

# TCx Display Configuration Utility for Windows

## User's Guide

*Version 1.5*

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This edition applies to TCxDisplay Configuration Utility for Windows and to all subsequent releases and modifications until otherwise indicated in new editions.

Toshiba Global Commerce Solutions, Inc. information of this product is available at:  
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## **About this guide**

This guide describes how to install and use the Toshiba TCxDisplay Configuration Utility.

## **Who should read this guide**

This guide is intended for the personnel who will install and use Toshiba TCxDisplay Configuration Utility.

## Introduction

TCxDisplay Configuration Utility is a command-line tool used to download, update settings and configure a TCxDisplay 6149 (Model 5Cx, Model 5Sx, Model 5NR and Models BxT/WxT/BxN/WxN) hardware settings.

Customers will be able to download the current settings of the device, update and load it accordingly. Examples of these configurable settings are the General Volume, Beep-on-Touch, POS Tone and On-Screen Display (OSD).

## Supported Operating Systems

The following Windows operating systems are supported by the tool:

- Windows 10 64 Bit

## Installing the TCx Display Configuration Utility

The installer of the utility is in the form of a “setup” executable file. The following section describes how to install this tool.

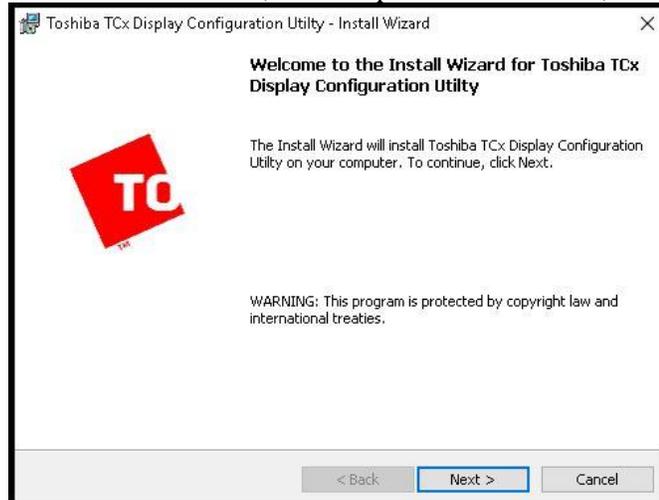
### Installation and Uninstallation using the graphical user interface

For the GUI installation please do the following:

1. Double click on setup.exe icon or second click and hit **open**, this will launch the next screen



2. Click Install button, the UAC will prompt to allow the installer to place the files in your system, select yes.
3. Once you allow the installer to be executed, the setup wizard will start, showing this window



4. Hit next, accept the license agreement, then install and the setup wizard will start to install the files in your system

After the tool is installed, it should be located in **<PROGRAM FILES>\Toshiba\TCxConfigUtility\TCxDisplay**.

For the uninstallation process please follow the next steps:

- 1 Go to Control Panel
- 2 Go to Uninstall a program
- 3 Look up for Toshiba TCx Display Configuration Utility
- 4 Click on Uninstall

## Unattended Installation and Uninstallation

The setup wizard for TCx Display Configuration Utility support the unattended installation and uninstallation to do so follow the next steps:

### Silent/Unattended Installation

Open a command prompt as an Administrator

Change the working directory where the setup.exe file is located at and type the following command

```
Setup.exe -q
```

