

DIY Magic Mirror

Software Installation v3.3

PC (Windows XP, Windows Vista, Windows 7)

PC DIY Magic Mirror Software Installation Instructions (Windows XP, Vista, and Windows 7)

1 Download and install the DIY Magic Mirror Software from <u>http://diymagicmirror.com/install-pc.html</u>. The installation program will install the Magic Mirror software and all necessary components under "C:\Program Files\DIY Magic Mirror" or "C:\Program Files\DIY Magic Mirror (x86)" if your OS is 64-bit. Do not change this installation directory.

Its recommended to run the Magic Mirror at a resolution of 1024 x 768.

IMPORTANT: If your OS is Windows Vista or Windows 7, you must run the installation program as administrator. Right click on the setup file and then choose "Run as administrator"





2 Plug your Magic Mirror Sensor Hub into your PC with a USB cable.

3 Install the USB serial port driver. Follow these prompts and use the path "C:\Program Files\DIY Magic Mirror\utils\arduino-0017\drivers\FTDI USB Drivers" or "C:\Program Files\DIY Magic Mirror (x86)\utils\arduino-0017\drivers\FTDI USB Drivers" for the drivers.

Hardware Update Wizard	Hardware Update Wizard
Welcome to the Hardware Update Vindows will search for current and updated software by vindows will search for current and updated software installation CD, or on windows update Web site (with your permission). Beach	Image: Second
Hardware Update Wizard	Browse For Folder
Please choose your search and installation options.	Select the folder that contains drivers for your hardware.
 Search for the best driver in these locations. Use the check boxes below to limit or expand the default search, which includes local paths and removable media (floppy, CD-RDM) Search removable media (floppy, CD-RDM) Include this location in the search: C:\Program Files\DIY Magic Mirror\utils\arduino-0012 Browse Don't search. I will choose the driver to install. Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware. Back Next> Cancel 	To view any subfolders, click a plus sign above.

After installing the driver, you may be prompted to run through the same screens a second time.

The driver should automatically install on Windows 7.

🗊 Driver Software Installation		×
Your device is ready to use		
USB Serial Converter USB Serial Port (COM3)	Ready to use Ready to use	
		Close

4 Once installed, the Magic Mirror Sensor Hub or Arduino will appear in device manager as a **USB Serial Port**. In this example, the Arduino is on COM3. Type "**devmgmt.msc**" from the run command to go directly to Device Manager. Make a note of the COM Port number as you'll need this later.



Note: The Magic Mirror will not function if the assigned USB Serial Port is COM10 or higher. If this happens, then go into COM Port advanced settings and change to a lower number.

USB Serial Port (COM11) Properties ? 🔀	Advanced Settings for COM11	? 🔀
General Port Settings Driver Details Bits per second: 9600 • Data bits: 8 • Parity: None • Stop bits: 1 • Flow control: None • Advanced Restore Defaults	COM Port Number: COM3 USB Transfer Sizes COM1 (in use) Select lower setting COM4 (in use) hance problems at low baud rates. Select higher setting for faster performance. Receive (Bytes): Heceive (Bytes): 4096 Transmit (Bytes): 4096 BM Options Select lower settings to correct response problems. Latency Timer (msec): 16 Timeouts Set RTS On Close Minimum Read Timeout (msec): 0 Minimum Write Timeout (msec): 0	OK Cancel Defaults
OK Cancel		

5 Skip this step if you purchased the Magic Mirror Sensor Hub and go directly to Step 6. Once

uploaded, the firmware (Firmata) will remain on your Sensor Hub permanently so you only need to do this once.

a. Launch "Download Firmata Firmware to Sensor Hub (do this once)". IMPORTANT: You must run as Administrator if your OS is Vista or Windows 7.



b. Select the BOARD, be sure to select the ATmega168 or the ATmega328 depending on your Arduino version. Select the COM Port.



c. Open "C:\Program Files\DIY Magic Mirror\utils\arduino-0017\Firmata2\StandardFirmata\ StandardFirmata.pde" IMPORTANT: You must use this version of Firmata, the Firmata that comes with the Arduino IDE will not work with the Magic Mirror.

