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Sunday, October 28, 2012

Making a Multi-function Water Level Controller Circuit

Posted by [Swagatam Majumdar](#)

The following multi-function water level controller circuit post is based on the suggestions [expressed](#) by Mr.Uzman. Let's learn more about the requested modifications and the circuit details.

The Suggestion:

"Hi Swagatam,

The concept [of this circuit](#) looks good. May I suggest a couple of other desirable features?

1) To protect the motor from potential overheating (or as a safety feature) can u add an automatic shutdown timer? If the motor is running for one hour (or 1.5hrs or 2-hrs) and the water level does NOT reach the level-sensor, the motor should be automatically stopped. Of course, it can be restarted [manually](#) by pushing the start button again.

2) Can the motor be manually stopped at any time? For example, what if one wants to water the lawn (or wash the car) for a few minutes using high pressure water directly from the motor?"

Thanks very much!

Your suggestions are interesting!

I think I have discussed these issues in the following article:

<http://homemadecircuitsandschematics.blogspot.in/2012/03/dc-motor-protector-circuit-over-voltage.html>

However instead of a timer I have used a temperature sensor circuit for tripping the motor if it starts getting hot.

The motor can be manually stopped by [shorting](#) the base of T3 to ground. This can be done by adding a push button across these terminals.

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So the upper push button may be used for initiating the motor while the lower button may be used for stopping the motor manually.

Thanks Swagatam for a prompt reply. I've found another circuit on your blog (April 20th post) that is closer to what I have in mind.

<http://homemadecircuitsandschematics.blogspot.com/2012/04/semi-automatic-water-level.html>

I want a slightly different control logic in the above circuit:

Motor START Logic:

Manual push button (already implemented)

Motor STOP Logic:

- 1) Water level reaches a pre-determined level (as implemented in April 21st post), OR
- 2) A pre-determined time has lapsed (e.g. 30, 60 or 90 mins, this requires a long time-delay/counter), OR
- 3) Manual stop (manual override), OR
- 4) Power failure (load shedding), this is implemented by default!

So I guess, the STOP logic (1, 2 and 3) can be configured to the base of T1 (in your April 20 post) and it should work. Pls comment, and if you have time maybe you can make a new post!

Thanks

Usman

The Design:

Let's analyze the above requirements and check how they have been implemented in the following diagram:

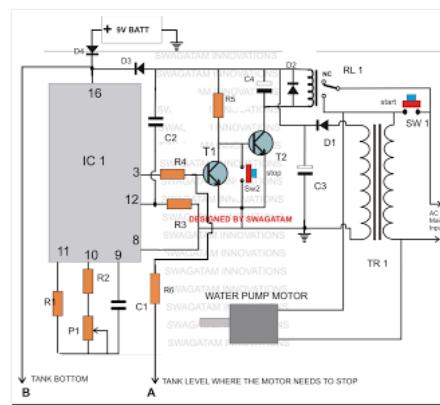
1) Water level reaches a pre-determined level: Point A and B may be appropriately fixed inside the tank for regulating this function. Since point B is situated at the bottom of the tank, remains connected with the water permanently, now as the level rises and comes in contact with point A, the positive potential from point A connects with point B, which instantly reset pin#12 of the IC, switching OFF the relay and the entire system.

2) A predetermined time has lapsed: This feature is already present in the below given circuit. The timing outputs can be increased to any desired extents simply by increasing the values of P1 and C1.

3) Manual stop (manual override): This feature is actuated by SW2, pressing which resets the IC pin#12 and the entire circuit.

4) Power failure (load shedding): During a possible power failure or instantaneous power "blinks", the IC needs to be supplied with the required supply voltage so that the timing does not get interrupted. This is very simply done by adding a 9 volt battery to the circuit.

As long as normal power is present, the cathode of D3 stays high keeping the battery switched OFF from the circuit. The moment power fails, the cathode of D3 becomes low, providing a way-in to the battery power which smoothly replaces the supply to the IC without causing any "hiccup" to the counting operation of the IC.



