parameter in the "Edit" menu. The channels that were displayed after the deleted channels will shift up accordingly.

• Clear Channel

To clear the current channel data, click the "Clear Channel" parameter in the "Edit" menu. The channels that were displayed after the deleted channels will not shift up and the blank channels will remain.

• Move Up

To move the current channel data up one row, click the "Move Up" parameter in the "Edit" menu.
If other channel data already exists where the channel data moves, the existing channel will be overwritten.

• Move Down

To move the current channel data down one row, click the "Move Down" parameter in the "Edit" menu, the currently selected channel data moves downward one row.
If other channel data already exists where the channel data moves, the existing channel will be overwritten.

• Add Frequency Range

New channels may be created in designated frequency steps from the starting frequency by clicking the left mouse button on the "**Add Frequency Range**" parameter in the "**Edit**" menu. The "**Add Frequency Range**" window will open.

A specified number of memory channels may be created, beginning from the starting frequency in the specified frequency steps.
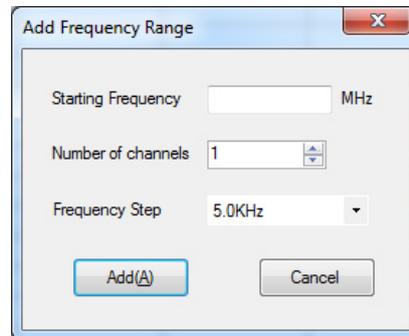
Starting Frequency: Enter the lower frequency

Number of Channel: Enter the number of channels

Frequency Step: Enter the desire frequency step

Click the [**OK**] button to create the additional specified memory channels.

ℹ	* The 8.33 kHz step is available only when receiving on the Air band (108-136.995 MHz).

• Sort

Click the "Sort" parameter in the "Edit" menu, the "Sort" window will open.
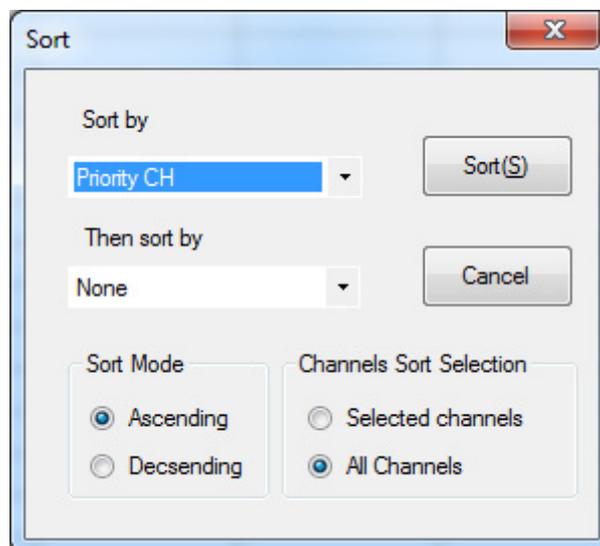
Sort by: Select the first parameter for sorting items such as the order of frequencies.

Then sort by: Select the second parameter for sorting.

Sort Mode: Set to sort in ascending or descending order.

Channels Sort Selection: Set whether to sort the selected channel column(s) or to sort all channel columns.

Click the [**OK**] button to initiate the sorting according to the above instructions. The data may be restored to the previous order by using the "Undo" command.

Communications (Data communication with the FT-70DR/DE)
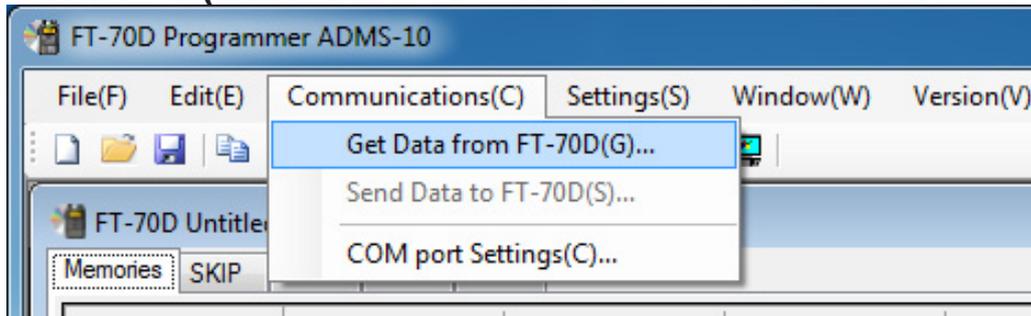
• Get Data from FT-70D

