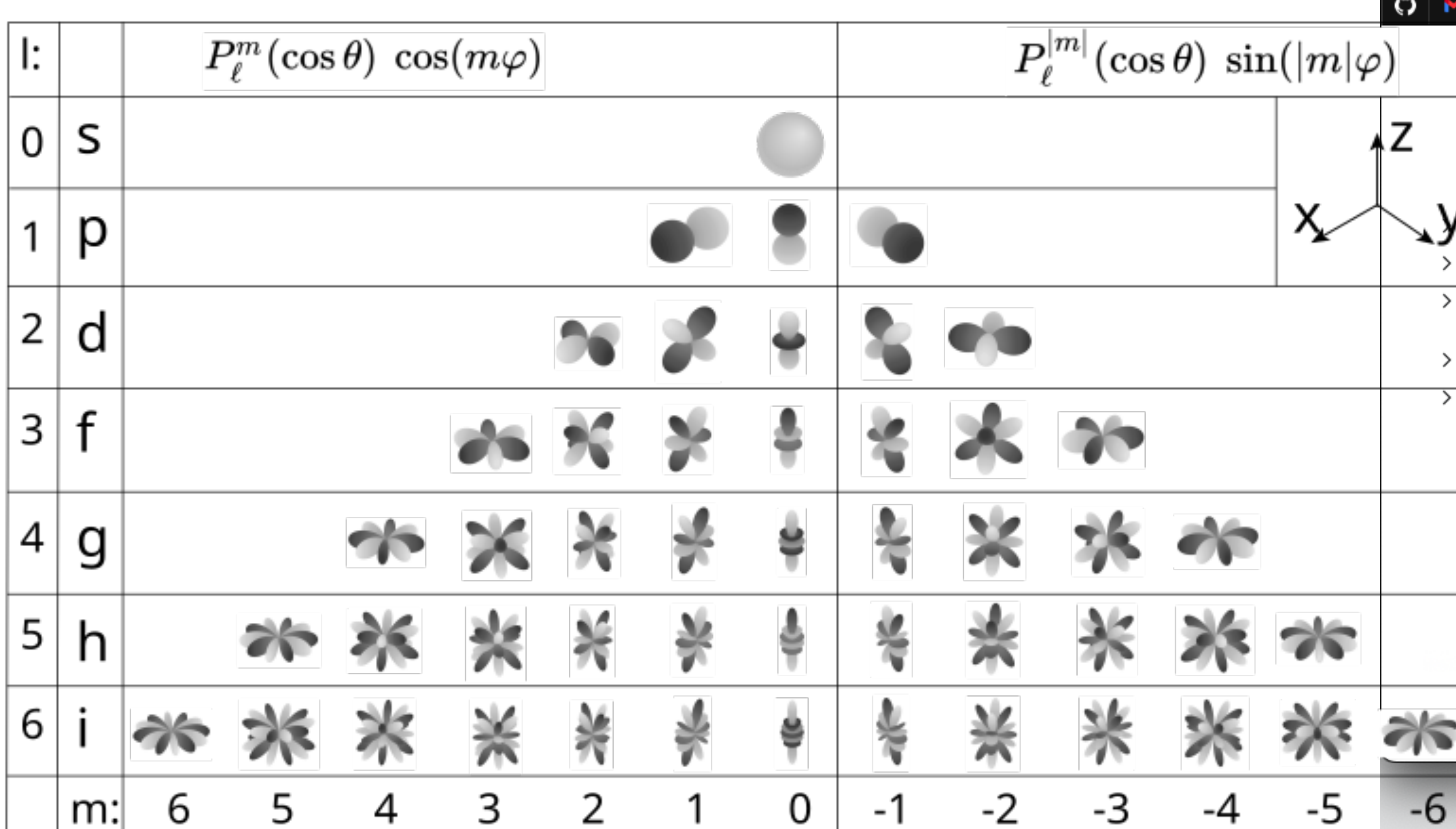
10	O_{13}	12	3	-2	$\frac{}{2}\sin(2\theta)\sin(\phi)\cos^2(\phi)$	$\sqrt{7}$	$\sqrt{35}$
11	M_{11}	14	3	-1	$\sqrt{\frac{21}{8}}\sin(\theta)(5\sin^2(\phi)-1)\cos(\phi)$	$\frac{1}{\sqrt{7}}$	$\sqrt{\frac{45}{224}}$
12	K_9	15	3	0	$\frac{\sqrt{7}}{2}\sin(\phi)(5\sin^2(\phi)-3)$	$\frac{1}{\sqrt{7}}$	$\frac{1}{\sqrt{7}}$
13	L_{10}	13	3	1	$\sqrt{\frac{21}{8}}\cos(\theta)(5\sin^2(\phi)-1)\cos(\phi)$	$\frac{1}{\sqrt{7}}$	$\sqrt{\frac{45}{224}}$
14	N_{12}	11	3	2	$\frac{\sqrt{105}}{2}\cos(2\theta)\sin(\phi)\cos^2(\phi)$	$\frac{1}{\sqrt{7}}$	$\frac{3}{\sqrt{35}}$
15	P_{14}	9	3	3	$\sqrt{\frac{35}{8}}\cos(3\theta)\cos^3(\phi)$	$\frac{1}{\sqrt{7}}$	$\sqrt{\frac{8}{35}}$
16	ø	17	4	-4	$\frac{3}{8}\sqrt{35}\sin(4\theta)\cos^4(\phi)$	$\frac{1}{3}$	ø
17	ø	19	4	-3	$\frac{3}{2}\sqrt{\frac{35}{2}}\sin(3\theta)\sin(\phi)\cos^3(\phi)$	$\frac{1}{3}$	ø
18	ø	21	4	-2	$\frac{3}{4}\sqrt{5}\sin(2\theta)(7\sin^2(\phi)-1)\cos^2(\phi)$	$\frac{1}{3}$	ø
19	ø	23	4	-1	$\frac{3}{4}\sqrt{\frac{5}{2}}\sin(\theta)\sin(2\phi)(7\sin^2(\phi)-3)$	$\frac{1}{3}$	ø
20	ø	24	4	0	$\frac{3}{8}(35\sin^4(\phi)-30\sin^2(\phi)+3)$	$\frac{1}{3}$	ø
21	ø	22	4	1	$\frac{3}{4}\sqrt{\frac{5}{2}}\cos(\theta)\sin(2\phi)(7\sin^2(\phi)-3)$	$\frac{1}{3}$	ø
22	ø	20	4	2	$\frac{3}{4}\sqrt{5}\cos(2\theta)(7\sin^2(\phi)-1)\cos^2(\phi)$	$\frac{1}{3}$	ø
23	ø	18	4	3	$\frac{3}{2}\sqrt{\frac{35}{2}}\cos(3\theta)\sin(\phi)\cos^3(\phi)$	$\frac{1}{3}$	ø
24	ø	16	4	-4	$\frac{3}{8}\sqrt{35}\cos(4\theta)\cos^4(\phi)$	$\frac{1}{3}$	ø

