RadioPro
System Upgrade Guide

Contact Us

Support, replacement part ordering, and service may be arranged by contacting our Cincinnati office. Parts for service can be returned following request of a Return Material Authorization.

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Technical terms

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Hyperlinks to other documents or web pages

Warnings

Notes and important information

Software buttons, menus, menu options, folders, and pages

Software parameter values

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SYSTEM COMPATIBILITY CONSIDERATIONS

Use the following table to determine compatibility between RadioPro or TurboVUi IP Gateway and software clients:

	IP Gateway				
Dispatch Client for PC	v8.0.x	v7.0.x	v6.0.x	v5.1.x	v5.0.x
Dispatch v8.0.x (Windows 7, 8, or 10 Pro)	Yes				
Dispatch v7.0.x (Windows 7, 8, or 10 Pro)		Yes	Yes ❶		
Dispatch v6.0.x (Windows XP, 7, 8, or 10 Pro)		Yes	Yes		
Dispatch v5.1.x (Windows XP or 7)		Yes	Yes	Yes	
Dispatch v5.0.x (Windows XP or 7)					Yes
Talk or Solo Client for PC					
RadioPro Talk (Windows 7 or 8)	Yes	Yes ❷			
TurboVUi Solo (Windows XP or 7)	Yes	Yes	Yes	Yes	Yes
Mobile App for iOS and Android					
RadioPro Talk for Mobile　　(4th generation)	Yes				

Notes:　❶ Channel-to-channel patching in RadioPro Dispatch is only available when both IP Gateway and Dispatch software are v7.0.x (or higher).
　　　　❷ RadioPro Talk requires minimum IP Gateway v7.0.10.
　　　　❸ Not compatible with iOS 11.

When upgrading to a new version where RadioPro Clients and IP Gateways are being upgraded, it is usually better to upgrade the IP Gateways before upgrading the Clients.

RADIOPRO IP GATEWAY SOFTWARE UPGRADE

An IP Gateway upgrade to Version 7 or 8 software (from Versions 4 through 6) requires that the IP Gateway to be returned to CTI Products using our RMA process. Use the following table to determine if an IP Gateway is Field-upgradable (***Field***) or requires return to our facility using an ***RMA***.

To Version	From Version		
	6	7	8
→ 6	Field	RMA*	RMA*
→ 7	RMA	Field	RMA*
→ 8	RMA	Field	Field

* Some software downgrades require the IP Gateway to be returned to our facility using an RMA.

When a ***Field*** upgrade is possible according to the above table, two methods are available:

- Remote access using RadioPro Dispatch client
- Local access using USB Flash Drive

Software Upgrade using Remote Access and RadioPro Dispatch client

The following upgrade method requires remote access using RadioPro Dispatch client.

1. Navigate to www.ctiproducts.com > Resources > RadioPro > Upgrade Software and Document Downloads, or use the link:
   http://ctiproducts.com/RadioPro_UpgradeDownloads.html

2. Download the latest file for the RadioPro IP Gateway software to a folder on the PC that has RadioPro Dispatch installed. The filename will be:
   `TurboVUiServer… .exe`

3. From the **File** menu in RadioPro Dispatch, choose **Edit**. Edit Mode is available when a field of dots is displayed on the main window.
4. From the **Options** menu, choose **Manage Devices**.
5. Right-click on a Gateway IP Address, and choose **Upgrade Gateway** from the drop-down list.
6. In the õPassword Requiredö window, enter the IP Gateway password. The factory default password is õadminö. (The password may have been changed using ICU.exe during installation of the IP Gateway.)
7. Choose the file that was download in Step 1 above. The IP Gateway will go off-line for approximately one minute as it is upgraded and then restarted.
8. Verify the version of the IP Gateway: **Options** > **Manage IP Gateways**.

   Repeat Steps 1 through 7 for each RadioPro IP Gateway in the system.

Software Upgrade using Local Access and USB Flash Drive

The following upgrade method requires local (physical) access to each IP Gateway to be upgraded.

1. Navigate to www.ctiproducts.com > Resources > RadioPro > Upgrade Software and Document Downloads, or use the link:
    http://ctiproducts.com/RadioPro_UpgradeDownloads.html

2. Ensure that there are not multiple files named õTurboVUiServer í   .exeö on the USB flash drive, and that the file does NOT have õInstalledö in its name. (Following the use of this file to perform an upgrade, the RadioPro IP Gateway renames the file, adding the word õInstalledö.) If õInstalledö appears in the file name, then rename the file, deleting the word õInstalledö.

