ReaSnow S1 User Manual

V1.5

Sept, 2022



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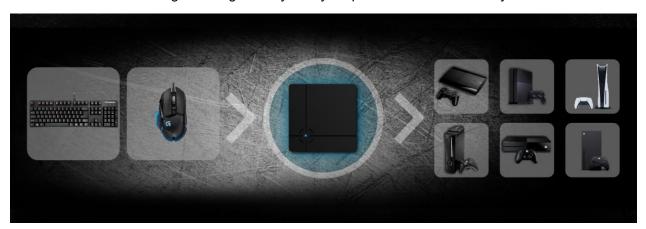
Chapter 1: Introduction to ReaSnow S1



ReaSnow S1 is a high-end gaming converter created by ReaSnow Team,

Professional mouse optimization for FPS games is embedded in it.

Accurate and stable aiming can be got easily with your preferred mouse and keyboard.



And it's also an all-around converter, most of the consoles in the market are compatible, such as:

PS5 S&D/PS4 Pro&Slim/PS4/PS3/
Xbox Series X&S/ Xbox One X&S/Xbox One/XBox 360/
Nintendo Switch.

Keyboards, mice, wheels, flight sticks, arcade sticks, third-party gamepads are all on our support list.

Except for these powerful features, it's also designed for intuitive and easy use. A completely new way to enjoy games will be found with ReaSnow S1 at hand.

1.1 Major Features of ReaSnow S1

- Professional Mouse Optimization for FPS games, Intelligent Engine 3.0 (accurate and stable aiming, 1:1 movement in game, mouse curve editor)
- No delay, Fastest USB communication, 1ms USB report rate
- Expert mode racing wheel support(Force feedback enabled)
- Better flight stick support (Stand-alone throttle acceptable)

- On-the-fly Macro editing
- Independent axis remapping
- All kinds of consoles:

PS5 S&D/PS4 Pro&Slim/PS4/PS3/

Xbox Series X&S/ Xbox One X&S/Xbox One/XBox 360/

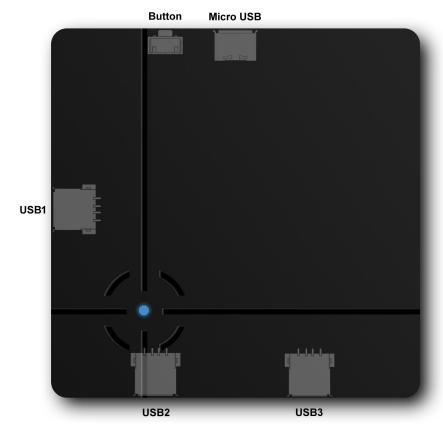
Nintendo Switch.

- Excellent compatibility, keyboards, mice, wheels, flight sticks, arcade sticks, third-party gamepads, etc
- ReaSnow Manager APP(Android & iOS Version)
- Multiple languages
- Online Game Preset Synchronization

1.2 Technical Specifications

Outline	76*76*20mm	
Net Weight	65g	
Platforms	PlayStation,Xbox,Nintendo Switch	
Configuration	16 configurations, user defined	
Color	Black	
PORT	3 USB ports	For controller, keyboard and mouse
	1 Micro USB port	Connecting to game console/PC
BUTTON		Firmware Upgrade/Bluetooth
BEEPER	Internal beeper	Sound indication
Temperature	-10~50℃ (14~122°F)	
Humidity	Below 90%	

1.3 Diagram



Micro USB:

Connecting to game console or PC

USB1:

Connect to the official wired controller shipped with game console.

As for wireless controller, just connect it with a suitable USB cable to this USB port.

The exception is that Xbox 360 requires a wired Xbox 360 controller.

USB2/3:

Connecting to mouse, keyboard, wheel, flight stick, 3rd-party gamepad or other peripherals.

BUTTON:

Firmware Upgrade

LED Indicator:

Status indication

Internal Beeper:

Status indication

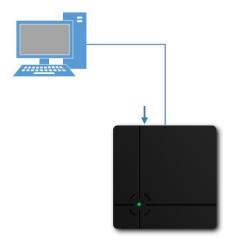
Chapter 2: Quick Guide

Please visit: www.reasnow.com/start-here for all the latest tool, software, and manual

2.1 Upgrade Firmware

ReaSnow S1's firmware shall be upgraded, even if it's just purchased.

for firmware will be updated frequently to keep up with changing games and new peripherals, or to provide patches and improvements.



Step 1:

Connect ReaSnow S1 to PC while holding the button.

