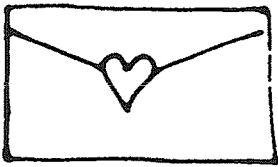
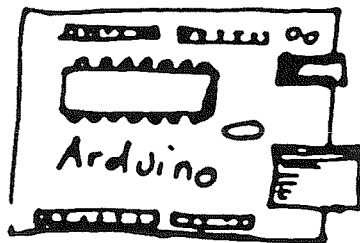




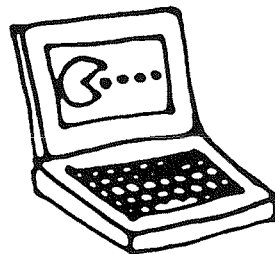
## WHAT YOU WILL NEED



SYLTJAMSYNTH KIT



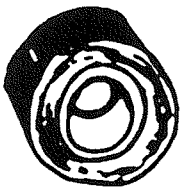
ARDUINO UNO



COMPUTER



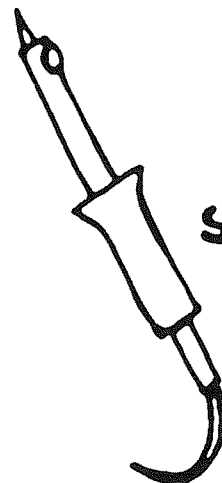
PLIERS



ELECTRIC TAPE  
(MAY BE INCLUDED)



USB CABLE



SOLDERING IRON  
&  
SOLDER

# HARDCORE MANUAL!!

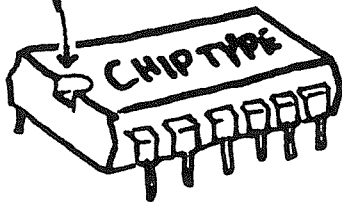
1. SOLDER!
2. UPLOAD  
SOFTWARE
3. ENJOY!!

For Weaklings: Please keep  
enjoying this nice instruction  
manual that we have  
composed for you!

/Syltmen

## IC-CIRCUITS

THIS INDICATES  
CHIP ORIENTATION



THIS IS PIN #1

## RESISTORS



COLOR-BANDS  
INDICATE VALUE

Orange Orange Brown  
220Ω

Green Brown Black Black  
510Ω

Brown Black Orange  
10kΩ

## DIODES

GLASS HOUSING

BLACK STRIPE  
INDICATES  
ORIENTATION

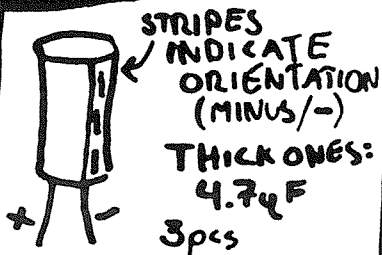
LONG ONES:

BZX55C2V4

2pcs

SHORT ONE:  
1N4148

## CAPACITORS



THIN ONE:  
10µF

## CERAMIC CAPS



MARKED 104  
100nF

ORIENTATION  
DOESN'T MATTER

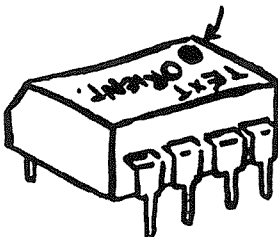
## RESISTOR ARRAY



CONTAINS 4 RESISTORS  
4.7kΩ

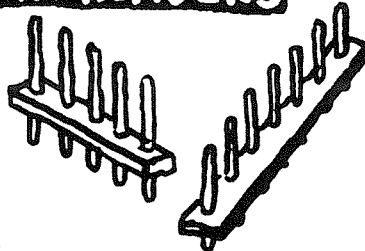
ORIENTATION  
DOESN'T MATTER

## OPTOCOUPLER



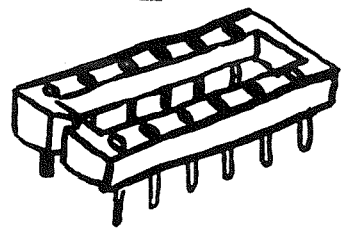
DOT AND CHAMFERED  
EDGE INDICATES PIN#1