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Parts list for the above explained multi-function water level controller circuit

R1 = 1M, 1/4 watt

R3 = 1M

R2, R6 = 4K7

R4 = 120K

R5 = 22K

P1 = 1M preset horizontal

C1 = 0.47uF

C2 = 0.22uF disc ceramic

C3 = 1000uF/25V

C4 = 100uF/25V

D1, D2, D3, D4 = 1N4007,

Relay = 12V/SPDT

SW1, SW2 = Bell push type of button

IC1 = 4060

T1, T2 = BC547

TR1 = 0-12V/500mA

BATT - 9V, PP3

About Me



[+ Swagatam Majumdar](#)

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I am an electronic hobbyist,
inventor, a freelance electronic
circuit designer, manufacturer.....

I also run a blog <http://homemadecircuitsandschematics.blogspot.com/>
where you can see many innovative
electronic circuit ideas, designed and developed
by me, I take pleasure in helping new hobbyists to
learn them.

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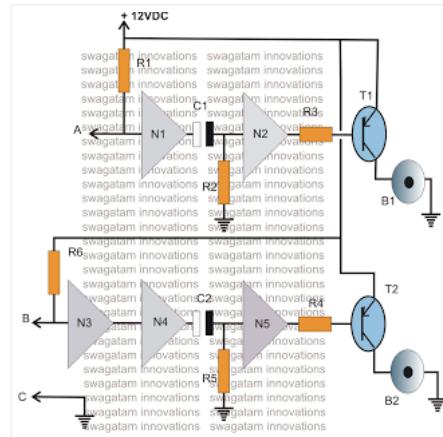
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Water level buzzer indicator circuit

The following circuit of a water high level and low level indicator circuit was requested by Mr.Amit. Please read the comments given below to know regarding the exact specs of the requested circuit.



Circuit Description

The above shown water high and low level buzzer indicator circuit may be understood with the following points:

Point C which is connected to the ground or negative of the supply rail is kept immersed in the tank water at the bottom level such that the water present in the tank is always held a logic low.

Point B is the low level sensor point which must be positioned near the bottom of the tank, distance may be set as desired by the user.

Point A is the high level sensor, which should be held somewhere at the top of the tank as per user preference.

When the water level reaches under the point B, point B goes high due to R6, making the output of N4 high and consequently producing a low at the output of N5....the buzzer B2 starts buzzing.

However in the meantime C2 starts charging up and once it's fully charged inhibits the positive potential at the input of N5....the buzzer is switched OFF. The time for which the buzzer remains On may be determined by the values of C2 and R5.

In an event the water reaches the top level of the tank, point A comes in contact with the low logic from the water, output of N1 becomes high and the same process is repeated as explained above. However this time B1 starts beeping, only until C1 gets fully charged.

Five gates from the IC 4049 have been utilized here, the remaining one unused gate input should be grounded for maintaining stability of the IC.

Parts List

R1,R6 = 3M3
 R3,R4 = 10K
 T1, T2 = 8550, or 187, or 2N2907 or similar
 C1,R2 = to be selected for setting up buzzer on time
 C2,R5 = to be selected for setting up buzzer on time.
 N1--N5 = IC 4049
 B1,B2 = Loud piezo buzzers



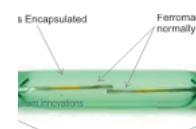
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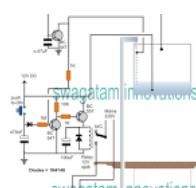
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at Sunday, October 28, 2012



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Reactions: good (0) interesting (0) cool (0)

64 comments:



Anonymous October 28, 2012 at 8:43 PM

Excellent!! It covers all the design parameters!

A few comments:

1) Instead of P1, I think one can use three (or four) resistors connected to a 3-position (or 4-position) slider switch (just like the ones on many small multi-voltage DC adapters). If the resistor values are chosen carefully, we can have fairly accurate time-out values. This way you can eliminate the guess-work/calibration of P1.

2) Personally I don't like mixing water and electricity (even small voltages). Point-B, which is held at about 15-18V DC, is always submerged. I am thinking on the lines of a mechanical-button (like a cheap float switch, or a mercury switch) that can be connect to points A and B.