Release the button until the LED indicator is stable green.

Step 2:

Then run "flash tool" on PC,

and click "Upgrade firmware" button.

2.2 Mouse Settings

Set mouse DPI and USB report rate properly using mouse manufacture software.

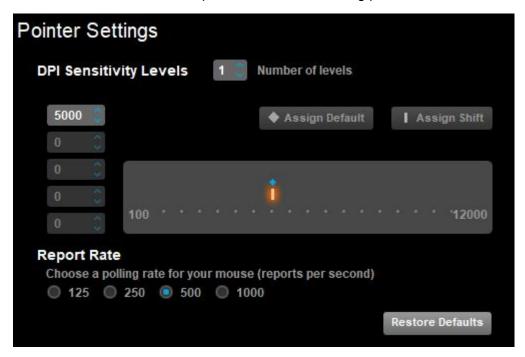
For some mouse, DPI and Report Rate can also be set by buttons on it. 4000-16000 DPI and 250-1000 Hertz are acceptable.

Higher DPI brings faster turning,

And higher USB report rate provides less delay,

but unstable signals might also be caused when a mouse is set to its MAX.

So, 5000DPI and 500Hertz Report Rate is a safe starting point.



2.3 Console and game settings

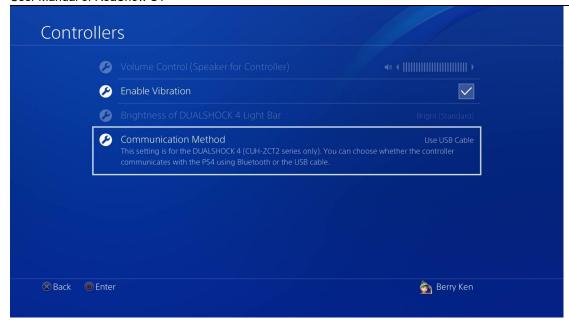
Prepare Consoles:

For PS4/PS5:

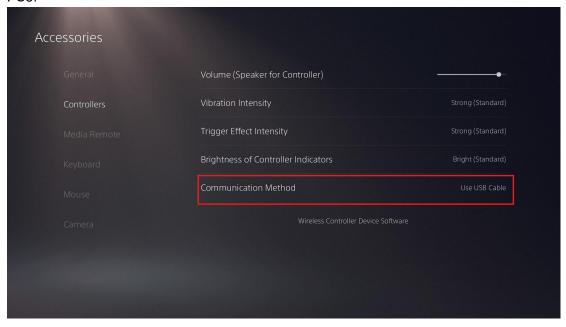
please change controller's communication method as shown below:

Settings -Accessories - Controllers - Communication Method - "Use USB cable"

This will not bring any trouble if the controller will be used wirelessly without ReaSnow S1. PS4:



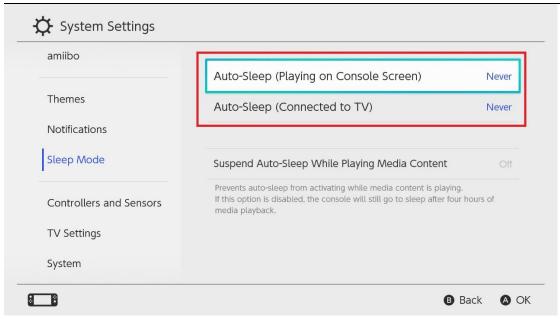
PS5:

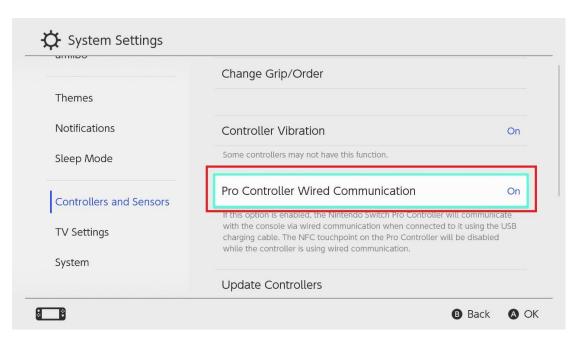


For SWITCH:

- 1. Upgrade Switch System Version to the latest one
- 2. Disable Auto Sleep
- 3. then enable Pro Controller Wired Communication
- 4. A SWITCH Pro controller is not required.

 If you have one, please do **turn it off**, while using ReaSnow S1 with SWITCH.





For Xbox series, no special settings are required.

Prepare Games:

Please restore all settings in game to defaults before we make these changes by following the recommendations.

