
Make your own 12v inverter

How do I build a 12V inverter circuit?

Connect a load, such as a small appliance or a test bulb, to the output of the inverter. Switch on the circuit and check if the load is powered on. If everything is working fine, congratulations, you have successfully built a 12V inverter circuit!

How to make a 12V 220V inverter?

Making a 12v-220v DIY Homemade Inverter inverter is not as complicated as you might think, and the steps are quite simple. First, acquire an inverter kit from your local electronics store or purchase one online. Next, connect the DC source (a 12V battery) to the input of the inverter using appropriate connecting wires.

What is a 12V inverter?

A 12V inverter is an electronic device that converts 12V direct current (DC) power from a battery into 120V alternating current (AC) power. This conversion is necessary when you want to power AC appliances or devices using a DC power source, such as a battery.

How to build an inverter?

To clearly understand how to build an inverter, let's go through the following simple construction details: As per the circuit schematic first complete the assembly of the oscillator section consisting of the smaller parts and the IC. It is best done by interconnecting the component leads itself and soldering the joints.

Make your own Power Inverter using Arduino Step by step approach is followed so that any hobbyist or design engineer can have a better understanding of the basic concepts.

What Is A Simple InverterSimple Inverter Circuit Using Cross Coupled TransistorsConstruction ProcedureUsing IC 4047Using IC 4093Another Simple Nand Gate Inverter Using MOSFETsUsing IC 4060Simplest 100 Watt Inverter For The NewcomersIf you have a single 4060 IC in your electronic junk box, along with a transformer and a few power transistors, you are probably all set to create your simple power inverter circuit using these components. The basic design of the proposed IC 4060 based inverter circuit can be visualized in the above diagram. The concept is basically the same, we us...See more on homemade-circuits

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#b_results .b_vidAns{border-radius:6px;box-shadow:0 0 0 1px
rgba(0,0,0,.05);padding:16px 20px;gap:10px;background:#fff}@charset "UTF-8";#b_results
.b_ans.b_vidAns{box-shadow:none!important;padding:var(--smtc-gap-between-content-medium)
0!important;background:var(--bing-smtc-background-ctrl-fade-on-image-stop-0)}#b_results
.b_ans.b_vidAns #serpvidans.vsacf .mc_vtvc,#b_results .b_ans.b_vidAns #serpvidans.vsacf
.mc_vtvc_th,#b_results .b_ans.b_vidAns #serpvidans.vsacf .cico,#b_results .b_ans.b_vidAns
#serpvidans.vsacf .mc_vtvc_htb,#b_results .b_ans.b_vidAns #serpvidans.vsacf .vrhc,#b_results
.b_ans.b_vidAns #serpvidans.vsacf .vrhcp,#b_results .b_ans.b_vidAns #serpvidans.vsacf .vrhtc,#b_results
.b_ans.b_vidAns #serpvidans.vsacf .vrhtpc{border-radius:var(--mai-smtc-corner-list-card-nested-
default)}#b_results .b_ans.b_vidAns #serpvidans.vsacf .mmlist .mc_vtvc,#b_results .b_ans.b_vidAns
#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta{margin:0}#b_results .b_ans.b_vidAns
#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_channel,#b_results .b_ans.b_vidAns
#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_row_channel{color:var(--smtc-
foreground-content-neutral-primary)}#serpvidans.vsacf,#serpvidans.vsacf .expctn
.expbody,#serpvidans.vsacf .mmlist{display:flex;flex-direction:column;gap:var(--smtc-gap-between-content-
medium)}#serpvidans.vsacf .cico{height:auto}#serpvidans.vsacf
.mc_vtvc_ban_lo{top:0;right:auto}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta,#serpvidans.vsacf
.mmlist .mc_vtvc .mc_vtvc_meta{height:auto;padding:var(--smtc-gap-between-content-xx-small) 0
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var(--smtc-gap-between-content-xx-small) var(--smtc-gap-between-content-medium);display:flex;flex-
direction:column;justify-content:space-between}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_title,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_title{color:var(--smtc-ctrl-link-fo
reground-brand-rest);font:var(--bing-smtc-text-global-body2);height:auto;display:-webkit-box;-webkit-line-
clamp:2;-webkit-box-orient:vertical}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area,#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block{displ
ay:flex;flex-direction:column;gap:var(--smtc-padding-ctrl-text-side)}#serpvidans.vsacf .mc_cwvc .mc_vtvc
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.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row{color:var(--smtc-foreground-content-neutral-pri
mary);height:var(--mai-smtc-padding-card-default);font:var(--bing-smtc-text-global-
caption1)}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area
.mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before,#serpvidans.vsacf
.mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before{content:" " }#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_pubdate{color:var(--bing-smtc-foreground-content-
neutral-tertiary);padding-bottom:0}.vsacf .mc_cwvc .mc_vtvc_con_rc,.vsacf .mmlist
.mc_vtvc_con_rc{display:flex}.vsacf .mc_cwvc .mc_vtvc_con_rc .mc_vtvc_meta_w,.vsacf .mmlist
.mc_vtvc_con_rc .mc_vtvc_meta_w{height:auto}.vsacf .b_title{padding-left:var(--mai-smtc-padding-card-
