



MEGA MULTI

Welcome!

Thank you for purchasing the Mega Multi adapter from RetroHQ! The Mega Multi allows you to use Mega Drive controllers and Master System light phasers with many Atari pin-out compatible devices.

Please DO NOT use this adapter with non-Atari pinout devices. Doing so may damage the device or adapter!

Changing Operating Modes

To allow the connected controller to be used with a variety of different systems from one adapter, the Mega Multi allows you to select from multiple operating modes using the Mega Drive controller.

The LED on the adapter shows the current operating mode by its colour. Match the LED colour to the colour on the sticker to determine the mode.

Each operating mode can have multiple sub-modes to fine tune the controls. The sub mode is shown by the LED flashing a number of times when changing the mode or sub mode, indicating the sub mode number.

To change modes, hold down the START button for around a second, the LED will flash to show the current sub mode. You can now use LEFT and RIGHT on the controller DPAD to change sub mode and UP and DOWN to change the mode. To return to using the controller in the currently selected mode press START.

Choosing an Operating Mode

There are three joystick operating modes: STANDARD, ALTERNATE and CD32. Machines and their preferred mode are listed in the table below. If your machine isn't listed, but you know it uses the standard Atari style pinout, STANDARD is likely to work.

	STD	ALT	CD32
Atari ST*			
Atari XL/XE			
Amiga/CD32			
C64/VIC20			
Kempston			

	A	B	C	Z	UP
MODE 1	1	2	3		U
MODE 2	1	U	2	3	U
MODE 3	1	U	2	3	

STD & ALT sub modes

The STD and ALT modes both have three sub modes which allow for the mapping of a button to act as UP for games which use UP to jump. These sub modes and their button mappings are shown above.

Extended MSX style SELECT and START buttons are also implemented in STD and ALT modes on buttons X and Y respectively. These virtual buttons use the otherwise invalid combinations of UP+DOWN for SELECT, and LEFT+RIGHT for START.

** NOTE: When plugged into an Atari ST, the adapter will lock to STANDARD mode to avoid conflicts with the keyboard processor.*

When in CD32 mode, the Mega Multi will respond to requests from compatible Amiga and CD32 software to return extended button information. The mapping from the Mega Drive to CD32 pad is shown below.

MD	CD32	Amiga	M1	M2	M3	M4
A	RED	Trojan				
B	BLUE	Actionware				
C	FORWARD	C64				
X	GREEN	Magnum				
Y	YELLOW	Cheetah				
Z	REVERSE	MARPES				
MODE	PLAY / PAUSE	Stack				
		Atari				
		XL / XE				

LIGHT GUN mode has four sub modes to support different light gun systems as shown in the table above. The sub mode can be selected with the control pad, but LIGHT GUN mode itself is automatically enabled when a light phaser is plugged in and pointed at a bright part of your CRT for a few seconds. The mode LED will turn RED to indicate a light phaser has been detected. To exit LIGHT GUN mode remove the light gun, connect a controller, and press a button to return to the last used pad mode. To switch between sub modes while in LIGHT GUN mode, point the gun away from the CRT and hold the trigger for 5 seconds or more.

Light Gun Compatibility

Due to the way light guns work, they require an old style CRT television to function. LCD televisions and even some newer high refresh rate (100 / 120hz) CRT televisions will not work!

Auto Fire Function

The Mega Multi supports individually configurable auto fire on A, B, C, X, Y and Z buttons. The auto fire mode has 4 speed settings ranging from 1 being OFF to 4 being the fastest speed.

When selecting the controller mode, you can alter the auto fire speed for an individual button by holding the button down, then pressing UP or DOWN on the DPAD to select the desired speed. The LED will flash from 1 to 4 times to show the current speed setting.

There is an initial short delay of around half a second before auto-fire starts to allow menu navigation to still be possible with auto fire enabled.

Support

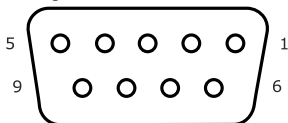
Additional support and information about the Mega Multi can be found on the support forum pages. Scan the QR code below or visit:

<http://retrohq.co.uk/megamulti/>



Pinouts and Technical Details

Mega Multi Female Connector



		STANDARD / ALTERNATE
1	Up	
2	Down	
3	Left	
4	Right	
5	Fire 3*	
6	Fire 1*	
7	5V	
8	GND	
9	Fire 2*	

	Mouse	Joystick	ATARI ST
5	n/c	n/c	
6	Fire 1 (LB)	Fire (as RB)	
9	Fire 2 (RB)	n/c	

	PAD	CD32		M1	M2	M3	M4	LIGHT GUNS
5	/CE		1					
6	/CLK		3	GREEN				
9	DATA		5		ORANGE	GREEN		
			6	SENSOR				

In STANDARD mode all signals are active low, so normally at 5V and pulled to GND when active. In ALTERNATE mode the fire buttons marked with an asterisk (*) are active high, so are normally at GND and are pulled to 5V when active. All other connections in ALTERNATE mode remain the same as STANDARD.

For light guns, the trigger button pin and signal level are shown above; GREEN is active low and ORANGE is active high. The light sensor is always pin 6.



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