



# **Language Manual**

## **HQ and HD Brazilian Portuguese**

---

## Language Manual: HQ and HD Brazilian Portuguese

Published 22 March 2011

Copyright © 2008-2011 Acapela Group.

All rights reserved

This document was produced by Acapela Group. We welcome and consider all comments and suggestions. Please, use the *Contact Us* link at our website:

<http://www.acapela-group.com>

---

---

# Table of Contents

1. General .....	1
2. Letters in orthographic text .....	2
3. Punctuation characters .....	3
3.1. Comma, colon and semicolon .....	3
3.2. Quotation marks .....	3
3.3. Full stop .....	3
3.4. Question mark .....	3
3.5. Exclamation mark .....	3
3.6. Parentheses, brackets and braces .....	3
3.7. Apostrophe .....	3
4. Other non alphanumeric characters .....	4
4.1. Non-punctuation characters .....	4
4.2. The <sup>2</sup> and <sup>3</sup> signs .....	4
4.3. Symbols whose pronunciation varies depending on the context .....	5
5. Number Processing .....	6
5.1. Full number pronunciation .....	6
5.2. Leading zero .....	7
5.3. Decimal numbers .....	7
5.4. Currency amounts .....	7
5.5. Ordinal numbers .....	8
5.6. Arithmetic operators .....	8
5.7. Mixed digits and letters .....	9
5.8. Time of day .....	9
5.9. Dates .....	10
5.10. Phone numbers [not SP] .....	11
6. How to change the pronunciation .....	13
6.1. User lexicon .....	13
6.2. Alternative spelling .....	13
7. Brazilian Portuguese Phonetic Text .....	14
7.1. Consonants .....	14
7.2. Vowels .....	14
7.3. Lexical stress .....	15
7.4. Pause .....	16
8. Abbreviations .....	17
9. Web-addresses and email .....	21

---

## List of Tables

4.1. Non-punctuation characters .....	4
7.1. Brazilian Portuguese consonants .....	14
7.2. Brazilian Portuguese vowels .....	15
8.1. Abbreviations .....	17

---

## Chapter 1. General

---

This document discusses certain aspects of text-to-speech processing for the Brazilian Portuguese text-to-speech system, in particular the different types of input characters and text that are allowed.

This version of the document corresponds to the High Quality (HQ) voice Márcia and the High Density (HD) voices Paola and Carlos.

Please note that the *User's Guide*, mentioned several times in the manual, is called *Help* in some applications.

Note: This language manual is general and applies to all Acapela Group HQ and HD Brazilian Portuguese voices specified above. One or more of the voices may be included in a certain Acapela Group product.

Note: For efficiency reasons, the processing described in this document has a different behaviour in some Acapela Group products. Those products are:

- Acapela TTS for Windows Mobile
- Acapela TTS for Linux Embedded
- Acapela TTS for Symbian



For these products, the default processing of numbers, phone numbers, dates and times has been simplified for the low memory footprint (LF) voice formats. Developers have the possibility to change the default behaviour from *simplified* to *normal* preprocessing by setting corresponding parameters in the configuration file of the voice. Please see the documentation of these products for more information. In the following chapters, each simplification will be described by the indication *[not SP]* following the description of the standard behaviour. The *SP* in the indication stands for *Simplified Processing*.

---

## Chapter 2. Letters in orthographic text

---

Characters from A-Z and a-z, as well as ç, õ, ã, à, á, â, é, ê, í, ó, ô, ú, û may constitute a word. Certain other characters are also considered as letters, notably those used as letters in other European languages. Characters used in other languages e.g. å, ä, ö are mapped into readable characters, for instance å is read as a. ñ, Ñ cause a nasalization of the preceding vowel.

Characters outside of these ranges, i.e. numbers, punctuation characters and other non-alphanumeric characters, are not considered as letters.

---

## Chapter 3. Punctuation characters

---

Punctuation marks appearing in a text affect both rhythm and intonation of a sentence. The following punctuation characters are permitted in the normal input text string:

, ; “ ” . ? ! ( ) { } [ ]

### 3.1. Comma, colon and semicolon

Comma ',', colon ':' and semicolon ';' cause a brief pause to occur in a sentence, accompanied by a small rising intonation pattern just prior to the character.

### 3.2. Quotation marks

Quotes '"' appearing around a single word or a group of words cause a brief pause before and after the quoted text.

### 3.3. Full stop

A full stop '.' is a sentence terminal punctuation mark which causes a falling end-of-sentence intonation pattern and is accompanied by a somewhat longer pause. A full stop may also be used as a decimal marker in a number (see chapter *Number processing* ) and in abbreviations (see chapter *Abbreviations* ).