3. Insert the USB flash drive into a USB port of the RadioPro IP Gateway.

4. Wait approximately 1 minute for update completion and rebooting of RadioPro IP Gateway.

5. Remove the USB flash drive from the RadioPro IP Gateway.

Repeat Steps 2 through 5 for each RadioPro IP Gateway in the system.

Use the following steps to verify the version of an IP Gateway:

6. Run ICU.exe on a PC or laptop that has connectivity to the IP Gateway that was upgraded.
    ICU.exe is available on the product distribution CDs as well as on our web site.

7. Verify that the version of ICU.exe is correct for the version of the IP Gateway: **Help** > **About**.

8. Connect to the IP Gateway: **Read Device > Auto Find**. Double-click on one of the IP Gateways in the list to connect to it. (If the IP Gateway does not appear in the list of accessible IP Gateways, use **Manual** to enter the IP address of the IP Gateway.)

9. In the **General** tab, verify that the **Version** listed is correct.

10. Close the ICU.exe utility.

RADIOPRO IP GATEWAY LICENSE EXPANSION

An upgraded license for an IP Gateway that adds connections for RadioPro Solo, Talk and Talk Mobile users and/or adds gateway features may be purchased at any time. (A change in the license to reduce the number of connections requires that the IP Gateway be returned to our facility using an RMA.)

Exporting a License

If you are instructed by CTI products to export an existing license from a RadioPro IP Gateway, use one of the following methods.

For Version 7 or 8 using ICU.exe

The ICU.exe version must match the version of the IP Gateway software, and can be downloaded from: http://ctiproducts.com/RadioPro_UpgradeDownloads.html

1. Start ICU.exe, click the **Read Device** menu, choose **Manual** or **Auto Find** from the drop-down list, and then double-click one of the IP Gateways in the list.
2. With a connection established to an IP Gateway, from the **License Key** tab, click the **Export License Key** button, and then choose a file name and storage location for the exported license file.
3. Email the exported license file to support@ctiproducts.com.

For Version 4 through 8 using a Solo client

A Solo client can be downloaded from: http://ctiproducts.com/RadioPro_UpgradeDownloads.html

Install a RadioPro/TurboVUi Solo client, and then login using the õadminö account.

1. From the **Settings** menu, click **Update License** to display the Update License window.
2. Click the **Get License Key** button, and then choose a file name and storage location for the exported license file.
3. Email the exported license file to support@ctiproducts.com.

Importing a License

Following the purchase and receipt of an expanded license file (with additional connections or features), use one of the following methods to upload the new license file to the IP Gateway.

For Versions 7 or 8 using ICU.exe

The ICU.exe version must match the version of the IP Gateway software, and can be downloaded from: http://ctiproducts.com/RadioPro_UpgradeDownloads.html

1. Start ICU.exe, click the **Read Device** menu, choose **Manual** or **Auto Find** from the drop-down list, and then double-click one of the IP Gateways in the list.
2. From the **License Key** tab, click the **Import License Key** button, and then choose the newly purchased license file for this IP Gateway serial number.
3. From the **Gateway** menu, choose **Write Settings**.
4. In the õPassword Requiredö window, enter the IP Gateway password. The factory default password is õadminö. (The password may have been changed using ICU.exe during installation of the IP Gateway.)
5. Verify that the license has been expanded: From the **License Key** tab, note the number of **User Connections**.

For Versions 4 through 8 using a Solo client

A Solo client can be downloaded from:
http://ctiproducts.com/RadioPro_UpgradeDownloads.html

Install a RadioPro/TurboVUi Solo client, and then login using the õadminö account.

1. From the **Settings** menu, click **Update License** to display the Update License window.

2. Click the **Set License Key** button, and then choose the newly purchased license file for this IP Gateway serial number.

3. Verify that the license has been expanded: From the **Settings** menu, click **Gateway**, then click the **Admin** tab to display the number of **User Connections**.

RADIO INTERFACE CONFIGURATION

The IP Gateway is configured at the factory for one of the following interfaces:

- Motorola MOTOTRBO
- Kenwood NEXEDGE

Configuration for one of the above interfaces consists of hardware, license, and interface cable.

Hardware

For Audio/Watchdog PCB version 110 (S3-61830-110) jumpers must be set according to the following table.

