



User Manual

Bingo 1.3.0

Welcome to Bingo 1.3.0! This version really aims to provide a great experience to our users, whilst placing emphasis on the interface and added format usability. These changes in Bingo have been summed up inside this manual.

October 2010

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Introduction

Welcome, user!

Bingo 1.3.0 was much expected to be a grand release. In fact, up until now Bingo can count about 10 blocks added after 1.2.0, and countless minor and major changes to the interface, kernel and support. They're all summed up in this manual, which includes help for all the added blocks since 1.0.0, and details about all the miscellaneous changes that took place in the 1.3.0 release.

I hope this manual can help you somewhat in your programming skills, and enjoy Bingo 1.3.0!

Manual Guidelines

This manual is set up in order to shorten the time spent while looking for block help. However, I still don't suggest you look for a certain block only if you are not sure what it does, as most new blocks are now equipped with their personal help screen. To view it, you may right-click that block in Bingo and select help, just like in normal Scratch.

New Blocks

Bingo counts more than 60 added blocks since 1.0.0. You can find them all here with a detailed explanation and credits.

Overview

What follows is a simple, categorized, illustrated list of all the new blocks.

Motion

set rotation style to normal

toggle draggable

draggable?

rotation style

Looks

paint new image

add Image to costumes and switch to it true

edit current

delete costume 1

name of costume 1

color effect

showing?

visible?

layer

Sound

default system beep

Pen

pen down?

pen color

pen hue

pen size

World (new category)

Bingo 1.2.0	Bingo 1.3.0
quit Bingo	quit Bingo
time	time
key pressed	key pressed
read file	read file
write to file	write Image to file
read URL http://	write to file
read line 1 of file	read URL http://
read line 1 of URL http://	read line 1 of file
# of lines of	read line 1 of URL http://
# of lines at URL http://	# of lines of
Go to http://	# of lines at URL http://
IP Address	Go to http://
Hosting Mesh?	IP Address
Host Mesh	Hosting Mesh?
Quit Mesh	Host Mesh
Join Mesh on IP 123.123.1.12	Join Mesh on IP 123.123.1.12
switch to normal cursor	Quit Mesh
run self hostMesh as smalltalk code	switch to normal cursor

Control

last broadcasted

Sensing

Bingo 1.2.0	Bingo 1.3.0

Operators

Bingo 1.2.0	Bingo 1.3.0
 <p>  letters 1 - 5 of hello world HeLlO reversed index of l from 1 of hello split 1,2,3,4,5 using , into list if then hi else bye hello contains e ? hello is a number ? round 1.236 to 2 places LCM of 4 , 7 log base 2 of 8 sum from 1 to 5 Inf </p>	 <p>  pick random 1 to 10 random number  letters 1 - 5 of hello world HeLlO reversed index of l from 1 of hello split 1,2,3,4,5 using , into list join list using , if then hi else bye hello contains e ? hello is a number ? round 1.236 to 2 places LCM of 4 , 7 log base 2 of 8 sum from 1 to 5 Inf </p>

Variables and Lists


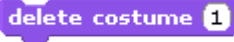












More (new category)

Bingo 1.2.0	Bingo 1.3.0
              	                 

Credits

This is a table with all the new blocks and their corresponding credits. All the blocks that are not listed below were created ENTIRELY by me, so I didn't include them.

	I have created the block, but took the idea from Panther.
	Took the block code from Panther
	Took the block code from Zatch and edited it
	Created entirely by me. Added this one in here due to a debate that I supposedly copied from Panther.
	Took the idea from Billyedward, but the code is entirely mine.
	These and the rest of the File I/O are taken from Panther, except the URL block which i took partially from Billyedward.
	The mesh blocks were made half by me, half from Panther.
	From nXIII. Thanks a lot!
	By passera. Good job for it being a first block too!
	From Panther. Thanks loads
	I took that 'is a number' bit from BYOB, but the 'text' and 'color' options are mine.
	I took these from panther when I was less experienced in Squeak, now I could make them myself without any help.
Show/Hide list blocks	Made by nXIII, taken from the forum thread 'The elusive show/hide list blocks'

Thanks to all of you for your wonderful blocks. Sorry if i didn't include you, but I think I've covered every single block I took from someone else.

