

DR-1X/XE

Installation Instructions for the DR-1X/XE DSP firmware (V4.13) and RX-UNIT firmware (V1.10Q)

Attention !

This instruction is for the DR-1X/XE with the firmware Version **1.10J** and **1.10D**.

Before installing the new firmware, be sure to check the firmware version of the DR-1X/XE repeater (Refer to Page 2).

If the DR-1X/XE contains firmware V1.00, do not install this version 1.10Q firmware to the repeater. For additional detailed information, please contact our Technical Support Department.

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How to check the firmware version of the DR-1X Repeater

1. Turn the DR-1X/XE power ON.
2. Touch [SETUP] on the DR-1X/XE LCD screen.
The firmware version will be displayed at the top of the screen.
3. After confirming the firmware version, turn the DR-1X/XE power OFF.



CAUTION!

Be sure to confirm the model and the version of your repeater before starting the installation. Writing incorrect firmware to the repeater may cause abnormal operation or failure.

Necessary material and System Requirements (Operating Environment) for Firmware installation

Notes: In order to use this program, a personal computer (PC) with one of the following Windows operating systems and a SCU-20 PC connection cable are required.

Supported Operating Systems

The firmware installation programmer requires one of the following operating system environments:

- Microsoft® Windows® 10 (32 bit / 64 bit)
- Microsoft® Windows® 8.1 (32 bit / 64 bit)
- Microsoft® Windows® 8 (32 bit / 64 bit)
- Microsoft® Windows® 7 (Service Pack 1 or later)
- Microsoft® Windows Vista™ (Service Pack 2 or later)

CPU

The CPU performance must satisfy the operating system requirements.

RAM (System Memory)

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

HDD (Hard Disk Drive)

The HDD capacity must exceed the operating system requirements.

In addition to the required operating system memory space, about 50 MB of additional memory space is required to run the firmware installation program.

Necessary PC peripheral interfaces

An available USB interface (USB Port)

Cable

SCU-20 PC connection cable

Important Notes

- All responsibility for the use of this software lies with the customer. YAESU MUSEN CO., LTD cannot be held liable in any way for damages or losses, which may be incurred by the customer as a result of using this software.
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- Downloaded files are for personal use only, any commercial use is prohibited.
- If you cannot perform the firmware installation yourself, please consult with one of our sales sites or service centers for assistance.

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Install / Uninstall Procedure

Installation procedure

Please visit Yaesu website (<http://www.yaesu.com/>) and download the Firmware files (see below).

- **RX-UNIT:** DR-1X_MAIN_vR110Qexp.zip
- **DSP:** PCTOOLe_v0413.zip

Uninstall procedure

Delete the folder opened by the program.

The operation will end if the opened folder is deleted since no data will be written to the registry and system folder.

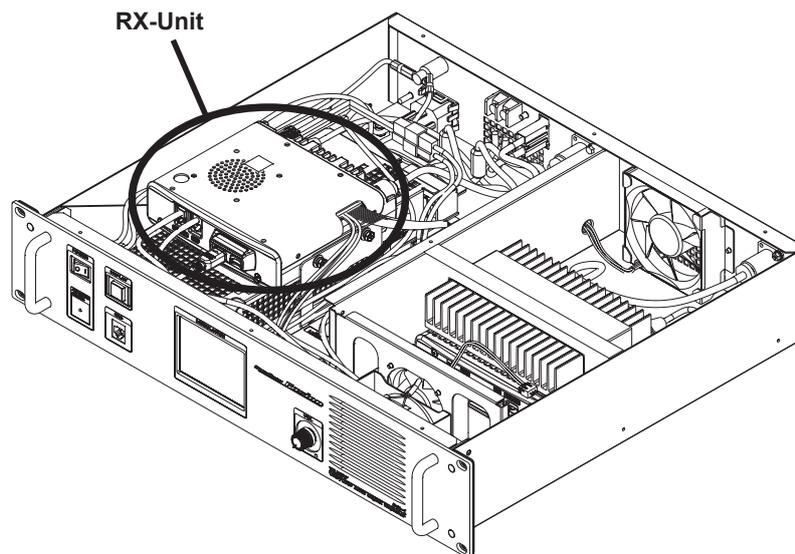
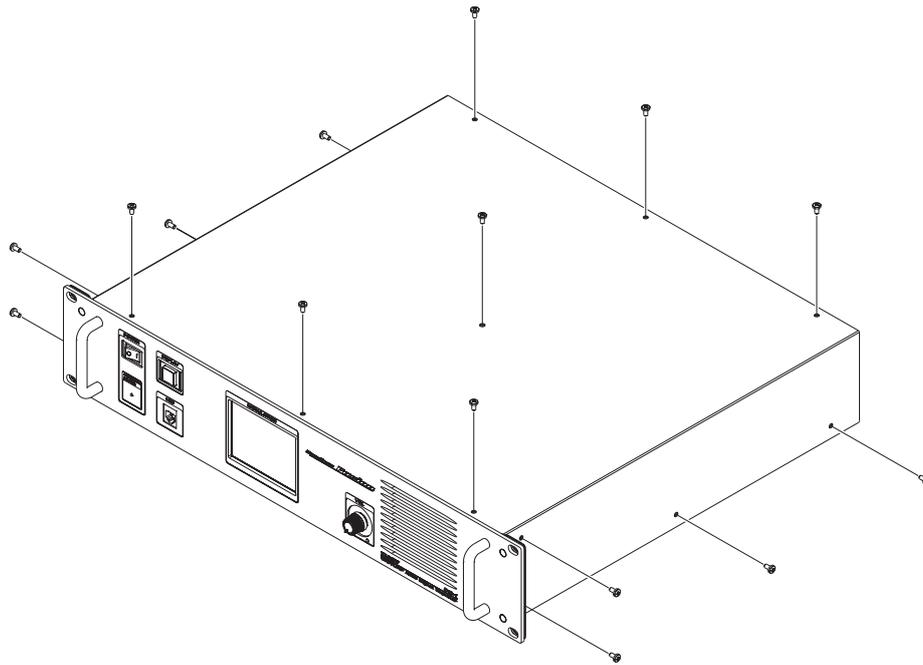
Using the Programmer