### Silent/Unattended Uninstallation

Open a command prompt as an Administrator

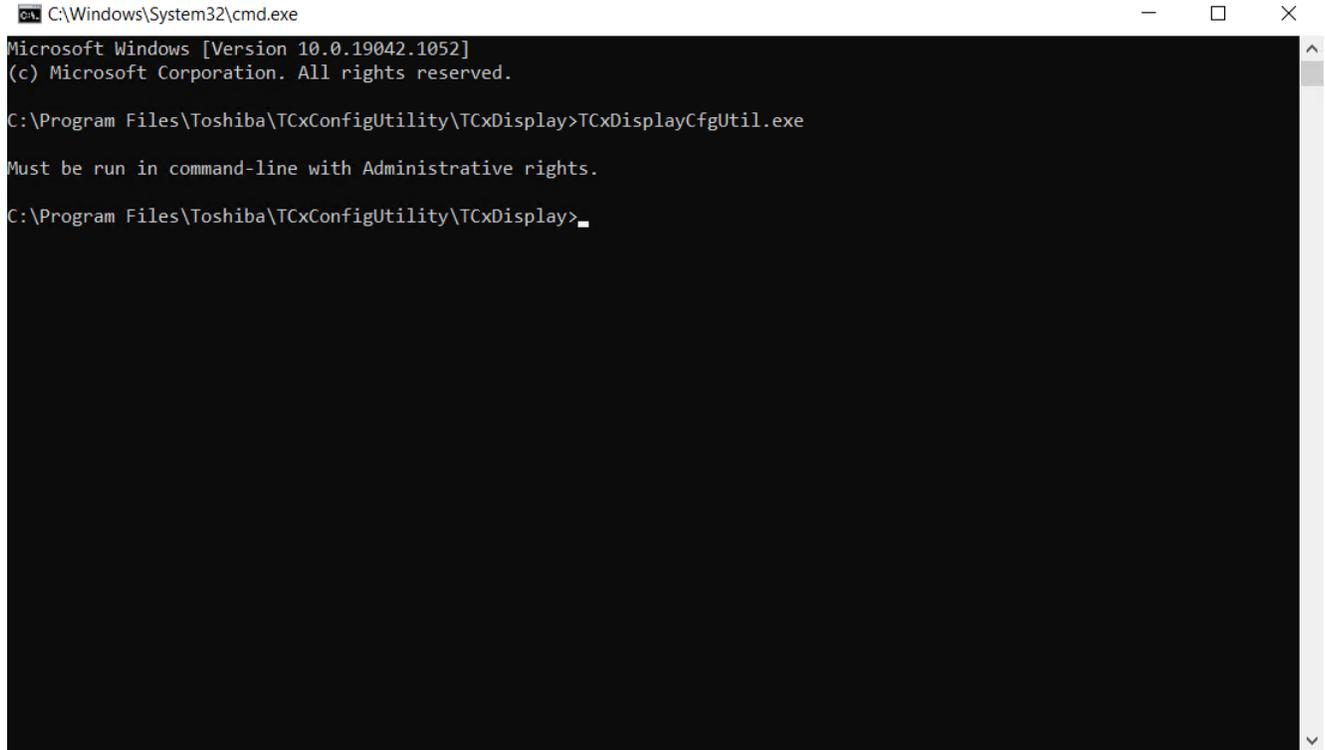
Change the working directory where the setup.exe file is located at and type the following command

```
Setup.exe -uninstall -q
```

## Running the utility

To use the TCxDisplayCfgUtil.exe tool you must open a command prompt and go to the location **<PROGRAM FILES>\Toshiba\TCxConfigUtility\TCxDisplay** where the exe file will be located.

The command prompt should have elevated/Administrator rights; otherwise, an error notification will be displayed. (See screenshot below)



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19042.1052]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files\Toshiba\TCxConfigUtility\TCxDisplay>TCxDisplayCfgUtil.exe

Must be run in command-line with Administrative rights.

C:\Program Files\Toshiba\TCxConfigUtility\TCxDisplay>_
```

## Tool Options

Use the following options in configuring the settings of a TCxDisplay 6149 (Model 5Cx, Model 5Sx or Model 5NR or Models BxT/WxT/BxN/WxN):

```

TCxDisplayCfgUtil Version 1.5.0 - TCxDisplay Configuration utility
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---
USAGE: TCxDisplayCfgUtil.exe [options]

WHERE OPTIONS are:

-o <filename> Retrieve the current device's configuration.
               Specify the name of the INI file in <filename>.

