

ambicode

ambicode – codes a signal into the ambisonic B format.

ambicode

Description

Codes a signal into the ambisonic B format.

Syntax

aw, *ax*, *ay*, *az* **ambicode** *asig*, *kalpha*, *kbeta*, *kord0*, *kord1*

aw, *ax*, *ay*, *az*, *ar*, *as*, *at*, *au*, *av* **ambicode** *asig*, *kalpha*, *kbeta*, *kord0*, *kord1* , *kord2*

aw, *ax*, *ay*, *az*, *ar*, *as*, *at*, *au*, *av*, *ak*, *al*, *am*, *an*, *ao*, *ap*, *aq* **ambicode** *asig*, *kalpha*, *kbeta*, *kord0*, *kord1*, *kord2*, *kord3*

Performance

asig – input signal.

kalpha – azimuth angle in degrees (clockwise).

kbeta – altitude angle in degrees.

kord0 – linear gain of the zero order B format.

kord1 – linear gain of the first order B format.

kord2 – linear gain of the second order B format.

kord3 – linear gain of the third order B format.

aw .. *aq* – output cells of the B format.

ambideco

ambideco – decodes an ambisonic B format signal into loudspeaker specific signals.

ambideco

Description

Decodes a B format signal into loudspeaker specific signals.

Syntax

```
ao1, ao2 ambideco isetup, aw, ax, ay, az [, ar, as, at, au, av [, abk, al, am, an, ao, ap, aq]]
```

```
ao1, ao2, ao3, ao4 ambideco isetup, aw, ax, ay, az [, ar, as, at, au, av [, abk, al, am, an, ao, ap, aq]]
```

```
ao1, ao2, ao3, ao4, ao5 ambideco isetup, aw, ax, ay, az [, ar, as, at, au, av [, abk, al, am, an, ao, ap, aq]]
```

```
ao1, ao2, ao3, ao4, ao5, ao6, ao7, ao8 ambideco isetup, aw, ax, ay, az [, ar, as, at, au, av [, abk, al, am, an, ao, ap, aq]]
```

Initialization

isetup – loudspeaker setup. There are five supported setups:

- *isetup*= 1 «hi fi»-type stereo setup. There must be two output cells. Following loudspeaker positions (azimuth angle clockwise/altitude angle) are assumed: ao1 330°/0°, ao2 30°/0°
- *isetup*= 2 quad setup. There must be four output cells. Following loudspeaker positions (azimuth angle clockwise/altitude angle) are assumed: ao1 45°/0°, ao2 135°/0°, ao3 225°/0°, ao4 315°/0°
- *isetup*= 3 5.1 surround setup. There must be five output cells. LFE channel is not supported. Following loudspeaker positions (azimuth angle clockwise/altitude angle) are assumed: ao1 330°/0°, ao2 30°/0°, ao3 0°/0°, ao4 250°/0°, ao5 110°/0°
- *isetup*= 4 eight loudspeaker circle setup. There must be eight output cells. Following loudspeaker positions (azimuth angle clockwise/altitude angle) are assumed: ao1 22.5°/0°, ao2 67.5°/0°, ao3 112.5°/0°, ao4 157.5°/0°, ao5 202.5°/0°, ao6 247.5°/0°, ao7 292.5°/0°, ao8 337.5°/0°
- *isetup*= 5 eight loudspeaker cubic setup. There must be eight output cells. Following loudspeaker positions (azimuth angle clockwise/altitude angle) are assumed: ao1 45°/0°, ao2 45°/30°, ao3 135°/0°, ao4 135°/30°, ao5 225°/0°, ao6 225°/30°, ao7 315°/0°, ao8 315°/30°

Performance

aw .. *aq* – input signal in B format.

ao1 .. *ao8* – loudspeaker specific output signals.