Before attempting to update the firmware, use the SCU-20 PC Connection Cable and install the driver software.
Then go to the website (<http://www.yaesu.com/>) to download and install the SCU-20 driver.

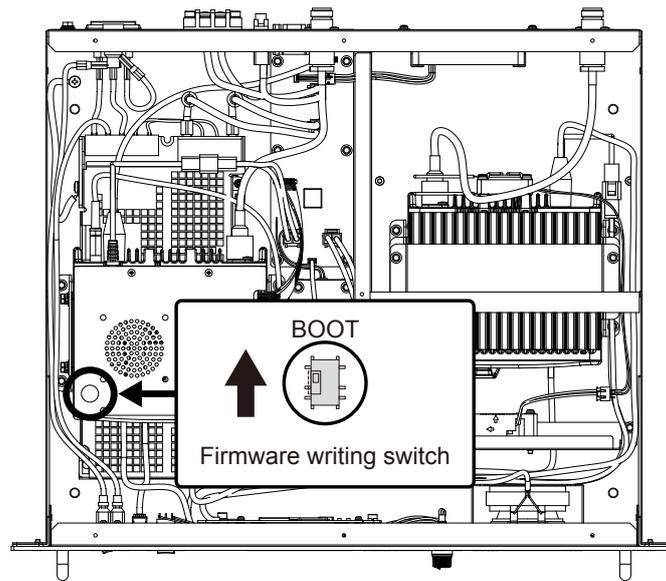
When the programmer is opened on the computer, press the [Update] button to display the preparation procedure screen, which explains the firmware installation process. Follow the procedure below.

Installation of the RX-UNIT firmware

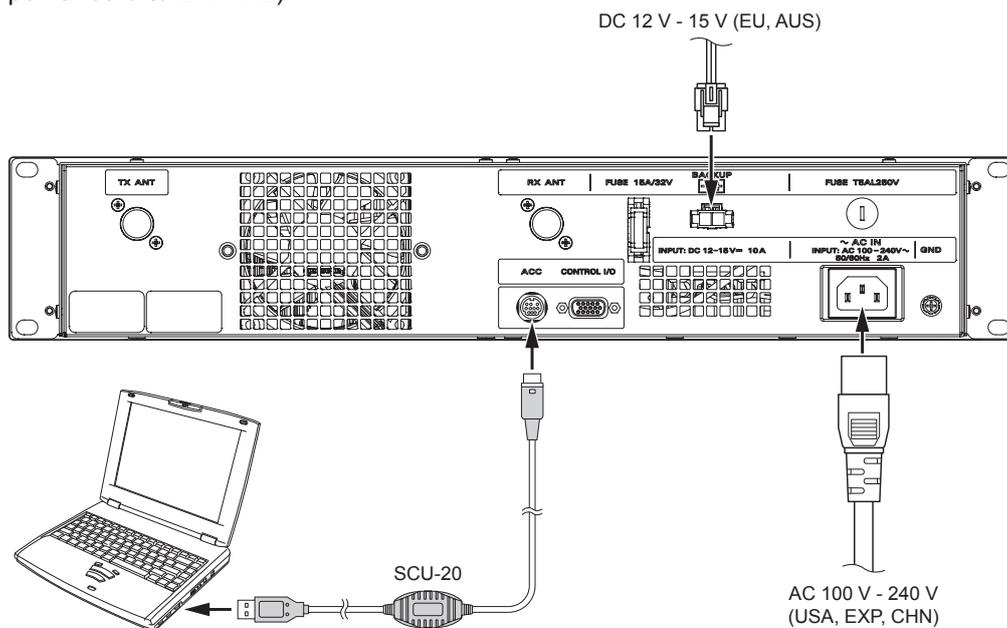
1. Remove the 15 screws from the top cover and then remove the cover.