Our goal is to get the highest sensitivity for gamepad right stick to harness all the potential of your game, for our mouse movement is mapped to the right stick.

Please do put this in mind.

There might be many settings in a game, which will show their effect on mouse control. Here are some recommendations:

Sensitivity = MAX

It is called by various names, such as Look Sensitivity,

Aim Sensitivity or just Sensitivity.

It's recommended to set all sensitivities to MAX.

Acceleration = MAX (unless otherwise specified)

Response Curve = Default(unless otherwise specified)

Dead zone = Default

Our Engine is trained on this, so please keep it as default.

Button Layout = Default

It's better to leave **Button Layout** as defaults to avoid confusion.

More recommendations for games settings can be found in our APP.

Or in this video list:

https://www.youtube.com/playlist?list=PL_W7SvvWDzBOgxdSxBSr11E7rg7czSpYV



2.4 Wiring

Firstly, connect all your peripherals to ReaSnow S1, then connect ReaSnow S1 to a game console.

For PlayStation 4/3 and XBox One, its controller shall always be connected to USB port 1, the left one.

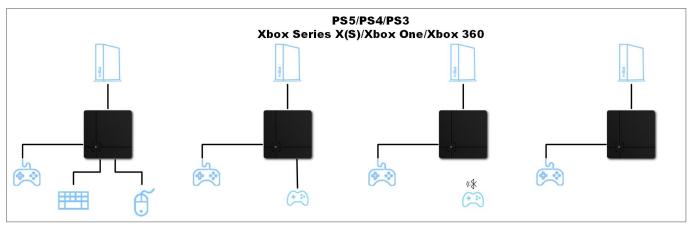
For PlayStation 5, a third-party controller is required. Check "workarounds for PS5" for more details.

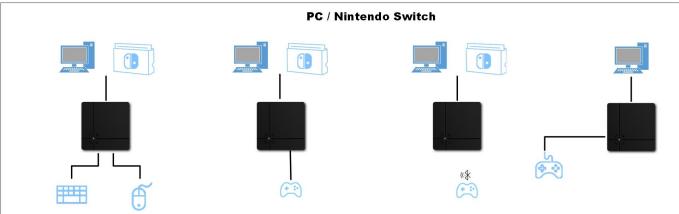
For XBox 360, a wired XBox 360 controller is required.

For SWITCH, there is no need of any controller, leave USB port 1 open.

keyboard and mouse, or any other peripherals shall be connected to USB port 2 and 3.

Flashing red LED indicator means ReaSnow S1 is waiting to be configured with APP.





2.5 ReaSnow Manager APP

You can find it in APP Store or Google Play, or just download it from our website. (www.reasnow.com/start-here)

Turn on Bluetooth and Location Services(GPS) before running the APP

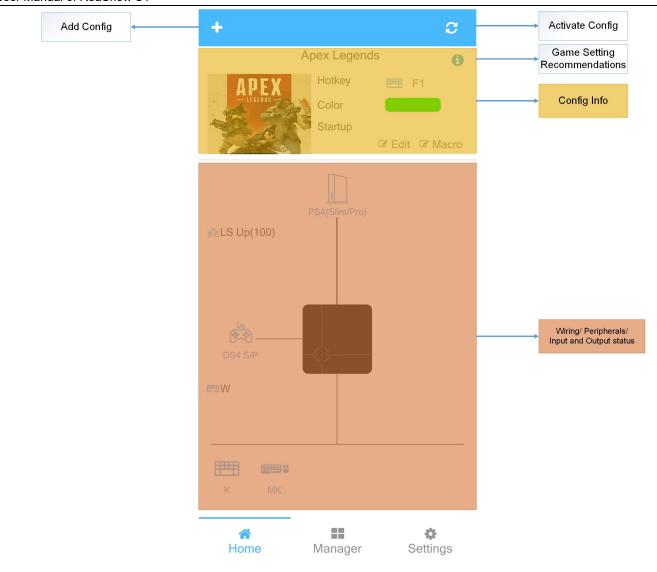
for the first time, add a preset game profile.

and now you are ready to GO!

To get more knowledge about ReaSnow S1, the following chapters are also very important.

