

ALPHA

Active Battle System

Documentation for
Version 1.2 Build 800

[DOCUMENTATION]

Complete the demo game for a better understanding of the basics of Alpha ABS controls and concepts

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Helpful information

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The license applies only to the plugin Alpha ABS .js files.

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Alpha ABS Web Page

<https://kagedesuworkshop.blogspot.ru/p/alpha-abs.html>

Description:

The main idea of mechanics of the combat system (hereinafter ABS) borrows from the game <[World of Warcraft](#)>. To perform combat actions, you must have a target. Every combat action (item, spell, weapon attack) is implemented using a special skill (ABS Skill). The basic concept of actions is based on 4 types of ABS Skill:

- 1) “Instant” (<ABS:0>) – performed on target.
<World of Warcraft> example: [Agony](#)
- 2) “Vector” (<ABS:1>) – It creates an object (a vector), which will follow to the target and performed when hit target
<World of Warcraft> example: [Frostbolt](#)
- 3) “Circle” (<ABS:2>) – creates the rounded area (circle), performed on all the objects that be in area.
<World of Warcraft> example: [Blizzard](#)
- 4) “Zone” (<ABS:3>) – creates a certain zone in the direction of use, performed on all the objects that be in area.
<World of Warcraft> example: [Cone-of-cold](#)

ABS Skills have special parameters, combine that allows you create a unique spells. Main difference between ABS skills it is special rules of combination of parameters.

Download and install

Check download link on Alpha ABS web page

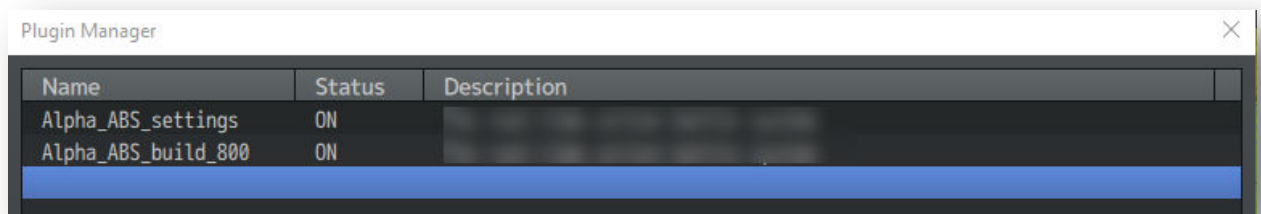
<https://kagedesuworkshop.blogspot.ru/p/alpha-abs.html>

Copy the **ABS** folder into your project directory to the img folder

Alpha_ABS_build_800.js and **Alpha_ABS_settings.js** to folder js/plugins

Alpha_ABS_build_800.js – this is the main plugin file. The build number may differ in the future. **Do not connect two plugins with different build numbers!**

Alpha_ABS_settings.js – this is the settings file with the plugin parameters



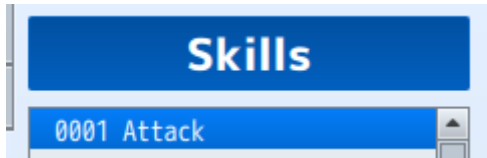
Warnign! If you not complete required settings, project doesn't start

The project required settings for ABS

Required configuration for start the project.

For detailed explanation see «ABS settings for Skills» chapter

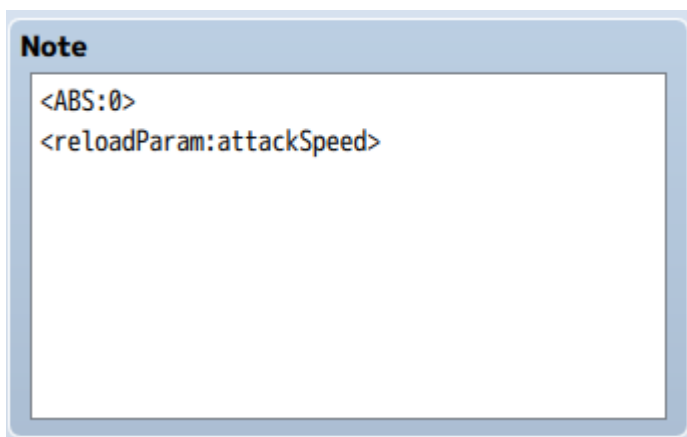
For standard **Attack** skill



Add to **Note**:

<ABS: 0>

<reloadParam: attackSpeed>



ABS Parameters

Next, we set the definition **<ABS param>** - parameter of ABS objects behavior.

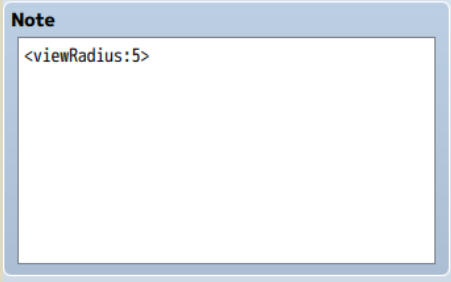
<paramName: X> - where paramName – name of parameter, X – Integer.

<paramName: Z> - where paramName – name of parameter, Z – Numbered Boolean (can be 0 or 1)

<paramName: W> - where paramName – name of parameter, W – String (text)

All ABS params are specified in object Note. Every object (enemy or skill) can have both common and unique parameters.

For example: enemy ABS param **<viewRadius:X>** - how long (map cells) enemy will see you



ABS Parameters for Enemies and Skills (weapon, items) we will see in the relevant sections

ABS settings for Skills

All ABS parameters you should put in Note section.

Required ABS parameter is **<ABS:X>**, where X – id of ABS skill type (ABS skills types see in description above)

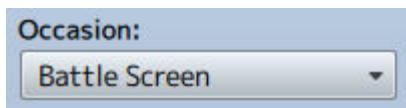
<ABS:0> - «Instant»

<ABS:1> - «Vector»

<ABS:2> - «Circle»

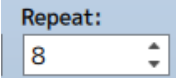
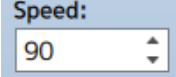
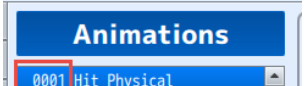
<ABS:3> - «Zone»

Next (and last) **required** is **occasion**. For ABS **spells** and **Items** must be set **<Battle Screen>**.