-g <filename> Generate a pre-defined INI file. Specify the
               name of the INI file in <filename>.
               If two monitors with different MCU levels
               are detected, you must specify the serial # of the monitor for the one
               you want the default ini file using -s <serial#> argument.
               example: TCxDisplayCfgUtil.exe -g <filename> -s <serial#>.

-i <filename> Update devices using only INI file specified in
               <filename>.

-L             List attached devices *1

-s <serial#>   Update device's configuration specified by the
               USB Serial Number: <serial#>

-v            Verbose logging to the console during execution

-l <log file> Specify the log file

-?           Usage (this message) and additional help information

```

### Current Setting [-o <filename>.ini]<sup>1</sup>

This is the option to use when downloading the current settings of the display. The path of the INI file can also be absolute.

```
TCxDisplayCfgUtil.exe -o "C:\Program
Files\Toshiba\ToolsUtilities\TCxDisplay\TGCSMonCfg.ini"
```

### Generate default settings [-g <filename>.ini]

This option generates the default values. The utility can be run in any machine when using this option. Then the generated INI file can be updated accordingly and loaded to a POS machine with TCxDisplay. The path of the INI file can also be absolute.<sup>2 3</sup>

```
TCxDisplayCfgUtil.exe -g "C:\Program
```

<sup>1</sup> If no serial number is specified the utility will download the current configuration of the first detected monitor, you can verify this using the -L option.

<sup>2</sup> If two or more monitors with different MCU firmware levels are attached to the POS system, you must use the serial option to select the monitor for the one you want to create the default \*.ini file.

<sup>3</sup> If key is not supported by the selected 6149 monitor, the value 0x00 will be written in the default \*.ini file.

```
Files\Toshiba\ToolsUtilities\TCxDisplay\default.ini”
```

### Update display [-i <filename>.ini]

Use this option to update the display settings. If there is no serial number specified, the utility will change the settings of all devices attached.<sup>4</sup>

```
TCxDisplayCfgUtil.exe -i TGCSMonCfg.ini
```

### List attached device(s) [-L]

Use this option to display the available TCxDisplay.

```
TCxDisplayCfgUtil -L
```

### Using device’s serial number [-s <serial\_number>]

Use this option to specify which device will be manipulated. It can be used to generate the current settings and update a device.

```
TCxDisplayCfgUtil -s 12345 -o current.ini
```

```
TCxDisplayCfgUtil -s 12345 -i current.ini
```

### Show utility logging to console [-v]

This option will come in handy to external utilities having to capture console logs. This can be used with any other available options.

```
TCxDisplayCfgUtil -o default.ini -v
```

```
TCxDisplayCfgUtil -s 12345 -i current.ini -v
```

### Save utility logging to a file [-l <filename>.log]

This option will save important execution logs of the utility. Normally, the log file generated will be used for debugging purposes. This can be used with any other available options.