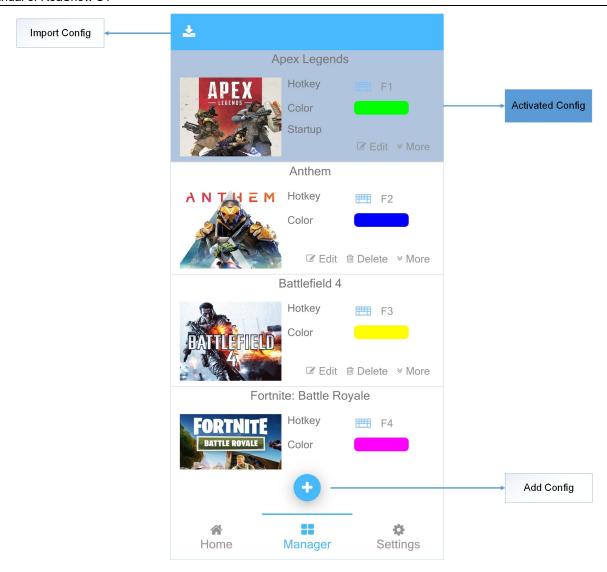
Chapter 3: ReaSnow Manager APP

3.1 Home



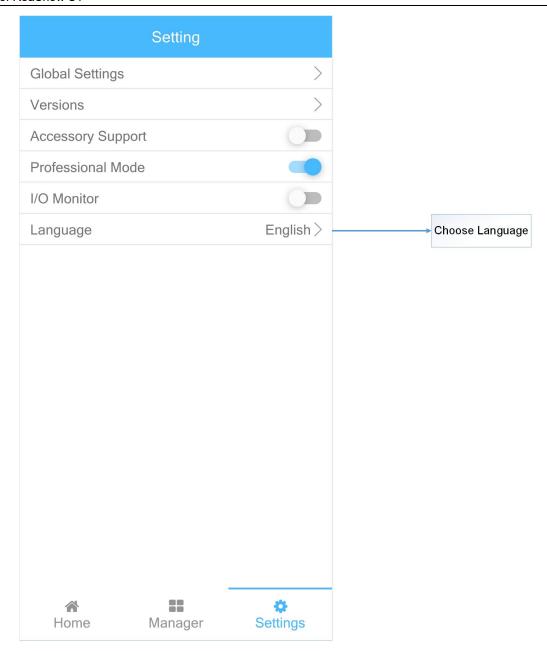
- Game Setting Recommendation is very important, please follow it carefully.
- Input and Output will be displayed when "I/O Monitor" is enabled.

3.2 Manager



- Add/ delete/ edit/ export/ import configs.
- Config which is set as "Startup" will be activated automatically every time when being powered up.

3.3 Settings



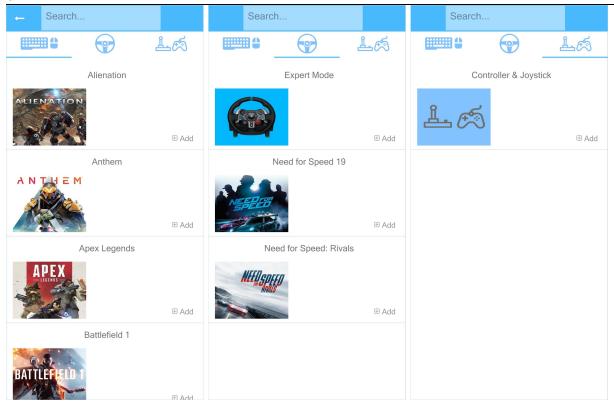
- Accessory Support: It is designed for independent throttle of flight stick or independent handbrake of wheel. In this way, 2 USB peripherals can be mapped to one controller.
- Professional Mode: All settings are accessible when this is enabled.

Once disabled, some settings will be hidden for simplicity.

• I/O Monitor: Input and Output will be displayed when "I/O Monitor" is enabled.

And this feature will be turned off automatically for better efficiency when APP is restarted.

User Manual of ReaSnow S1





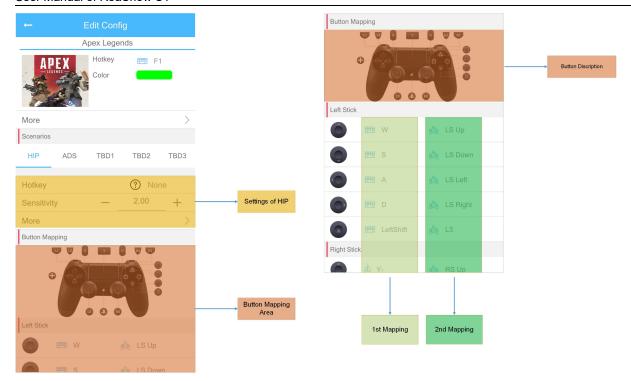
Games in this column are for mouse and keyboard control(FPS games)



Games in this column are for wheel control(racing games)



Games in this column are for controller, gamepad, flight stick, arcade stick, etc



• Scenarios (HIP/ADS/TBD1/TBD2/TBD3)

Scenarios can also be treated as sub configs, there are 5 scenarios in one config.