Depending on ABS skill type, some ABS parameters will act differently. All other ABS parameters are optional.

Common ABS params for Skills

ABS Param	Description	Example	In database
<range:x>	Range (in map cells)	<range:8>	
<castTime:x>	Casting time (in frames)	<castTime:90>	
<reloadTime:x>	Cool down time (in frames)	<reloadTime:90>	<i><Only in Note></i>
<reloadParam:w>	Cool down attribute (*).	<reloadParam:agi>	<i><Only in Note></i>
<startSound:w>	Sound when use	<startSound:Crossbow>	<i><Only in Note></i>
<castAnim:x>	Animation when casting (id of animation from in database) 	<castAnim:1> <i>By default using animation defined in plugin</i>	<i><Only in Note></i>

(*) **reloadParam** allow set cooldown time by character attribute (like agi, def, mdf, ect. Also calculations like $agi + def/2$, ect.) Attribute value will be interpreted in **frames**. By default, attack skill use parameter <attack speed> for cooldown (in frames). **1 second = 60 frames**. You can set this parameter also on weapon, class, actor or ect.

reloadParam can be used with **reloadTime** ($result = reloadParam() + reloadTime$).

For example: **<reloadParam:agi>** - spell cooldown time will be equal to the character agi (Agility) attribute. If you character has 30 agility, then $30/60 = 0.5$ seconds spell cool down.

Caution! Some ABS params you can set directly in database (see <in database> row in table above), but ABS param that was set in Note have priority and will overwrite the value from the database.

For example:

The screenshot shows a game skill configuration window. The 'Invocation' section contains several fields: 'Speed' (set to 120), 'Success' (set to 100%), 'Repeat' (set to 6), and 'TP Gain' (set to 10). The 'Hit Type' is set to 'Magical Attack' and the 'Animation' is '0045 Cure One 1'. A blue callout bubble points to the 'Speed' field with the text 'Equal to <castTime:120>'. Another blue callout bubble points to the 'Repeat' field with the text 'Equal to <range:6>'. The 'Note' section at the bottom right contains two lines: '<ABS:1>' and '<range:8>'. A red callout bubble points to the '<range:8>' line with the text 'This range will used in result'.

ABS Skill Scope settings

Type	Scope	Effect
«Instant» <ABS:0>	Scope: 1 Enemy	On target
	Scope: The User	On self
«Vector» <ABS:1>	Scope: 1 Enemy	On target / select area (if <radius> (see below))
«Circle» <ABS:2>	Scope: 1 Enemy	Select area (on area)
	Scope: All Enemies	Around the user
«Zone» <ABS:3>	Scope: All Enemies	Area in the direction of the user

Attention! I highly recommend using ABS skill types with table scopes.

Advanced ABS parameters for ABS skill types

(also optional)

Type	ABS param	Description	By default
«Instant» <ABS:0>	<directionFix:z>	On same line *	<directionFix:0>
«Vector» <ABS:1>	<img:w>	Image file name (from pictures folder)	<img:vector> (file pictures/vector.png)
	<vSpeed:x>	flight velocity	<vSpeed:5>
	<radius:x>	Area radius (max 5)	<radius:0>
	<directionFix:z>	On same line *	<directionFix:0>
«Circle» <ABS:2>	<radius:x>	Area radius (max 5)	<radius:3>

(*) If <directionFix:1>



If <directionFix:0> (by default)



ABS settings for Weapons

If weapon use standard attack skill, this settings not needed.

Weapon setting is like a skills settings, but exists some rules:

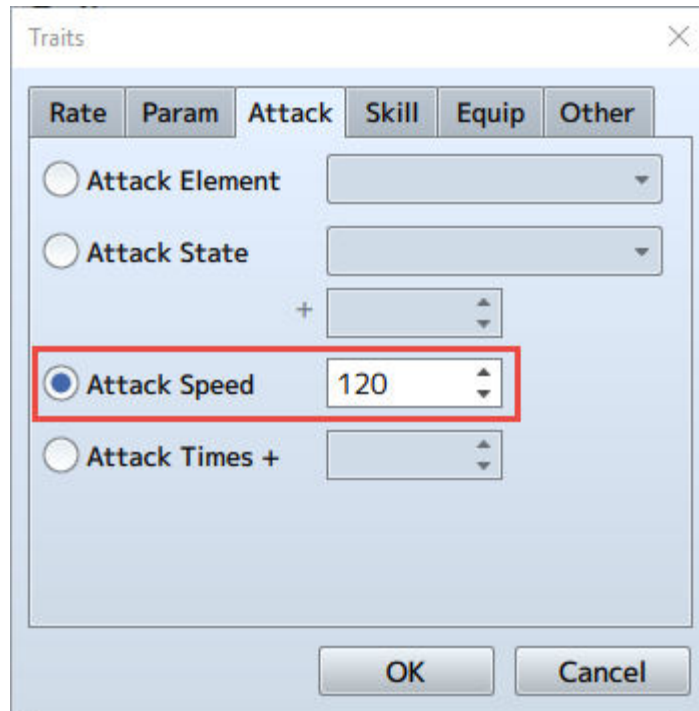
- 1) Support only <ABS:0> and <ABS:1> type.
- 2) <castTime:X> not supported at all. (You can't casting when using weapon)
- 3) If type is <ABS:1>, you can't use <radius:X> (You can't select area when using weapon)

These rules are related to the fact that the weapons just modifies an attack skill. In fact, these rules apply to the configuration of attack skill, **be careful**.

For example: Bow

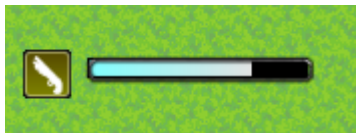
[illegible]

By default, **attack skill** use parameter <attack speed> for cooldown (in frames). **1 second = 60 frames**. If you want use own parameter or constant value, see <Basic settings>. You can set this parameter on **weapon, class, actor or ect**.