B [hide]					$Y_\ell^m (\equiv Y_{ACN})$	Conversion factors	
ACN	FuMa	SID	ℓ	m	Spherical harmonic in N3D	to SN3D	to maxN*[note 2]
0	W_0	0	0	0	1	1	$\frac{1}{\sqrt{2}}$
1	Y_2	2	1	-1	$\sqrt{3}\sin(\theta)\cos(\phi)$	$\frac{1}{\sqrt{3}}$	$\frac{1}{\sqrt{3}}$
2	Z_3	3	1	0	$\sqrt{3}\sin(\phi)$	$\frac{1}{\sqrt{3}}$	$\frac{1}{\sqrt{3}}$
3	X_1	1	1	1	$\sqrt{3}\cos(\theta)\cos(\phi)$	$\frac{1}{\sqrt{3}}$	$\frac{1}{\sqrt{3}}$
4	V_8	5	2	-2	$\frac{\sqrt{15}}{2}\sin(2\theta)\cos^2(\phi)$	$\frac{1}{\sqrt{5}}$	$\frac{2}{\sqrt{15}}$
5	T_6	7	2	-1	$\frac{\sqrt{15}}{2}\sin(\theta)\sin(2\phi)$	$\frac{1}{\sqrt{5}}$	$\frac{2}{\sqrt{15}}$
6	R_4	8	2	0	$\frac{\sqrt{5}}{2}(3\sin^2(\phi)-1)$	$\frac{1}{\sqrt{5}}$	$\frac{1}{\sqrt{5}}$
7	S_5	6	2	1	$\frac{\sqrt{15}}{2}\cos(\theta)\sin(2\phi)$	$\frac{1}{\sqrt{5}}$	$\frac{2}{\sqrt{15}}$
8	U_7	4	2	2	$\frac{\sqrt{15}}{2}\cos(2\theta)\cos^2(\phi)$	$\frac{1}{\sqrt{5}}$	$\frac{2}{\sqrt{15}}$
9	Q_{15}	10	3	-3	$\sqrt{\frac{35}{8}}\sin(3\theta)\cos^3(\phi)$	$\frac{1}{\sqrt{7}}$	$\sqrt{\frac{8}{35}}$
10	O_{13}	12	3	-2	$\frac{\sqrt{105}}{2}\sin(2\theta)\sin(\phi)\cos^2(\phi)$	$\frac{1}{\sqrt{7}}$	$\frac{3}{\sqrt{35}}$
11	M_{11}	14	3	-1	$\sqrt{\frac{21}{8}}\sin(\theta)(5\sin^2(\phi)-1)\cos(\phi)$	$\frac{1}{\sqrt{7}}$	$\sqrt{\frac{45}{224}}$
12	K_9	15	3	0	$\frac{\sqrt{7}}{2}\sin(\phi)(5\sin^2(\phi)-3)$	$\frac{1}{\sqrt{7}}$	$\frac{1}{\sqrt{7}}$



en.wikipedia.org
My Drive - Google Drive
r5aspberry how to decrease volume

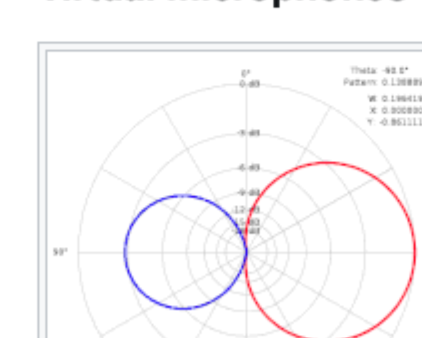
signal over the Ambisonic components with different gains:

$$W = S \cdot \frac{1}{\sqrt{2}}$$
$$X = S \cdot \cos\theta\cos\phi$$
$$Y = S \cdot \sin\theta\cos\phi$$
$$Z = S \cdot \sin\phi$$

Contents hide

Being omnidirectional, the W channel always gets the same const
angles. So that it has more-or-less the same average energy as th
by about 3 dB (precisely, divided by the square root of two).[3] The
the polar patterns of figure-of-eight microphones (see illustration o
their value at θ and ϕ, and multiply the result with the input signal.
in all components exactly as loud as the corresponding micropho

Virtual microphones [edit]



The B-format components can be
microphones with any first-order
cardioid, hypercardioid, figure-of-
pointing in any direction. Several
parameters can be derived at the
stereo pairs (such as a Blumlein)