## PIN HEADERS



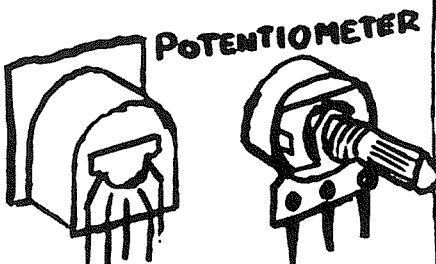
CONNECTS SYNTH  
WITH ARDUINO

## SOCKETS



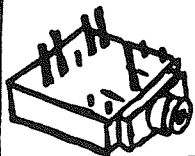
A PLACE TO PUT  
THE IC'S AND OPTOCOUPLER

## OTHER STUFF



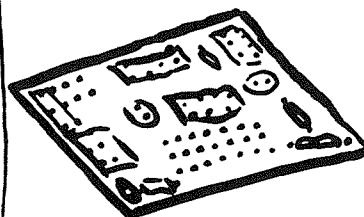
POTENTIOMETER

MIDI CONNECTOR



3.5mm TELE  
CONNECTOR  
(AUDIO OUT)

## PCB



MAGICALLY MAKES  
ASSEMBLY EASY  
AND DEVICES  
HANDSOME!

## PIECE OF TAPE



GOES ONTO THE  
ARDUINOS USB-PORT

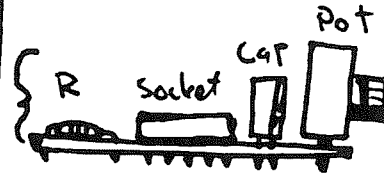
### STEP 1

UNPACK!



BACK IN THE  
GLORY OF  
SHINY ELECTRONICS!

### STEP 2



START WITH SMALL  
COMPONENTS AND  
WORK YOUR WAY  
UP TO THE TALLER  
ONES.

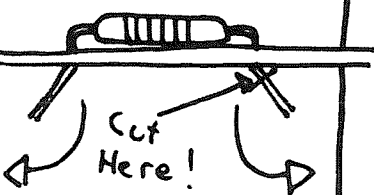
### STEP 3

Bend it!



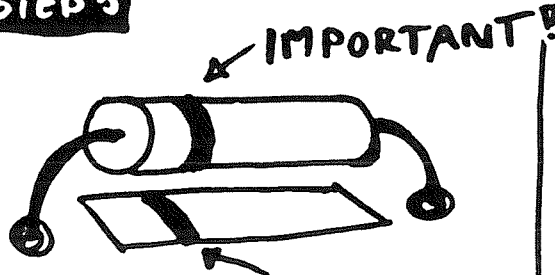
BEND THE LEGS OF  
RESISTORS, DIODES  
AND CERAMIC CAPS  
CLOSE TO THE BODY.

### STEP 4



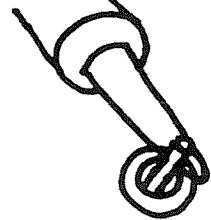
INSERT COMPONENT.  
BEND LEGS TO  
KEEP IT IN PLACE.  
CUT LEGS.

### STEP 5



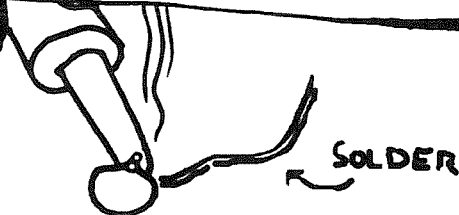
DIODES MUST BE  
MOUNTED IN THE CORRECT  
ORIENTATION!

### STEP 6



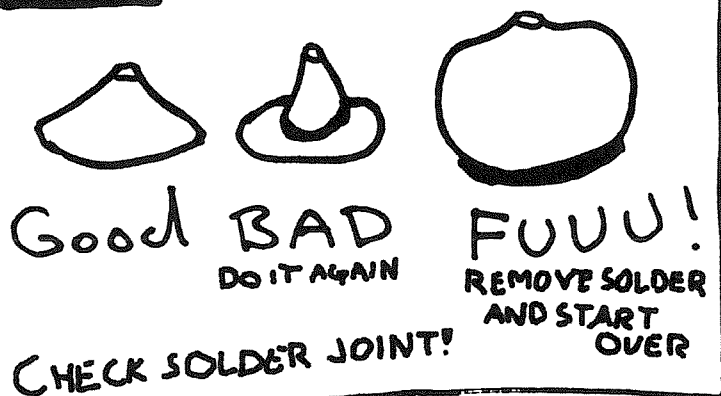
HEAT BOTH PAD  
AND LEG AT THE  
SAME TIME FOR  
APPROX. 1 SEC.