default)}.vsacf .b_title .mmtitle{font:var(--bing-smtc-text-global-subtitle1-strong);margin-bottom:0}.vsacf
.b_title .mmtitle a::after{content:"";margin:5px 5px 0 0;border-top:2px solid var(--smtc-foreground-content-
neutral-primary);border-right:2px solid var(--smtc-foreground-content-neutral-primary);background-size:7px
7px;width:7px;height:7px;transform:rotate(45deg);display:inline-block;margin-left:4px}#serpvidans.vsacf
.b_title .mmtitle{margin-bottom:0}#serpvidans.vsacf .b_title .mmtitle a{color:var(--smtc-foreground-content-
neutral-primary)}#serpvidans.vsacf .cardless.mmlist .mc_vtvc_con_rc,#serpvidans.vsacf .cardless.mmlist
.mc_vtvc_th{height:auto}#serpvidans.vsacf .vsb_tr_c.va_tt{margin:0}#serpvidans.vsacf .vtbc
.mv_vtvc_play,#serpvidans.vsacf .vtbc .mv_vtvc_play_ext{position:static}#serpvidans.vsacf .va_tt
.mc_vtvc_ban_lo{display:block}#serpvidans.vsacf .mc_bc{width:auto;border-radius:var(--smtc-ctrl-badge-
sm-corner);padding:var(--smtc-padding-ctrl-text-side) var(--smtc-gap-between-content-xx-
small)}#serpvidans.vsacf .rmts .mc_bc ems{display:none}#serpvidans.vsacf a.vsb_tr_t{color:var(--smtc-
foreground-content-neutral-primary)}.vsacf .va_tt .vsb_tr_chd
.mc_vtvc_th_dock.rmoveoverlay{height:36px}.vsacf .va_tt .vsb_tr_chd .mc_vtvc_th_dock{height:92px;backgro
und:linear-gradient(180deg,var(--bing-smtc-background-ctrl-fade-on-image-stop-0) 0%,var(--mai-smtc-
background-ctrl-on-image-rest) 100%)}.vsacf .va_tt a.vsb_tr_t{padding:0 20px;font:var(--acf-font-
title-2-strong)}.vsacf .va_tt .vsb_tr_chd .mc_vtvc .mc_vtvc_meta,.vsacf .va_tt .vsb_tr_chd .mc_vtvc
.mc_vtvc_title{color:var(--mai-smtc-foreground-ctrl-on-image-rest)}.vsacf span.vcmt_ctt{font:var(--bing-smtc-
text-global-caption2);margin:var(--smtc-gap-between-content-xx-small) 0 0;height:16px}#serpvidans.vsacf
.vsb_tr_chd .mc_vtvc_tot .mc_vtvc_title strong{font-size:14px;line-
height:20px;display:unset}#serpvidans.vsacf .va_tt .b_slgrp.slide:not(:first-child){margin-left:var(--smtc-gap-
between-content-small)}#serpvidans.vsacf .va_tt .vsb_tr_chd .mc_vtvc .mc_vtvc_title{white-
space:normal;display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical}#serpvidans.vsacf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion{background-color:var(--bing-smtc-b
ackground-ctrl-neutral-rest);display:flex;justify-content:center;align-items:center;gap:4px;width:fit-
content;height:auto;padding:8px 12px}#serpvidans.vsacf .b_module_expansion_control .b_btnContainer
.b_CompactExpansion .b_CompactExpansionBtnText{font:var(--bing-smtc-text-global-
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caption1-strong);color:var(--bing-smtc-foreground-content-brand-rest))#serpvidans.vsaf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion
.b_arrow{display:flex;margin:0;height:auto}#serpvidans.vsaf .b_module_expansion_control
.b_btnContainer .b_CompactExpansion .b_arrow path#Shape{fill:var(--bing-smtc-foreground-content-brand-
rest))#serpvidans.vsaf .b_module_expansion_control .b_btnContainer::after{content:"";position:absolute;w
idth:100%;bottom:20px;left:0;height:1px;border-radius:1px;background:var(--smtc-stroke-ctrl-on-neutral-
rest))#b_results .b_ans.b_vidAns{box-shadow:none;padding:12px 20px 0}#b_results .b_ans.b_vidAns
.vsaf{padding:unset;margin:0}#b_results .b_ans.b_vidAns .vsa .b_attribution{padding-
bottom:0}#b_results .b_ans.b_vidAns .cardless .salink{margin:0}#b_results .b_ans.b_vidAns .mmlist
.mc_vtvc{margin-top:10px}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta{display:flex;flex-
direction:column;justify-content:space-between;margin:0 10px 4px 12px}#b_results .b_ans.b_vidAns
.mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_channel{color:#111}#b_results .b_ans.b_vidAns .mmlist
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_row_channel.#b_results .b_ans.b_vidAns .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area{color:#666}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area{bottom:0;height:unset}.b_dark .vsa.cardless .mc_vtvc{backgro
und-color:unset}.mmtitle>a{display:block}.mc_fh{height:100%;border-
radius:6px}.mc_tc_bs{overflow:hidden}.mmlist .mc_vtvc .mc_vtvc_meta { padding: 12px 16px 16px 16px; }
.mmlist .mc_vtvc .mc_vtvc_meta_w { height: 112px; margin-top: -0px; } .mmlist .mc_vtvc .mc_vtvc_title {
height: 44px; line-height: 22px; margin-bottom: 0px; margin-top: 0px; } .mmlist .mc_vtvc
.mc_vtvc_meta_block_area { height: 40px; } .mmlist .mc_vtvc .vtmu, .mmlist .mc_vtvc .vtpl { bottom: 120px;
} .mmlist .mc_vtvc_th_dock { height: 112px; } .mmlist .mc_vtvc_th .cico { height: 131px; }
.mc_vtvc{background-color:#fff;box-shadow:0 0 0 1px rgba(0,0,0,.05);line-height:0;margin:0;position:relativ
e;border-radius:6px;overflow:hidden}.mc_vtvc.noshadow{box-shadow:none}.mc_vtvc_con_rc{border-radius
:6px;overflow:hidden;position:relative}.mc_vtvc>a{color:#71777d;display:block;text-
decoration:none;width:100%}.mc_vtvc>a:focus::after{outline:2px solid #00a89d;width:100%;height:100%;c
ontent:"";outline-offset:-2px;position:absolute;top:0;left:0}.mc_vtvc_th{background-
color:#d5d5d5;position:relative}.mc_vtvc_th .cico{border-radius:0}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{positi
on:absolute;vertical-align:middle}.mc_vtvc_ban_lo{bottom:0}.mc_vtvc_ban_up{top:0}.mc_vtvc_title{font-
weight:normal;margin-bottom:11px;overflow:hidden;color:#111;height:54px;line-height:18px}.mc_vtvc_title
