

NOTICE

This hed file was created using UtauUtauUtau’s online tool. It uses arpasing and some other phonemes from Italian, Latin & French to make an all encompassing hed file for **OPERA**.

This is a list of the currently supported phonemes, examples, and other various notes.

This phoneme set covers **all English phonetic sounds, with aproximations for support for latin, italian & French**, utilizing NNSVS’s phoneme context. As such it will work for loan purposes of **OPERA** songs in different languages such as latin, italian, french, ect...

Vowels - monophthongs:

Phoneme	Aproximation	IPA	Description
ah	hUt	ʌ	‘uh’ sound.
aa	clOck	ɑ~ɒ	open ah.
ao	bOUght, stORy	ɔ	un/rounded aw. **US English uses unrounded by itself but rounded for rhotic. It’s fine.
ae	bAt	æ~a	“at” sound for US.
ax	commA, parrOt	ə	schwa.
iy	bEAt,petIt	i	
ih	sIt	ɪ	
ix	rosEs, rabbIt	ɨ	
uh	bOOk, nOOk	ʊ	
uw	bOOt, sUIt	u	
eh	bEt, plEthera	ɛ	
er	bIRd, nERd	ɜ	
ux	dUde	ʊ	Pronounced like “oo”

Vowels - diphthongs:

Phoneme	Aproximation	IPA	Description
ay	bItE	aɪ	
ey	bAIt	eɪ	
oy	bOY	ɔɪ	
aw	plOW, abOUt	aʊ	
ow	bOAT	oʊ	
eu	EUro	eu	
ui	rUIn	ui	

Consonants:

Voice and unvoiced equivalents are paired (ex: k/g, t/d)

Phoneme	Aproximation	IPA	Description
b	Better,Berry	b	
ch	Chance, Change	tʃ	
d	DeaD	d	
dh	Then	ð	
dx	buTTer	r	
dz	aDDS	dz	
el	bottLE	l	
em	rhythM	m	
en	buttoN	n	
f	Fight, Fancy	f	
g	Good, Guy	g	
h	Help, Healthy	h	
j	JuDGE	dʒ	Makes ‘dg’ sound for end of words. like [dʒ]zh] or /dZ/ in xsampa.
k	Kite,Keep	k	
l	Ship, puSH	l	
gl	biLLIon	ʎ	Is the “gl” sound in most italian words. (Eg, figli, glielo, maglia)
m	Many, Monkey	m	
n	New, Noun	n	
ny	caNYon	ɲ	
ng	Winning, CampING	ŋ	
nx	wiNNer, woNder		
p	PaPPer, Pants	p	
r	Random, Rye	ɹ	
rr	Roma, quattRo, morte	ɾ	Trilled/Tapped R
rx	RegaRder, nôrRe	ʁ	Guttural R, Scottish English loch, but voiced
s	Sample, Some	s	
sh	Shiny, Shingle	ʃ	
t	Tender, Timing	t	
ts	caTS	ts	
th	THigh, THing	θ	
v	Vie, Very	v	
w	Will, Wonder	w	
wh	WHy, WHen	ʍ	Without wine-whine merger
x	Jota, baCH, KHamsin	x	
y	Yes, Yatch	j	
z	Zoo, Zone	z	
zh	pleaSure, meaSure	ʒ	The ‘judge’ example is [j ah d zh], not [j ah zh]. To avoid any confusion.
q	we-eat, baTTen	bottom	glottal stop and vowel separator. NOT vocal fry.
dx	buTTer	shuTup	tapped/flapped d/tt. Use in UK English is spotty.

Utility phonemes:

Phonemes that aren’t strictly vocal sounds but are useful in one way of another

phoneme	Example	Description
pau	silence	During unsung/silent periods.
exh	[exhale]	end breaths, end of phrase exhale. devoiced. Label consonant coda.
axh	[release]	voiced variation of [exh]. voiced schwa exhale/release. Label as consonant coda.
ct	[closure-toggle]	override the default state of a consonant’s closure. Entirely optional.
cl	[held stop]	Held stop/plosive consonant. For when the silence is held. Similar to Japanese usage but not syllabic.
vf	[vocal fry]	vocal fry. Can be used as a consonant OR on it’s own note.