HIP and ADS are for infantry,

TBD1/2/3 are for vehicles, such as tank, plane or for inventory and map control.

Each scenario has some settings of its own, and when this scenario is activated by a hotkey, the corresponding settings will take effect.

By default, HIP and its settings will be effective.

• 1st and 2nd Mappings

These 2 mappings are effective at the same time, so 1 button on controller can be represented by 2 keys from other peripherals.

Furthermore, every scenario can have its own 1st and 2nd mapping.



• Config Mode

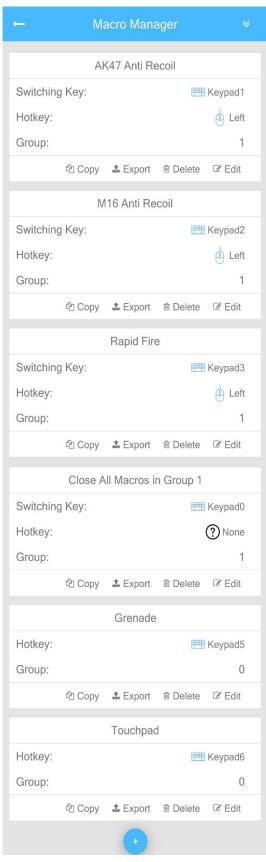
By default, press F12 to enter and exit config mode, when APP is disconnected or closed.

While in config mode, LED indicator will be turned off, and HIP/ADS sensitivity can be changed by corresponding keys.

Chapter 4: Macro

4.1 Macro Manager

Add/ delete/ edit/ export/ import macros.



4.2 Macro Glossary

Name:

Choose a suitable name for macro, so its function can be easily remembered.

Switching Key:

Switching key is used to force a macro into effective or ineffective state,

Once it's effective, this macro can then be triggered by the hotkey.

Hotkey:

A key which is used to trigger a macro.

e.g.: Left mouse button is always used as a hotkey for anti recoil and rapid fire macros.

Type:

There are 2 options: Common, Anti recoil(ADS).

Anti recoil(ADS): when a macro is created for anti recoil, please choose this type.

Some special optimization for mouse control will be added to this macro.

This macro is only effective in ADS scenario.

Common: choose this type for all macros which are not used for anti recoil.

Mode:

It defines how a Macro will be triggered by Hotkey.

There are 4 options: Hold, Press, Release, and Toggle.

Hold and Toggle are frequently used.

Hold: when the hotkey is pressed and held, macro will be executed repeatedly.

Toggle: Once the hotkey is pressed, macro will be executed repeatedly until the hotkey is pressed again.

Press: Once the hotkey is pressed, macro will be executed some times which is defined in **Count**.

Release: Once the hotkey is released, macro will be executed some times which is defined in Count.

Count:

It tells how many times a Macro will be executed repeatedly. Available in Press and Release mode.

Terminate:

The way how a Macro will be terminated.

There are 2 options: Immediately and Until the last line.

e.g. a Macro has 5 lines.

A terminate signal is generated by the hotkey, when the 3rd line is being executed.

If **Immediately** is used, this Macro will be terminated immediately.

If until the last line is used, this Macro will be terminated until the last line has been executed.

Group:

All macros in group 0 are always effective,

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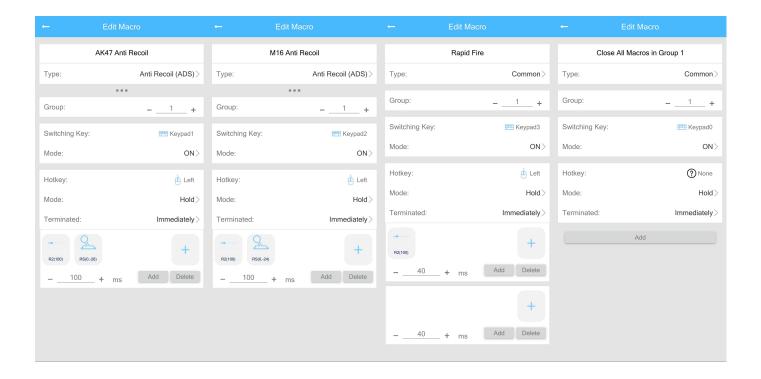
and for macros in other groups (1 \sim 250), only one of the macros will be effective. you need to choose one macro with switching key before triggering a macro.