For example: We set weapon trait <Attack speed> = 120, when we equip weapon, attack skill cool down will be 2 seconds.

Weapon cooldown progress bar (with equipped weapon icon)



If cool down time <= 30 frames, will not be seen.

ABS settings for States

States

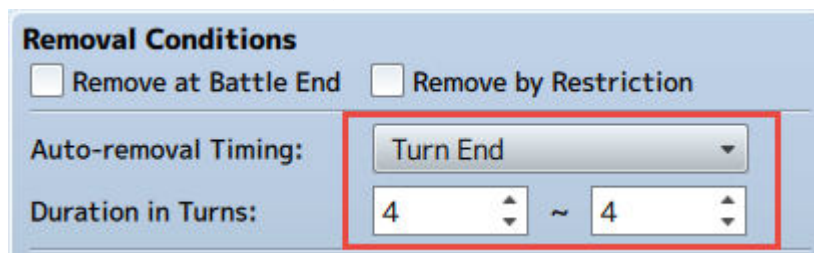
All current character states displayed in the upper right corner of the screen



The battle is in real time and **every turn now is a one second** on ABS map.

<Remove at Battle End> – if checked, state will be removed after character leave ABS map

<Auto-removal Timing: Turn End>



State will be removed after <Duration in Turns> seconds. (exmpl. 4 second on picture)

<Auto-removal Timing: Turn End>

Removal Conditions

☐ Remove at Battle End ☐ Remove by Restriction

Auto-removal Timing: Action End

Duration in Turns: 1 ~ 1

State will be removed after the character (with state) complete some battle action (attack, spell, use item).


States priority and displaying

General Settings

Name:

Restriction: None

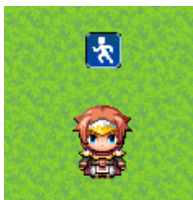
[SV] Motion: Normal

Icon: 82 

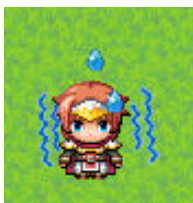
Priority: 90

[SV] Overlay: Fear

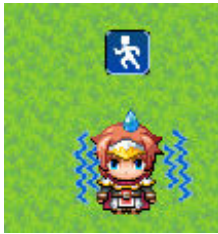
- 1) If <priority> \geq 90, then state **Icon** will be appear above your character too



- 2) Also you can use <[SV] Overlay>



3) You can use both of them (icon and overlay)



4) Also <[SV] Motion> supports too (Sleep or Dead), but don't work with Icon or <[SV] Overlay>



State always visible above **enemy** (if <priority> < 90 too) and you can view it under enemy UI



States has one own ABS parameter <speed:X>. It will modify character movement speed (add X). Also, you can use negative value.

ABS settings for Enemies

List of enemies ABS params:

<name: value type> - description (default value)

<viewRadius: X> - how long (map cells) enemy will see you (5)

<returnRadius : X> - how many cells maximum enemy can escape from the last position where he fought (12)

<escapeOnBattle: Z> - whether to escape from player during a battle when there is no available actions or waiting for attack cool down (0)

<canSearch: Z> - can enemy hear everything happening around him (the reaction to the battle near (in the area of viewRadius param)) (1)

<noFight: Z> - no fight at all (0) *(like dummy in demo game)*

<reviveTime: X> - time (in **seconds**) to reborn after death (0) *(0 – not reborn after death)*

<regen: Z> - health regeneration (not in battle mode) (1)

<slow: Z> - not accelerating in pursuit (0)

<returnType: X> - 0 - fast, 1 - normal, 2 - stay (not return at all)

<aggressive: Z> - is aggressive? *(always approach the player)* (1)

<noMove: Z> - can't moving during battle (0)

<noEmote: Z> - no balloon animation (0)

<teamId: X> - enemy team (1).

0 – is the player party team. Enemies in same teams don't fight each other

<rage:Z> - switch the target to the one who caused more damage (1)

<cEonStart: X> - call common Event with ID (X) when start battle (see target)

<cEonEnd: X> - call common Event with ID (X) when stop battle (after start)

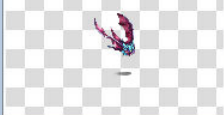
<cEonDeath: X> - call Common Event with ID (X) on Death

Not one of the ABS params is not required, you can create enemy with empty Note. In this way all params will sets automatically with default values.

For example: Bat from Demo game.

General Settings

Name:

Image:


Max HP:

Attack:

M.Attack:

Agility:

Max MP:

Defense:

M.Defense:

Luck:

Rewards

EXP:

Gold:

Drop Items

Bow : 1/1 ...

None ...

None ...

Action Patterns

Skill	Condition	R
Attack	Always	5

Traits

Type	Content
Ex-Parameter	Hit Rate + 95%
Ex-Parameter	Evasion Rate + 5%
Attack Element	Physical
Attack Speed	120

Note

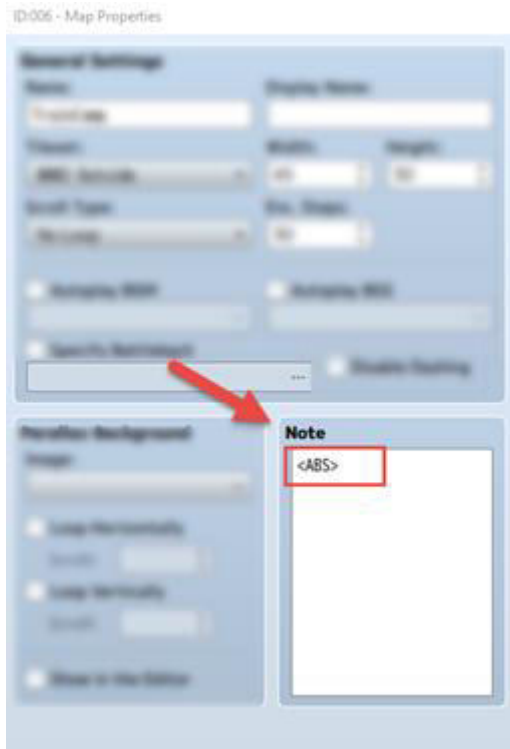
<escapeOnBattle:1>

We use default attack skill, so we add `<Attack speed>` trait (120 frames).