This command transfers the settings data of the FT-70DR/DE to the ADMS-10 programmer. To communicate with the FT-70DR/DE and create a new data file. Click the "Get Data from FT-70D" parameter in the "Communications" menu. The "Get Data From FT-70D" window will open. Connect the supplied USB cable between the FT-70DR/DE and the computer.

Follow the on-screen instructions to acquire data from the FT-70DR/DE. When the data transfer is completed, the template screen received from the FT-70DR/DE appears on the computer display.
The memory channels and configuration menu data may be edited using the ADMS-10 software tools.

> This template and configuration data may be saved to the computer hard drive, using the "Save" or "Save as" commands in the "File" menu.

• Send Data to FT-70D

This command downloads the ADMS-10 data from the computer to the FT-70DR/DE
Click the "Save Data to FT-70DR/DE" parameter in the "Communications" menu. The transmission procedure screen will open.

> To load a previously created data file to the FT-70DR/DE, click the "Open" parameter in the "File" menu, and open the desired file before performing the send data operation above.

Connect the supplied USB cable between the FT-70DR/DE and the computer.
Follow the on-screen instructions to transmit data to the FT-70DR/DE. After the data transmission completes, "Completed" will appear on the computer display, and click the [Close] button. Then, remove the plug of the USB cable and battery charger from the FT-70DE/DE, after installation of the battery pack, the FT-70DR/DE will automatically start up in accordance with the set data.

> • Never disconnect the programming cable while data transmission is in progress.
> • Pay careful attention to the power cable and the connections to the FT-70DR/DE and the PC. Do not interrupt the power during data reception/transmission.

Settings

• Set Mode

From the set mode menu, the functions of the FT-70DR/DE may be customized according users preferences.

The ADMS-10 software displays the set mode menu in an easy-to-understand manner where users can change and save the setting values.

Click the "Settings" parameter in the "Settings" menu to open the "SetMode" window.
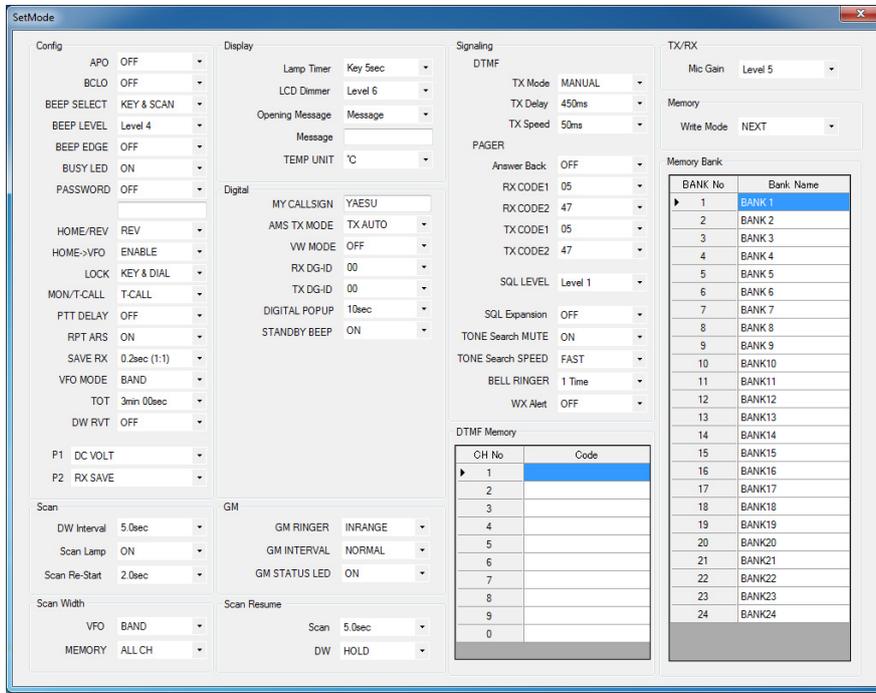
To change the setting of each item in the window, click the "▼" icon to show the dropdown settings list, and then click the desired selection in the list.

