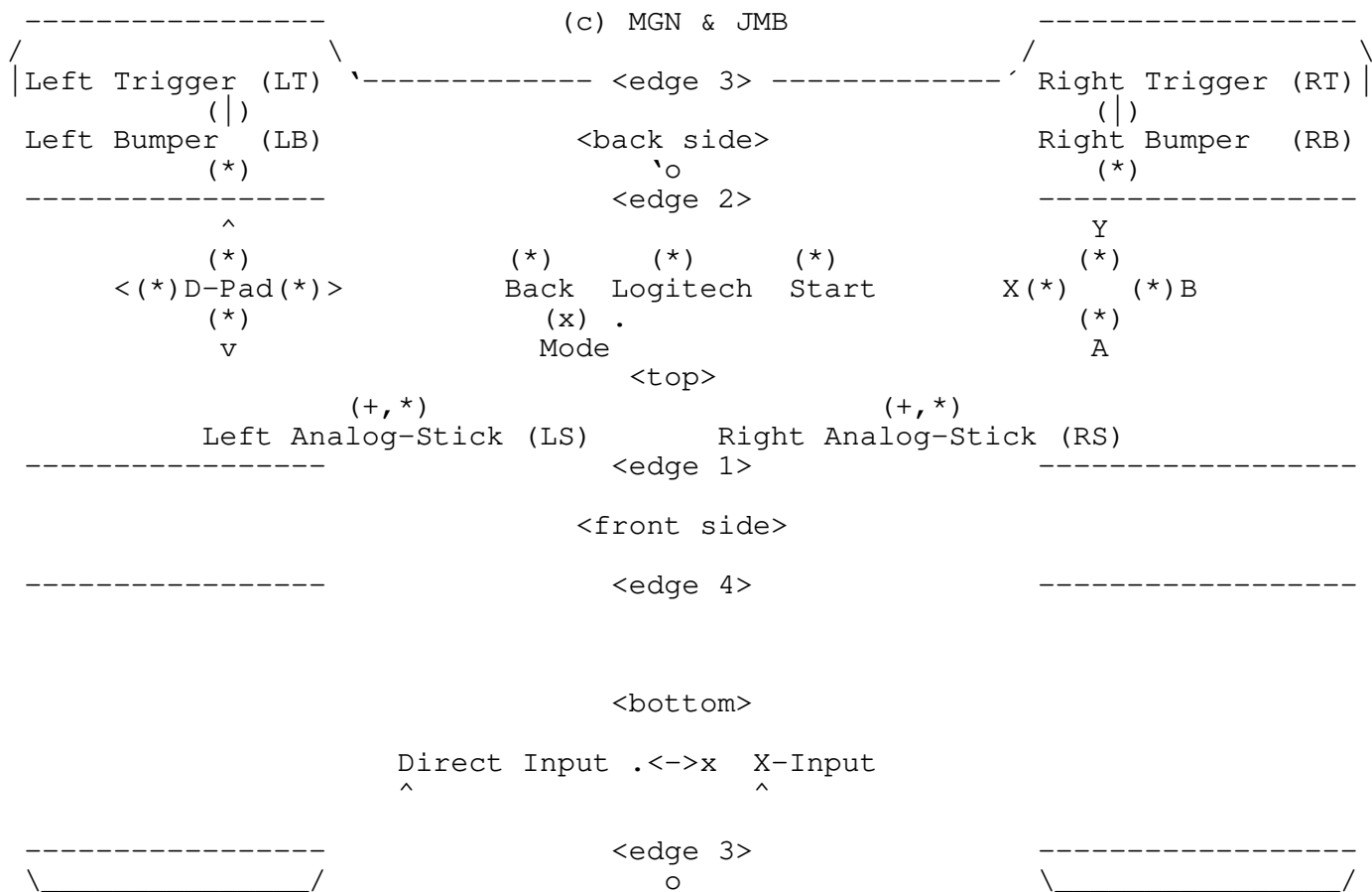


* Very good Controller Support (Logitech F310 based predominantly)



Notes: Analogue {how far it is pressed}: "+" = 2x Axis, "|" = 1x Axis;
 Digital {just yes or no}: "*" = Button, "x" = Switch;
 "." Light; "o" = USB cable;
 <.. side/edge ..>: 3D positions.

Buttons: up: Y - yellow = triangle / \
 left: X - blue = square | |
 right: B - red = circle o
 down: A - green = x

 \ X-Box / \Playstation Contr./

Switch (X<->D) is on the rear side opposite of Logitech button.