### 3.4. Question mark

A question mark '?' ends a sentence and causes question-intonation, first rising and then falling.

### 3.5. Exclamation mark

The exclamation mark '!' is treated in a similar manner to the full stop, causing a falling intonation pattern followed by a pause.

### 3.6. Parentheses, brackets and braces

Parenthesis '()', brackets '[]' and braces '{} ' appearing around a single word or a group of words cause a brief pause before and after the bracketed text.

### 3.7. Apostrophe

Apostrophe "'" may be used but it makes no difference to the pronunciation.

---

## Chapter 4. Other non alphanumeric characters

---

### 4.1. Non-punctuation characters

The characters listed below are processed as non-letter, non-punctuation characters. Some are pronounced at all times and others are only pronounced in certain contexts, which are described in the following sections of this chapter.

**Table 4.1. Non-punctuation characters**

Symbol	Reading
/	barra
+	mais
\$	dólar
£	libra
€	euro
¥	ieni
<	menor que
>	maior que
%	porcento
^	acento circunflexo
	barra vertical
~	til
@	arroba
<sup>2</sup>	quadrado
<sup>3</sup>	cúbico
=	Igual a
*	see below
-	see below

### 4.2. The <sup>2</sup> and <sup>3</sup> signs

The reading of expressions with <sup>2</sup> and <sup>3</sup> is:

Expression	Reading
mm <sup>2</sup>	milímetro(s) quadrado(s)
cm <sup>2</sup>	centímetro(s) quadrado(s)
m <sup>2</sup>	metro(s) quadrado(s)
km <sup>2</sup>	quilómetro(s) quadrado(s)
mm <sup>3</sup>	milímetro(s) cúbico(s)
cm <sup>3</sup>	centímetro(s) cúbico(s)
m <sup>3</sup>	metro(s) cúbico(s)
km <sup>3</sup>	quilómetro(s) cúbico(s)

All the units of measure, such as *mm*, *mm<sup>2</sup>*, *cm*, *cm<sup>2</sup>*, etc. are read in the plural form when alone.



## 4.3. Symbols whose pronunciation varies depending on the context

### 4.3.1. Hyphen

A hyphen '-' is pronounced *menos* if it is in the beginning of a line and followed by a digit, or if it is in a mathematical equation with an equal sign. [not SP] In certain date formats, in between days and days, or years and years, the hyphen is pronounced *a*. In date formations the hyphen is pronounced *de*. In other cases the hyphen is never pronounced.

Expression	Reading	
44-3=41	44 menos 3 igual a 41	
15-20 outubro	15 a 20 de outubro	[not SP]
6-10 nov	6 a 10 de novembro	[not SP]
1998-2004	mil novecentos e noventa e oito a dois mil e quatro	[not SP]
02-02-2002	dois de fevereiro de dois mil e dois	
ultra-sensível	ultra sensível	

### 4.3.2. Asterisk

Asterisk '\*' is pronounced *vezes* if it is in a mathematical equation with an equal sign. In other cases it is pronounced *asterisco*.

Expression	Reading
2*3=6	dois vezes três igual a seis
*bc	asterisco b c

---

## Chapter 5. Number Processing

---

Strings of digits that are sent to the text-to-speech converter are processed in several different ways, depending on the format of the string of digits and the immediately surrounding punctuation or non-numeric characters. To familiarise the user with the various types of formatted and non-formatted strings of digits that are recognised by the system, we provide below a brief description of the basic number processing along with examples. Number processing is subdivided into the following categories:

Full number pronunciation  
Leading zero  
Decimal numbers  
Currency amounts  
Ordinal numbers  
Arithmetic operators  
Mixed digits and letters  
Time of day  
Dates  
Telephone numbers

### 5.1. Full number pronunciation

Full number pronunciation is given for the whole number part of the digit string.

<b>Expression</b>	<b>Reading</b>
2425	full number
2.425	full number
2 425	full number
24,25	24 is a full number, 25 is the decimal part

Numbers denoting thousands, millions and billions (numbers larger than 999) may be grouped using space or full stop (not comma). In order to achieve the right pronunciation the grouping must be done correctly.

The rules for grouping of numbers are the following:

- Numbers are grouped in groups of three starting at the end.
- The first group in a number may consist of one, two, or three digits.
- If a group, other than the first, does not contain exactly three digits, the sequence of digits is not interpreted as a full number.
- The highest number read is 999999999999 (twelve digits). Numbers higher than this are read as separate digits.
- An exception is made for year pronunciation, which occurs in four-digit strings in the range between 1100 and 2099.