Example:
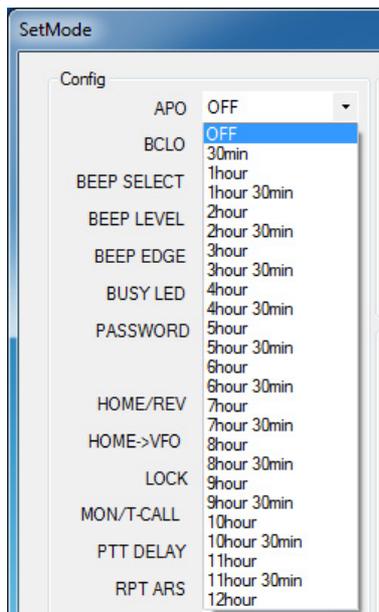
Refer to the "FT-70DR/DE Operating Manual" for the details of each function.

When the desired settings have been edited, close the Menu Setting window.

• Tool Bar

Click the "Toolbar" parameter in the "Setting" menu to display or hide the Toolbar.
A check mark appears next to the "Toolbar" parameter when the Toolbar is displayed.

• Status Bar

The "Status Bar" describes the action to be executed by the selected menu item, or the depressed toolbar button, and keyboard latch state.
A check mark appears next to the "Status Bar" parameter when the Status Bar is displayed.

Ready
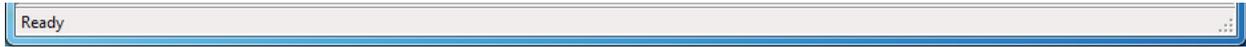
Window

This menu sets the operating window parameters of the ADMS-10 programmer.

• Click the "Tile (up and down)" parameter in the "Window" menu to display multiple template files by dividing the window into two lists (upper and lower parts).

• Click the "Tile (up and down)" parameter in the "Window" menu to display multiple template files by dividing the window into two lists (right and left parts).

• Click the "Cascade" parameter in the "Window" menu to display multiple templates in cascade format.

Setting the Template Items

Memory

Use this page to edit the Memory channels data, Skip Memory channels, or PMS (Programmable Memory Scan) memory channels.
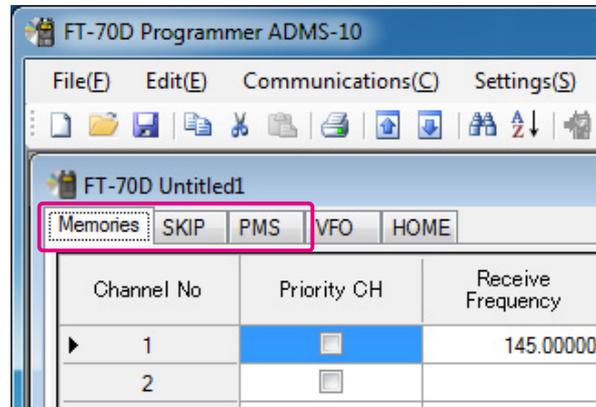
Memories

Enter and edit the routinely used frequencies to the memory channels. Up to 900 channels can be registered.

SKIP

When scanning the VFO, if there are frequencies with continuous signals, scanning may be interrupted. Up to 99 channels can be registered to be skipped.

PMS

Edit the upper and lower limit frequencies for performing PMS (Programmable Memory Scan).
Enter the lower limit frequency for the L channel and the upper limit frequency for the corresponding U channel. Up to 50 pairs (100 channels) of PMS can be registered.