Please note: If you don't agree with the remixing blocks policy, go visit the creative commons site (license v2) and have a think over it, with the following in mind:


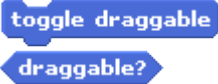




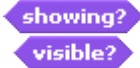












- I took something you created under this license
- I remixed it (changing it in some cases)
- I gave you full credit















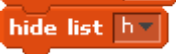



Thanks for your understanding.

Amazingly, all of the blocks added in version 1.3.0 are created by me (I'm improving! :D)

Details

Below is a complete list of all the blocks I added since Bingo 1.0.0 with an explanation.

	This block sets the rotation style of a sprite to the selection of the user. It serves the same purpose as the three buttons next the sprite thumbnail.
	This block toggles the sprite's draggable status and reports it in the Boolean. Serves the same purpose as the lock icon next to the sprite name.
	Deletes the selected costume. Just like the little X next to the costume in the costumes tab.
	Reports an image taken from: the paint editor, stage, grabbed, imported, webcam, cloned
	Returns the name of that costume. A costume # reporter can be placed instead of that '1' to return the current costume's name.
	This reporter returns the color, blur, mosaic etc. effect of that sprite.
	These blocks both return whether a sprite is showing or not. If the sprite's ghost effect is 100, the visible reporter will return false.
	Returns the layer of that sprite. Set by go to front and go back by X layers.
	Adds a reported image to the costumes
	Beeps according to your operating system.
	These blocks report the different pen states. Pretty self-explanatory.
	Returns the last thing that was broadcasted by the 'broadcast X' blocks. Works in mesh.
	Returns whether a certain sprite is touching another sprite. Updated in Bingo 1.3.0!
	Returns a string or value inputted by the user through the string input dialog.
	Returns a color for use in color arguments such as 'touching color X' or for setting a variable color.
	Reports a color. Can be inserted in the block described above to make it lighter, darker, inverted or to return individual RGB/HSV values.
	Exactly the same as the old <mouse down> Block, with right, middle and any added.
	Some added string blocks. Pretty self-explanatory. The index one returns the position of a certain letter in a string.
	Splits a string into a list using a symbol as separator.

	Does the inverse of the block above
   	More string control blocks. Returns whether the string is of type text, number, or color, or whether a string contains a certain sub-string.
	Rounds a number to the given number of places. This example will return 1.24
  	This block is the so-called fraction function block. It can return the greatest common factor, lowest common denominator and mod of two numbers.
 	Returns the log base X of a number Returns the summation from X to X
	Returns the abstract value of infinity. Could be useful in certain situations. NB: in Squeak, Infinity = (1.7E380) ²
	Sets the variable to that color. The sensing color block can be inserted here too.
 	Shows and hides lists.
World blocks	I won't explain all. Very self-explanatory. Try them yourself if you want to experiment.
More blocks	I won't explain all either. Very self-explanatory. Try them yourself if you want to experiment.
	Removed in Bingo 1.3.0 because of possible security issues with primitives
	Sets the cursor costume to the selection. Includes normal, wait, read, crosshair, blank and more.
	Writes a reported image to a file

New Features

The changes that took place in the 1.3.0 release.

Summed up changes from 1.0 to 1.2:

- Two new categories (thanks to Zorbak42 and nXIII)
- A dev menu (removed in 1.1)
- An open shortcut button
- A 'last opened project' button in file menu
- Minor skin changes
- Compatibility mode where Bingo becomes exactly like Scratch 1.4
- Added some Scratch blocks to obsolete
- Added a 'share' shortcut button
- Added help screens
- Added a 'set' menu
- Enabled dev. menu with password
- Made changes to the paint editor
- Enabled skin 'themes'
- Improved obsolete to toggle along with compatibility

Overview

- Improved share button (now uploads automatically to mod share)
- Re-styled reporter blocks and their 'holders' to look more modern
- Added little pictures to arguments
- Fixed background variable glitches
- Color arguments report their RGB color when hovering

Credits

These interface changes were done mostly by me. The few exceptions are listed below.

- Categories tutorial (not coding) – by nXIII, solved by Zorbak42 (thanks to nXIII anyway for trying)
- 'open browser' in dev menu – took the code from Panther, couldn't be bothered to make it myself
- Minor skin changes – a bit of a tutorial by nXIII for the ScratchSkin, but no coding involved
- Compatibility – i took the idea from another mod, but absolutely no code taken

Again, all other changes were made by me, with no code or tutorials from others.

Details for 1.2.0

The details for the changes that took place in 1.2.0 only.

