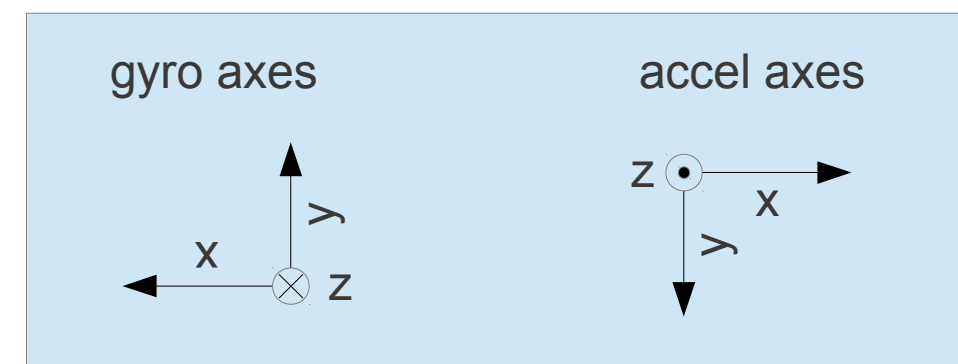


Axis conversions to DCM frame

UDB4 axis	UDB4 sensor flip/swap	MPU sensor flip/swap
gx	-gy	-gy
gy	-gx	-gx
gz	-gz	-gz
ax	-ay	ay
ay	-ax	ax
az	+az	az

Resultant coord. frames for MPU6000 not the same for gyros and accelerometers



Axis swapping and sign flipping in MatrixPilotQuad/libUDB/ConfigUDB4.h and analog2digital_uhb4.c (ORIENTATION_FORWARDS)

sensor	AN input	Scan order	BUFF	a2d destination	XXX_SIGN	result axis
gyro x	1	1	2	yrate	-	-y
gyro y	4	2	1	xrate	-	-x
gyro z	6	3	3	zrate	-	-z
acc x	11	6	5	-yaccel	+	-y
acc y	10	5	6	-xaccel	+	-x
acc z	9	4	4	zaccel	+	z

Neither frame matches labeling on UDB4 and the accel frame is left-handed, but notice that if we flip the signs of all accel. axes, that frame matches the gyros (and becomes right-handed) and also matches UDB3.