Group in Macro is designed for that if a gamer has several different guns, and these guns need different anti-recoil macros or rapid fire macros. they shall all be triggered by the same left mouse button.

These macros can be added in one group(e.g. Group 1), and assign different switching keys for them, such as
Keypad1 for AK47 anti-recoil macro,
Keypad2 for M16 anti-recoil macro,
Keypad3 for rapid fire macro,

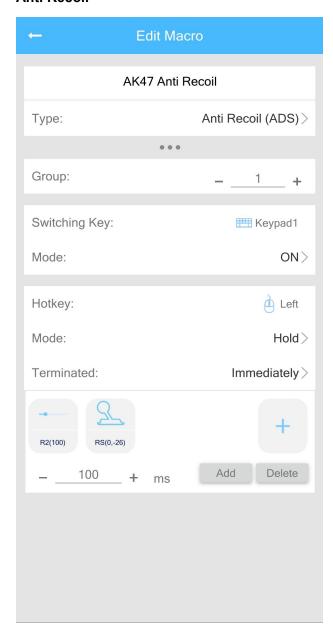
Keypad0 for closing all macros in group 1(an empty macro)

While switching between different weapons, one press on Keypad 1 ~ 3 will bring you suitable macro. To disable all these 3 Macros, just press Keypad 0, Then left mouse button can be used with no macro on it.



4.3 Macro Examples:

Anti Recoil





This is an anti-recoil macro, it belongs to Group 1.

When keypad1 is pressed, this macro will be turned into effective state.

And then it can be triggered by left mouse button.

When keypad1 is pressed again, this macro will be turned into ineffective state.

Line 1, Item 1

R2(100), it means R2 is pressed and the strength is 100%.

Line 1, Item 2

RS(0,-26), it means Right Stick is move down a bit, the strength is -26. This the strength of anti recoil.

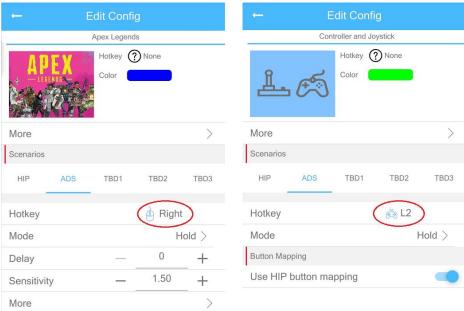
Different guns, different attachments, or different sensitivity settings in game will need different strengths for anti recoil. So it has to be changed according to actual situation.

These 2 items will be executed simultaneously for 100ms,

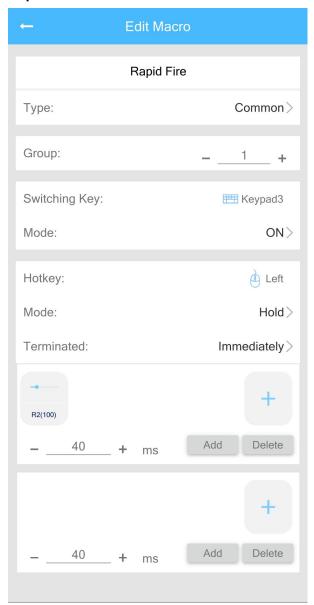
And if left mouse button is held, it will be executed repeatedly.

Since Anti Recoil(ADS) macro can only be triggered when ADS scenario is enabled, Please make sure there is a proper hotkey to activate ADS scenario in the config you are using. Do not leave it to None or some other improper buttons.

When using a controller, this hotkey should be LT or L2 or some others which are used to ADS in game. When using a mouse, this hotkey should be the right mouse key.



Rapid fire





This is an rapid-fire macro, it belongs to Group 1.

When keypad3 is pressed, this macro will be turned into effective state.

And then it can be triggered by left mouse button.

When keypad3 is pressed again, this macro will be turned into ineffective state.

