

Serial Device Application Software

NETRSAPP



*actual product may vary from photos

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DE: Bedienungsanleitung - de.startech.com
ES: Guía del usuario - es.startech.com
NL: Gebruiksaanwijzing - nl.startech.com
PT: Guia do usuário - pt.startech.com
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Introduction

The Serial Control application features numerous functions and settings that allow you to use the app as a serial console that you can use to connect with and control virtually any serial device. You can also use the app to create user interfaces and automate commands, and control and monitor connected serial devices.

The Serial Control app is designed to communicate with other StarTech.com serial products (for example, NETRS232, NETRS2321P, NETRS232485, NETRS232485W, and ICUSBANDR232).

The Serial Control app is free to download and install, and works on both mobile and desktop operating systems.

Requirements

The Serial Control app is supported on the following operating systems:

- Google™ Android operating system (version 4.4 and later)
- Apple iOS operating system (version 8.0 and later)
- Any operating system that supports the Google Chrome browser
- A local area network (LAN)
- An RS232 serial product with a DB9 connector
- Any of the following compatible StarTech.com serial products:
 - NETRS232
 - NETRS2321P
 - NETRS232485
 - NETRS232485W
 - ICUSBANDR232 (Android only)

Requirements are subject to change. For the latest requirements, please visit www.StarTech.com.

Icon table

The following table describes some of the icons featured in the Serial Control app.

Icon	Function
	Serial Control app icon Tap or click to open the app
	Menu icon Tap or click to open the app menu
	Context menu icon Tap or click to open the device menu
	Back icon Tap or click to return to the previous screen
	Test icon Tap or click to test commands and events
	Save icon Tap or click to save your settings
	Copy icon Tap or click to copy your settings

Download and install the app

The Serial Control app is free to download and install.

1. On the device that you want to install the Serial Control app to, in a web browser, do one of the following:
 - Navigate to the Apple App Store.
 - Navigate to the Google Play™ Store.
 - Navigate to the Chrome web store.
2. In the **Search** field, type **StarTech.com Serial Control**.
3. Depending on the operating system that you're using, do one of the following:
 - In the Apple App Store search results, next to the Serial Control app, tap or click **Get**.
 - In the Google Play Store search results, next to the Serial Control app, tap or click **Install**.
 - In the Chrome web store search results, next to the Serial Control app, tap or click **Add to Chrome**.
4. Follow the on-screen instructions to complete the installation.

Search for NETRS devices

When you open the Serial Control app, the app automatically searches for all of the serial devices that are connected to the same network and supported by the app, and lists them on the NETRS List screen.

- To initiate a manual search for NETRS devices, on the **NETRS List** screen, pull or drag down.

Managing connected NETRS devices

View hardware properties

1. On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Settings**.
2. Under **Hardware Properties**, view the SKU, name, and firmware version of the NETRS device.

Change the wired network settings

1. On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Settings**.
2. Next to **Wired Network**, tap or click the **gear** icon.
3. Tap or click **DHCP** or **Static**.
4. Change the **IP**, **Mask**, **Gateway**, or **DNS** fields.
5. Tap or click **Save**.

Change the serial properties settings

1. On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Settings**.
2. Next to **Serial Properties**, tap or click the **gear** icon.
3. Next to **Mode**, **Baudrate**, **Character Bits**, **Parity**, **Stop Bit**, or **Flow Control**, tap or click the **triangle** icon.
4. Tap or click a **settings** option.
5. Tap or click **OK**.

Manage commands

1. On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Settings**.
2. Do any of the following:

- To add a command, next to **Commands**, tap or click the **plus** icon. Select an existing command or complete the necessary fields to add a new command. For more information about adding commands, see the *Adding and editing events and actions* section.
- To delete a command, next to a command, tap or click the **gear** icon > **Delete**.
- To edit a command, next to a command, tap or click the **gear** icon > **Edit**. Change the necessary fields, and tap or click the **back** icon.
- To test a command, next to **Test**, click the **test** icon.

Name a device

1. On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Set Name**.
2. Tap or click in the text field, and enter a name for the device.
3. Tap or click **OK**.