Radio Interface	Jumper			
	E1	E2	E5	E6
MOTOTRBO			A & C	
NEXEDGE	Tx	Rx	B	A

Example photos of these jumper settings are shown below.

MOTOTRBO

NEXEDGE

License
A license installed in each IP Gateway determines the following:

- The number of simultaneous connections allowed from RadioPro Solo, Talk, and Talk Mobile client users.
- The type or radio interface, either MOTOTRBO or NEXEDGE.
- Optional features such as: RTP Transfer Option, MultiSpeak Transfer Option, Permanent Patch Option, and GPS Locate Option (for Talk Mobile clients).

Interface Cable

Motorola MOTOTRBO XPR4550/5550 Voice Radio

Interface Cable # S2-61431

Signal Name	IP Gateway DE-9* Pin #	IP Gateway USB Pin #	XPR Radio J2 Accessory Connector
Tx+ (Mic audio to radio) Transformer isolated, 600 ohms	4		11
Tx- (Mic audio to radio)	5		16
Rx+ (Speaker audio from radio) Transformer isolated, 600 ohms	8		14
Rx- (speaker audio from radio	9		16
12v Accessory	2		25
USB Data +		3	1
USB Data -		2	2
USB 5Vdc		1	3
USB Gnd		4	4

* Interface cable requires DE-9 Male to connect to the IP Gateway female connector.

Motorola MOTOTRBO XPR4550/5550 Data Radio

Interface Cable # S2-61664

Signal Name		IP Gateway DE-9* Pin #	XPR Radio J2 Accessory Connector
USB Data +		3	1
USB Data -		2	2
USB 5Vdc		1	3
USB Gnd		4	4

Kenwood NEXEDGE NX-700/800 Voice Radio

Interface Cable # S2-61769

Signal Name	IP Gateway DE-9* Pin #	NXx00 Radio DB-25 Pin #
Tx+ (Mic audio to radio) Transformer isolated, 600 ohms	4	6
Tx- (Mic audio to radio)	5	25
Rx+ (Speaker audio from radio) Transformer isolated, 600 ohms	8	17
Rx- (speaker audio from radio	9	18
Tx Data (from radio)	1	3
Rx Data (to radio)	6	2
Digital Ground	3	7

* Interface cable requires DE-9 Male to connect to the IP Gateway female connector.

Kenwood NEXEDGE NX-700/800 Data Radio

Interface Cable # 89-10505 (standard DE-9 to DB-25 serial cable)

Signal Name	IP Gateway DE-9* Pin #	NXx00 Radio DB-25 Pin #
Tx Data (from radio)	2	3
Rx Data (to radio)	3	2
Digital Ground	5	7

* Interface cable requires DE-9 Male to connect to the IP Gateway female connector.

Kenwood NEXEDGE NX-720/820 Voice Radio

Interface Cable # S2-61890

Signal Name	IP Gateway DE-9* Pin #	NXx20 Radio HD-15 Pin #
MI2 (Tx+ Mic audio to radio)	4	5
Audio Ground	5	15
AF0 (Rx+ Speaker audio from radio)	8	4
Audio Ground	9	15
Tx Data (from radio)	1	6
Rx Data (to radio)	6	7
Digital Ground	3	15

* Interface cable requires DE-9 Male to connect to the IP Gateway female connector.

Kenwood NEXEDGE NX-720/820 Data Radio

Interface Cable # S2-61891

Signal Name	IP Gateway DE-9* Pin #	NXx20 Radio HD-15 Pin #
Tx Data (from radio)	2	6
Rx Data (to radio)	3	7
Digital Ground	5	15