3) Side note: One idea that is stuck in my mind is to make a (ultra-cheap) water level sensor using a ping-pong ball in a uPVC-pipe. This would be a fail-safe mechanical design, will take care of ripples and splashes in the tank and will have a service life of many decades! This assembly can even be fixed outside the tank (thru the water supply pipe.) So far so good, but the key question remains how to sense the height of the floating ball relative to the top of the pipe? Any ideas? Can we use light (LEDs)? Pressure? Range sensor? It has to be very cheap at the same time.

Thanks
Usman

[Reply](#)[▼ Replies](#)

Swagatam October 28, 2012 at 9:30 PM

Thanks Usman!

I appreciate your response!

A water level indicator circuit has been covered in the following article, can be used in conjunction with your third suggestion:

<http://homemadecircuitsandschematics.blogspot.in/2012/04/make-this-water-level-indicator-circuit.html>

Regards.



Unknown June 26, 2013 at 11:30 AM

sir this multi functional [water tank](#) circuit is full automatic, means this circuit is able to on and off [the pump](#) automatically....thanks hundal76@gmail.com

[Reply](#)

amit October 29, 2012 at 12:04 PM

Dear Mr. Swagatam,

can you please make circuit which do as follows.

i have 250 liter overhead water tank. what i want is when we start filling the tank with water & when water level reaches to 90% { or consider height of tank which is abt. 3.5' } a siren should start for 3 times so we can come to know that the tank is about to full { otherwise it waste lots of water } and 2nd is when the water level is about 25% again the siren should start for 3 times so we can come to know that its time to fill up the water tank.

{if possible , please make circuit that works on battery as it is not possible to give power supply there }

Thanks in advance.

Regards,
Amit Desai.

[Reply](#)[▼ Replies](#)

Swagatam October 29, 2012 at 12:40 PM

Dear Amit,

Three times beeping siren will be difficult to configure and would make the design complicated.

A siren which would sound for a few seconds and then stop can be made though.

I'll try to design it and update it here soon.

Regards.



amit October 29, 2012 at 12:49 PM

Dear Mr. Swagatam,

Thanks , seconds based beeping is would be also a good solution.

please try it for me.

Regards,
Amit Desai.



Swagatam October 29, 2012 at 6:01 PM

Dear Amit,

I'll do it asap...



Swagatam October 30, 2012 at 6:39 PM

Hi Amit,
I've the updated the required circuit in the above article....



amit October 31, 2012 at 12:39 PM

Dear Sir,

thanks a lot.

Regards,
Amit Desai

[Reply](#)



Anonymous October 31, 2012 at 10:35 PM

Dear Swagatam,

On similar lines for a water level buzzer can we use a push button switch to mute the buzzer and once the water level goes down the buzzer will get automatically reset and ready for next operation? Please help me on such a circuit, Can we build it using just BJTs?

Best regards
niranjan

[Reply](#)

▼ [Replies](#)



Swagatam November 1, 2012 at 9:44 AM

Dear Niranjan,

The buzzer circuit shown above automatically stops buzzing after a few seconds or more depending upon the values of the specified R and C. so a switch is not required here.

And also the circuit resets for the next cycle once the water level goes below the set points.

So everything's there in the design as required by you.

BJTs won't produce accurate results and the circuit might get too lengthy.

Regards.

[Reply](#)



Anonymous November 2, 2012 at 10:44 PM

Hy

i new comer in this field with little bit knowledge

recently i purchase First Figure Component but instead of

C1 = 0.47uF i got the 474k/450v and C2 = 0.22uF i got 224 ceramic capacitor

So Please Advise me can i use this two capacitor

and For the Point A and Point B which is going to Water what i used there a simple wire or anything else

and what type and how much max rating water pump i can operate by using this

Thanks

[Reply](#)

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Swagatam November 3, 2012 at 9:58 AM

Hi,

You could have used ceramic for C1 also because 450V is unnecessarily big.

But anyway, both the capacitors will work, no issues.

Simple wire outlets will do, however it would be better to put them neatly over a plastic stick and clamp the metal outlets at the relevant levels inside the tank, use brass screws and attach them to the wires outlet terminals and the screws over the plastic stick.

The relay contacts should be matched with the pump max current otherwise the relay may burn due to overload.



