

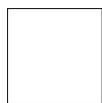


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# Windows Install Guide

**SOFTWARE VERSION 1.10**

December 20, 2017



**Mechdyne**  
ENABLING DISCOVERY

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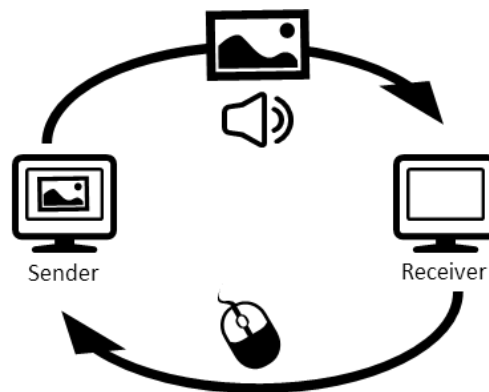
## DOCUMENT REVISION HISTORY

Version	Description of Changes	Author	Date
1.0	Updated formatting	C. Joyner	03/22/2017
1.2	Updated for 1.9.0 release – sections: USB, hardware/drivers table, and unattended install.	C. Twine/J. Moder	07/06/2017
1.3	Added version compatibility matrix.	C. Twine/J. Moder	07/25/2017
1.4	Added Appendix A, advanced administration, and updated unattended installation section.	J.Moder/C. Twine	08/22/2017
1.5	Added note to unattended install for Windows 7 exception.	J. Moder	8/25/2017
1.6	Updated for 1.10 release.	J. Moder/C. Twine	12/20/2017

## WELCOME TO TGX

TGX installers are available from the Mechdyne Product Download Center. Contact Mechdyne to receive your login credentials and licenses for the software.

TGX provides separate installers for the sender and the receiver. The sender is the remote workstation whose desktop and applications are shared by TGX to a receiver. The receiver is the local computer that displays and interacts with the remote desktop of the sender via TGX.



## LICENSE MANAGEMENT

The TGX Sender requires a valid license to function. On Windows, install a license file (e.g. TGX.lic) to C:\ProgramData\Mechdyne\licenses. To set an alternative license file location, set the LM\_LICENSE\_FILE or MECHDYNE\_LICENSE\_FILE environment variable. The environment variable can provide a list of license files using the “;” separator or a list of servers (i.e. *port@hostname*) using the “,” separator.

To set an environment variable on Windows, press the Windows key and type “System” to find the System control panel item. Select “Advanced system settings”, select the Advanced tab, click “Environment Variables” and add a new variable under “System variables”.

TGX uses FlexLM for license management. To use floating licenses with a FlexLM server, please contact [software\\_support@mechdyne.com](mailto:software_support@mechdyne.com) for instructions on how to download and configure the FlexLM license server software.

## SYSTEM REQUIREMENTS

### OPERATING SYSTEM

The TGX Sender and Receiver support Windows 7, 8, 8.1, 10, Server 2008R2 and 2012.

### HARDWARE/DRIVERS

	Graphics Card	Driver
TGX Sender	NVIDIA Quadro Kepler or better, NVIDIA GRID (pass-thru)	<ul style="list-style-type: none"> <li>R346 (minimum)</li> <li>354.99 (recommended)</li> </ul>
	NVIDIA GRID (vGPU)	Latest available from NVIDIA website (recommended)
	NVIDIA GTX	Latest available from NVIDIA website (recommended)
	Intel HD, Iris, Iris Pro (Intel HD 4000 or newer)	XX.XX.XX.4352 or newer (December 23, 2015)
TGX Receiver	NVIDIA Quadro	<ul style="list-style-type: none"> <li>R346 (minimum)</li> <li>354.99 (recommended)</li> </ul>
	NVIDIA GTX	Latest available from NVIDIA website (recommended)
	Intel HD, Iris, Iris Pro (Intel HD 4000 or newer)	XX.XX.XX.4352 or newer (December 23, 2015)
	AMD (software decode)	14.301.1019 or newer (May 15, 2015)

TGX currently uses software decoding on AMD graphics cards; hardware decoding is under development.

## TGX VERSION COMPATIBILITY

The following matrix depicts the TGX software version compatibility.

TGX Software Version					
	1.6	1.7	1.8	1.9	1.10
1.6	X				
1.7		X	X		
1.8		X	X		
1.9				X	
1.10					X

## SENDER INSTALLATION OPTIONS

### USB REMOTING COMPONENT

TGX provides support for USB devices being redirected from the receiver to the sender. This is currently only supported for human interface device (HID) class devices, though others may work. See the *Administrator's Guide* for more information on configuring devices. If the USB component is not selected during install, USB redirection will not be available on this sender.

The USB Remoting component adds a USB service and drivers to enable the USB redirection.