```
TCxDisplayCfgUtil -o default.ini -l test.log
```

```
TCxDisplayCfgUtil -s 12345 -i current.ini -l test.log
```

### Show the help message [-?]

This option will show the help message and the configuration definition in section 6 of this document.

---

<sup>4</sup> If two different monitor models are detected (i.e., Different MCU, SCALAR or HW\_CONF levels), the serial number is required to do the upgrade process, as shown in section “Using device’s serial Number”

## TCx Display 6149 Models Configuration Definition

The value entered on the .ini configuration file must be in hex format, always use 2 digits as shown in the **Default Value** cell, otherwise the tool won't be able to read nor upload them to the monitor and an error message will be displayed.

KEY	Item Name	Range (Hex)	Default Value (Hex)	Description	Support on 6149 5Cx	Support on 6149 5Sx/5Nx	Support on 6149 BxT/N and WxT/N
<b>[General] Section</b>							
Volume	Master Volume	00-28	20 <sup>5</sup>	This is the master volume for the overall sound volume except POS Tone.	Y	Y	Y
Brightness	Backlight Brightness	00-20	1D <sup>6</sup> DC <sup>7</sup>	Set monitor backlight brightness. The Range will depend on offset 0x46, if set to 0x00 the max value will be 0x20 while if it is set to 0x01 the max value will be 0xFF, only on 6149(Bxx\Wxx) Monitors	Y	Y	Y
RmtPwrCtrl	Remote Power Control	00-01	00	Set the remote power control option 00h-Disabled 01h-Enabled	Y	Y	Y
ExtBLEn	Extended Backlight life	00-01	01	Set Extended Backlight life option 00h-Disabled 01h- Enabled	Y	Y	Y
AudOutput <sup>8</sup>	Audio Output channel	00-01	01	Set which sound source to use 00h- Buzzer 01h- Speaker Option	N	N	Y
<b>[BeepOnTouch] Section</b>							
BOTFreq	"Beep" Frequency	01-03	02	Allow to set which frequency in hertz to play of touch beep 01h- 2000	Y	Y	Y

<sup>5</sup> For 6149 5Cx that have HW\_CONF level as 1.06 the default value shall be 26h

<sup>6</sup> For 6149 5Cx that have HW\_CONF level as 1.06 the default value shall be 18h

<sup>7</sup> The offset 0x46 is a key that 6149 (Bxx\Wxx) monitor have and only this feature applies for these, when this key is set to 0x01 a default value of 0xDC will be used.

<sup>8</sup> This option will only take place on monitors that have both, buzzer and speakers. If no speaker is present the default will be the buzzer.

				02h-1300 03h-875			
BOTDur	"Beep" Duration	01-0A	02	Allow to set the time the beep is played	Y	Y	Y
BOTVol	"Beep" Volume	00-28	18	Allow to set the beep sound level	Y	Y	Y <sup>9</sup>
BOTEvent	Touch Event Trigger Point	00-03	01	Allow to set the behavior when the beep is touched 00h- Disabled 01h- Finger Touch Down 02h-Finger Touch Up 03h- Both.	Y	Y	Y
<b>[POSTone] Section</b>							
SoftVol	Sound Volume level for soft tone	00-28	18	Allow to control the sound volume in soft tone state.	Y	Y	Y
LoudVol	Sound Volume level for loud tone	00-28	26	Allow to control the sound volume in loud tone state.	Y	Y	Y
<b>[OpPanel] Section</b>							
IconBright	Icon Brightness	00-20	1B	Allow to set backlight brightness on all buttons	Y	Y	Y <sup>10</sup>
PwrEn	Power Button Enabled/Di sabled	00-01	01	This setting applies to power button only. Allow to make the power button functional if the setting is enabled. 00h - Disabled 01h - Enabled	Y	Y	Y
PwrBtnBh	Power Button Behavior	00-02	00	The behavior while the end user presses the power button. 00h - Off mode. 01h - Video Off mode. 02h - Video/Audio Off mode.	N	N	Y
<b>[OSD] Section</b>							
OSDEn	OSD Control	00-01	01	Allow to use the On screen Display menu. 00h-Disabled 01h-Enabled	Y	Y	Y

<sup>9</sup> It will be only available if the monitor has a built-in speaker, as well as Tone1Vol and Tone2Vol

<sup>10</sup> There is no icon LED, but will apply to Power LED Button

OSDRPCEn	OSD Remote power control	00-01	01	Allow to use "Remote Power Control" settings on OSD Menu 00h-Disabled 01h-Enabled	Y	Y	Y
OSDEBLEn	OSD Extended backlight life	00-01	01	Allow to use Extended backlight life on OSD Menu 00h-Disabled 01h-Enabled	Y	Y	Y