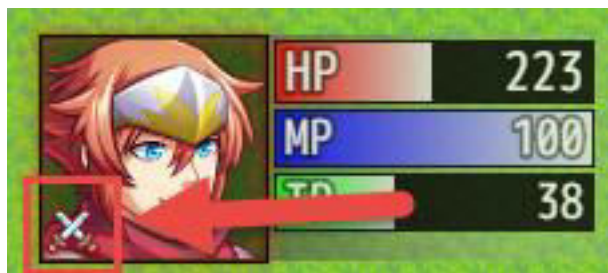
Also we use only one enemy ABS parameter `<escapeOnBattle>`.

ABS Map and events commands

To turn on ABS on map, add **<ABS>** keyword to map **Note**.



ABS map has two modes: normal mode and battle mode. Battle mode is activated when the player enters to fight.



While the portrait has icon , you are in battle mode.

There are restrictions for both modes. Battle mode includes all restrictions of normal mode. Basically the restrictions associated with events commands. Be careful when you create events on ABS map.

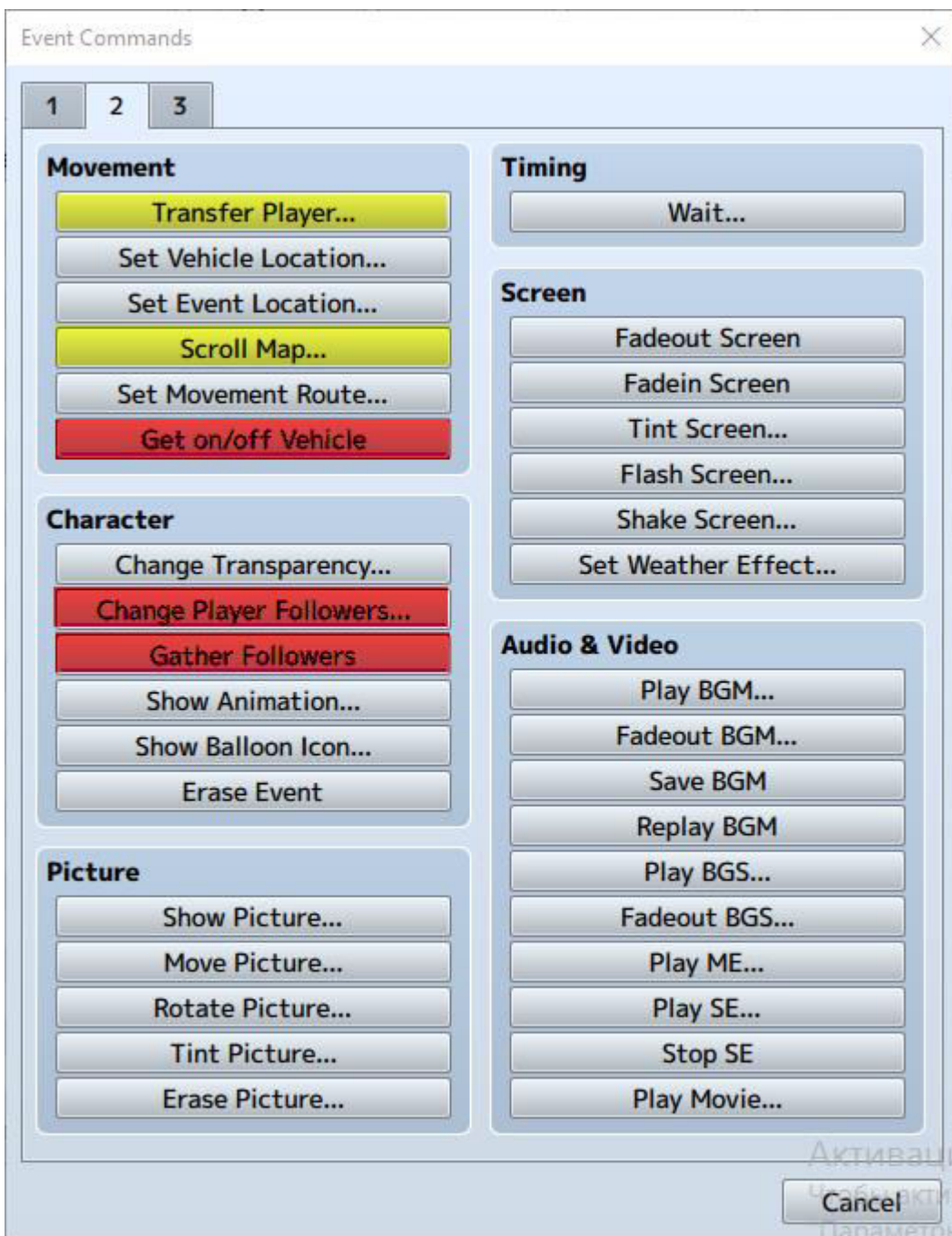
List of restrictions:

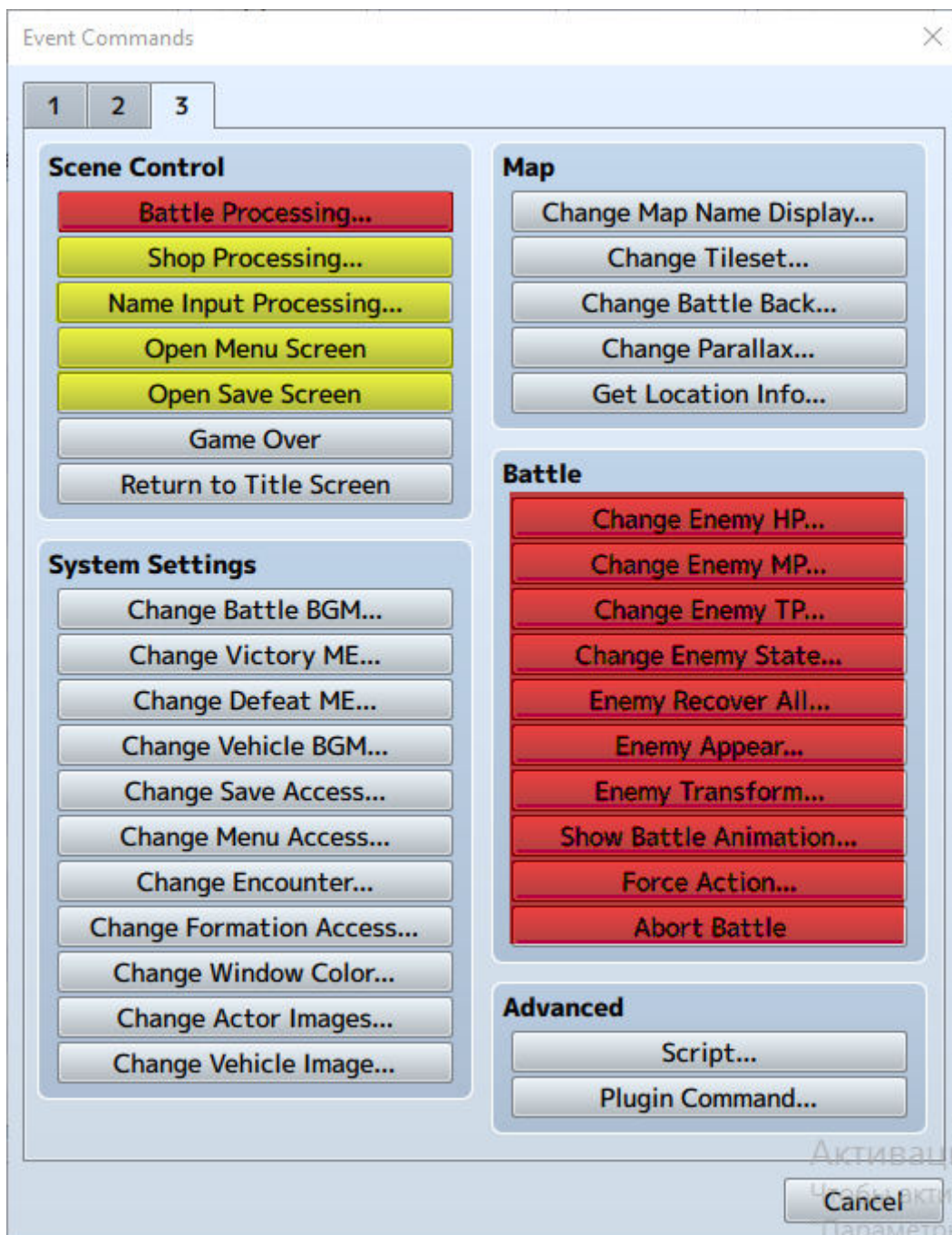
RED – event command don't work on ABS map at all (in two modes).

Yellow – event command don't work only in battle mode.



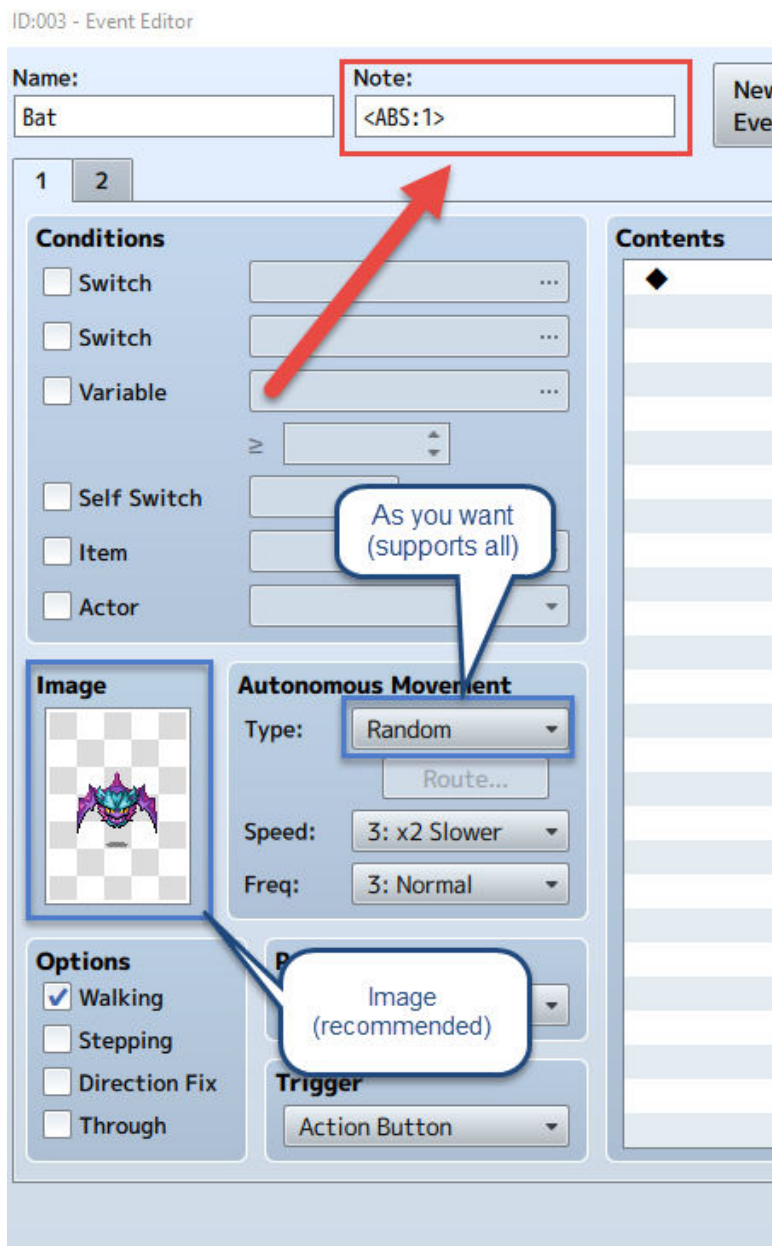
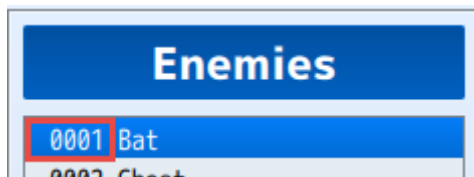
* - you can add new members in your party, but can't remove any





Create enemies on ABS map

Create a map event, add to **Note** <ABS:X>, where **X** – id of enemy from Database.