Line 1, Item 1

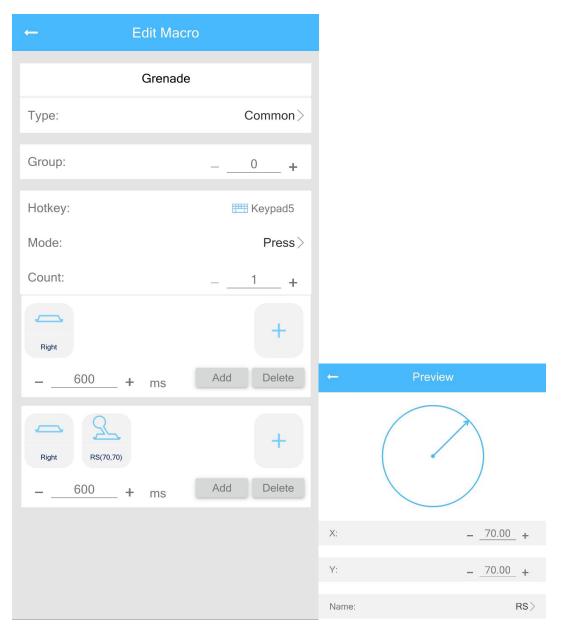
R2(100), it means R2 is pressed and the strength is 100%. R2 will be held for 40ms

Line 2:

All buttons will be released for 40ms

when left mouse button is held, this macro will be executed repeatedly.

Grenade



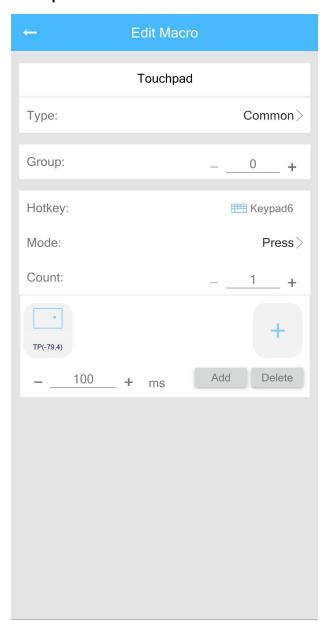
This Macro(Grenade) is used in Apex Legends to choose a grenade,

Line 1: Right button will be held for 600ms

Line 2: Right button and a movement of the right stick will be held for 600ms.

When Keypad5 is pressed, this macro will only be executed for once(1 time).

Touchpad





This Macro(Touchpad) is to press some specific position on the touchpad.

Line 1: move to (-79,4) the left side, press and hold for 100ms

When Keypad6 is pressed, this macro will only be executed for once(1 time).

Chapter 5: Steering Wheel

5.1 Introduction

Advantages:

Real Force Feedback

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Vibrations from different road surfaces, rumble strips, bumps and so on

Support clutch

Support manual gear: H-pattern(6+1)shift or Sequential(+/-) shift

Support automatic Gear

Support RPM/Shift indicator LED

All major key functions are set and ready for use (Keys can also be remapped)

Wheel angle adjustable

No delay or lag

Supported wheels:

Logitech G920

Logitech G29

Logitech G27

Logitech G25

Logitech Driving Force GT

Logitech Driving Force Pro

Thrustmaster T300 RS

Supported Consoles:

PS5/PS4 /XBox Series X(S)/XBox One/XBox 360

Expert Mode Games:

DriveClub, Project Cars, Project Cars 2, Sebastien Loeb Rally Evo, Dirt Rally, Dirt 4, Assetto Corsa, F1 2015, F1 2016, F1 2017, WRC5, WRC6, GT Sport etc.

5.2 Usage

Step 1: Wiring



Firstly, connect the original controller (USB 1) and the wheel (USB 2 or 3) to ReaSnow S1, and then connect ReaSnow S1 to console.

Step 2: Add a Config

Add a config, such as "Expert Mode" in ReaSnow S1 with our APP. Then you are ready to drive.

5.3 Notes

• Expert Mode and Legacy Mode

In Expert Mode, your wheel will work as a real wheel(G29/G920), which can be recognized by the console. In Legacy Mode, your wheel will work as a controller, and it will also be treated as a controller by the console.

• On PS5/PS4,

Expert Mode supports all the games which can accept Logitech G29 as an input device, such as: DriveClub, Project Cars, Project Cars 2, Sebastien Loeb Rally Evo, Dirt Rally, Dirt 4, Assetto Corsa, F1 2015, F1 2016, F1 2017, WRC5, WRC6, GT Sport etc.

• On XBox Series X(S)/XBox One,

Expert Mode supports all the games which can accept Logitech G920 as an input device.

While this Expert Mode is still a beta version, all features are supported except real force feedback. There is only simulated FFB on Xbox one.

It means FFB on Xbox One is not as good as it's on PS5/PS4.

- No need to choose wheel model in Expert Mode config,
 - It will detect that automatically.

But if it's Legacy Mode support, please choose your wheel model in this config and save it.