Anonymous November 6, 2012 at 10:09 AM

Hy Swagatam Thanks for reply

when i connect the circuit i got ac supply in water tank as well circuit cant work and how to test a relay also how to know ic proper working

one more que the 9v dc supply is compulsory needed is not
any idea

[Reply](#)



Anonymous November 10, 2012 at 6:08 AM

hy swagatam

i also new in this field so i would like to know work function of this circuit.

interested to know how i identify the ic & relay terminals

[Reply](#)

[▼ Replies](#)



Swagatam November 10, 2012 at 10:13 AM

The left pin starting at the left of the notch on the IC is pin#1 while the pin at the right is the last pin of the IC.

for understanding relays you may refer to this article:

<http://homemadecircuitsandschematics.blogspot.in/2012/01/how-to-understand-and-use-relay-in.html>

[Reply](#)



Anonymous November 16, 2012 at 9:55 AM

Hy

Is this perfect ic no for this cd4060be

Because of I use this ic but this circuit can't run in any condition so any idea where I miss

[Reply](#)

[▼ Replies](#)



Swagatam November 16, 2012 at 4:08 PM

Hi,

Yes the diagram is perfect!

You should make and check the 4060 timer section separately, and then integrate it with rest of the stages.

[Reply](#)



Anonymous November 20, 2012 at 4:42 PM

hy swagatam

i little bit confuse regarding a ic

for the ic 4060 u displaying a real pin number of ic or output sequence of ic because when i read

http://en.wikipedia.org/wiki/4000_series

in this on 4017 decade counter there is two types of number

first one is Pin number & Second is Name

that's y i confused about

[Reply](#)[▼ Replies](#)
 **Swagatam** November 20, 2012 at 6:57 PM

I have put real pin numbers..... for indicating sequence order I would have used Q1, Q2, Q3.....etc.

However there's no sequence indicated here because it's just a timer circuit with a single output at pin#3.

[Reply](#)
Anonymous November 22, 2012 at 3:36 PM

Hy Swagatam

is this tested circuit

and can u provide a pcb design for this circuit

[Reply](#)[▼ Replies](#)
 **Swagatam** November 22, 2012 at 7:45 PM

It's not tested but according to me it will work, PCB design will be difficult for me to provide... sorry.

[Reply](#)
Anonymous November 22, 2012 at 4:29 PM

hy

When i connect this circuit its start up but when point A & B Connect its cant stop the circuit

instead of motor i used a lamp & instead of water tank i manually connect the Lead A & B

any idea why this happen

[Reply](#)[▼ Replies](#)
 **Swagatam** November 22, 2012 at 7:51 PM

Hi,

You are correct, the circuit needs correction, I'll do it after sometime, check back soon..

Thanks!


Swagatam November 22, 2012 at 8:04 PM

It's done now! the parts list has also been modified appropriately....


Anonymous November 23, 2012 at 11:56 AM

hy Swagatam

According to your modification i changed connection as well parts also but still when i switch on ac power supply and lead A & B Not connected its glow the Bulb but when manually i connect lead A & B it's cant stop bulb glow

Please if possible then do something

because in my new home i want to use this circuit


Swagatam November 23, 2012 at 2:06 PM

You mean the relay does not trip off on connecting points A and B???

This cannot happen now, because when we join A and B, T1 receives a positive potential at its base and switches ON.

With T1 switched ON, T2 base voltage becomes zero, which in turn switches OFF the relay and also the entire circuit along with the load.....please check your circuit connections once again.


Anonymous November 26, 2012 at 12:34 PM

Hy Swagatam

i checked my circuit connection is complete as per your new connection diagram but it still can't stop the relay

also can we add a new level in this means after a some water level goes down the motor start because in this i figure out if water level goes down suddenly motor start but i think its rapidly start and stop motor a lot time in a day

that's why i think we have to make a Lower Level after that motor start and when reach top its became stop and vice-verse



Swagatam November 26, 2012 at 2:31 PM

I think T2 may be faulty in your circuit.

I am sorry I did not understand your need, please explain it more clearly....