Connect a device

1. On the **NETRS List** screen, next to the NETRS device that you want to connect to, tap or click the **context menu** icon > **Open Console**.
2. To return to the **NETRS List** screen, tap or click the **back** icon.

Disconnect a device

1. On the **NETRS List** screen, next to a connected NETRS device, tap or click the **context menu** icon > **Disconnect**.
2. Tap or click **OK**.

Using the Console screen to add and send commands

The Console screen functions as a virtual serial console that is unique to each of the NETRS devices, and that you can use to issue commands and interact with your devices. Each of the connected NETRS devices has a unique Console screen that lists the commands that you added to the device.

You can enter the following types of commands:

- String (text)
- ASCII (text with special characters such as carriage returns and line feeds)
- Hex (hexadecimal)

Open the Console screen

To access the Console screen, do one of the following:

- On the **NETRS List** screen, next to a NETRS device, tap or click the **context menu** icon > **Open Console**.
- On any screen, tap or click the **menu** icon > **Console**. Tap or click a NETRS device.

Change the way commands are displayed

1. On the **Console** screen, tap or click the **gear** icon.
2. Tap or click **View Default**, **View ASCII**, or **View Hex**.

Add a command to a device

1. On the **Console** screen, tap or click in the **Enter Command Here** text field.
2. Enter your command.
3. Tap or click the **arrow** icon.

If the command that you added contains an error or the NETRS device doesn't support the command, an error message is displayed.

Clear the console

Any commands that you add to a NETRS device are automatically displayed on the Console screen while the Serial Control app is still running. When you close the app, the commands on the Console screen are cleared.

- To clear the **Console** screen without closing the app, on the **Console** screen, tap or click the **gear** icon > **Clear Console**.

Using the Command Builder

On the Command Builder screen, you can add commands from the StarTech.com command library or you can build your own commands and add them to NETRS devices.

Build a command

1. Tap or click the **Menu** icon > **Command Builder**.
2. In the **Device** field, enter the name of the NETRS device that you want to add the command to, or select a NETRS device from the list.
3. In the **Command Name** field, enter the name of a command or select a command from the list.
4. Under **Command**, view the result of the build input in HEX or ASCII.

Note: You cannot edit these fields.

5. To add an item to the command, under **Build Command**, tap or click **ASCII**, **HEX**, or **Calculation**.
6. In the **text** field, enter a label for the item, and tap or click **OK**.
7. To make the item that you added variable, tap or click the **item** icon. Select the **Variable** check box, and tap or click **OK**.
9. To specify response properties that apply to the event, under **Response Properties**, do any of the following.
 - In the **Timeout** field, enter a value in milliseconds.
 - In the **Success** field, enter the text that will indicate that the event was successful.
 - In the **Error** field, enter the text that will indicate that the event was unsuccessful.

- In the **Completed** field, enter the text that will indicate that the event is complete.
10. To add the command to a NETRS device, next to **Interface**, tap or click the **drop-down** icon, and select a device from the list.
 11. To turn on Hex mode, slide the **Hex Mode** toggle to the right.
 12. To save the command, tap or click the **save** icon > **OK**.

Test your command

1. To test your command, in the toolbar, tap or click the **test** icon.
2. Select the interface that you want to test the command on.

A response should indicate if the command was acceptable or not. If necessary, you can continue to edit the command.

Clear the screen

When you are done building your command and you have saved it, you can clear the Command Builder screen and build another command.

- To clear the screen, in the toolbar, tap or click the **erase** icon.

Configuring pages

On the **Page Configure** screen, you can create customized interfaces that you can use to control your NETRS devices.

Add a page

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the **plus** icon.
3. Tap or click the text field, enter a page name, and tap or click **OK**.
4. To add controls to the page, tap or click the **plus** icon.
For more information about adding controls to the page, see the other topics in this section.
5. To save the page, tap or click the **save** icon > **OK**.

The pages that you add appear under **Pages** in the menu.