Added a 'share' shortcut button

I added the share button back to the shortcut menu next to the file menu for sharing projects to the bingo website. The system is a bit complicated at the moment, but I hope to get it smoother in 1.2.1 or 1.3.



Added help screens

Now, for just about every single added block you can find a help screen, just like the one in normal Scratch. I also imported the screens for Scratch blocks.

Added a 'set' menu

I added a settings menu after the edit one and put all the settings in it, such as compatibility, programmer facilities, motor blocks toggle, theme changing and display depth.

Enabled dev menu with password

I re-enabled the developer's menu, but with a password, so that nobody can hack into Bingo. I will be releasing the source code for Bingo 1.2 later.

Made changes to the paint editor

I have made two changes to the paint editor. One is an export drawing button to export the canvas to a file. The other one is a font size edit – if you shift-click the font size dropdown arrow, you get a dialog asking you what font size you want. You can input any number between 3 and 380!



Enabled skin 'themes'

I have added a function in the settings menu that allows you to completely change the skin of your Bingo interface. Bingo 1.2 comes with 2 preset themes – classic and futuristic. I will release more once it has been released.

Improved obsolete to toggle along with compatibility

In version 1.1 I had added a Compatibility function, and I'd also added the blocks removed from Scratch 1.4 to the obsolete list so that they could work when importing a project made in Scratch. One problem: when you saved a project in compatibility mode that used those blocks, they turned red as if they were obsolete. In 1.2 this doesn't happen. The blocks in the obsolete list are removed from it when in compatibility mode so no conflicts happen, and all the blocks added in Bingo to Scratch are put in the list, so that they work even in compatibility mode (with a COMPAT tag next to them to remind the user it's a Bingo block).

Details for 1.3.0









The details that took place in 1.3.0 only

Improved share button (now uploads automatically to mod share)

Previously, in 1.2.0, if you clicked the share button you would send an email to the Bingo team asking them to upload your project. In 1.3.0, there is a fully tested feature which allows you to *automatically* upload to Mod Share (see this [Scratch Forums post](#)) with no intermediate steps.

Re-styled reporter blocks and their 'holders' to look more modern

Images are worth more than a thousand words. I'll let them explain!

Before (1.2.0)	After (1.3.0)
	
	
	
	

Added little pictures to arguments

Images can explain everything ☺



Fixed background variable glitches

I can't really show you anything for this. All I can do is let you enjoy the (hopefully) glitch-free system!

Color arguments report their RGB color when hovering

I hovered over the color and it reported its value in RGB format. How useful for exporting a color you like into another program!

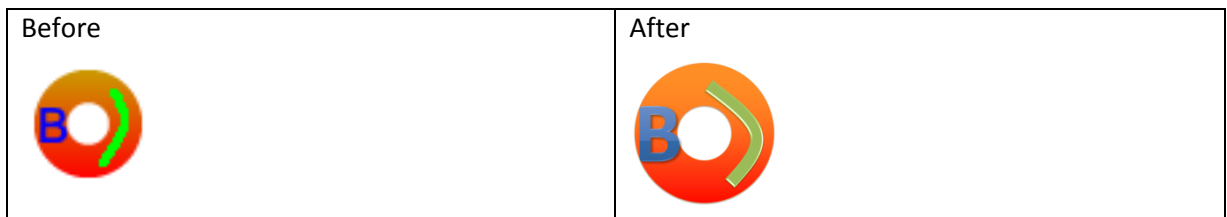


Conclusions

Thanks for reading this manual (or skipping to the end). Again, I hope you have learned something from it, and enjoy Bingo 1.3.0!

As a side note . . . (from the 1.2.0 manual)

- Bingo 1.2.0 Source Code will be released according to the scratch Source Code license with all comments to code included later on in August, once everybody has tried my new blocks and will recognize credit. The program will include a dev menu with advanced programmer features.
- Something I discovered using a Bingo block: the meaning of life = 49.5 (or 499999999.5 if you prefer). In fact, that's what the sum of all the float decimals from 0 to 1 is. It can also be described as infinity.
- The display depth under the settings menu normally lets you choose between 32, 16, 8, 4 and 1. This means how many colors the program can use. This is counted although in powers of two. So, depth 1 = $2^1 = 2$ colors. Depth 8 = $2^8 = 256$ colors. Depth 32 = $2^{32} = 4.295$ billion colors! Think about the users who have 64bit graphics – must be real high quality...
- Did you notice the logo redesign? It's more 3D and smoother gradient. I'll use it from now on.



Thanks again for reading!