About the setting items of each memory channel

• Priority CH

While Dual Watch is functioning, this channel is designated as the priority channel to be monitored before other channels. Only one normal memory channel can be set as Priority CH. Tick the checkbox of the desired channel.
This setting is allowed only with the normal memory channel.

• Receive Frequency / Transmit Frequency

Enter the desired receive/transmit frequency. When the frequency entry is complete, use the → key to move the cursor to the right and subsequently configure the additional detail settings for the channel. To enter the transmit frequency for the next channel, press the ENTER or ↓ key. The receive and transmit frequencies can be set separately.

• Offset Frequency

When a transmit frequency is not entered, transmission will be performed at a frequency obtained by adding/subtracting the offset frequency to/from the receive frequency.

• Offset Direction

Set the frequency shift direction.

OFF: The transmit frequency is not shifted.
-RPT: The transmit frequency is shifted to the minus offset.
+RPT: The transmit frequency is shifted to the plus offset.
-/+   The transmit frequency is not shifted.

• AUTO MODE

When the check box of AUTO MODE is ticked, the receive mode (FM mode or AM mode) is automatically selected. Un-ticking the checkbox enables selecting the operating mode.

• Operating Mode

Select the operating mode for the receive channel.

FM: The selected frequency band is set to FM mode.
AM: The selected frequency band is set to AM mode.

• AMS

The AMS (Automatic Mode Select) function automatically selected the transmission mode in accordance with the received signals setting ON/OFF.

• DIG/ANALOG

The V/D mode (DN), the Voice FR mode (VW) and the ANALOG mode (FM/AM mode) are selectable.

> [!] When the Set Mode "16 DIG VW" is set to "OFF", the Voice FR mode (VW) cannot be selected.

• Name

Enter the desired memory name (up to 6 digits).

• Tone Mode

This item selects the Audio Squelch Code type.

• CTCSS Frequency

This item selects the Tone Frequency of the Tone Squelch.

• DCS Code

Select the DCS code when DCS is set.

• DCS Polarity

Change the phase inversion of the DCS code for receive/transmit. When communication using the DCS code cannot be achieved, changing the phase inversion might enable the DCS code communication.

• User CTCSS

Select the idle line frequency to remove signals such as idle line signals used by private railways and control signals of MCA radio system.

• Tx Power

This item selects the TX Power.

• Skip

Select the scanning condition for receiving channels.

OFF: Performs scanning according to the set mode basic setting –SCAN RESUME.
SKIP: Skips the designated memory channels during scanning.
SELECT: Starts scanning from a designated channel and scans only designated channels.

- **AUTO STEP**

Ticking the checkbox of this item, the frequency step is set to "AUTO" and automatically provides a suitable frequency step (frequency variation by rotating the **DIAL** knob) according to the frequency band. By turning off the checkbox, the step setting becomes selectable.

- **Step**

Sets the channel step for receiving channels.

- **TAG**

By setting the memory tag, the checkbox of TAG is automatically ticked. When recalling this memory channel, the set memory tag is displayed. By turning off the checkbox, the receive frequency is displayed instead of the memory tag.

- **Memory Mask**

By ticking the checkbox of this item, the channel temporally may not be recalled.
Un-ticking the checkbox enables calling the memory channel.

- **ATT**

By ticking the checkbox of this item, the receive sensitivity is lowered by about 10dB. This is useful when, for example, an adjacent strong radio wave interferes with the reception.

- **S Meter SQL**

Configure the normal noise squelch setting, and also the S-meter squelch level setting.

- **BELL**

Outputs a ringing tone when receiving a signal that satisfies the conditions set from the squelch type.
Set the number of times the tone (bell) rings.

- **Half DEV**

Lowers the transmit deviation to approximately half.

- **Clock Shift**

When an internal spurious signal occurs due to the microcomputer clock, turn this setting on (tick the checkbox). This may improve the situation.
Usually, this item is set to "OFF" (un-tick the checkbox).

- **BANK 1 to BANK 24**

A combination of up to 100 memory channels and preset memory channels can be registered to each of BANK 1 to BANK 24. In the column of each channel, tick the checkbox of the BANK to register the desired channel.
When recalling a bank, only channels registered to the bank will be recalled.

