

# Package ‘ipa’

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**Title** Convert Between Phonetic Alphabets

**Version** 0.1.0

**Description** Converts character vectors between phonetic representations. Supports IPA (International Phonetic Alphabet), X-SAMPA (Extended Speech Assessment Methods Phonetic Alphabet), and ARPABET (used by the CMU Pronouncing Dictionary).

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**URL** <https://github.com/rossellhayes/ipa>

**BugReports** <https://github.com/rossellhayes/ipa/issues>

**Depends** R (>= 2.10)

**Imports** stringi

**Suggests** covr, testthat

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.0

**NeedsCompilation** no

**Author** Alexander Rossell Hayes [aut, cre, cph]  
(<https://orcid.org/0000-0001-9412-0457>)

**Maintainer** Alexander Rossell Hayes <[alexander@rossellhayes.com](mailto:alexander@rossellhayes.com)>

**Repository** CRAN

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arpa

*Convert phonetic representation from ARPABET (CMU)*

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### Description

Converts to IPA or X-SAMPA

### Usage

```
arpa(x, to = c("ipa", "xsampa"))
```

```
arpabet(x, to = c("ipa", "xsampa"))
```

```
cmu(x, to = c("ipa", "xsampa"))
```

### Arguments

|    |  |
|----|--|
| x  | A phonetic character vector in ARPABET   |
| to | The phonetic alphabet to convert to. Defaults to "ipa". "sampa" is an accepted alias for "xsampa". |

### Value

A character vector the same length as x

### See Also

[convert\\_phonetics\(\)](#) to convert between any phonetic representations

[ipa\(\)](#) to convert from IPA

[sampa\(\)](#) and [xsampa\(\)](#) to convert from X-SAMPA

### Examples

```
arpa('HH EH L OW')
arpa(c('HH EH L OW', "W ER L D"))

arpa('HH EH L OW', "xsampa")
arpa(c('HH EH L OW', "W ER L D"), "xsampa")
```

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convert\_phonetics      *Convert between phonetic representations*

---

## Description

Converts between IPA, X-SAMPA and ARPABET (used by the CMU Pronouncing Dictionary)

## Usage

```
convert_phonetics(
  x,
  from = c("ipa", "xsampa", "arpabet"),
  to = c("ipa", "xsampa", "arpabet")
)
```

## Arguments

`x`                    A phonetic character vector in IPA, X-SAMPA, or ARPABET

`from`                The phonetic alphabet to convert from

`to`                    The phonetic alphabet to convert to. "sampa" is an accepted alias for "xsampa". "arpa" and "cmu" are accepted aliases for "arpabet".

## Value

A character vector the same length as `x`

## See Also

[ipa\(\)](#) to convert from IPA

[sampa\(\)](#) and [xsampa\(\)](#) to convert from X-SAMPA

[arpa\(\)](#), [arpabet\(\)](#) and [cmu\(\)](#) to convert from ARPABET (CMU)

## Examples

```
convert_phonetics('%hE"loU', from = "xsampa", to = "ipa")
convert_phonetics(c('%hE"loU', "w3`ld"), from = "xsampa", to = "ipa")
convert_phonetics('%hE"loU', from = "xsampa", to = "arpabet")
convert_phonetics(c('%hE"loU', "w3`ld"), from = "xsampa", to = "arpabet")

convert_phonetics('HH EH L OW', from = "arpabet", to = "ipa")
convert_phonetics(c('HH EH L OW', "W ER L D"), from = "arpabet", to = "ipa")
convert_phonetics('HH EH L OW', from = "arpabet", to = "xsampa")
convert_phonetics(c('HH EH L OW', "W ER L D"), from = "arpabet", to = "xsampa")

# `convert_phonetics()` supports raw Unicode input or escaped Unicode sequences
# (\uxxxx), but raw Unicode is not supported in R package documentation,
# hence the ugly examples
```

```

convert_phonetics("\u02cch\u025b\l\u028a", from = "ipa", to = "xsampa")
convert_phonetics(
  c("\u02cch\u025b\l\u028a", "w\u025dld"), from = "ipa", to = "xsampa"
)
convert_phonetics("\u02cch\u025b\l\u028a", from = "ipa", to = "arpabet")
convert_phonetics(
  c("\u02cch\u025b\l\u028a", "w\u025dld"), from = "ipa", to = "arpabet"
)

```

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ipa

---

*Convert phonetic representation from IPA*


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### Description

Converts to X-SAMPA or ARPABET (used by the CMU Pronouncing Dictionary)

### Usage

```
ipa(x, to = c("xsampa", "arpabet"))
```

### Arguments

|    |  |
|----|--|
| x  | A phonetic character vector in IPA   |
| to | The phonetic alphabet to convert to. Defaults to "xsampa". "sampa" is an accepted alias for "xsampa". "arpa" and "cmu" are accepted aliases for "arpabet". |

### Value

A character vector the same length as x

### See Also

[convert\\_phonetics\(\)](#) to convert between any phonetic representations

[sampa\(\)](#) and [xsampa\(\)](#) to convert from X-SAMPA

[arpa\(\)](#), [arpabet\(\)](#) and [cmu\(\)](#) to convert from ARPABET (CMU)

### Examples

```

# `ipa()` supports raw Unicode input or escaped Unicode sequences (\uxxxx),
# but raw Unicode is not supported in R package documentation,
# hence the ugly examples
ipa("\u02cch\u025b\l\u028a")
ipa(c("\u02cch\u025b\l\u028a", "w\u025dld"))

ipa("\u02cch\u025b\l\u028a", to = "arpabet")
ipa(c("\u02cch\u025b\l\u028a", "w\u025dld"), to = "arpabet")

```

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|       |   |
|-------|---|
| sampa | <i>Convert phonetic representation from X-SAMPA</i> |
|-------|---|

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**Description**

Converts to IPA or ARPABET (used by the CMU Pronouncing Dictionary)

**Usage**

```
sampa(x, to = c("ipa", "arpabet"))
```

```
xsampa(x, to = c("ipa", "arpabet"))
```

**Arguments**

|    |  |
|----|--|
| x  | A phonetic character vector in X-SAMPA   |
| to | The phonetic alphabet to convert to. Defaults to "ipa". "arpa" and "cmu" are accepted aliases for "arpabet". |

**Value**

A character vector the same length as x

**See Also**

[convert\\_phonetics\(\)](#) to convert between any phonetic representations

[ipa\(\)](#) to convert from IPA

[arpa\(\)](#), [arpabet\(\)](#) and [cmu\(\)](#) to convert from ARPABET (CMU)

**Examples**

```
sampa('%hE"loU')
sampa(c('%hE"loU', "w3`ld"))

sampa('%hE"loU', "arpabet")
sampa(c('%hE"loU', "w3`ld"), "arpabet")
```

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