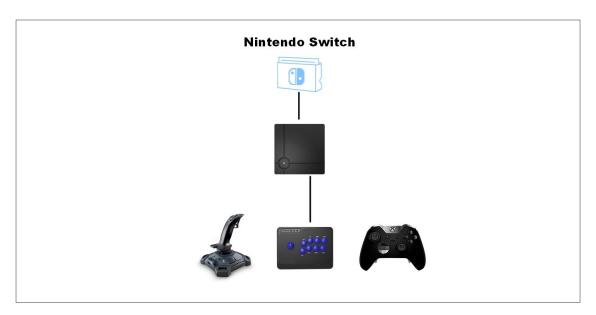
Other preset configs(NFS19/ NFS: Rivals) are legacy mode support,

- Racing games shall be started after ReaSnow S1 is powered up and set properly.
- If your racing game is installed from a CD/DVD, please do upgrade the game to the latest version, or it might not support wheels.
- During the power-on procedure, do not press the PS/GUIDE button on controller, unless ReaSnow S1's LED indicator is breathing.

Chapter 6: Flight Stick, Arcade Stick, and Other Controllers

6.1 Wiring





Firstly, connect all peripherals to ReaSnow S1 as shown above, and then connect ReaSnow S1 to console.

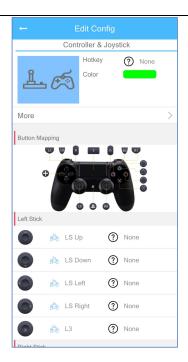
6.2 Add a Config(Controller&Joystick)

This preset config is designed for flight stick, arcade stick, and other controllers(gamepads). Unnecessary settings are removed from it to keep UI as simple as possible.

And manual mapping might be required for some sticks and buttons.

User Manual of ReaSnow S1





Chapter 7: Bluetooth Controllers

Supported Bluetooth controllers:

Dual Sense(PS5 controller), DualShock 4, DualShock 3, Sony Move, Xbox One S, Xbox Adaptive Controller, SWITCH Pro controller, Xbox Elite Wireless Controller Series 2 Scuf Impact, Scuf Vantage, Nacon Revolution Pro V3, Astro C40 Razer Raiju(PC_BT mode)

7.1 Wiring





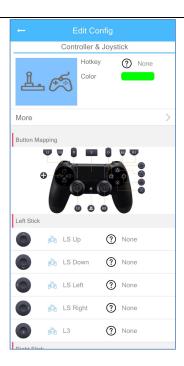
Firstly, ReaSnow S1 to console as shown above.

7.2 Add a Config(Controller and Joystick)

This preset config is designed for flight stick, arcade stick, and other controllers(gamepads). Unnecessary settings are removed from it to keep UI as simple as possible.

User Manual of ReaSnow S1





7.3 Pairing

To pair a Bluetooth controller with ReaSnow S1

Step 1: Put the supported wireless controller into pairing mode.

e.g. DualShock 4, Press and Hold the PlayStation button and Share button at the same time, hold these buttons until the light bar starts flashing.

Step 2: then press the button on ReaSnow S1, to start the pairing.

LED indicator on ReaSnow S1 will flash blue during this procedure.

When LED indicator returns to a breathing one, the controller is now paired properly, and ready to be used wirelessly.

To put a controller into pairing mode:

Bluetooth Controller	Buttons	Others
DualShock 4	PS + Share	DS4 shall be turned off before pairing
SWITCH Pro Controller	Pairing	This controller shall be upgraded to the latest firmware
Xbox Elite Wireless Controller Series 2	Pairing	
XBox One S controller	Pairing	This controller shall be upgraded to the latest firmware
XBox Adaptive Controller	Pairing	

For DualShock 3, Sony Move,

Step 1: first connect the controller to ReaSnow S1(USB 2 or 3) with a suitable USB cable, A beep will be sounded when the pairing is finished.(about 1 second)

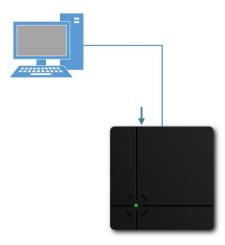
Step 2: then disconnect the USB cable

the controller is now ready to be used wirelessly.

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Chapter 8: Restoration

8.1 Restore factory defaults



If ReaSnow S1 works improperly, restoration is something we should try. And please always check our website for the latest flash tool.

Step 1:

Connect ReaSnow S1 to PC while holding the button.

Release the button until the LED indicator is stable green.

Step 2:

Then run "flash tool" on PC, and click "Restore Factory Defaults" button.

Most of the problems can be solved by this, but all your data will be lost too. So back up your data before restoring.