### STEP 7



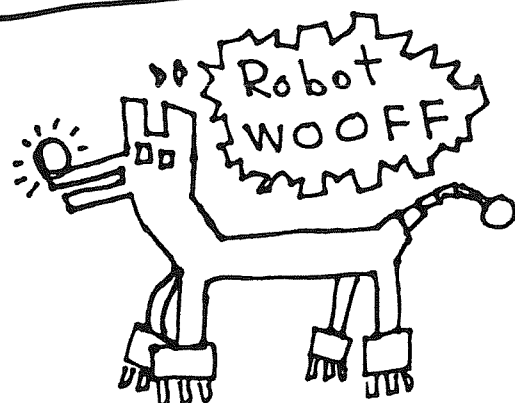
ADD SOLDER. MAKE SURE IT  
BINDS TO BOTH THE LEG AND  
THE PAD. THE PROCESS SHOULD  
NOT TAKE MORE THAN A SECOND  
OR TWO. REMOVE SOLDER AND  
SOLDERING IRON SIMULTANEOUSLY.

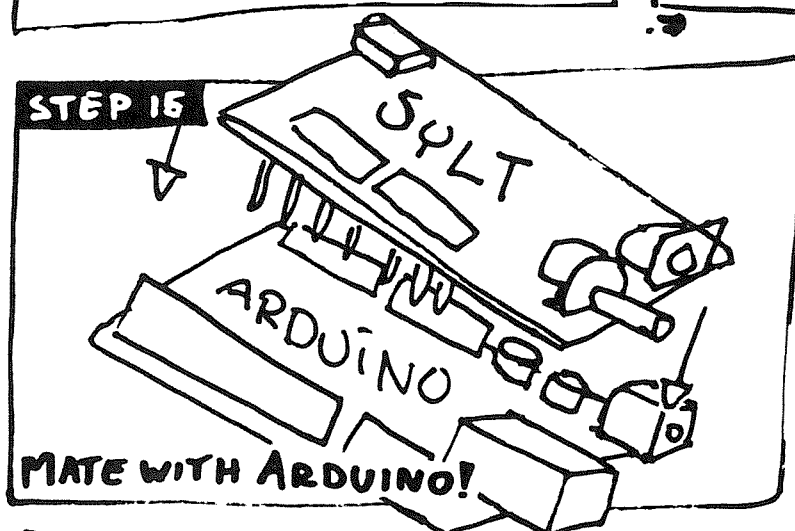
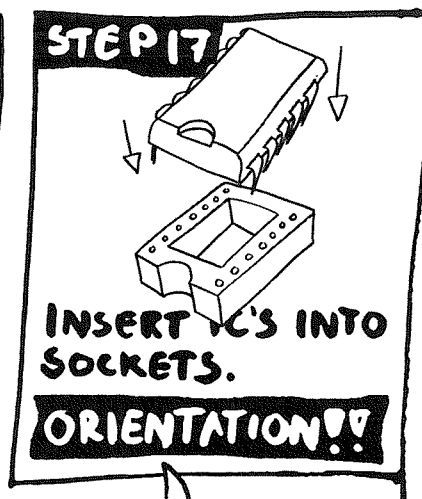