a{display:inline-block;color:#111}.mc_vtvc_title a:hover{text-decoration:underline}.mc_vtvc_src_ico{float:left
;margin-right:4px}.mc_vtvc_act{height:16px;margin-top:-40px;padding:12px 8px;z-index:1}.mc_vtvc_actc{ri
ght:16px;bottom:16px;position:absolute;display:inline-block;z-index:1}.mc_vtvc_act_sep{border-top:1px
solid #d5d5d5;height:40px;margin:0 8px}.mc_vtvc_fh .mc_vtvc_act_sep,.mc_vtvc_fh
.mc_vtvc_act{visibility:hidden}#serpvidans .b_topTitle{margin-bottom:8px}.mc_vtvc_htc{width:100%;height:
100%;position:absolute;top:0;bottom:0;left:0;right:0}.mc_vtvc_htb{width:100%;height:100%;background:rgb
a(0,0,0,.7);position:absolute;top:0;bottom:0;left:0;right:0}.mc_vtvc_ht{width:100%;padding:0 16px;line-heigh
t:16px;color:#fff;text-decoration:underline;word-break:break-word;box-sizing:border-box;vertical-align:middl
e;text-align:center}.mc_vtvc_th_live_b{background-color:#c80000;color:#fff;display:inline-block;padding:2px
8px;font:11px/14px Arial;border-radius:2px;text-
transform:uppercase;height:15px;width:26px;position:absolute;left:8px;top:110px}.isvctrl .isv
.mc_vtvc_ban_up{left:0;right:initial}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{right:0}.vt_text.b_lRight
.b_lLeft{margin:0 0 0 1px;height:14px;line-height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-
radius:2px;font-weight:bold}.mc_vthtb{width:100%;height:100%;background:rgba(0,0,0,.7);position:absolut
e;top:0;bottom:0;left:0;right:0;display:table}.mc_vtht{width:100%;padding:0 16px;line-height:16px;color:#fff;t
ext-decoration:underline;word-break:break-word;box-sizing:border-box;vertical-align:middle;text-
align:center;display:table-cell}.vt_text.b_lRight .b_lLeft{margin:0 0 0 1px;height:14px;line-
height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-radius:2px;font-weight:bold}.emptyStyleFo
rDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.mc_vtvc_center_play{width:32px;heig
ht:32px;background-size:contain;position:absolute;margin:auto;bottom:0;top:0;left:0;right:0;box-shadow:no
ne;border-radius:0}.mc_vtvc_center_play.rmvbg{width:32px;height:32px;background-
image:none}.mc_vtvc_htb,.mc_vtvc_ht{display:none}.vt_onhv .mc_vtvc_htb{display:table}.vt_onhv
.mc_vtvc_ht{display:table-cell}.mc_vtvc_center_play{display:inline-block}.vt_onhv
.mc_vtvc_center_play{display:none}.mc_vtvc .vtmu,.mc_vtvc .vtpl{bottom:163px}.vsarf .mc_vtvc
.vtmu,.vsarf .mc_vtvc .vtpl{bottom:122px}.svarh #mmcar .mc_vtvc .vtmu,.svarh #mmcar .mc_vtvc
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block;position:absolute;bottom:8px;left:9px;height:8px;width:7px}.vtbc
.mv_vtvc_play_ext{background:url(/rp/Lp38sn_O4jegSK0IHxZVxyp-yKQ.png) -172px -31px;display:inline-
block;height:8px;width:12px;position:absolute;bottom:8px;left:6px}.vtbc .pivot{height:20px;width:8px;min-
width:8px}.vtbc .mv_vtvc_play{background:url(
AAcAAAAIBAMAAADHKvg1AAAAIVBMVEX//////////9/gMdvAAAACnRSTIMAETNEVW
almbvu04D1oAAAAB9JREFUCB1jmMoABKuaQcSqQhCxCkGFGgLnNQlKpQAwA8zkLyQAI6F0AAAAASUV
ORK5CYII=)}.mc_bc_w{height:18px;padding:8px;text-align:right}.mc_bc{background-
color:rgba(0,0,0,.75);padding:2px 8px;line-height:14px;color:#fff;display:inline-block;vertical-
align:middle;border-radius:2px;font-weight:bold}.mc_bc_w .pivot{text-align:center;margin-
right:1px;height:14px}.vsarr .mmgrid .mc_bc_w .mc_bc{background-color:rgba(0,0,0,.75);opacity:1}.mmgrid
>div{width:197px;display:inline-block;margin-right:8px;margin-bottom:8px;box-shadow:0 0 0 1px rgba(0,0,0
,.05);position:relative;vertical-align:top;overflow:hidden;white-space:normal;border-radius:6px}.vsarr
.mmgrid>div,.vsarr1stbig .mmgrid>div{margin-right:8px;margin-bottom:8px}#serpvidansrr .mc_vtvc
.mcv_tvc .mc_vtvc_meta{height:auto}#serpvidansrr .mc_vtvc .mc_vtvc_title{display:-webkit-box;-webkit-line-
clamp:2;-webkit-box-orient:vertical}.mmgrid .mc_tc{border:0}.vsa .mmgrid>div:nth-child(3n){margin-
right:0}.vsa .b_moreLink{padding-top:4px}#serpvidansrr .mc_vtvc_meta_row{line-height:18px;font-
size:100%;height:17px}.vsarr .mmgrid>div:nth-child(2n){margin-right:0}#serpvidansrr .mc_vtvc
.vtmu,#serpvidansrr .mc_vtvc .vtpl{bottom:128px}.vsarr1stbig .mmgrid>div:nth-child(2){margin-
right:0}#serpvidansrr .uipolish .mc_vtvc_meta_pubdate,#serpvidansrr .uipolish
.mcv_tvc .mc_vtvc_meta_channel,#serpvidansrr .uipolish #vidans2 .b_videocard .video_metadata
.video_source{color:#767676}#serpvidansrr #vidans2 .b_videocard
.video_metadata_container,#serpvidansrr #vidans2 .b_videocard .video_metadata_container
.video_metadata>h3{width:100%}@media(max-width:1362.9px){#serpvidansrr
.mmgrid>div{width:168px;height:206px}#serpvidansrr .mmgrid>div .cico,#serpvidansrr .mmgrid>div .cico
.rms_img{width:168px;height:100px}#serpvidansrr .mc_vtvc .mc_vtvc_meta{padding:12px}#serpvidansrr
.mcv_tvc .mc_vtvc_title{height:32px;line-height:16px;margin-bottom:16px}#serpvidansrr .mc_vtvc
.mcv_tvc_meta_block_area{height:34px}#serpvidansrr .mc_vtvc_meta_row{line-height:15px;font-
size:13px;height:15px}#serpvidansrr .mc_vtvc_meta_pubdate{padding-bottom:4px}#serpvidansrr .mc_vtvc
.vtmu,#serpvidansrr .mc_vtvc .vtpl{bottom:114px}#serpvidansrr #vidans2 .b_videocard
.videoPlayer,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico .rms_img{width:343px!important;height:194px!important;margin-right:0}@media(max-
width:1274.9px){#serpvidansrr .mmgrid>div{width:124px;height:164px}#serpvidansrr .mmgrid>div
.cico,#serpvidansrr .mmgrid>div .cico .rms_img{width:124px;height:76px}#serpvidansrr .mc_vtvc