Next, add second event page for dead state. By default **<Self Switch>** is **B**, but you can change by plugin parameter **<Enemy Dead Switch>**.

ID:003 - Event Editor

Name: Bat Note: <ABS:1> New Event

1 2

Conditions

☐ Switch ...

☐ Switch ...


☐ Variable ...

☒ Self Switch B

☐ Item

☐ Actor

Image



Autonomous Movement

Type: Fixed

Route...

Speed: 3: x2 Slower

Freq: 3: Normal

Options

☐ Walking

☐ Stepping

☒ Direction Fix

☒ Through

Priority

Below characters

Trigger

Action Button

Contents

◆

Dead enemy work like simple event, you can add some contents and interact with it.

For example: we want when interacting with a dead enemy, we received from him the gold and items that you set in its settings in the database. (The experience we get automatically)

Rewards	Drop Items
EXP: 25	Bow : 1/1 ...
Gold: 125	Potion : 1/2 ...
	None ...

Add <Plugin Command> <ABS loot> on dead enemy page.

ID:003 - Event Editor

Name: Bat Note: <ABS:1> [New Event Page] [Copy Event Page] [Paste Event Page]

1 2

Conditions

☐ Switch ...

☐ Switch ...

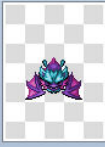
☐ Variable ...

☒ Self Switch B

☐ Item

☐ Actor

Image



Options

☐ Walking

☐ Stepping

☒ Direction Fix

☒ Through

Autonomous Movement

Type: Fixed

Speed: 3: x2 Slower

Freq: 3: Normal

Priority

Below characters

Trigger

Action Button

Contents

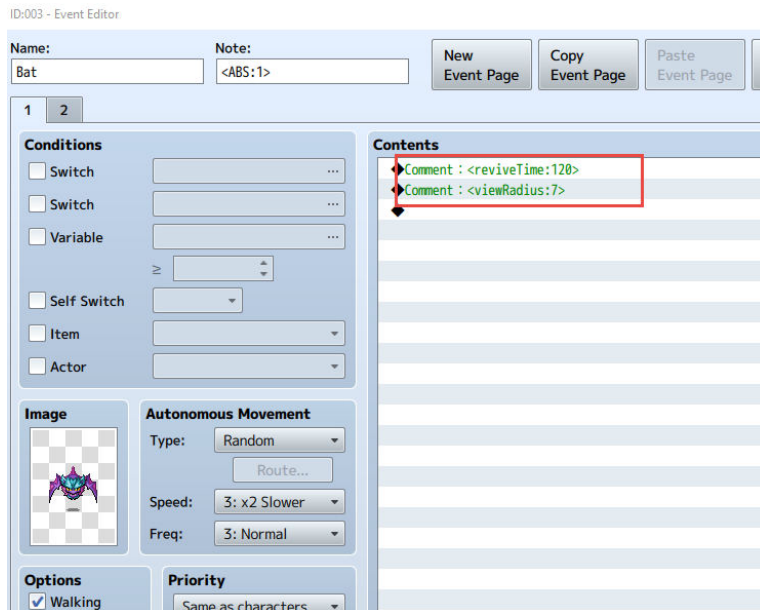
◆ Plugin Command : ABS loot

Take attention on two things:

- 1) Read the description of <ABS loot> command and <Auto loot enemies> plugin parameter.
- 2) <ABS loot> runs once on dead enemy. On interaction with the enemy again and again you don't get more items and gold. (Only if enemy is revived and you kill him again (see advanced settings))

Enemy ABS parameters on Event

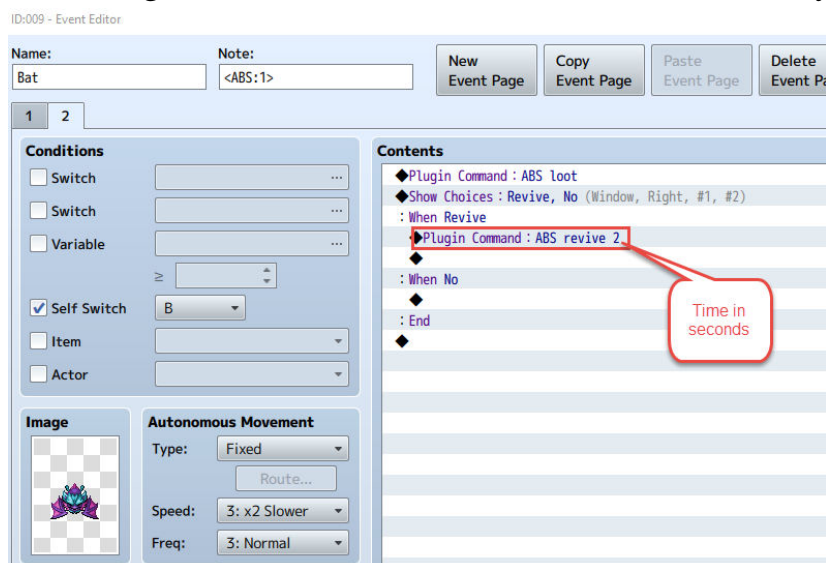
You can write ABS parameters directly in event for create unique instances.



