

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

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Repository CRAN

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arpa

Convert phonetic representation from ARPABET (CMU)

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")
```

| | |
|-------------------|-------------------------------------------------|
| convert_phonetics | <i>Convert between phonetic representations</i> |
|-------------------|-------------------------------------------------|

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"
)

```

ipa

Convert phonetic representation from IPA

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")

```

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

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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