.mcv_tvc .mc_vtvc_meta{padding:8px}#serpvidansrr .mc_vtvc .mc_vtvc_title{height:32px;line-height:16px;margin-
bottom:12px}#serpvidansrr .mc_vtvc .mc_vtvc_meta_block_area{height:28px}#serpvidansrr
.mcv_tvc .mc_vtvc_meta_row{line-height:13px;font-size:11px;height:13px}#serpvidansrr
.mcv_tvc .mc_vtvc_meta_pubdate{padding-bottom:2px}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:96px}#serpvidansrr #vidans2 .b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico
.rms_img{width:256px!important;height:144px!important;margin-right:0}#serpvidansrr .maskthumb
.mcv_tvc .mc_vtvc_w{padding:8px 4px 4px 8px}#serpvidansrr .withsplitline .mmgrid>div:nth-last-
child(1),#serpvidansrr .withsplitline .mmgrid>div:nth-last-child(2){margin-
bottom:24px}#serpvidansrr .withsplitline .mmgrid{border-bottom:1px solid #ecec; margin-
bottom:16px}#serpvidansrr #vidans2 .b_videocard .video_metadata{max-width:auto;padding:12px
16px}#serpvidansrr #vidans2 .b_videocard{margin-bottom:12px;box-shadow:0 0 1px rgba(0,0,0,.05),0 2px
3px rgba(0,0,0,.1);border-radius:6px}#serpvidansrr .b_rich{padding-top:0}#serpvidansrr #vidans2
.videoPlayer{border-radius:6px 6px 0 0;overflow:hidden}#serpvidansrr #vidans2 .b_videocard .video_meta
data>h3{white-space:nowrap;overflow:hidden;text-overflow:ellipsis;-webkit-line-clamp:1;line-height:15px;he
ight:15px;font-size:13px;color:#000;margin-bottom:20px;font-family:Arial,Helvetica,Sans-Serif;font-
style:normal;display:block}#serpvidansrr .vsarr1stbig #vidans2 .b_videocard .video_metadata
.actionmenu{display:none}#serpvidansrr #vidans2 .b_videocard .video_summary,#serpvidansrr #vidans2
.b_videocard .video_source{line-height:15px}#serpvidansrr #vidans2 .b_videocard .videoPlayer
.vtbc{right:0}.vrhc line.nhvpv .pffvi,.vrhc line.nhvpv[data-tps="S"] .pffvt,.vrhc line.nhvpv[data-tps="M"]
.pffvt,.vrhc line.nhvpv[data-tps="L"] .pffvt{display:inline-flex}.vrhc line.nhvpv .vrhc.pffv
```

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.vrhol{display:none}.vrhc line.nhvpv .vrhc.pffv .player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color .5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);gap:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.mc_vtvc_th img{transition:all .3s ease-out}.nhvpv+.mc_vtvc_th img{transform:scale(1.1)}.smtplayerhtml5{height:100%;width:100%;overflow:hidden}.smtplayerhtml5 video{min-height:100%;min-width:100%}.smtplayerhtml5 .videoplaying{background-color:#000}.smtplayerhtml5.hide{display:none}.pffvt{display:none;color:var(--mai-smtc-foreground-ctrl-on-image-rest);font:var(--bing-smtc-text-global-subtitle2-strong)}.pffvi{mask:url(/rp/ui07wU6K7FR_inzG7DRbP1i8fGo.svg) center no-repeat;mask-size:12px;background:var(--bing-smtc-background-card-on-image-default);width:20px;height:20px;flex-shrink:0;align-self:flex-start}[data-tps="L"] .pffvt{font:var(--bing-smtc-text-global-subtitle2-strong)}[data-tps="L"] .pffvi{width:22px;height:22px;mask-size:16px}[data-tps="S"] .pffvt{font-size:0}[data-tps="S"] .pffvi{width:24px;height:24px;mask-size:24px;align-self:center}.hvpv.h5s .pffvt{display:inline-flex}.hvpv.h5s .vrhc.pffv .vrhol{display:none}.hvpv.h5s .vrhc.pffv .player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color .5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);gap:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.pffvt{text-decoration:underline}.vrhcp .vrhol{position:absolute;width:100%;height:35px;max-height:35px;bottom:0;left:0;padding:0;background:none;display:block;z-index:9}.vrhcp .vrhol.hide,.vrhcp .vrhol .hide{display:none}.vrhot{white-space:nowrap;text-overflow:ellipsis;overflow:hidden;display:inline-block;position:absolute;max-width:240px;height:18px;line-height:14px;margin-left:8px;top:10px;left:0;right:0;border-radius:2px;padding-right:8px}.vrhot div{display:inline-block}.vrhot nt{color:#fff;font-size:11px;font-weight:bold;background-color:rgba(0,0,0,.75);padding:2px 8px;margin-left:0;top:0;box-sizing:border-box;position:relative}.vrhc .ricons{position:absolute;right:8px;top:10px;left:auto;bottom:auto;height:18px;display:inline-block;cursor:pointer}.vrhol.icons_1 .vrhot{margin-right:27px}.vrhol.icons_2 .vrhot{margin-right:49px}.vrhol.icons_3 .vrhot{margin-right:79px}.vrhol .vrhot nt,.vsb_tr_chd .vrhol.icons_1 .vrhot{margin-right:0}.vpb{position:absolute;display:block;bottom:0;left:0;height:4px}.vpb div{position:absolute}.vpb nt{width:0;background:#fff}.vpb nt.test{display:none}.vpb.back{background-color:#999}.vrhcp .vrhol.npb{height:36px;max-height:36px}.vrhol .vadda{width:22px;height:18px;padding:0;margin-right:0;margin-left:2px;bottom:0;position:relative;display:inline-block;z-index:1;background:rgba(0,0,0,.75);border-radius:2px;overflow:hidden}.vrhol .vadda.hide{display:none}.vrhol .vadda.mc_vfaa{margin:3px 5px}.ricons .vol{float:left}.ricons .adultFlag{float:right}.vol{width:22px;height:18px;bottom:0;margin-left:1px;margin-right:1px;position:relative;display:inline-block}.vol.hide,.vol .hide{display:none}.vol .bg{background:rgba(0,0,0,.75);border-radius:2px}.vol.bg,.vol nt{position:absolute;bottom:0}.vol.bg.volnb{border-radius:0 0 2px 2px}.vol .volsliderHandle.bg{border-radius:2px 2px 0 0}.vol nt .volsliderHandle{height:70px;display:none;width:22px;float:left;bottom:18px;position:absolute;display:block}.vol nt .volsliderHandle.hide{display:none}.volsliderHandle .vsb{height:54px;width:4px;background-color:#999;margin:9px