Edit a page

1. To edit a page, tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the page that you want to edit.
3. Do any of the following:
 - To edit a control on a page, tap or click a control. Revise the control settings as necessary. Tap or click the **back** icon to return to the **Pages** screen.
 - To reorder the controls on the page, touch and hold or press and hold a control. Tap or click **Re-order**. Touch and drag or click and drag the controls to the order that you want. When you are done, in the toolbar, tap or click **Stop Re-ordering**.
 - To delete a control, touch and hold or press and hold a control. Tap or click **Delete** > **OK**.
 - To rename a page, on the **Pages** screen, touch and hold or press and hold a page. Tap or click **Edit Name**. Tap or click the text field, enter a new name, and tap or click **OK**.
 - To delete a page, on the **Pages** screen, touch and hold or press and hold a page. Tap or click **Delete** > **OK**.

Add a toggle control to a page

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the page that you want to add the toggle control to.
3. Tap or click the **plus** icon > **Toggle**.
4. To associate a command with the toggle, tap or click the **plus** icon and complete the necessary fields. For more information about commands, see the *Using the Command Builder* section.
5. Do any of the following:
 - To label the toggle, under **Appearance**, tap or click in the **label** field and enter a label.
 - To add an icon to the toggle, under **Appearance**, tap or click the **folder** icon. Tap or click an icon from the list.
 - Tap or click **Turn On** or **Turn Off**.
6. To save your changes, tap or click the **back** icon. Then tap or click the **save** icon.

Add a button control to a page

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the page that you want to add the button control to.
3. Tap or click the **plus** icon > **Button**.
4. To associate a command with the button, tap or click the **plus** icon and complete the necessary fields. For more information about commands, see the *Using the Command Builder* section.
5. Do any of the following:
 - To label the button, under **Appearance**, tap or click in the **label** field and enter a label.
 - To add an icon to the button, under **Appearance**, tap or click the **folder** icon. Tap or click an icon from the list.
 - To specify an icon height, tap or click in the **height** field and enter a value.
 - To initiate the command when you interact with the icon, click or tap **On Tap** or **Turn Off**.
6. To add a button to a row, on the page screen, touch and hold or press and hold a button. Tap or click **Add Button to Row**. Complete the necessary fields and tap or click the **back** icon.
7. To save your changes, tap or click the **back** icon. Then tap or click the **save** icon.

Add a slider control to a page

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the page that you want to add the slider control to.
3. Tap or click the **plus** icon > **Slider**.
4. To associate a command with the button, tap or click the **plus** icon and complete the necessary fields. For more information about commands, see the *Using the Command Builder* section.
5. Do any of the following:
 - To label the slider, under **Appearance**, tap or click in the **label** field and enter a label.
 - To add an icon to the slider, under **Appearance**, tap or click the **folder** icon. Tap or click an icon from the list.

- To enter a maximum, tap or click in the **max** field and enter a value.
 - To enter a minimum, tap or click in the **min** field and enter a value.
 - To enter a value, tap or click in the **value** field and enter a value.
 - To initiate the command when you interact with the icon, click or tap **On Release** or **On Change**.
6. To save your changes, tap or click the **back** icon. Then tap or click the **save** icon.

Add a text box to a page

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click the page that you want to add the text box to.
3. Tap or click the **plus** icon > **TextBox**.
4. To associate a command with the text box, tap or click the **plus** icon and complete the necessary fields. For more information about commands, see the *Using the Command Builder* section.
5. Do any of the following:
 - To label the text box, under **Appearance**, tap or click in the **label** field and enter a label.
 - To add an icon to the text box, under **Appearance**, tap or click the **folder** icon. Tap or click an icon from the list.
6. To save your changes, tap or click the **back** icon. Then tap or click the **save** icon.

Adding and editing events and actions

When you send a command to a NETRS device, you can customize the response that you receive from the device. An event is triggered based on the response from the device. You can edit event and action settings on the **Action Edit** screen.

Events will trigger if the search string is found anywhere in the response from the device. For example, "OK" will match with "Power off OK," "OK," and "Nokia." Search strings are also case sensitive, so "OK" won't match with "ok."