OSDIBCEn	OSD Buttons LED Brightness	00-01	01	Allow to use "Button LED Brightness option in OSD Menu 00h-Disable 01h-Enabled	Y	Y	N <sup>11</sup>
OSDVCEn	OSD Volume	00-01	01	Allow to use the OSD volume menu 00h-Disabled 01h-Enabled	Y	Y	Y
OSDBCEn	OSD Brightness	00-01	01	Allow to use "Brightness" option in OSD Menu 00h-Disabled 01h-Enabled	Y	Y	Y
PwrBtnDely	Power Button enabled delay	00-FF	14	Allow to change the delay time of enable power button after user exits OSD	Y	Y	Y
PwrDwTmr <sup>12</sup>	Power Down timer	00-64	00	This sets the countdown timer to turn of the system after pressing the power button	N	Y	Y
Contrast	Contrast	00-64	50	Set monitor contrast	N	Y	Y
SleepTmr	Sleep Timer	01-FF	05	Set the time for entering the sleep mode	N	Y	Y
PushMsg	Push message	00-01	01	Set the push message behavior.	N	N	Y

<sup>11</sup> On non-supported keys by the monitor type, the utility will set the value as 0x00 to avoid monitor malfunctioning

<sup>12</sup> For 6149 5Cx monitors the keys PwrBtnTmr, Contrast, OSDLanguage, OSDTransparency, OSDTimeOut and SleepTmr, will take the 0x00, 0x050, 0x00, 0x00,0x14,0x05 values respectively as these are the default values for these monitors.

	on/off			00h-Enabled 01h-Disabled			
<b>[PortControl] Section</b>							
PortCtrl2 (Touch)	USB Port2 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y
PortCtrl3 (Left USB Port)	USB Port3 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y
PortCtrl4 (Right USB Port)	USB Port4 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y
PortCtrl5 (Top USB Port)	USB Port5 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y
PortCtrl6 (Tailgate USB port)	USB Port6 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y
PortCtrl7 (USB Audio)	USB Port7 Control	00-01	00	Set the USB Downstream port on/off 00h-ON 01h-Off	N	N	Y

## USB PORT Control Ordering on 6149 BxT/WxT monitors

For newest monitor models like 6149 BxT/WxT series, USB 2.0 ports have been integrated which can be disabled or enabled using the keys described previously in **[PortControl] Section**, the list below clarifies how to identify them.

2. Touch Control
3. Left Side Mounted Downstream Port
4. Right Side Mounted Downstream Port
5. Top Side Mounted Downstream Port
6. Tailgate Mounted Downstream Port
7. Audio.

## Known limitations and workarounds

1. All values entered on the .ini configuration file must be in hex format, otherwise the tool will not be able to read nor upload them to the monitor and an error message will be displayed.
2. After package upgrade from version 1.1 to version 1.2, all directories and files will be deleted as old .ini file format are not supported by the tool. To get the current configuration you should use the tool with -o option.
3. The utility does not support updating more than 1 display when using serial number. The command below is not supported:

```
TCxDisplayCfgUtil.exe -s 12345 -s 01234 -i TGCSMonCfg.ini
```

The above example will only update the device with serial number "01234". In order to update all devices, do not specify any serial number.

4. To avoid any irreversible damage to the 6149 Monitor, do not unplug the USB cable while a FW update process or a configuration process is going on.
5. The utility will ask for a hardware configuration level upgrade for 6149-5Cx monitors when selecting the default settings generation option(-g) only if it detects that the monitor has a MCU level higher than 1.23 and a HW\_CFG lower than 1.06, stopping the update process, but, for the current settings (-o) and update display(-i) options the utility will log a warning for updating the HW\_CFG level continuing with the update process.
6. If you have a scenario where the MCU level first two numbers are different from the first two numbers of the HW\_CFG value like below

Firmware levels:

MCU=0220

HW\_CFG=0101

Please first generate a current configuration file with -o option and then upload this is using -i option:

- a) `TCxDisplayCfgUtil.exe -o TGCSMonCfg.ini`
- b) `TCxDisplayCfgUtil.exe -i TGCSMonCfg.ini`