- Through the hole at the front left of the RX-UNIT case, change the RX-UNIT firmware-writing switch inside to the BOOT position (rearward).



- Connect the SCU-20 PC connection cable to the ACC jack, and connect the AC or DC power cord to DR-1X (DC power cord to DR-1XE).



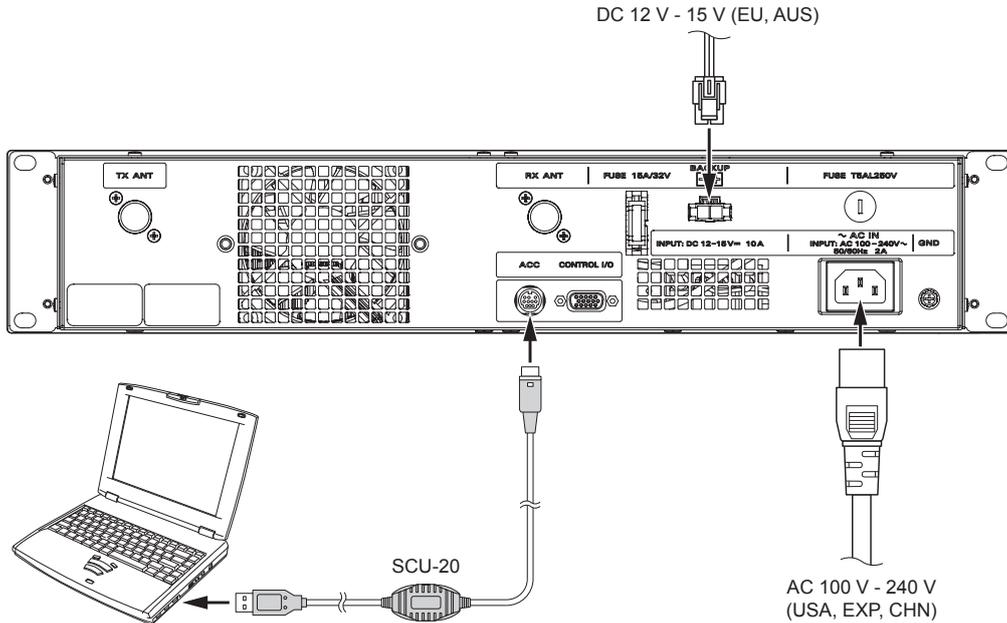
Install the firmware

- Turn the DR-1X/1XE power ON.
The cooling fan will start rotating but nothing will appear on the LCD screen.
- Open the “DR-1X_MAIN_vR110Qexp” folder on the personal computer, and then Double-click the “DR-1X_MAIN_vR110Qexp.exe” file that is saved on your PC to execute the program.
- Follow the on-screen instructions on your PC to install the DR-1X/1XE firmware.
- Select the COM Port number assigned when you installed the SCU-20, and press “Update”.
- After the installation completes, turn the DR-1X/1XE power OFF, and then through the hole at the forward left of the RX-UNIT case, set the RX-UNIT firmware writing switch inside to the original position (forward).
- Turn ON the DR-1X/1XE, power and then touch [SETUP] to view the firmware version number displayed at the top of the screen. If the install was successful, the firmware version number (Ver. 1.10Q) will be displayed.

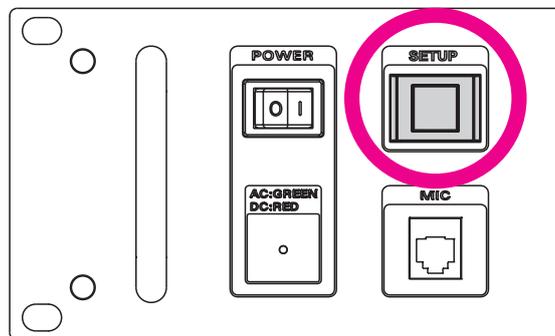
Installation of the DSP firmware

Note: Install the MAIN firmware before attempting to Install the DSP firmware.

1. Connect the SCU-20 PC connection cable to the ACC jack on the DR-1X rear panel.



2. Touch and hold the DR-1X/XE LCD screen while turning the DR-1X/XE ON.
3. Press the [SETUP] switch button, (although “PUSH SETUP” message is displayed on the screen).
"DSP <--> COM" will appear on the display



Install the firmware

1. Open the “PCTOOLe_v0413.zip” file on the personal computer, and then Double-click the “PCTOOLe_v0413.exe” file that is saved on your PC to execute the firmware installation program.
2. Select the COM Port number that was assigned when you installed the SCU-20 programming cable, and then press “OK”.
3. Press the “Update” button on the PC screen.
4. After the firmware installation completes, press “Exit”.
5. Turn the DR-1X/XE power OFF.
6. Disconnect the SCU-20 programming cable.
7. Replace the top cover, and fasten it using 15 screws.

This completes the firmware installation process.



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