Anonymous November 26, 2012 at 3:37 PM

there is three level in the tank 1) Bottom 2) Middle 3) Top

i need Motor Start after Water level Go down Below the Middle Level And Also when Motor Start its has to stop on the Top Level not at Middle Level



Swagatam November 26, 2012 at 7:58 PM

I think the following circuit might help:

<http://homemadecircuitsandschematics.blogspot.in/2012/09/simple-water-level-controller-circuit.html>

[Reply](#)



Vijilan May 26, 2013 at 7:52 PM

Good day sir,

I need circuit diagram for water level controller which should be set in the underground tank which collects the water from the municipal.

that is when the water level rises and attain a particular stage in the underground tank the motor should be switched on and the water if drain the motor should be set off. And if the overhead tank get overflow before..

it should be necessary that the motor should set off that's my requirements sir.

Thanks in advance.

[Reply](#)

[▼ Replies](#)



Swagatam Majumdar May 27, 2013 at 10:03 AM

Good day Vi,

I could not understand this sentence:

"and the water if drain the motor should be set off. And if the overhead tank get overflow before"

[Reply](#)



Vijilan May 27, 2013 at 1:18 PM

Thanks for your instant reply sir,

You are wonderful in giving some awesome circuits for us. i am coming to my needed circuit design.

I had done many of your circuits sir.

I saw a circuit in your bright hub page sir that is my exact requirement with some additional functions i am asking a circuit sir.

* I am getting tap water and storing in the underground tank now i am manually switching the motor to fill those water in the overhead tank so I thought that a automation work could do this instead of man

circuit requirement:

1. when water rises a certain level in the underground tank the motor should be switched ON and when the water attained a low position in the underground tank the motor should be switched OFF.

2. During this process if the overhead tank overflows then the total system should be switched OFF automatically using an relay.

Sir you have done these circuits separately I think. I need a conjunction of those circuits sir.

Sorry for my bad English I think it will disturb you lot.

Thanks in advance sir.

[Reply](#)

Replies**Swagatam Majumdar** May 27, 2013 at 3:45 PM

Thanks V1,

you will have to make the following circuit first:

<http://homemadecircuitsandschematics.blogspot.in/2011/12/how-to-make-simple-water-level.html>

then add another transistor stage to it in the following manner:

use a BC547 transistor.

connect its collector to the base of the relay driver transistor.

emitter to ground.

connect its base via a 1K resistor somewhere at the overflow point of the overhead tank.

also connect a positive supply link at the bottom of the overhead tank so that it stays immersed in the tank water.

The above set up will hopefully fulfill your application.

Reply**Vi Jilan** May 27, 2013 at 7:59 PM

Thanks once again Sir.

Kindly i will be back after my exams sir

Thank You for your help and your excellent blog Sir.

Reply**Replies****Swagatam Majumdar** May 27, 2013 at 8:24 PM

you are welcome Vi Jilan.

Reply**avijeet agrawal** June 10, 2013 at 8:32 PM

Hello sir,

Thanks for your great circuits.

I had made the above one and it is working fine.the timer section and the overflow sensing section is working perfectly allright. the only problem is with manual stop switch accross .22uf which is not giving any response.i had used two .1uf/400v ppc type cap.in parallel.

Help me to get out of this problem

Thanks

Reply**Replies****Swagatam Majumdar** June 11, 2013 at 9:44 AM

Hello Avijeet,

yes the position of the switch is incorrect.

connect the switch across the base of T2 and ground, this will instantly stop the motor.

Thanks

**avijeet agrawal** September 3, 2013 at 8:10 PM

Thanks sir,

I had made the corrections and now it is working fine.

#Sir want to ask u that i had to drive the circuit only for 10 to 20 min so 1m preset is giving huge fluctuations to set it for such a small time period.could i reduce the value of 1m preset without changing capacitor value.

#how could i use 6-0-6 value trfo to get 0-12v for above circuit.

Thanks

**Swagatam Majumdar** September 4, 2013 at 12:58 PM

Hi Avijeet,

You can any value above 10k for the 1M position and get any desired timing output.

Alternatively you can also experiment with the capacitor for the same.

Use the outer taps of the trafo and connect them with the bridge or whatever rectifier stage you are using, leave the center tap alone, it won't be required.