- **Comments**

Comments may be added to the registered memory channels. Up to 255 letters can be used. This function is useful in organizing the memory channels by, for example, applying a category name to each channel. These comments are not transferred to the FT-70DR/DE.

VFO

Edit the VFO configurations for each band on this page template.
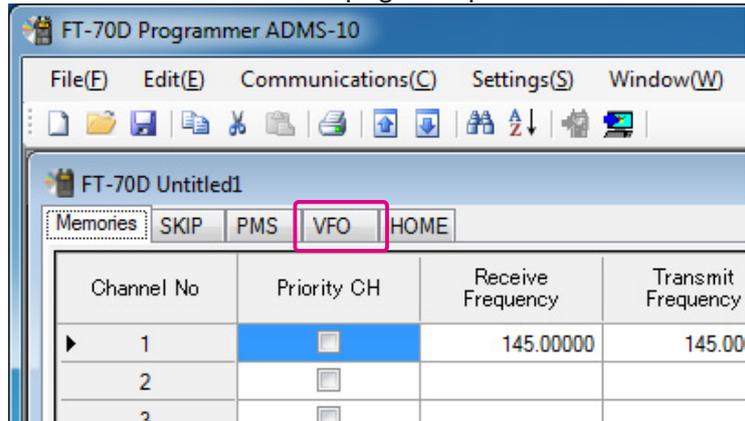
About the setting items of VFO frequencies

• Receive Frequency

Enter the VFO frequencies for each band. The FT-70DR default Frequencies are pre-entered into the ADMS-10 standard template.

A frequency that is out of the transceiver's range cannot be entered. When the error pop-up window is opened, enter the correct frequency.
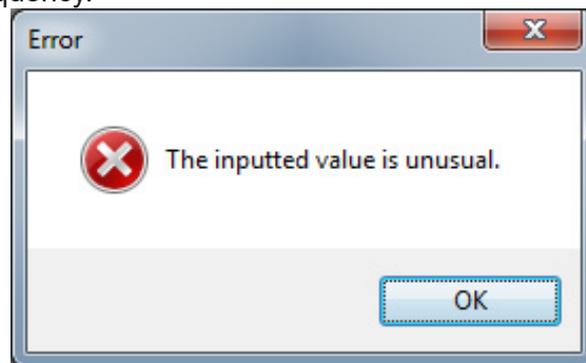
• Transmit Frequency

The transmit frequency display is grayed out, and it will be set automatically, in accordance with the receive, and the offset frequencies.

• Offset Frequency

When a transmit frequency is not entered, transmission will be performed at a frequency obtained by adding/subtracting the offset frequency to/from the receive frequency.

• Offset Direction

Set the frequency shift direction.
OFF: The transmit frequency is not shifted.
-RPT: The transmit frequency is shifted to the minus offset.
+RPT: The transmit frequency is shifted to the plus offset.

• AUTO MODE

When tick the check box of AUTO MODE, the receive mode (FM mode or AM mode) is automatically selected. Un-ticking the checkbox enables selecting the operating mode.

• MODE

Select the operating mode for receive channel.
FM: The selected frequency band is set to FM mode.
AM: The selected frequency band is set to AM mode.

• AMS

The AMS (Automatic Mode Select) function automatically selected the transmission mode in accordance with the received signals setting ON/OFF.

• DIG/ANALOG

The V/D mode (DN), the Voice FR mode (VW) and the ANALOG mode (FM/AM mode) are selectable.

! When the Set Mode "16 DIG VW" is set to "OFF", the Voice FR mode (VW) cannot be selected.

• Tone Mode

This item selects the Audio Squelch Code type.

• CTCSS Frequency

This item selects the Tone Frequency of the Tone Squelch.

• DCS Code

Select the DCS code when DCS is set.

• DCS Polarity

Change the phase inversion of the DCS code for receive/transmit. When communication using the DCS code cannot be achieved, changing the phase inversion might enable the DCS code communication.