auto 8px;position:relative;display:block;border-radius:2px}.volsliderHandle .vsh{height:6px;width:14px;padding:9px 7px 9px 7px;margin:0 -12px;display:block;position:absolute;top:30px}.volsliderHandle .vsh.hide{display:none}.volsliderHandle .vshi{height:4px;width:14px;background-color:#fff;border-radius:2px}.volMuteIcon{width:16px;height:14px;margin:2px 4px;float:left}.volMuteHandle{width:22px;height:18px}.vo{background:url(/rp/ffZxBXEIP9WYOO0jhTaElyLhEVU.svg) no-repeat}.vm{background:url(/rp/fsX-ZVd03wB2TL0vmQJxSp4U9vs.svg) no-repeat}.vl{background:url(/rp/YXYMPC1Rry_XJGc7Yg8IR4B2eEs.svg) no-repeat}.vf{background:url(/rp/NosrlR4amKtS1zYxWy3laZN3HRk.svg) no-repeat}@media(forced-colors:active){.vol{forced-color-adjust:none}}.vrhc line .vt_vp,.vrhc.popout .vt_vp,.vrhc.mousefollow .vt_vp{position:absolute;bottom:0;border:1px solid transparent;padding:0;top:0;left:0;z-index:3}.vrhc .hide{display:none}.vrh_clc .vt_vp,.vrh_clc .vrhc .vrhi,.vrh_clc .player_ol{cursor:pointer}.vrh_clc .cico{border-radius:0}.vrhc{border:1px solid transparent;border-top:0;left:0;padding:0}.vrhc.mousefollow .vrhc,.vrhc.popout .vrhc{background-color:#999}.vrhtpc.load .player_ol{background:url(/rp/J_o2maogFDeUOsovPJL-ofEuxJ4.gif) center center no-repeat}.vrhc line .vrhc .vrhi,.vrhc.popout .vrhc .vrhi,.vrhc.mousefollow .vrhc .vrhi{position:absolute!important;border:1px solid transparent;border-top:0;left:0;top:0}.player_ol{position:absolute;width:100%;height:100%;bottom:0;border:1px solid transparent;z-index:7}.vrhc.popout,.vrhc line,.vrhc.mousefollow{border
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r-radius:6px;overflow:hidden;display:table-row-group;background:none}.vrhc.popout,.vrhc.mousefollow{z-index:4;box-shadow:0 4px 4px rgba(0,0,0,.1),0 2px 80px rgba(0,0,0,.2)}.vrhc line{z-index:1;margin:0}.vrhc.popout,.vrhc line{position:absolute;top:0}.vrhc.popout{border:1px solid #fff}.vrhc.mousefollow{position:fixed}.vrhcx{position:relative;top:0;left:0;display:table-row}.vrhcx.vrhc{position:relative;overflow:hidden}.vrhc.hide{display:none}@keyframes vh_fadein{from{opacity:0}to{opacity:1}}.vrhc:not(.hide){animation:vh_fadein 250ms}.vrhc line img{color:transparent}.vrhc line.fullsize{height:100%}.vrhc,.vrhc: hover,.vrhc: link,.vrhc: active,.vrhc: visited{color:#000;text-decoration:none}.vrhc.vrh_clc{cursor:pointer}a.hover-anchor{display:block;height:100%;width:100%;text-decoration:none}.vrhstat{height:0;overflow:hidden}Videos of Make Your Own 12V InverterWatch video on instructables How to Make 12V DC to 220V AC Inverterinstructables Oct 1, 2020Watch video on MSN4:51How to Make Inverter at Home DIY ExperimentsMSNIdeas corner2 weeks agoWatch video on MSN4:51How to Make Inverter at Home DIY ExperimentsMSNIdeas corner3 months agoWatch full video.rcimgcol .cico { background: #f5f5f5; }.b_drk.rcimgcol .cico, .b_dark.rcimgcol .cico { background: unset; }.b_imgSet .b_hList li.square_m,.b_imgSet .b_hList li.tall_m{width:75px}.b_imgSet .b_hList li.tall_mlb{width:113px}.b_imgSet .b_hList li.tall_mln{width:96px}.b_imgSet .b_hList li.wide_m{width:128px}.b_imgSet .b_Card .b_hList li{padding-left:1px;padding-right:9px}.b_imgSet .b_Card .b_hList li.tall_wfn{width:80px;padding-right:6px}.b_imgSet .b_Card .b_hList li:last-child{padding-right:1px}.b_imgSet .b_Card .b_imgSetData{padding:0 8px 8px;height:40px}.b_imgSet .b_Card .b_imgSetItem{box-shadow:0 0 0 1px rgba(0,0,0,.05),0 2px 3px 0 rgba(0,0,0,.1);border-radius:6px;overflow:hidden}.b_imgSet .b_imgSetData p a{color:#444;outline-offset:0}.b_subModule .b_clearfix.b_mhdr .b_floatR .b_moreLink,.b_subModule .b_clearfix.b_mhdr .b_floatR .b_moreLink:visited,.b_subModule>.b_moreLink,.b_subModule>.b_moreLink:visited{color:#767676}.b_imgSet .cico.b_placeholder{display:flex;justify-content:center;background-color:#f5f5f5;background-clip:content-box}.b_imgSet .cico.b_placeholder a{display:flex}.b_imgSet .cico.b_placeholder a img{width:48px;height:48px;margin:auto}@media(max-width:1362.9px){#b_context .b_entityTP .b_imgSet li:nth-child(5){display:none}.b_imgSet .b_hList li.wide_m:nth-child(3){display:none}}@media(max-width:1274.9px){#b_context .b_entityTP .b_imgSet li:nth-child(4){display:none}.b_imgSet .b_hList li.wide_m:nth-child(2){display:none}}.rcimgcol .b_imgSet{content-visibility:auto;contain-intrinsic-size:1px 124px}.rcimgcol{height:108px;padding-top:var(--smtc-gap-between-content-x-small);padding-bottom:var(--smtc-gap-between-content-x-small)}.b_algo:has(.b_agh) .rcimgcol{padding-top:var(--smtc-gap-between-content-xx-small)}.rcimgcol .b_imgSet{overflow:hidden}.rcimgcol .b_imgSet ul{overflow-x:auto;overflow-y:hidden;white-space:nowrap;padding-left:var(--mai-smtc-padding-card-default)}.rcimgcol .b_imgSet ul::-webkit-scrollbar{webkit-appearance:none}.rcimgcol .b_imgSet .b_hList>li{padding-right:var(--smtc-padding-ctrl-text-side)}.rcimgcol .b_imgSet .cico{border-radius:unset}.rcimgcol .b_imgSet .b_hList>li:first-child .cico,.rcimgcol .b_imgSet .b_hList>li:first-child .cico a{border-radius:unset;border-top-left-radius:var(--smtc-corner-card-rest);border-bottom-left-radius:var(--smtc-corner-card-rest);overflow:hidden}.rcimgcol .b_imgSet .b_hList>li:last-child .cico,.rcimgcol .b_imgSet .b_hList>li:last-child .cico a{border-radius:unset;border-top-right-radius:var(--smtc-corner-card-rest);border-bottom-right-radius:var(--smtc-corner-card-rest);overflow:hidden}.rcimgcol .rcimgcol .b_sideBleed{margin-left:unset;margin-right:unset}.rcimgcol .b_imgclgovr{cursor:pointer}.rcimgcol .b_imgclgovr .cico img: hover{transform:scale(1.05);transition:transform .5s ease}#b_content #b_results>.b_algo .b_caption:has(.rcimgcol){padding-right:var(--mai-smtc-padding-card-default);margin-right:calc(-1*var(--mai-smtc-padding-card-default));margin-left:calc(-1*var(--mai-smtc-padding-card-default));padding-left:var(--mai-smtc-padding-card-default)}.rcimgcol .b_imgSet .b_hList .cico a{display:flex;outline-offset:-2px}SightsOverlay,#OverlayIFrame.b_mcOverlay sightsOverlay{position:fixed;top:5%;left:5%;bottom:5%;right:5%;width:90%;height:90%;border:0;border-radius:15px;margin:0;padding:0;overflow:hidden;z-index:9;display:none}#OverlayMask,#OverlayMask.b_mcOverlay{z-index:8;background-color:#000;opacity:.6;position:fixed;top:0;left:0;width:100%;height:100%}.b_algoTextCarousel{margin-left:calc(-1*var(--mai-smtc-padding-card-default));margin-right:calc(-1*var(--mai-smtc-padding-card-default));padding-bottom:var(--smtc-gap-between-content-x-small)}.b_algoTextCarousel .b_insideSlide{padding:var(--mai-smtc-padding-card-default);height:200px;width:200px;display:flex;flex-direction:column;border-radius:var(--smtc-corner-card-rest);border:1px solid var(--smtc-stroke-ctrl-on-neutral-rest);box-sizing:border-box;background:var(--smtc-background-card-on-primary-default-rest)}.b_algoTextCarousel .b_insideSlide: hover{background:var(--smtc-background-card-on-primary-default-hover)}.b_algoTextCarousel .b_insideSlide: active{background:var(--
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smtc-background-card-on-primary-default-pressed)}.b_algoTextCarousel .b_slidebar .slide{border-
radius:var(--smtc-corner-card-rest)}.b_algoTextCarousel .b_slidebar .slide a:hover{text-
decoration:none}.b_algoTextCarousel .b_slidebar .slide .b_text{color:var(--smtc-foreground-content-neutral
-secondary);font:var(--bing-smtc-text-global-body3);display:-webkit-box;-webkit-box-orient:vertical;-webkit-
line-clamp:7;overflow:hidden;text-overflow:ellipsis;word-wrap:break-word}.b_algoTextCarousel
.b_textcarouselfooter{margin-top:auto}.b_algoTextCarousel .b_textcarouselfooter .b_upvote .rms_img{heig
ht:12px;width:12px;padding-right:var(--smtc-gap-between-content-xx-small);vertical-align:middle;margin-
top:-2px}.b_algoTextCarousel .b_textcarouselfooter .b_upvote{font:var(--bing-smtc-text-global-
caption2);color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}.b_algoTextCarousel .b_slidebar
.slide:has(.b_textcarouselfooter) .b_text{-webkit-line-clamp:6}.b_algoTextCarousel .b_algoTxCalSml
.b_insideSlide{padding:var(--smtc-gap-between-content-small) var(--mai-smtc-padding-card-
default);height:88px}.b_algoTextCarousel .b_algoTxCalSml .b_slidebar .slide .b_text{-webkit-line-
clamp:3}.b_acf_crs1 .slide.b_crs1itm>*.last-child,.b_acf_crs1 .b_slideexp,#b_topw .b_wpt_container
.b_slidesContainer:has(.b_acf_crs1) .b_slidesContainer{margin-bottom:unset}#b_topw
.b_wpt_container:has(.b_acf_crs1) .b_viewport{padding:unset}#b_topw .b_wpt_container
.b_wpt_bl:has(.b_acf_crs1){overflow:visible}.b_acf_crs1 .b_slidesContainer
.slide.b_crs1itm{overflow:unset}.b_acf_crs1 .btn.next .bg,.b_acf_crs1 .btn.prev
.bg{background:unset}#b_topw .b_wpt_container .b_acf_crs1 .btn.bld.next,#b_topw .b_wpt_container
.b_acf_crs1 .btn.bld.prev,.b_acf_crs1 .btn.next,.b_acf_crs1 .btn.prev{z-index:5}.b_acf_crs1 .b_fadebg .btn.next
.bg{background:linear-gradient(90deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0)
0%,var(--smtc-background-card-on-primary-default-rest) 60%)}.b_acf_crs1 .b_fadebg .btn.prev
.bg{background:linear-gradient(270deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0)
0%,var(--smtc-background-card-on-primary-default-rest) 60%)}.b_dark .b_acf_crs1 .b_slidebar
.slide{background-color:unset}[dir="rtl"] .b_acf_crs1 .b_fadebg .btn.next .bg{background:linear-
gradient(270deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0) 0%,var(--smtc-background-card-
on-primary-default-rest) 60%)}[dir="rtl"] .b_acf_crs1 .b_fadebg .btn.prev .bg{background:linear-
gradient(90deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0) 0%,var(--smtc-background-card-
on-primary-default-rest) 60%)}.b_acf_crs1 .hovexp .leftmost .b_overlay .b_viewport,.b_acf_crs1 .hovexp
.leftrightmost .b_overlay .b_viewport,.b_acf_crs1 .hovexp .b_overlay .b_viewport{padding-left:var(--smtc-gap
-between-content-x-large)!important;margin-left:calc(var(--smtc-gap-between-content-x-
large)*-1)!important}.b_acf_crs1 .hovexp .middle .b_overlay .b_viewport,.b_acf_crs1 .hovexp .rightmost
.b_overlay .b_viewport{padding-left:unset!important;margin-left:unset!important}.b_colg_4xs .slide{margin-
inline-end:var(--smtc-padding-ctrl-text-side)!important}.b_rowg_4xs .slide>{*margin-bottom:var(--smtc-
padding-ctrl-text-side)!important}.b_colg_3xs .slide{margin-inline-end:var(--smtc-padding-ctrl-sm-text-
top)!important}.b_rowg_3xs .slide>{*margin-bottom:var(--smtc-padding-ctrl-sm-text-
top)!important}.b_colg_2xs .slide{margin-inline-end:var(--smtc-gap-between-content-xx-
small)!important}.b_rowg_2xs .slide>{*margin-bottom:var(--smtc-gap-between-content-xx-
small)!important}.b_colg_xs .slide{margin-inline-end:var(--smtc-gap-between-content-x-
small)!important}.b_rowg_xs .slide>{*margin-bottom:var(--smtc-gap-between-content-x-
small)!important}.b_colg_s .slide{margin-inline-end:var(--smtc-gap-between-content-