X

Open

Cancel

/ · · · · ·	uino 0017						
ile Edit Sketch Tools	Help						
New	Ctrl+N						
Open	Ctrl+O						
Sketchbook	•	. P)pen an Arduino	o sketch			
Examples	•		Look in:	: 📙 Standard F	Firmata		- (
Close	Ctrl+W	hristoph Steiner. All rights rese	(Tree)	Name	Date modif	Type	Size
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Save As	Ctrl+Shift+S	you can redistribute it and/or be GMU Lesser General Public	Recent Places	Standard	lFirmata.pde		
Upload to I/O Board	Ctrl+U	e Software Foundation; either					
Page Setup	Ctrl+Shift+P	(at your option) any later versio					
Print	Ctrl+P	er informations on licensing terms	Desktop				
Desferrer	Chill Common	The function of the first of the					
Preferences	Ctri+Comma		1				
Quit	Ctrl+Q	setPinMode(nin, SERVO):					
* TODO: use Progra	m Control to	load stored profiles from EEPROM					
*/			Computer				
include < EEPROM. h>							
include <firmata.h< td=""><td>></td><td>-</td><th></th><td></td><td></td><td></td><td></td></firmata.h<>	>	-					
		•	Network	File name:	1		
				Files of the st	All Eles (1.1)		
				riles of type.			

d. Verify and then Upload to the Arduino. While uploading, you will see the TX and RX LEDs flash on the Arduino. "Done Uploading" will display at the bottom of the screen when finished. If it does not upload correctly, see http://arduino.cc/en/Guide/Troubleshooting#toc2. Close when finished.





6 Launch "configure"

Select the Magic Mirror Sensor Hub Port. If your Sensor Hub is on COM3, then choose 5333. If on COM4, then choose 5334 and so on.

SIY Magic Mirror Configuration					
DIY Magic Mirror Configuration Version 3.1	Magic Mirror Sensor I	Hub Check for Updates	Online Manuals He	lp	
Enter Registration Code		Switch 1 - Door Switch	ON OFF		
Sensor Hub Version Version 3.0	OFF Proximity	Switch 2 - Weather Forecast	ON OFF		
Arduino Version		Switch 3 - Stock Performance	ON OFF		
Magic Mirror Mode Princess	OFF Touch 1	Switch 4 - Picasa Slide Show	ON OFF		
		Switch 5 - X-10 ON/OFF	ON OFF		
	OFF Touch 2	Proximity Sensor	ON OFF		
Weather Zip 95050 Good Weather Threshold 70		Proximity 1 Lower Range 40	Upper 46 Time 100		
Forecast Cutoff 11 Unit of Temperature Fahrenheit	OFF Touch 3	Proximity 2 Lower Range 20	Upper 26 Time 100		
Orientation Portait (90) Portrait (270) Landsc (0) Landsc (0) Landsc (0)	ndsc (180)	Prox 2 Can Play Before Prox 1	ON OFF		
Video Resolution High-Res Low-Res (for older hw & if video is the second sec	is jerky) Switch 1 OFF	Touch Sensor 1 - Weather	ON OFF		
Adjust Screen Positioning & Size		Touch Sensor 2 - Stock	ON OFF		
Enter Stock	Switch 2 OFF	Touch Sensor 3 - X-10 ON/OFF	ON OFF		
Symbol(s)		Character Select Potentiometer	 ON OFF 		
amat+sbux+aapl	Switch 3 OFF	X-10 Lighting Control	 ON OFF 		
		Lights House Code	A - Lights Unit Code 2	•	
Clear Stocks	Switch 4 OFF	ON/OFF House Code	A ON/OFF Unit Code 4	•	
Good Stock Bad Stock	and the second	Magia Mirror Consor Hub Dart			
Threshold 3 Threshold -1	Switch 5 OFF	Startun Delay (seconds)	5333 V		
	Char ON	Verbose/Debug Mode	5332 - OFF		
Picasa Slide Show Settings	Select Pot ON	Stock Readout Text	5333 OFF		
Picasa/Google ID magicmirror2000 Refresh Album List	Sensor Hub to Arduino	Weather Readout Text	5334 OFF		
Pin Mapping Reference Weather Icon 5335 V OFF					
Picasa Album					
Selected Album DIY Magic Mirror ON OFF					
Slide Duration 5 seconds	IP Camera URL or IP add	fress (no http://) thepoolcam.dyn	ndns.tv Port 80	_	
	IP Camera Make	Axis 🔻	Adjust Doorcam Positioning		
Adjust Slide Show Positioning & Size Video Stream Path /axis-cgi/mjpg/video.cgi					
	IP Camera Username	IP Camera Pa	issword		

IMPORTANT: Only sensors that are wired up and connected should be set to **ON** which would be the < Character Select Potentiometer > input with the Magic Mirror Sensor Hub. All other switches/sensors that are not yet hooked up must be left **OFF** until they are hooked up or you'll overload your computer with false sensor readings and potentially crash the software. Click "Save" when finished.