Additional modifications to internal Tx-Rx unit of NX-720/820

Out	In	Description
R664	R666	Change FNC1 (TXD) and FNC2 (RXD) of HD-15 (DE-15) Connector from TTL level to RS-232C level
R635	R633	
R662	R665	
R796	R798	Change signal output from DEO to AFO
R797	R799	Change signal input from DI to MI2
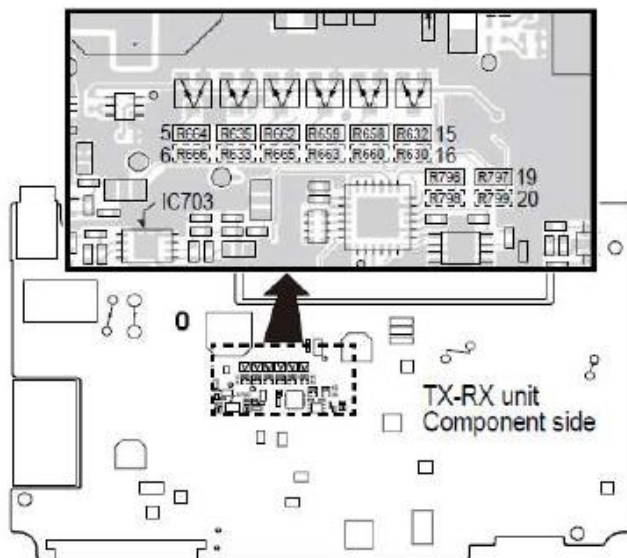
RADIOPRO DISPATCH SOFTWARE UPGRADE

What You Will Need

RadioPro Dispatch License File

An upgraded license file is required if upgrading to a Major Version of v7 or higher. Contact CTI Products for an upgrade quote and provide the serial number for the existing license key(s).

RadioPro Dispatch Software Install File

For RadioPro Talk or Dispatch clients, a file can be downloaded from:
http://ctiproducts.com/RadioPro_UpgradeDownloads.html

The RadioPro Dispatch software install filename will be:
                    RadioPro_Dispatch_v***xxx***.exe
where xxx indicates the 3-level version as discussed in õ*System Considerations*ö above.

Upgrade Instructions

Following the purchase and receipt of a new RadioPro Dispatch License File, perform a software upgrade for RadioPro Dispatch using the following steps:

Document the existing installation

1. Take a screen shot(s) or photo(s) of the main page that shows the custom action buttons on the main toolbar, the various tabs for voice and maps, as well as locations for panels such as Subscriber, Recent History, Geo-fence Alerts, Messages, Missed Calls, and Subscriber Grid.

2. Record the location of the layout files.
    a. From the õEditö mode: **Options > Dispatch Settings >** then click the link in the lower left corner of this window.
    b. Note the file names for the .tdcfg and .xml files and the location of these files by taking a screen shot.

3. Record the location of the AudioSettings.cfg file:
    a. From the õEditö mode: **Options > Audio Presets > Configure >** then click the link in the lower left corner of this window.
    b. Note the file name for the AudioSettings.cfg file and the location of this file by taking a screen shot.

4. Record the location of the AliasTable.csv file:
    a. From the õEditö mode: **Options > Contacts >** then click the link in the lower left corner of this window.
    b. Note the file name for the aliasTable.csv file and the location of this file by taking a screen shot.

5. Close the RadioPro Dispatch application.

Install the new software version

6. Run the Software Install File that was downloaded from above. (Do not un-install any previous versions.) When prompted, use default file locations.

7. Ensure that "Run as Administrator" is enabled for this application.
    a. Right-click on the desktop icon, and choose **Properties**.
    b. Enable **Run as Administrator**.
        This parameter is located in slightly different places depending on operating system.
        This parameter may be disabled after configuring the new version of the software.

8. Run the new version of RadioPro Dispatch client.

9. Click the button for **Import New License**, and choose the new license file.

10. Modify configurations based on steps 1-4 above.
    If upgrading from Version 6 (or earlier) to Version 7 (or later), it will be necessary to copy several configuration files to new locations as indicated in the following table.

File Names	Version 6 (or earlier)	Version 7 (or later)
aliasTable.csv DispatchUsers.cfg AudioSettings.cfg	`c:\ProgramData\TurboVUi`	`c:\ProgramData\CTI Products\RadioPro Dispatch`

RADIOPRO DISPATCH LICENSE EXPANSION

License options for RadioPro Dispatch may be purchased and added at any time. Available optional modules include Voice, GPS Mapping, Text Messaging, and Telemetry.

Following purchase and receipt of an expanded license file for RadioPro Dispatch, import the new license file using the following steps:

1. Change to Edit mode: **File > Edit**
2. Open the Update License window: **Options > Update License**
3. In the Update License window, click the **Import License Key** button.
4. Navigate to the storage location of the new license key, choose the file, and then click **Open**.
5. The parameters on the Update License window should be updated. Close the Update License window.
6. Change to Lock mode: **File > Save**

A reduction in license options is not possible.