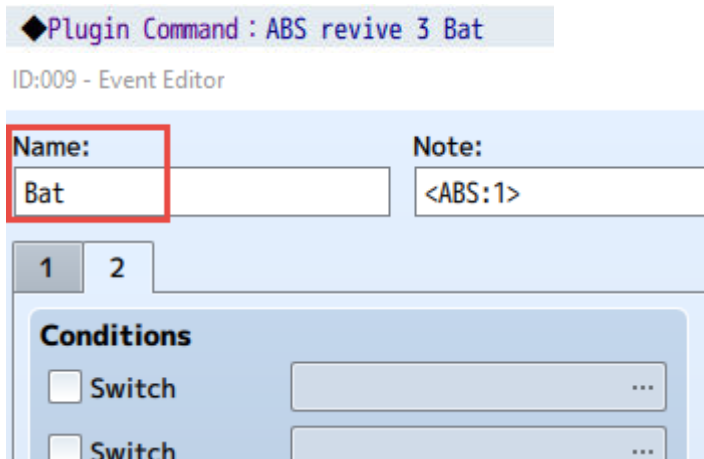
This parameters will override database parameters and take effect only on this instance of enemy.

3 Ways to revive enemy

- 1) Set ABS param **<reviveTime:X>** in enemy Note (in database) or in enemy event.
- 2) Use <Plugin Command> **ABS revive X** on dead enemy event page.



- 3) Use <Plugin Command> **ABS revive X W**, where X – time in seconds, W – enemy **event Name**. This plugin command can be called from another event.

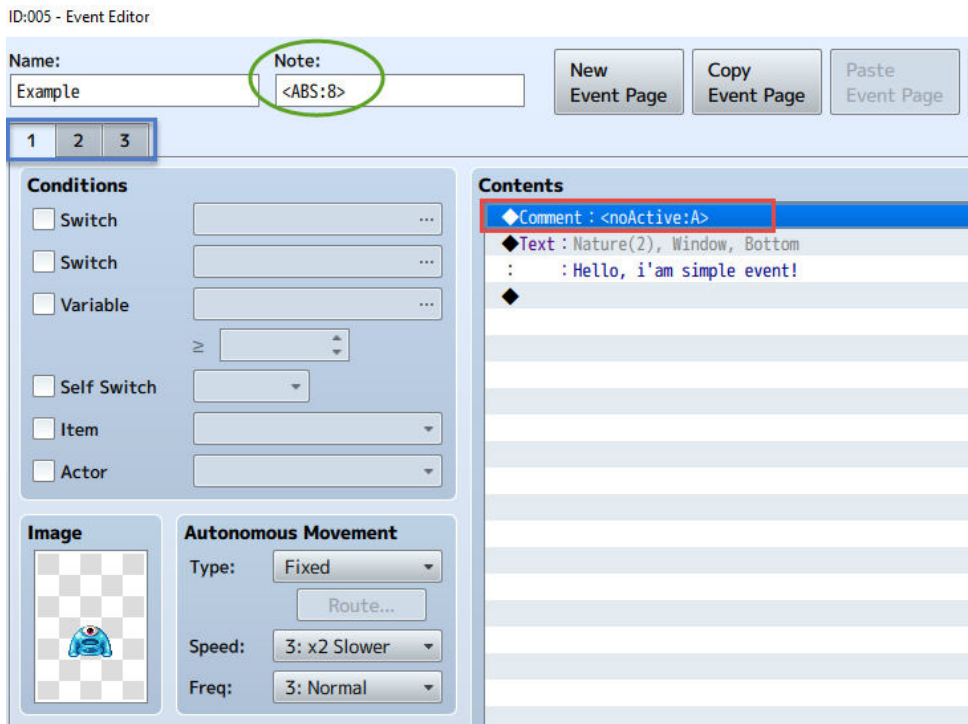


Deactivate enemy on start

If you want that the enemy did not turn on AI from start, you can deactivate enemy.

You need at least 3 event pages.

- 1) First is event page where enemy is not has AI



Put comment **<noActive:W>**, where W – Self Switch with active enemy page.

Don't forget like in a simple enemy use **Note**

2) Create next event page with used in comment Self Switch

ID:005 - Event Editor

Name: Example Note: <ABS:8>

New Event Page Copy Event Page Paste Event Page

1 2 3

Conditions

☐ Switch ...

☐ Switch ...

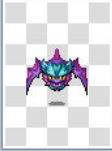
☐ Variable ...

☒ Self Switch A

☐ Item ...

☐ Actor ...

Image



Autonomous Movement

Type: Fixed

Route...

Speed: 3: x2 Slower

Freq: 3: Normal

Contents

◆

This page like a simple enemy we create before

- 3) Create last event page with Dead Switch (for dead state) (see basic settings)
- 4) Use <Plugin Command> **ABS activate W**, where W – enemy **event Name**.
This plugin command can be called from another event.

◆ **Plugin Command : ABS activate Example**

Enemy Action Conditions

The screenshot shows a software interface for configuring enemy actions. It consists of a main window titled 'Action' with a close button (X) in the top right corner. Inside, there are two main sections: 'Skill and Rating' and 'Conditions'.

Skill and Rating: This section contains two fields. 'Skill:' is a dropdown menu currently showing '0001 Attack'. 'Rating:' is a numeric spinner box currently set to '5'.

Conditions: This section lists various conditions that can be applied to an action. Each condition has a radio button to its left. The 'Turn' condition is selected, and its configuration is highlighted with a red rectangular box. The configuration for 'Turn' shows a value of '0' in a spinner box, followed by a '+' sign, another '0' in a spinner box, and a '* X' multiplier. Below 'Turn', there are other conditions: 'Always' (unselected), 'HP' (unselected), 'MP' (unselected), 'State' (unselected), 'Party Level' (unselected), and 'Switch' (unselected). Each of these has associated input fields or dropdown menus.

At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

You can use standard conditions for enemy actions, but condition **<Turn>** now in seconds. Each enemy has its own timer that starts counting only when the enemy directly engages in battle.