• User CTCSS

Select the idle line frequency to remove signals such as idle line signals used by private railways and control signals of MCA radio system.

• Tx Power

This item selects the TX Power.

• AUTO STEP

By ticking the checkbox of this item, the frequency step is set to "AUTO" and automatically provides a suitable frequency step (frequency variation by rotating the **DIAL** knob) according to the frequency band. By Turning off the checkbox, the step setting become selectable.

• Step

Sets the channel step for receiving channels.

• ATT

By ticking the checkbox of this item, the receive sensitivity is lowered by about 10dB. This is useful when, for example, an adjacent strong radio wave interferes with the reception.

• S Meter SQL

Configure the normal noise squelch setting, and also the S-meter squelch level setting.

• BELL

Outputs a ringing tone when receiving a signal that satisfies the conditions set from the squelch type.
Set the number of times the tone (bell) rings.

• Half DEV

Lowers the transmit deviation to approximately half.

• Clock Shift

When an internal spurious signal occurs due to the microcomputer clock, turn this setting on (tick the checkbox). This may improve the situation.
Usually, this item is set to "OFF" (un-tick the checkbox).

• Comments

Comments may be added to the edited VFO channels. Up to 255 letters can be used. This function is useful in organizing the VFO channels by, for example, applying a category name to each channel. These comments are not transferred to the FT-70DR/DE.

HOME

Edit the Home Channel configurations:
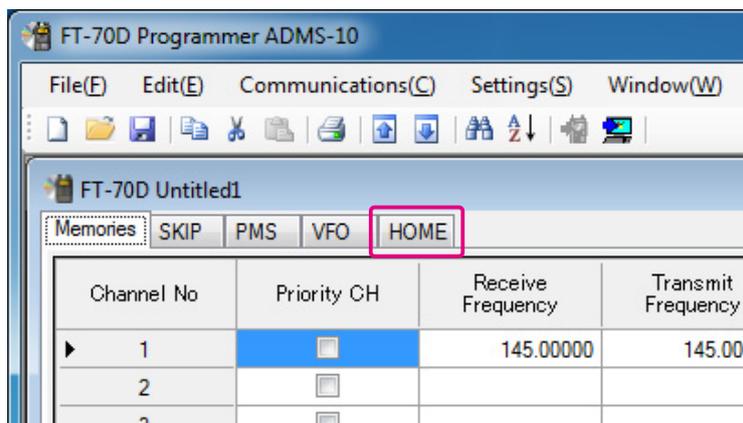
About the setting items of HOME channel frequency

• Receive Frequency / Transmit Frequency

Enter any desired changes into Home Channel frequency. The FT-70DR default Frequencies are pre-entered into the ADMS-10 standard template.
A frequency that is out of the transceiver's range cannot be entered. When the error pop-up window is opened, enter the correct frequency. Inputting the receive frequency, the transmit frequency is automatically set.
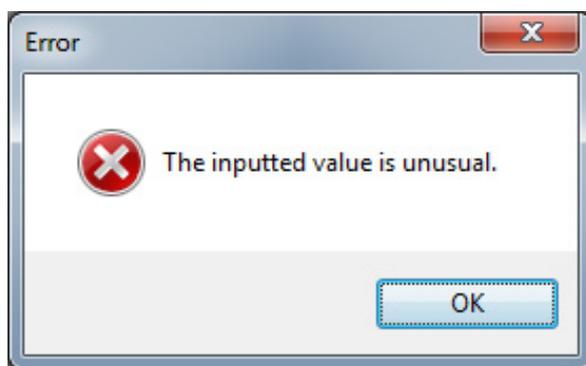
• Offset Frequency

When a transmit frequency is not entered, transmission will be performed at a frequency obtained by adding/subtracting the offset frequency to/from the receive frequency.

• Offset Direction

Set the frequency shift direction.

OFF: The transmit frequency is not shifted.
-RPT: The transmit frequency is shifted to the minus offset.
+RPT: The transmit frequency is shifted to the plus offset.
-/+:   The transmit frequency is not shifted.