RADIOPRO DISPATCH RE-INSTALLATION ON REPLACEMENT PC

Re-installation of RadioPro (or TurboVUi) Dispatch software may be needed if a replacement PC is to be implemented. If the original PC still functions, then steps can be taken to minimize the re-installation on a new PC.

Version 7 and later

Use the following steps to copy configuration settings from the existing PC:

1. In the Dispatch software, change to õEditö modeö: **File > Edit**
2. Clone the existing settings: **File > Clone Settings**
3. Copy the .trbodat file obtained in Step 2 to a USB thumb drive or network storage device.

Use the following steps to import settings into new PC:

4. Install RadioPro Dispatch software on the new PC.
5. In the Dispatch software, change to õEditö modeö: **File > Edit**
6. Import the cloned settings obtained in Step 3 above: **File > Import Cloned Settings**

Version 6 and earlier

Copy configuration and settings from the existing PC

1. Copy Layout Files (.xml and .tdcfg) using the following steps:
   a. In TurboVUi Dispatch, change to Edit Mode: **File > Edit**
   b. Open the Dispatch Settings window: **Options > Dispatch Settings**
   c. Click on the link in the lower left corner of this window in order to open the file location for the Layout files.
   d. Copy the .xml and .tdcfg files from this location to a USB thumb drive.
2. Copy the aliasTable.csv file using the following steps:
   a. Open the Subscriber Contacts window: **Options > Contacts**
   b. Click on the link in the lower left corner of this window in order to open the file location for aliasTable.csv
   c. Copy the aliasTable.csv file from this location to a USB thumb drive.
3. Copy the AudioSettings.cfg file using the following steps:
   a. Open the Audio Configuration window: **Options > Audio Presets > Configure**
   b. Click on the link in the lower left corner of this window in order to open the file location for AudioSettings.cfg
   c. Copy the AudioSettings.cfg file from this location to a USB thumb drive.
4. Copy the License.key file using the following steps:
   a. Open a Windows Explorer window and navigate to:
      c:\Program Files (x86)\TurboVui
   b. Copy the License.key file to a USB thumb drive.

Copy settings to a new PC

5. Install the Dispatch version 6 software onto the new PC. Contact CTI Products if the original distribution CD cannot be located.
6. Change the Dispatch desktop icon to **Run as Administrator**.
7. Run the Dispatch software.
8. Install the existing Layout Files obtained in Step 1 above:
   1. **File > Open**, then open the Layout file saved on the USB thumb drive.
   2. **File > Save As** (to save this layout on the new PC).
9. Install the existing aliasTable.csv file obtained in Step 2 above:
   1. Open the Subscriber Contacts window: **Options > Contacts**
   2. Click on the link in the lower left corner of this window in order to open the file location for aliasTable.csv
   3. Delete the aliasTable.csv file.
   4. Copy the old aliasTable.csv file from the USB Thumb drive to this folder.
10. Install the existing AudioSettings.cfg file obtained in Step 3 above:
    1. Open the Audio Configuration window: **Options > Audio Presets > Configure**
    2. Click on the link in the lower left corner of this window in order to open the file location for AudioSettings.cfg
    3. Delete the AudioSettings.cfg file
    4. Copy the old AudioSettins.cfg file from the USB thumb drive to this folder.
11. Install the existing License.key file obtained in Step 4 above:
    1. Open a Windows Explorer window and navigate to: c:\Program Files (x86)\TurboVUi
    2. Copy the License.key file from the USB thumb drive to this folder.
12. Restart the Dispatch application.

TIMED LICENSE

RadioPro application software and/or IP Gateway software may be shipped with a timed license. Following the period of the timed license, the software will not function. The following describes instances when a timed license may have been installed, and the method for updating a license to a non-expiring license.

Dealer Demo Kits

Dealer Demo Kits should have their software and licenses updated annually. These updates are provided at no charge as long as the Dealer Demo Kit is being used for sales of RadioPro systems. Dealer Demo Kits shipped after June 1 2015 will have a timed license that expires 12 months after shipment.

Contact CTI Products to receive a renewed 12-month license.

Poor Payment History

Shipments to dealers with poor credit or payment history will have licenses that expire 4 months after shipment. Upon payment of invoice, a non-expiring license will be emailed to Dealer.

License Update

IP Gateway License
To update the license for an IP Gateway, use instructions listed under ***RadioPro IP Gateway License Expansion***.

Dispatch License
To update the license for RadioPro Dispatch software, use instructions listed under ***RadioPro Dispatch License Expansion***.