### GENERATE SELF-SIGNED CERTIFICATES

TGX can generate self-signed certificates for temporary or permanent use. When selecting this option, TGX will generate a 2048-bit RSA key and self-signed certificate and configure the sender to use them. On Windows 8+ these will be stored in the Windows Local Machine Certificate Store, otherwise by default the certificate and key will be stored as files. Self-signed certificates will prompt users to add a fingerprint exception when connecting to a sender for the first time. If the defaults are not desirable please see the *Administrator's Guide* for more information on how to configure certificates.

### ALLOW TGX TO OVERWRITE THE EXISTING DISPLAY CONFIGURATION

TGX provides support for the Sender desktop to be reconfigured to match that of the Receiver. This option is enabled by default on the Sender as part of the installation. To disable this capability, uncheck the box. It is recommended that this option be disabled on Sender's that are physically connected to complex display systems, especially those configured with NVIDIA Quadro Sync or Mosaic mode.

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## LOG REMOTE USERS IN AUTOMATICALLY AFTER AUTHENTICATING

TGX provides support to transfer the credentials of the user authenticated on the Receiver to allow automatic login on the Sender. This option is enabled by default on the Sender as part of the installation. To disable this capability, uncheck the box.

## PORT CONFIGURATION

TGX reserves sixteen ports for communication between Sender and Receiver. The default starting port is 40001, however this is configurable as part of the installation. Note, the default port must match between Sender and Receiver.

## ADD FIREWALL EXCEPTIONS

By default, the installation process will create an exception to the standard Windows Firewall rules to allow TGX connections. Uncheck this box if your IT security does not use the Windows Firewall and have your IT group manually configure your firewall system to allow TGX connections.

## RECEIVER INSTALLATION OPTIONS

### USB REMOTING COMPONENT

TGX provides support for USB devices being redirected from the receiver to the sender. This is currently only supported for human interface device (HID) class devices, though others may work. The USB devices that may be used are restricted based on the sender configuration. If the USB component is not selected during install, USB redirection will not be available on this receiver.

The USB Remoting component adds a USB service and drivers to enable the USB redirection.

### ADD FIREWALL EXCEPTIONS

By default, the installation process will create an exception to the standard Windows Firewall rules to allow TGX connections. Uncheck this box if your IT security does not use the Windows Firewall and have your IT group manually configure your firewall system to allow TGX connections.

### PORT CONFIGURATION

TGX reserves sixteen ports for communication between Sender and Receiver. The default starting port is 40001, however this is configurable as part of the installation. Note, the default port must match between Sender and Receiver.

## UNATTENDED INSTALL

Both the sender and receiver can be installed unattended via command-line.

The following arguments will hide all message boxes, accept all defaults, and log results to the user's TEMP directory: /SILENT /SUPPRESSMSGBOXES /LOG

e.g. # TGX\_Sender\_1.7.1.223\_64-bit.exe /SILENT /SUPPRESSMSGBOXES /LOG

An additional flag, /COMPONENTS, is provided to select/de-select the USB redirection features. The TGX components are main, for the main TGX application and usb, for the USB redirection drivers. If the components flag is unspecified the USB redirection features will be installed.

e.g. # TGX\_Receiver\_1.9.0.371\_64-bit.exe /SILENT /SUPPRESSMSGBOXES /LOG  
/COMPONENTS=main (does not install the USB redirection features)

For more detailed information and more options consult the Inno Setup documentation, [here](#).

With the addition of the USB remoting feature some additional setup is required to get a completely unattended install. Windows security features require manual acceptance, even of signed driver installs, unless the certificate for that publisher is in the Trusted Publisher certificate store.

The public certificate can be found in the install directory with the executables, default: C:\Program Files\Mechdyne\TGX <Sender or Receiver>\bin64\MechdynePublicCertificate.pem. Or it can be extracted from the certificate store on a system where TGX and the USB components have been installed.

The certificate can be imported with the following command which should be run prior to running the TGX installer for a truly unattended install. This command will add the certificate to the Trusted Publisher store.

```
certutil -addstore "TrustedPublisher" <path to certificate>
```

If the store does not exist, an additional -f parameter may be required to force creation of the store or use certmgr.msc to verify the store exists.

**Note: For Windows 7 this also requires two hotfixes ([KB2921916](#), [KB3033929](#)) since the Mechdyne certificate is SHA256 signed. The certificate may need to be removed and reloaded once these hotfixes are installed.**

## TECHNICAL SUPPORT

Mechdyne is available for additional technical support.  
Please submit queries through our support portal on the web.

### WEB

<http://www.mechdyne.com/software-support.aspx>

### EMAIL

[software\\_support@mechdyne.com](mailto:software_support@mechdyne.com)