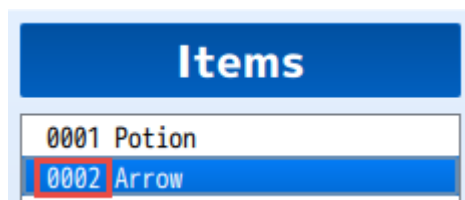
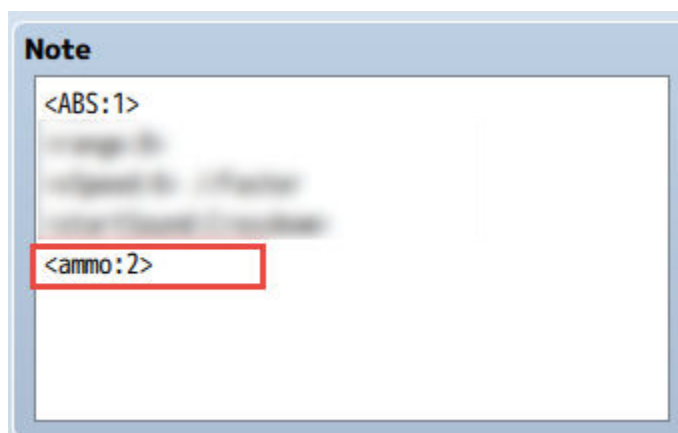
Advanced ABS settings for Skills and Weapons

Using ammo

You can create weapon (or spell) that needs ammo.

For ammo you need create simple Item object in database. (see how created <Arrow> (id 2) in Demo game database)

Use ABS parameter **<ammo:X>** in weapon (spell) **Note**, where X – id of ammo item.



When you attack by this weapon or use spell, ammo automatically decreases by 1 from party inventory. When ammo item count = 0, you can't use weapon (spell).

Create multiply charged skills (weapons)

You need use **two** ABS parameters:

<stack:X> - charges count, **minimum is 2**

<stackTime:X> - all charges reload time (in frames), **not be 0**

After each charge cooldown time be <reloadTime> or <reloadParam>, but when all charges is gone, cooldown time be <stackTime>

You can use this parameters with ammo, but remember ammo be decreased by 1 on each charge.

Weapon and Skill in game description

By default skills and weapon have own description.



Also, if you have a target, you can see the approximate damage value of skill\weapon



To disable the description, you must use ABS parameter `<noDescription : 1>` on skill or weapon Note.

Plugin commands

ABS showUI

ABS hideUI

[] - optional

ABS activate *[EventName]* – activate current enemy event or event with [Event Name]

ABS deactivate *[EventName]* – deactivate current enemy event or event with [Event Name]

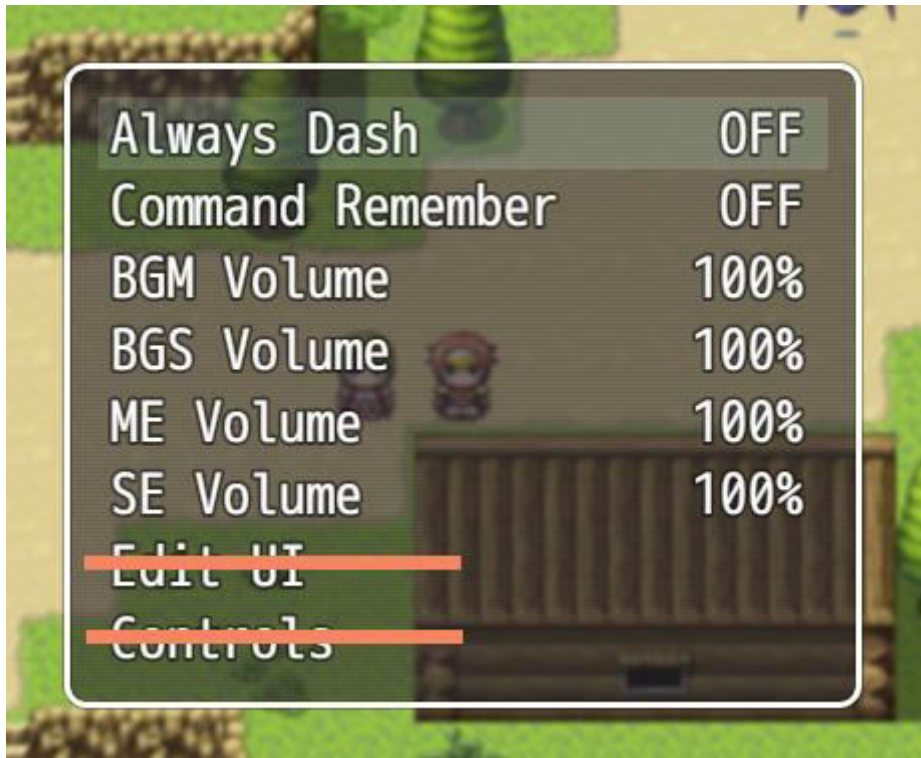
ABS param [ParamName] *[Value]* *[EventName]* – change ABS parameter for enemy event, where [ParamName] – name of ABS parameter, [Value] – new value for ABS parameter, [EventName] – event name (or current)

Example: ABS param NoEmote 1 – set NoEmote to true for current Event

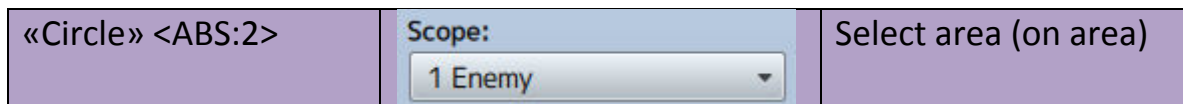
```
◆ Plugin Command : ABS param NoEmote 1
```

Mobile device restrictions

In game UI Editor and Key binding Editors **not allowed** on mobile devices



Type 2 skills with select area **not allowed** on mobile devices



If class has one of those skills, you see warning in console on map load

Alpha ABS: Skill Heal not learned, not support on mobile platform

The icon signatures are not visible