- Typical Functionality: / ^ \
 - Movement: LS / D-Pad (similar to 4 cursor keys: < v >)
 - Shooting: RS (typical for twin stick shooters)
 X (blue button) - specials on other 3 buttons or LB, RB, LT, RT
 - Look Around: RS - similar to mouse (typical for FPS, e.g. shoulder persp.)
 - Main Menu/Pause: Start (similar to Esc on keyboard)
 - Menu Movement: LS, sometimes LB = left, RB = right
 - Accept/Continue: A (green), seldom X (blue) - similar to Enter/Space
 - Back: B (red button) - similar to Esc
 - Yes | No: A (green) | B (red) or LS: right | left

Instead of Bumper (LB/RB) the term Shoulder may be used (Left/Right Shoulder).
 Of course good controller support means you can {re-}define for every possible
 action of a game 2 different possibilities for keyboard and 2 for controller
 (this is done e.g. by Fury Unleashed - similar good support by SuperTuxKart).
 Then also the Logitech button (called 'Guide') can be defined - only Mode
 button (swapping functionality of LS and D-Pad when lamp "." is on) and
 the X<->D Switch (choosing input method: X for Linux) is not usable by games,
 of course.

=> See also: <https://www.logitech.com/assets/35017/gamepad-f310-gsw.pdf>

- * Very good Controller Support (Logitech F310 based predominantly; -continued-)
- o Logitech Gamepad F310 info:
 - introduced on 03. Sep. 2010 with Rumble Gamepad F510 (dual vibration motors, on/off switch) & Wireless Gamepad F710 (2.4 GHz wireless connectivity)
 - worked out of the box since Ubuntu 12.04 'Precise Pangolin'
 - only problem detected is with some old 32 bit GMS games ... just not working
 - appears as mix from Xbox 360- (e.g. being XBox-compatible - but not 360; ABXY) & PS3-Controller (e.g. axial sym. design, PS: Thumbstick Caps 2.2 cm)
 - 2 × analog sticks (LS, RS), 2 × analog trigger buttons (LT, RT), 11 × digital buttons (A, B, X, Y, LB, RB, left stick "click", right stick "click", Start, Back, Logitech), Digital d-pad (may be regarded as 4 additional but linked digital buttons)
 - "XInput" preferable mode (to "DInput" {here also central "Logitech" button is unavailable} - don't switch when in game)
 - deadzone of around 20% of the analog sticks (problem when games force their own deadzone ... like 'Dead Space'; personally I had no trouble with that)
- o General Controller Support:
 - e.g. Not A Hero, Shovel Knight: Treasure Trove
- o Twin Stick Shooter / Multidirectional Shooters (movement & firing [LS & RS]):
 - e.g. Children of Morta, Fury Unleashed, Rush Troopers
- o Controller-Info for DOSBox and many older Windows etc. games:

For Logitech controllers with an input mode switch at the back side (F310, F510, F710 ...) one wants the switch in the "D" position {for DirectInput}. This makes the triggers show up as buttons instead of an axis.

If your controller layout isn't the way you want it, use the DOSBox mapper (Ctrl+F1 or by command line option to DOSBox binary '-startmapper'; see <https://www.dosbox.com/wiki/Mapper>) to rearrange/reassign inputs as needed.
- o Controller-Info for SNK/DotEmu titles:

Nearly all ports have 2P mode (i.e. localCoop 2 Player) - that's right, but one needs at least one XInput capable gamepad (like F310; switch to the left on "X" on the back side of the controller), if you have older gamepads you can use the xbox controller emulator called "x360ce". If you have 2 XInput controllers even better, both work.

Then 1P enters the "coins" and 2P presses the "start" button and voila - you can play multiplayer, e.g. usage for 'Metal Slug' series:

 - Left Bumper - Pause/Main Menu (save your game here!)
 - Right Bumper - Insert Coin ;^)
 - Start - Start/Continue
 - Left Analog Stick - Direction (Walk/Aim)
 - A - Shoot/Knife (when close)
 - B - Jump
 - X - Bomb/Cannon
 - Down+B - Exit Tank
 - A+B - Frontal Assault (Tank)

Strong attack that destroys the tank (but you exit automatically).

Note that the stamp is the main menu where one should enable Fullscreen, "A"-key is on y in German keyboards, "D"-Key is not used.

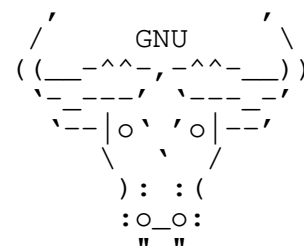
If game runs too fast, use prohibition of screen tearing: force "Vsync" in your graphics card options or use "Force Full Composition Pipeline" in Nvidia X Server Settings.