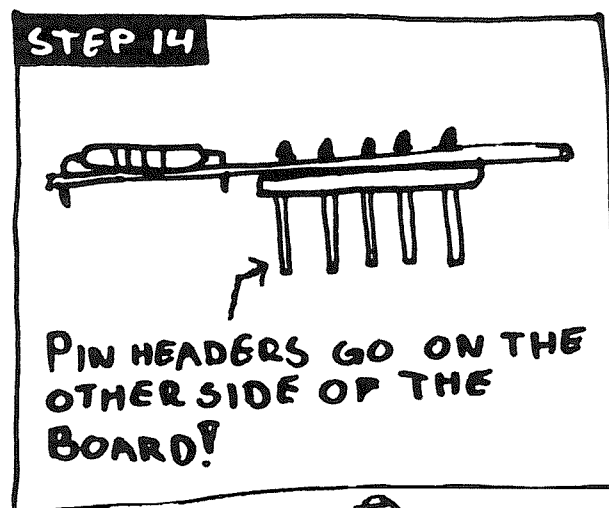
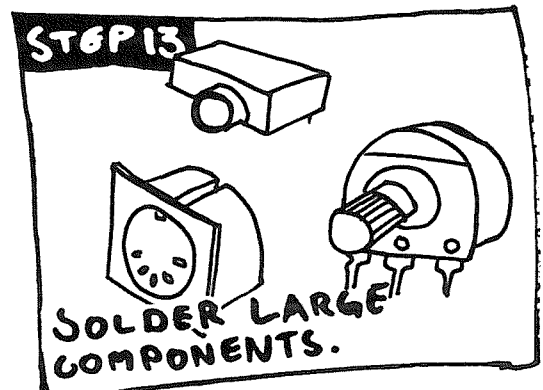
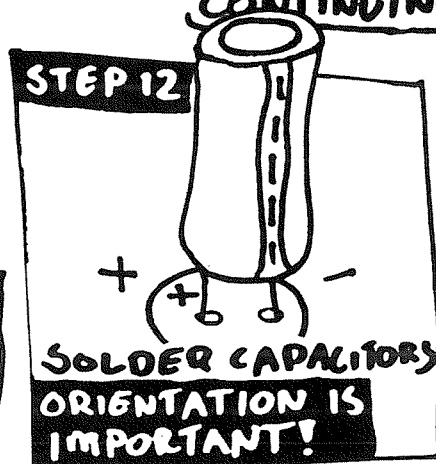
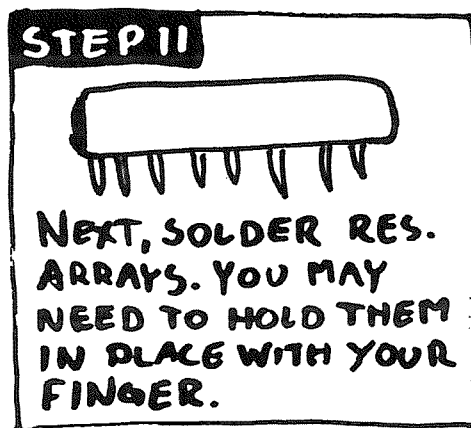
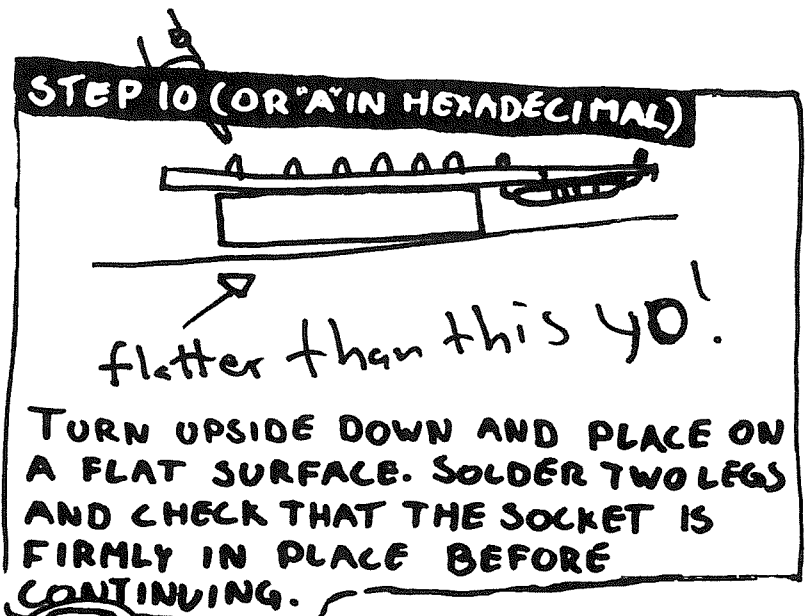
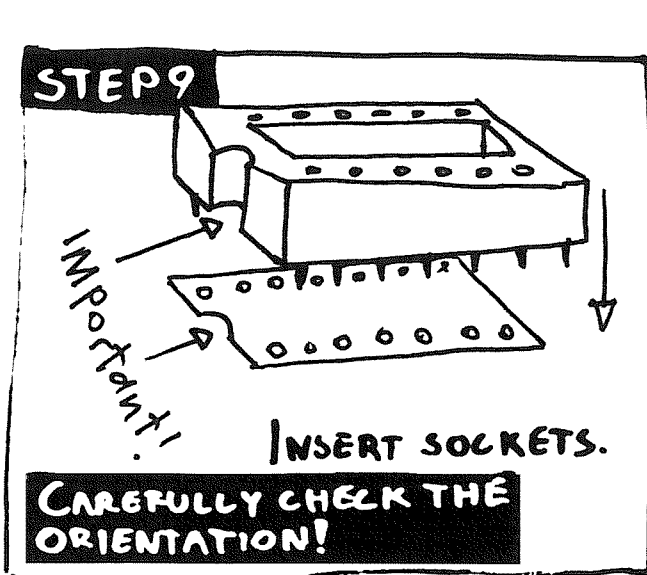
### STEP 8



Good BAD  
DO IT AGAIN  
CHECK SOLDER JOINT!

