

Identify the type of radio...



WARNING

It is extremely crucial to know what type of radio is to be upgraded before starting the upgrade process.

The series 6 (ES) radio, introduced in early 2007, have 6.x.x Application Codes and are compatible with PC Configure™ 2.4.0 or higher.

51xx Portable Radios

- 1 Turn on the radio and check the displayed version number at power up.
 - a Series 4 radios have a S/W version 4.x.x displayed.
 - b Series 6 radios have S/W version 6.x.x displayed.
- or
- 2 Use PC Configure™ (PCC) to read the version information.
 - a With radio programming cables attached and radio powered on, Select **Transfer** → **Read Version Info**.
 - b Controller Version is the radio application software.

Note: *These instructions do not apply if the radio software begins 1, 2, 3, or 5.*

53xx Mobile Radios

Note: *Look for the second set of number. The first set of numbers is the control head version that can be ignored.*

- 1 Turn on the radio and check the displayed version number at power up.
 - a Series 4 radios have a S/W version 4.x.x displayed.
 - b Series 6 radios have S/W version 6.x.x displayed.
- or
- 2 Use PC Configure to read the version information.
 - a With radio programming cables attached and radio powered on, Select **Transfer** → **Read Version Info**.
 - b Controller Version is the radio application software.

Note: *These instructions do not apply if the radio software begins 1, 2, 3, or 5.*

Computer Requirements

The computer used to run PC Configure must meet the following minimum requirements:

- Microsoft Windows® 98, 2000 or XP
- Intel Pentium® processor or equivalent
- A hard disk drive with at least 4 MB of free space
- A CD-ROM drive
- An available serial port (If your computer does not have an available serial port, EFJohnson recommends using the Keyspan Model USA-19HS Serial-to-USB adaptor.)

Programming (.rcf) File Conversions — Series 4 radios only

In mid-2006 the format of the RCF file changed, requiring different versions of PCC.

- Radios with 4.4.x Application Codes are compatible with PC Configure 1.28.0.8.
- Radios with 4.6.x Application Codes are compatible with PC Configure 2.1.0 or higher.
- Radios with 4.8.x or higher Application Codes are compatible with PC Configure 2.4.0 or higher.

To save a working RCF from a radio with 4.x.x app code:

- 1 Open PCC 1.28.0.8.
- 2 Read (upload) RCF file from radio.
- 3 Save RCF file to PC hard drive. (We recommend referencing 4.x.x in the file name.)

To write an RCF file back to a radio with 4.4.x app code:

- 1 Open PCC 1.28.0.8.
- 2 Open RCF file compatible with 4.4.x app code.
- 3 Write (download) RCF to radio.

To write a working 4.4.x RCF file to a radio with 4.8.x app code:

- 1 Open PCC 2.1.0 or higher.
 - 2 Open RCF file saved to hard drive with 4.4.x file format.
- Note:** *Do **not** save over the 4.4.x saved file. Archive all .rcf files: Once a 4.4.x RCF file is saved/opened with 4.8.x PCC or 4.6.x PCC, it cannot be opened by a 4.4.x PCC.*
- 3 Download file to radio with 4.8.x application code.
 - 4 PCC reformats the file and the radio operates normally.

If radio software has been upgraded from 4.4.x to 4.8.x:

- 1 Download file to radio with 4.8.x application code.
- 2 PCC reformats the file and the radio operates normally.

EFJohnson®

Quick Reference

(Series 4 / 6 radios)

Programming Setup

To program a portable (51xx series) radio, you need:

- A portable radio - 51xx, 51SL, or Ascend™.
- A radio programming cable, Part No. 023-5100-920. This cable has a female DB-9 connector for connection to your workstation's serial port. This cable, along with the PC Configure CD (which includes PC Configure and its Programming Manual), is included in the portable PC Configure Programming Kit, Part No. 250-5100-003 (for PC Configure 1.x.x) or 250-5100-004 (for PC Configure 2.x.x).
- A valid unit ID for this radio for each system it needs to access (obtained from each system's administrator).
- If you are programming SMARTNET®, SmartZone®, or P25 trunking system access on this radio, you'll need an EFJohnson system key for each system of these types that this radio needs to access. Contact your System or LMR Manager for the key or contact EFJ for the authorization forms to submit requesting a key.

Note: EFJohnson provides the system key to **Authorized Personnel** on CD or USB Master Keys.

- EFJohnson USB master keys are Part No. 250-5000-971. Your organization may also distribute them on slave keys (Part No. 250-5000-973).

To program a mobile (53xx series) radio, you need:

- A mobile radio - 53xx, 53SL, or Ascend.
- A Remote Programming Interface (RPI) box, Part No. 023-5300-000 (DB-9 female connector)
- A radio programming ribbon cable, Part No. 023-5300-005. This cable, along with the RPI and the PC Configure CD (which includes PC Configure and its Programming Manual), is included in the mobile PC Configure Programming Kit, Part No. 250-5000-004 (for PC Configure 1.x.x) or 250-5300-004 (for PC Configure 2.x.x).
- An interface cable to connect the RPI to your workstation. This interface cable is a standard cable that you may have on hand; you can also buy it at most computer supply stores. EFJohnson offers a 6-foot DB-9 male-female interface cable (Part No. 597-5900-002).
- A 12 volt power supply and DC cable.
- A valid unit ID for this radio for each system it needs to access (obtained from each system's administrator).
- If you are programming SMARTNET, SmartZone, or P25 trunking system access on this radio, you'll need an EFJohnson system key for each system of these types that this radio needs to access. Contact your System or LMR Manager for the key or contact EFJ for the authorization forms to submit requesting a key.

Note: EFJohnson provides the system key to **Authorized Personnel** on CD or USB Master Keys.

- EFJohnson USB master keys are Part No. 250-5000-971. Your organization may also distribute them on slave keys (Part No. 250-5000-973).

PC Configure Software Installation

Note: Copy the files in the Data and Keys folders from your previous PCC version to those folders of the new version.

- 1 Ensure there are no other applications open during this installation procedure. Also, ensure the computer meets the minimum requirements
- 2 Insert the PC Configure CD-ROM in the CD drive of your computer. Double-click on the PC Configure Application File.
or
In the lower left corner of the screen, select **Start → Run** and then click the **Browse** button. Select the CD-ROM drive and the file *PCConfigure_x_x.exe* (x_x is the PC Configure version number). Click the **Open** button and then from the **Run** window, click **OK** and the installation process begins.
- 3 Follow the on-screen instructions. The default directory for the program is *|Program Files|EF Johnson|PCConfigure|*. During installation, you can specify a different directory to install the program in if you wish to do so.
- 4 At the Sentinel Protection Installer, select **Next**. Please read and accept the license agreement. Click **Next** and the Set Up screen is displayed. Select **Complete**. Finish your installation procedure.

Starting PC Configure

To start the PC Configure program from Windows, select
Start → Programs → EFJohnson → PCConfigure_x_x_x.

Exiting PC Configure

Select **File → Exit** or click the red **X** in the upper right corner of the screen.

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