- * Small list of Game-relevant GNU/Linux distributions (aka distro-s):
- 10.04 LTS Lucid Lynx = Mint 9 Isodora = Debian 6 Squeeze / Sid
- 12.04 LTS Precise Pangolin = Mint 13 Maya = Debian 7 Wheezy / Sid
- 14.04 LTS Trusty Tahr = Mint 17.x Rosa = Debian 8 Jessie / Sid
- 16.04 LTS Xenial Xerus = Mint 18.x Sylvia = Debian 9 Stretch / Sid
- 18.04 LTS Bionic Beaver = Mint 19.x Tricia = Debian 10 Buster / Sid
- 20.04 LTS Focal Fossa = Mint 20.x Ulyana = Debian 11 Bullseye / Sid
- 22.04 LTS ??? = Mint 21.x ??? = Debian 12 Bookworm / Sid
- 24.04 LTS ??? = Mint 22.x ??? = Debian 13 Trixie / Sid

Please note that even the listed LTS releases of Ubuntu just have 5 years support and other Flavours (like Kubuntu and Xubuntu) even 3 years only!

Don't use distros being out of support (i.e. 'EoL' = End of Life) - and look at support info of the Gaming Platforms like (here DRM-free selection):

- o GOG (you may chose: "Linux - Free | Discounted - Hide DLCs" to the left):
x <https://www.gog.com/games?>
- o Itch.io (here for free under Linux):
x <https://itch.io/games/free/platform-linux>



no gates... .~.
 /V\
no windows! /()\
 ^^ ^^
 TUX

 running GNU/Linux
 free at last!

- * Resolution of the Screen:
- 16k: 15360 x 8460 pix video mode (16:9 = wide-screen/WS {usually TFT screens}),
- 10k: 10240 x 4320 pix video mode (16:9),
- 8k: 7680 x 4320 pix video mode (16:9 - not yet usual),
- 5k: 5120 x 2880 pix video mode (16:9 - never reasonable),
- 4k: 3840 x 2160 pix video mode (16:9 - typical for 2014+),
- WQHD: 2560 x 1440 pix video mode (16:9),
- FHD: 1920 x 1080 pix video mode (16:9 - lowest current standard),
- UXGA: 1600 x 1200 pix video mode (4:3 {~20" CRTs}),
- HD+: 1600 x 900 pix video mode (16:9),
- SXGA+: 1400 x 1050 pix video mode (4:3),
- WXGA: 1280 x 720 pix video mode (16:9),
- XGA: 1024 x 768 pix video mode (4:3 - really old standard resolution),
- qFHD: 960 x 540 pix video mode (16:9),
- SVGA: 800 x 600 pix video mode (4:3 - better than VGA),
- VGA: 640 x 480 pix video mode (4:3; 256 colours choosable; better than CGA),
- CGA: 320 x 200 pix video mode (4:3; originally 4 not choosable colours:
white - black - magenta - cyan).

Note that a 300 dpi DIN A4 page of a LASER printer of 1990 had 4k resolution. So that may be the highest standard single screen resolution in 2020 {5k technique was always bad and not standard!}, but it is quite low. Sub-FHD is no longer pleasant to the eye ... hoping for 8k with DP 2.0 in 2021!

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* Age rating systems:
USKyy - 'Unterhaltungssoftware Selbstkontrolle', e.g. USK6,
PEGIyy - 'Pan European Game Information', e.g. PEGI16, yy: year of age or above,
  oAB - without age restrictions,
  nn - not named (means 18 or to old / to low number for rating / pending),
ESRB - Entertainment Software Rating Board:
  E - everyone {formerly K-A - Kids to Adults}, E10+ - everyone 10 and older,
  T - teen, M - mature 17+, A - adult only 18+, RP - rating pending,
RecYY - 'Recommendation YY years' (with Yyp meaning YY+; e.g. by developer),
-
# USA rating system by MPAA (Motion Picture Association of America; cf. USK):
USA_G - General Audiences,
USA_PG - Parental Guidance Suggested,
USA_PG_13 - Parents Strongly Cautioned,
USA_R - Restricted (below 17 need PG),
USA_NC_17 - No one of age 17 and under admitted
# Flash gaming sites:
All_Ages - suitable for all ages
Teen_Plus - (Teen+) suitable for ages 13 and older
Teen_Caution - may or may not be suitable for ages 13 and older
# Comic books:
# E- Everyone; T - Teen (12 and older), T+ - Teen plus (15 and older),
# M - Mature (age 17 and older) {EXPLICIT CONTENT - 18 years and older}.
See links to look for rating of a special game:
  o https://usk.de/?s=
  o https://pegi.info/de/search-pegi?
```

Warning: Don't take these ratings too seriously - it's better to look at the content and judge for yourself than just be sorry ... there are films rated USK0 which are not suited for small children and also USK18 ratings which could be really strange ...