**avijeet agrawal** September 4, 2013 at 11:31 PM

Thanks for ur kind reply sir

[Reply](#)**Unknown** June 26, 2013 at 12:10 PM

1. multifunctional circuit is worked or not.
2. can i operate 2hp submersible on this circuit.
3. this circuit start/stop motor automatically.
4. p1=port or something else..

[Reply](#)[Replies](#)**Swagatam Majumdar** June 26, 2013 at 2:21 PM

This circuit is not fully automatic, use the following circuit which suits your application:

<http://homemadecircuitsandschematics.blogspot.in/2011/12/how-to-make-simple-water-level.html>[Reply](#)**SUHAIL M** July 13, 2013 at 2:30 PM

i make a water level monitor using a remote controlled toy car circuit.
It can can monitor water levels and alarm when tank is full.But i can't to controll the motor
Pls help me?

[Reply](#)[Replies](#)**Swagatam Majumdar** July 14, 2013 at 10:22 AM

show me the full details, i'll check it.

[Reply](#)**Raman** July 28, 2013 at 1:08 AM

Hi Swagatam,

You are having one of the best blogs which hits the nail right at the head. I am trying to make a water level indicator, but with data logging to an SD card to collect some data for research. I just wanted some advice on sensors. I would like to have some kind of sensors which won't corrode easily. What's your experience with these stainless steel or brass probes or what other alternatives do you suggest. I was also thinking of using ultrasonic distance sensor, but again I am worried that it might also corrode due to humidity in the tank. What do you say ?

Regards
Raman

[Reply](#)[Replies](#)**Swagatam Majumdar** July 28, 2013 at 1:57 PM

Hi Raman,

Thank you very much!

This question has been asked by many readers here, and as per my thinking I have suggested them to use use brass terminals tinned thoroughly with solder wire. According to me tin will remain unaffected from corrosion, but I am not sure about algae or other such formation on its surface which probably has no remedy.

Using frequency with the sensors is one option but since the receiving sensors are passive we cannot introduce frequency in them, so this option doesn't hold good either.

**Raman** July 28, 2013 at 4:00 PM

Thanks for your reply.

I think there is a strong possibility of lead poisoning if solder comes in contact with drinking water. Already there are thousand other things which could kill us and I don't think we should add one more :-)

I think some kind of contactless sensor should be a safe bet. I read somewhere people using sensors from automatic washing machines which could measure water pressure. But these

sensors will surely be difficult to find. I'll keep scratching my head for more ideas.

Regards
Raman



Swagatam Majumdar July 29, 2013 at 9:58 AM

Lead atoms would be tightly bonded inside the solder metal so there's little chance of it getting dissolved, and even if it does it will be in negligible quantity. But anyway safety is always first so it's better to avoid it and find some other similar yet safe alternative.

Regards.

[Reply](#)



Sooryanarayanan October 26, 2013 at 10:00 PM

Sir will the battery used in the first schematic be drained all the time by the ic and the incorporating circuitry????? Even the mains is present????

[Reply](#)

▼ Replies



Swagatam Majumdar October 27, 2013 at 10:39 AM

As long as mains power is present battery will not drain, when mains fails the IC will consume 5mA, and the relay 40mA (when in ON position) from the battery

[Reply](#)



Kajal November 3, 2013 at 6:45 PM

Sir can i use a 12V 10 A relay for a half hp pump?????

I have found in some articles that the initial driving current goes to 6-7 times the running current for a motor. So even though mine is a HALF Hp one drawing nominal current of 380W/230V= 1.6 A, it may have 9.6 to 11.2 A of starting current.

Also i have noticed in my relay the specifications written which i am giving below

50/60 Hz
7A 250V ~ | 10A 125V AC
12A 125V --- | 10A 28V DC

I am not at all familiar with electronics but i am very interested to do simple projects like this. I couldn't understand the exact meaning of the specification written here. So please help in this issue?
May i have to change the relay or not?

Sorry for the bad english

[Reply](#)

▼ Replies



Swagatam Majumdar November 3, 2013 at 8:28 PM

Hello Kajal,

Yes you will have to replace the existing relay with a 30amp relay or you may also try using a triac instead.....a BTA41/600 could be tried.