• AUTO MODE

When tick the check box of AUTO MODE, the receive mode (FM mode or AM mode) is automatically selected. By Turning off the checkbox, the receive mode is selectable.

• MODE

Select the operating mode for receive channel.

FM: The selected frequency band is set to FM mode.
AM: The selected frequency band is set to AM mode.

• AMS

The AMS (Automatic Mode Select) function automatically selected the transmission mode in accordance with the received signals may set ON/OFF.

• DIG/ANALOG

The V/D mode (DN), the Voice FR mode (VW) and the ANALOG mode (FM/AM mode) are selectable.

| ! | When the Set Mode "16 DIG VW" is set to "OFF", the Voice FR mode (VW) can not be selected. |

• Name

Enter the desired memory name (up to 6 digits).

• Tone Mode

This item selects the Audio Squelch Code type.

• CTCSS Frequency

This item selects the Tone Frequency of the Tone Squelch.

• DCS Code

Select the DCS code when DCS is set.

• DCS Polarity

Change the phase inversion of the DCS code for receive/transmit. When communication using the DCS code cannot be achieved, changing the phase inversion might enable the DCS code communication.

• User CTCSS

Select the idle line frequency to remove signals such as idle line signals used by private railways and control signals of MCA radio system.

• Tx Power

This item selects the TX Power.

• AUTO STEP

By ticking the checkbox of this item, the frequency step is set to "AUTO" automatically provides a suitable frequency step (frequency variation by rotating the DIAL knob) according to the frequency band. By Turning off the checkbox, the step setting become selectable.

• Step

Sets the channel step for receiving channels. Normally, when a frequency is entered, the optimal channel step will be automatically set according to the frequency.

• TAG

Setting the memory tag, the checkbox of TAG is automatically ticked. When recalling this memory channel, the set memory tag is displayed. By Turning off the checkbox, the receive frequency is displayed instead of the memory tag.

• ATT

By ticking the checkbox of this item, the receive sensitivity is lowered by about 10dB. This is useful when, for example, an adjacent strong radio wave interferes with the reception.

• S Meter SQL

Configure the normal noise squelch setting, and also the S-meter squelch level setting.

• BELL

Outputs a ringing tone when receiving a signal that satisfies the conditions set from the squelch type. Set the number of times the tone (bell) rings.

• Half DEV

Lowers the transmit deviation to approximately half.

• Clock Shift

When an internal spurious signal occurs due to the microcomputer clock, turn this setting on (tick the checkbox). This may improve the situation.
Usually, this item is set to "OFF" (un-tick the checkbox).

• Comments

Comments may be added to the edited HOME channels. Up to 255 letters can be used. This function is useful in organizing the HOME channels by, for example, applying a category name to each channel. These comments are not transferred to the FT-70DR/DE.

Troubleshooting

- **The FT-70DR/DE cannot receive or transmit data to the computer**
- **The Data transfer does not start**
- Verify that the programming cable is correctly connected to the FT-70DR/DE data port and to the PC. Connect correctly.
- The battery of the FT-70DR/DE may be depleted.
  Charge the battery or replace the battery with the new one.
- Is the computer COM Port setting correct?
  Set the COM Port correctly.
- Are you operating in a different order from the clicked the "Get Data from FT-70D" in the "Communications" menu and displayed procedure?
- Follow the on-screen instructions.
- Are you operating in a different order from the clicked the "Send Data to FT-70D" in the "Communications" menu and displayed procedure?
  Follow the on-screen instructions.

- **The data transmission has stopped before completion**
- Disconnecting the connection cable or poor contact of the connection cable.
  Confirm the cable connection and try again.
- The battery of the FT-70DR/DE may be depleted.
  Charge the battery or replace the battery with the new one.

- **The data import/export is not successful**
- Adjust the number of the rows of CSV file.
- Use the designated letter for the character string.
- When importing and exporting channels such as memory channels and VFO channels, make sure that the template files are consistent. If the template files are different, an error will occur and the data import and export will not be successful.

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