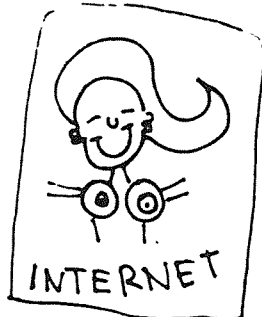
FUUU!  
REMOVE SOLDER  
AND START  
OVER





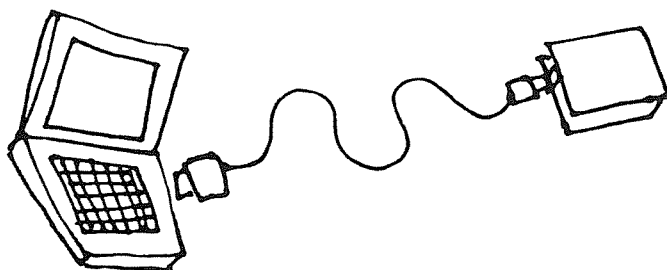
**RELAX FOR A WHILE. THE HARDWARE IS ALL DONE. YOU'RE THE BEST!**

### STEP 19



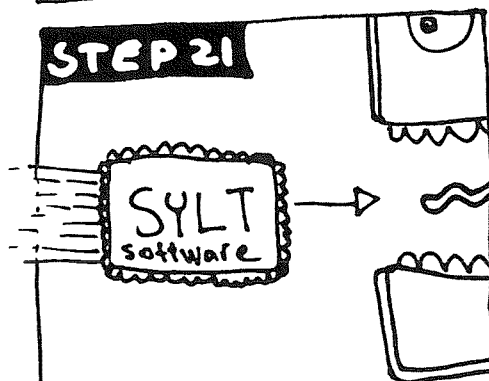
DOWNLOAD THE ARDUINO  
SOFTWARE FROM  
[WWW.ARDUINO.CC](http://WWW.ARDUINO.CC) INSTALL!

### STEP 20



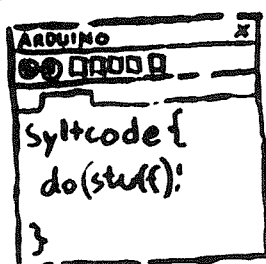
CONNECT SYLTJAMSYNTH TO  
COMPUTER USING USB-CABLE.

### STEP 21



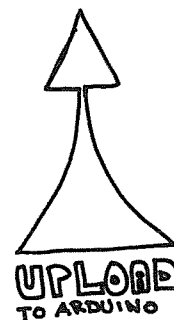
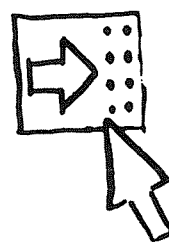
DOWNLOAD  
SYLTFIRMWARE OF  
CHOICE.

### STEP 22



OPEN SYLTFIRMWARE  
IN THE ARDUINO  
APPLICATION.

### STEP 23



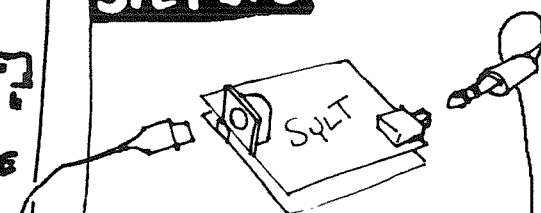
PRESS UPLOAD!

### STEP 24

ERROR #5FYX?

SEE ARDUINO WEBSITE  
FOR HELP WITH  
CONFIGURATION OF  
ARDUINO AND  
UPLOADING ISSUES.

### STEP 25

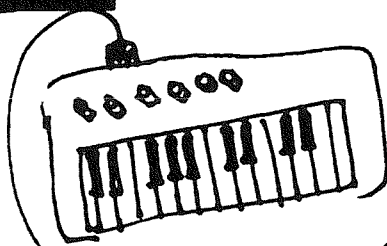


CONNECT MIDI  
AND AMPLIFIER.

### STEP 26

GET READY!

### STEP 27



Rooooo

### STEP 28



CK!!