[Reply](#)



Anonymous November 13, 2013 at 11:42 PM

Hi Sawagatam,

How do you post a new request on your blog? This request needs a new thread.

Can you help me with this problem: In a basement sump, there are two submersible pumps with float switches (P1 and P2) installed to achieve some level of redundancy. In order to use both pumps equally, we want to alternate between P1 and P2 whenever a preset water level is reached. That is, the first time the preset level is reached P1 should start and pump the water out. Next time when the preset level is reached P2 should start and pump the water out. On next occasion it will be P1's turn and so forth. What we need is an "alternating" relay control running P1 and P2 turn by turn.

[Reply](#)

▼ Replies



Swagatam Majumdar November 14, 2013 at 9:23 PM

Requests can be posted through comments only, exactly as you have done.

I have understood your requirement, I will try to update it soon in my blog and inform you.

[Reply](#)



prikshit June 15, 2014 at 7:06 PM

I have used many type of brass/steel screws for the purpose of sensor, after sometime it will be rusty, now someone suggest put a floater switch as a sensor, can you suggest is it working on your ckt, in the floater switch there are three terminals, may i know the wiring.

Thanks
Priksht
Chandigarh

[Reply](#)

[▼ Replies](#)



Swagatam Majumdar June 16, 2014 at 9:57 AM

if you can provide me the 3 lead specification of the float switch then surely I can show you the integration method with my circuits.

I guess one lead may be assigned to the supply positive or negative, while the other two may be responsible for switching this negative or positive via reed relays in response to their specific water levels....you may confirm this for further discussion.

[Reply](#)



Prabhu Guna June 22, 2014 at 7:35 PM

this crkt working. here motor starts automatically if water level goes below point A itself(not point B (i.e.,) even if water is 1% below point A motor starts but water above point B).
i want a circuit which switches on motor only when it reaches below point B(lower point)

[Reply](#)

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Swagatam Majumdar June 23, 2014 at 9:36 AM

the first circuit will not start once it's switched OFF until SW1 is pressed, so something may not be correctly connected in your circuit.
for an automatic start and stop you can try the following design, it will provide both upper and lower limit protections:

<http://homemadecircuitsandschematics.blogspot.in/2011/12/how-to-make-simple-water-level.html>

[Reply](#)



Prabhu Guna July 1, 2014 at 10:40 PM

Hi Sawagatam,

can u make a circuit similar to the one in the link given below using 4060 with motor timing & water level controller(i.e.,)motor should run for 1 / 1.5 / 2 ,etc hours depending on the interval set or till water reaches up probe in given link.

Circuit link : <https://docs.google.com/file/d/0B8LpX4NzfdkIMm51eVdIWWUyOWM/edit?pli=1>

here motor starts only when water level goes below low probe & motor stops when it reaches up probe.

[Reply](#)

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Swagatam Majumdar July 2, 2014 at 10:48 AM

Hi Prabhu,

I already have a similar circuit in my blog, which is even more accurate since a CMOS IC is involved

<http://homemadecircuitsandschematics.blogspot.in/2011/12/how-to-make-simple-water-level.html>

[Reply](#)



Arun Dev October 10, 2014 at 2:36 PM

thank you sir for the reply.... but your answer is not suitable for my need.... i want to design a led demonstration of the solar planet system.... so in each orbital path leds should be arranged in such a way that all the LEDs in that path shouldn't blink simultaneously, in other words one after another.... if we are

gonna implement the current design in this blog for this project, it will lead to the use of 8 separate CD4017 ICs and their components... that is why i had initially asked for a LED flasher which is to be implemented to a series connected LEDs

[Reply](#)

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Swagatam Majumdar October 11, 2014 at 8:09 AM

Arun, yes you'll have to incorporate 8 separate 4017s for the different paths...you can't get the feature in one IC, or you'll have to resort to a microcontroller circuit for getting it one chip.

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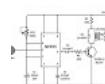
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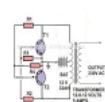
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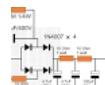
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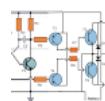
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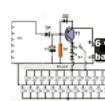
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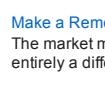
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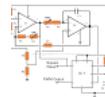


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