Add an event

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click an element (for example, a toggle or button).
3. Next to **Commands**, tap or click the **plus** icon.
4. On the **Action Edit** screen, tap or click in the **Interface** field and select a device to send the command to.
5. Do one of the following:
 - To select a saved command, next to **Open**, tap or click the **folder** icon. Tap or click a command set from the list, and then tap or click a command.
 - To enter a new command, tap or click the in **Command** field and enter a command.

Tip! To change to **Hex** mode, tap or click the bottom of the screen. If you're entering complex hex commands, consider using the **Command Builder** to create the commands, and then follow the steps to select the saved command on the **Action Edit** screen.

6. To specify the event details, do an of the following:
 - To set the time in milliseconds that you want to wait for a response from a device, tap or click in the **Timeout** field and enter a value. The default setting is 3000 ms.
 - To set a response that indicates that the command was successful, tap or click in the **Success** field and enter text.
 - To set a response that indicates that there was an error completing the command, tap or click in the **Error** field and enter text.
 - To set a response that indicates that the response is complete and the next command can be sent, tap or click in the **Response Completed** field and enter the text.

Note: The Response Completed settings override the Timeout settings. If the Response Completed search string is matched, it will stop listening to the response and will send the next command if there is one.

Add a custom event

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click an element (for example, a toggle or button).
3. Next to **Commands**, tap or click the **plus** icon.
4. On the **Action Edit** screen, tap or click in the **Interface** field and select a device to send the command to.
5. Next to **Add Custom Event**, tap or click the **plus** icon.
6. Tap or click in the **Event Name** field and enter a name for the event.
7. Tap or click in the **Event String** field and enter a command string.
8. Tap or click **OK**.

Add actions to events

An action is a change to the controls on your page that indicates that an event has occurred. You can change the action settings; options include setting a button to highlight on and off, turning a toggle on and off, setting a slider value, and displaying an event name. For example, when you can set the Power ON button to highlight when a Success event occurs and remove the highlight from the Power OFF button.

1. Tap or click the **Menu** icon > **Page Configure**.
2. Tap or click an element (for example, a toggle or button).
3. Next to **Commands**, tap or click the **plus** icon.
4. On the **Action Edit** screen, next to **Add Action**, tap or click the **plus** icon.
5. Tap or click in the **Event** field, and select an event.
6. Tap or click in the **Control** field, and select a control.
7. Tap or click in the **Action** field, and select an action.
8. Tap or click **OK**.

Test an action or event

- On the **Action Edit** screen, next to **Test**, click the **lightning bolt** icon.

The test results are listed under **Test**.

Managing your settings

You can import and export your settings to a file so that you can manually move and access settings on a different device.

Export your settings

1. Tap or click the **Menu** icon > **Import/Export**.
2. Tap or click **Export**.
3. Select a location to export the settings to.
4. In the **File name** field, enter a name for the settings file.
5. Tap or click **Save**.

Import settings

Caution! When you import a settings file, you overwrite all of your current settings. If you want to save your current settings, export them before you import a settings file.

1. Tap or click the **Menu** icon > **Import/Export**.
2. Tap or click **Import** > **Continue**.
3. Select a file to import.
4. Tap or click **OK**.

Using Client mode

If you have configured pages, you can turn on Client mode. In Client mode, users can access the pages that you added and use the app as a virtual console for connected devices. All app functionality except for the Pages screen are disabled in Client mode.

To prevent unauthorized users from disabling Client mode and access app settings, you should set a Client mode password.

Turn on Client mode

1. Tap or click the **Menu** icon > **Client Mode**.
2. To select a start page, tap or click **Start Page**. Select a start page.
3. To set a password, tap or click in the **Password** text field, and enter a password.
4. Tap or click **Activate Client Mode**.

Turn off client mode

1. Tap or click the **Menu** icon.
2. Tap or click the **lock** icon.
3. If a password is required, tap or click in the **Password** text field. Enter the password.
4. Tap or click **De-Activate Client Mode**.

Open the Help screen

To view app details including contact information, the version number, and a link to the manual, complete the following:

- Tap or click the **Menu** icon > **Help**.

Technical support

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For the latest drivers/software, please visit www.startech.com/downloads

Warranty information

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