small)!important}.b_rowg_s .slide>{*margin-bottom:var(--smtc-gap-between-content-
small)!important}.b_colg_m .slide{margin-inline-end:var(--smtc-gap-between-content-
medium)!important}.b_rowg_m .slide>{*margin-bottom:var(--smtc-gap-between-content-
medium)!important}.b_colg_l .slide{margin-inline-end:var(--mai-smtc-padding-card-
default)!important}.b_rowg_l .slide>{*margin-bottom:var(--mai-smtc-padding-card-
default)!important}.b_colg_xl .slide{margin-inline-end:var(--smtc-gap-between-content-x-
large)!important}.b_rowg_xl .slide>{*margin-bottom:var(--smtc-gap-between-content-x-
large)!important}.b_colg_2xl .slide{margin-inline-end:var(--smtc-gap-between-content-xx-
large)!important}.b_rowg_2xl .slide>{*margin-bottom:var(--smtc-gap-between-content-xx-
large)!important}.b_colg_3xl .slide{margin-inline-end:var(--smtc-padding-content-xx-
large)!important}.b_rowg_3xl .slide>{*margin-bottom:var(--smtc-padding-content-xx-
large)!important}.b_colg_4xl .slide{margin-inline-end:var(--smtc-padding-content-xxx-
large)!important}.b_rowg_4xl .slide>{*margin-bottom:var(--smtc-padding-content-xxx-large)!important}.b_ac
f_card{box-sizing:border-box;border-radius:var(--smtc-corner-card-rest);-webkit-user-select:none;user-sele
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ct:none;position:relative;width:100%;height:100%}.b_acf_card.b_acf_bckgnd{background:var(--bing-smtc-b
 ackground-card-on-primary-alt-rest)}.b_acf_card_link{border-radius:var(--smtc-corner-card-rest);outline-offs
 et:-1px;position:absolute;width:100%;height:100%}.b_acf_card_link:hover{text-decoration:unset}.acf_col1_
 4{width:140px}.acf_col1_6{width:160px}.acf_col1{width:88px}.acf_col2{width:200px}.acf_col3{width:312px}
 .acf_col4{width:424px}.acf_col5{width:536px}.acf_col6{width:648px}.acf_col7{width:760px}.acf_col8{width:
 872px}.acf_col9{width:984px}.acf_col10{width:1096px}.acf_col11{width:1208px}.acf_col12{width:1320px}.a
 cf_row1{height:88px}.acf_row2{height:200px}.acf_row3{height:312px}.acf_row4{height:424px}.acf_row5{he
 ight:536px}.acf_row6{height:648px}.acf_row7{height:760px}.acf_row8{height:872px}.acf_row9{height:984p
 x}.acf_row10{height:1096px}.acf_row11{height:1208px}.acf_row12{height:1320px}.b_slideexp{margin-
 bottom:20px;position:relative}.b_ans>.b_slideexp>.slide:last-child,.b_ans>.b_slideexp:last-child,.b_vPanel
 .b_slideexp:last-child{margin-bottom:0;padding-bottom:0}.b_slidebar .slide{display:inline-block;vertical-
 align:top}.b_slidebar .slide,.b_slideexp .b_viewport{overflow:hidden}.b_slideexp
 .b_viewport{margin:auto}.b_slidebar{white-space:nowrap}.b_slidebar .slide{white-
 space:normal;position:relative}.b_cards .cico,.b_slidebar .slide .cico{border-radius:0}.b_slidebar,.b_slidebar
 .slide{width:100%}.b_slidebar.anim{transition:margin-left .35s cubic-
 bezier(.15,.85,.35,1)}.slide>.spinner{position:absolute;left:50%}.slide>.spinner> ner{position:relative;left:-50
 %;width:40px;height:40px;background:url(/rp/OJWYLxkTdSOmE7-V53KpAdOj-xY.gif) no-
 repeat;margin:40px auto 30px;z-
 index:1000}.slide_mask.hideSlideMask{visibility:hidden}.b_slidebar.b_autoslidingfade
 .slide.slide_fading{opacity:1}.slide_mask,.b_slidebar.b_autoslidingfade .slide{transition:opacity .3s
 linear}.slide_mask.slide_fading,.b_slidebar.b_autoslidingfade .slide{opacity:0}.slide_mask{position:absolute
 ;width:100%;height:100%;opacity:.7;top:0}.carousel_seemore{text-align:center}.carousel_seemore.dark
 a{color:#fff}.b_slidebar.enable_selecting .slide.selected::after,.b_slidebar.enable_selecting
 .slide:hover::after{box-shadow:inset 0 0 0 2px #fff}.b_slidebar .slide.selected::after,.b_slidebar
 .slide:focus::after{box-shadow:inset 0 0 0 2px #0099bc;outline:0}.b_slidebar.enable_selecting
 .slide.selected::after,.b_slidebar.enable_selecting .slide:hover::after,.b_slidebar
 .slide.selected::after,.b_slidebar
 .slide:focus::after{content:"";height:100%;width:100%;position:absolute;left:0;top:0}.b_slideexp .b_antiSide
 Bleed{display:inline-block}.carousel_seemore>.b_moreLink.rndChev{vertical-align:middle;height:92px;text-
 decoration-color:#444;display:inline-block}.carousel_seemore .seeAll_txt{display:block;color:#444;line-
 height:17px}.carousel_seemore .seeAll_chev{display:block;height:48px;padding-bottom:12px;margin-
 top:15px}html[dir="rtl"] .carousel_seemore .seeAll_chev{transform:scaleX(-1)}.b_slideexp
 .b_viewport.scrollbar{overflow-x:auto;-ms-overflow-style:none;scrollbar-width:none}.b_slideexp
 .b_viewport.scrollbar::-webkit-scrollbar{display:none}.b_slideexp .b_viewport{-webkit-overflow-
 scrolling:touch}.b_overlay{position:relative}.b_overlay .btn{height:100%;position:absolute;width:20px;cursor
 :pointer;z-index:1;-moz-user-select:none;-khtml-user-select:none;-webkit-user-select:none;-o-user-
 select:none;-ms-user-select:none;user-select:none}.b_overlay .btn *{transition:opacity .3s linear}.b_overlay
 .btn.bg{position:absolute;width:100%;height:100%;background-
 color:#444;opacity:.3;filter:alpha(opacity=30)}.b_overlay .btn.nobg.bg{background-
 color:transparent}.b_overlay .btn.hover.bg{opacity:.7;filter:alpha(opacity=70)}.b_overlay
 .btn.nohover.hover.bg{opacity:.3;filter:alpha(opacity=30)}.b_overlay .btn.disabled.bg,.b_overlay
 .btn.nohover.disabled.bg{opacity:.01;filter:alpha(opacity=1)}.b_overlay .btn.hidden.bg,.b_overlay
 .btn.nohover.hidden.bg{opacity:.01;filter:alpha(opacity=1)}.b_overlay .btn.disabled,.b_overlay