LIY Magic Mirror Configuration				_O×	
DIY Magic Mirror Configuration Version 3.1	Magic Mirror Sensor I	Hub Check for Updates	Online Manuals Hel	р	
Enter Registration Code		Switch 1 - Door Switch	ON OFF		
Sensor Hub Version Version 3.0	OFF Proximity	Switch 2 - Weather Forecast	🔾 ON 💽 OFF		
Arduino Version		Switch 3 - Stock Performance	🔵 ON 💿 OFF		
Magic Mirror Mode Princess	OFF Touch 1	Switch 4 - Picasa Slide Show	ON OFF		
Idle Videos ON OFF		Switch 5 - X-10 ON/OFF	ON OFF	_	
Weather Zin 95050 Good Weather Threshold 70	OFF Touch 2	Proximity Sensor	ON OFF	,	
		Proximity 1 Lower Range 40 Proximity 2 Lower Range 20	Upper 46 Time 100		
Forecast Cutoff	OFF Touch 3	Prox 2 Can Play Before Prox 1	ON OFF		
Orientation Portait (90) Portrait (270) Landsc (0) Landsc (Video Recolution Utick Rec Landsc (Statistical Statist	(180) Switch 1 OFF	Touch Sonsor 1 Weather			
Video Resolution I high-Res C Low-Res (for older nw & if video is jerk	(y) Switch I off	Touch Sensor 2 - Stock			
Adjust Screen Positioning & Size	Switch 2 OFF	Touch Sensor 3 - X-10 ON/OFF	ON OFF		
Enter Stock Add		Character Select Potentiometer	ON OFF		
	Switch 3 OFF	X-10 Lighting Control	ON OFF	¬	
amat+sbux+aapi		Lights House Code	▲ ▼ Lights Unit Code 2	-	
Clear Stocks	Switch 4 OFF	ON/OFE House Code	A ON/OFE Unit Code 4	-	
Cood Stock	in the second second				
Threshold Threshold	Switch 5 OFF	Magic Mirror Sensor Hub Port Startup Delay (seconds)	5333 -		
	Char Colored Date ON	Verbose/Debug Mode	ON OFF		
Picasa Slide Show Settings	Select Pot On	Stock Readout Text	ON OFF		
Picasa/Google ID magicmirror2000 Refresh Album List	Sensor Hub to Arduino	Weather Readout Text	ON OFF		
Picasa Albums Select Album V	Pin Mapping Reference	Weather Icon	 ON OFF 		
Selected Album					
Slide Duration 5	IP Camera URL or IP add	lress (no http://) thepoolcam.dynd	Ins.tv Port 80		
Side Duration 3 Seconds	IR Camora Maka	Axis T	diust Doorcam Positioning		
Adjust Slide Show Positioning & Size	Video Stream Path	axis-cai/mipa/video.cai	gust boor can't ositioning		
		IP Comoro Poo	aword		
IP Camera Username IP Camera Password					
Save Reset to Defaults					



8 From the desktop, launch the Magic Mirror program

If you see < Sensor Hub Found on Port: 533x> where x is the com port number of your sensor hub and one of the characters is playing, then your Magic Mirror software is installed correctly. Now refer to the DIY Magic Mirror Operations Manual for instructions on how to wire up the sensors and configure the Magic Mirror.

Turn the character select knob to see the character change.

If prompted by your Firewall, instruct it to permanently unblock serproxy.exe.

Windows Firewall has blocked some features of this program	
Windows Firewall has blocked some features of serproxy on all public and private networks.	
Name: serproxy	
Publisher: Unknown	
Pat <u>h</u> : C:\program files (x86)\diy magic mirror\serproxy.exe	
Allow serproxy to communicate on these networks:	
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)	
What are the risks of allowing a program through a firewall?	
🛞 <u>A</u> llow access Cancel	
	_
Version 3.1 Switch 1 (Door) - Arduino Switch 2 (Weather) - Arduino Switch 3 (Stock) - Arduino Switch 4 (Picasa) - Digital Pin 2 Digital Pin 3 Digital Pin 4 Arduino Digital Pin 7	Switch 5 (X10 ON/OFF) - Arduino Digital Pin 5
X10 Command Number: 1	
anu to additora we	Magic Mirror Sensor Hub Found on
Idle Video Status	Port: 5333
	No Proximity Sensor Readings
Proximity 1	
Proximity 2	No Proximity Match
X10 DN	Stock Status
X10 OFF	
Door	Weather Status
Weather	
Stock	
Start Side Show	
Stop Silde Show	
87 Touch Sensor 1 - Veather Touch Sensor 2 - Stock Touch Sensor 3 - X10 Character Select Potentiometer=0	
Touch Counter	

Adobe AIR will periodically prompt for automatic updates. To disable Adobe AIR automatic updates, run this application http://airdownload.adobe.com/air/applications/SettingsManager/SettingsManager.air and then disable automatic updates.