 .btn.hidden{cursor:default}.b_overlay .btn.cr{text-align:center;line-height:0}.b_overlay
 .btn.bld.polecarchev.hidden .cr,.b_overlay .btn.bld.polecarchev.disabled .cr,.b_overlay
 .btn.bld.rounded.hidden .cr,.b_overlay .btn.bld.rounded.disabled .cr,.b_overlay .btn.bld.bigrounded.hidden
 .cr,.b_overlay .btn.bld.bigrounded.disabled .cr{opacity:.01;visibility:unset}.b_overlay .btn.hidden
 .cr,.b_overlay .btn.disabled .cr{visibility:hidden}.b_overlay .btn.prev.ltr .cr,.b_overlay .btn.next.rtl
 .cr{transform:scaleX(-1)}.b_overlay .btn.next{right:0}.b_overlay .btn .cr>div{background-size:40px
 200px;background-repeat:no-repeat;width:20px;height:40px;background-position:-10px 0}.b_overlay .btn
 .cr>div{background-image:url(/rp/S9lIHAMBy7JxaR5m1KRvMwDswyw.png)}.b_overlay
 .acfdefaultchev.btn.next{right:0!important}.b_overlay .acfdefaultchev.btn.prev{left:0!important}.b_overlay
 .acfdefaultchev.btn:hover.bg{opacity:unset;filter:unset}.b_overlay .acfdefaultchev.btn.disabled,.b_overlay
 .acfdefaultchev.btn.hidden{display:none}.b_overlay .acfdefaultchev.btn{width:48px}.b_overlay

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.acfdefaultchev.btn.bg{opacity:unset}.b_overlay .acfdefaultchev.btn.prev.cr{left:0}.b_overlay
.acfdefaultchev.btn.next.cr{right:0}.acfdefaultchev.cr{display:flex;justify-content:center;align-
items:center;flex:1 0 0;align-self:stretch;width:36px;height:48px;position:absolute;margin:unset;opacity:uns
et;transition:unset;border-radius:var(--smtc-corner-ctrl-lg-rest);background:var(--bing-smtc-background-con
tainer);box-shadow:var(--acf-elevation-3);fill:var(--smtc-foreground-content-neutral-
secondary)}.acfdefaultchev.cr:hover{background:var(--smtc-background-card-on-primary-default-
hover)}.acfdefaultchev.cr:active{background:var(--smtc-background-card-on-primary-default-
pressed)}.b_ofchev .acfdefaultchev.btn.prev.cr{left:-18px}.b_ofchev .acfdefaultchev.btn.next
.cr{right:-18px}@media(forced-colors:active){.acfdefaultchev.cr{background:ButtonText}.acfdefaultchev
.cr>svg{fill:ButtonText}.acfdefaultchev.cr:hover,.acfdefaultchev.cr:has(:focus-
visible){background:Highlight}}.b_overlay .btn.bld.prev{left:-20px}.b_overlay .btn.bld.next{right:-20px}.vcac{
position:absolute;width:100%;top:50%}.vcac>div{position:relative;width:100%}.slide.b_crslitm.b_sldfitcont{
width:fit-content}#slideexp0_649D9A .slide:last-child { margin-inline-end: 0; } #slideexp0_649D9A
.slide>*.last-child { margin-bottom: unset !important; } .b_acf_crsl #slideexp0_649D9Ac .b_slidebar .slide {
box-shadow: unset; -webkit-box-shadow: unset; } .b_acf_crsl.hovexp #slideexp0_649D9Ac.b_slideexp
.b_overlay .b_slidesContainer { overflow: visible !important; } .b_acf_crsl.hovexp
#slideexp0_649D9Ac.b_slideexp .b_overlay .b_viewport { padding-top: 12px !important; margin-top: -12px
!important; padding-bottom: 12px !important; margin-bottom: -12px !important; }InstructablesDIY Cheap
1000W Pure Sine Wave Inverter (12V to ...DIY Cheap 1000W Pure Sine Wave Inverter (12V to
110V/220V): Car batteries for powering you home? Build a low cost 12V to 220V (DC-AC) Pure Sine Wave
Inverter from scratch! The ...
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DIY Cheap 1000W Pure Sine Wave Inverter (12V to 110V/220V): Car batteries for powering you home?
Build a low cost 12V to 220V (DC-AC) Pure Sine Wave Inverter from scratch! The ...

Build a simple DC to AC power inverter with a 12V battery. Get circuit design, calculations, applications,
and safety tips for reliable inverter use.

Find the circuit diagram for a 12v inverter and learn how it can convert direct current (DC) to alternating
current (AC) for various applications. Understand the components and connections ...

Making your own power inverter at home is becoming increasingly popular as it allows you to save money
and generate power without relying on the grid. A 12V-220V inverter ...

Learn how to build an inverter in a most easy to understand and step by step method. An inverter can be
taken as a crude form of ...

In portable off-grid systems AC power comes from inverters. Inverters transform 12V DC current into 120V
AC current. Refer the ...

These 7 inverter circuits might look simple with their designs, but are able to produce a reasonably high
power output and an efficiency of around 75%. Learn how to build ...

Building an inverter can be a rewarding project, offering both practical knowledge and the ability to power
your devices even when you're off the grid. So, let's get started and ...

Learn how to build an inverter in a most easy to understand and step by step method. An inverter can be
taken as a crude form of UPS. Obviously the main use of an ...

Here is a 12v-220v DIY Homemade Inverter using very simple method and basic components. I tried to
make this Inverter as easy as it can be.

Understanding Inverters: The Basics Before we jump into the how to make inverter 12v to 220v build, let's
break down what an inverter actually is. In simple terms, an inverter is a ...

Story Simple DIY Inverter An inverter that uses the minimum number of components for converting a 12 V DC to 220 V AC is called a simple inverter. A 12 V lead-acid ...

Story Simple DIY Inverter An inverter that uses the minimum number of components for converting a 12 V DC to 220 V AC is called a ...

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