<b>Number</b>	<b>Reading</b>
2580	dois mil quinhentos e oitenta
2 580	dois mil quinhentos e oitenta
2.580	dois mil quinhentos e oitenta
25800	vinte cinco mil e oitocentos

<b>Number</b>	<b>Reading</b>
25 800	vinte cinco mil e oitocentos
25.800	vinte cinco mil e oitocentos
2580350	dois milhões quinhentos e oitenta mil trezentos e cinqüenta
2 580 350	dois milhões quinhentos e oitenta mil trezentos e cinqüenta
2.580.350	dois milhões quinhentos e oitenta mil trezentos e cinqüenta
1000000000	um bilhão
1234567890123	um dois três quatro cinco seis sete oito nove zero um dois três
23 456 789 012	vinte e três bilhões quatrocentos e cinqüenta e seis milhões setecentos e oitenta e nove mil doze

## 5.2. Leading zero

Numbers that begin with 0 (zero) are read as a zero followed by the number read as a whole.

<b>Number</b>	<b>Reading</b>
09253	zero nove mil duzentos e cinqüenta e três
020	zero vinte

## 5.3. Decimal numbers

Comma or full stop may be used when writing decimal numbers.

The full number part of the decimal number (the part before comma or full stop) is read according to the rules in the section *Full number pronunciation*. If the decimals (the part after comma or full stop) are more than three, the decimal part is read as separate digits.

Note: A number containing full stop followed by exactly three digits is not read as a decimal number but as a full number, following the rules in the section *Full number pronunciation*.

<b>Number</b>	<b>Reading</b>
16,234	dezesesseis vírgula duzentos e trinta e quatro
3,1415	três virgula um quatro um cinco
1251,04	mil duzentos e cinqüenta e um virgula zero quatro
1.251,04	mil duzentos e cinqüenta e um virgula zero quatro
2,50	dois virgula cinqüenta
2.50	dois ponto cinqüenta
3.141	três mil cento e quarenta e um

## 5.4. Currency amounts

The following principles are followed for currency amounts:

- Numbers with zero or two decimals preceded or followed by the currency markers R\$, £, \$, ¥ or € are read as currency amounts. If the decimals are more than two the number is not recognized as currency amount.
- Numbers with zero or two decimals followed by the words *real*, *libra*, *dólar*, *ieni* or *euro* (singular or plural) are read as monetary amounts.

- Accepted decimal markers are comma and full stop.
- The decimal part (consisting of two digits) in monetary amounts is read as *e nn pence* and *e nn centavos*.
- If the decimal part is *00* it will not be read.

Expression	Reading	
R\$15	quinze reais	[not SP]
\$15.00	quinze dólares	
15.00£	quinze libras	
15.00 euros	quinze euros	[not SP]
€ 200.50	duzentos euros e cinqüenta centavos	
1.000.000 ¥	um milhão de ienes	

There is also the possibility of writing large amounts as follows:

\$ 1 milhão	um milhão de dólares
-------------	----------------------

## 5.5. Ordinal numbers

Numbers are read as ordinals in the following cases:

- The number *1* is followed by *de* and a month name or one of the month name abbreviations. The number may be preceded by a day or an abbreviation for a day.
- The number is followed by *o(s)*, *a(s)*, *o*, *a*.

Expression	Reading	
1 de janeiro	primeiro de janeiro	
1 de janeiro	primeiro de janeiro	
1 de jan	primeiro de janeiro	[not SP]
terça-feira 1 de jan.	terça-feira primeiro de janeiro	[not SP]
3 <sup>a</sup> feira	terça-feira	
5 <sup>o</sup>	quinto	
6 <sup>a</sup>	sexta	
6 <sup>as</sup>	sextas	
3 <sup>a</sup>	terceira	
7 <sup>o</sup>	sétimo	

## 5.6. Arithmetic operators

Numbers together with arithmetical operators and an equal sign are read according to the examples below.

Expression	Reading
-12	menos doze
12-1	doze menos um
12-1=11	doze menos um igual a onze
+19	mais dezenove
2+3	dois mais três

Expression	Reading
2+3=5	dois mais três igual a cinco
2*3=6	dois vezes três igual a seis
6÷3=2	seis dividido por três igual a dois
25%	vinte cinco por cento
3,4%	três vírgula quatro por cento

## 5.7. Mixed digits and letters

If a letter appears within a sequence of digits, the groups of digits will be read as numbers according to the rules above. The letter marks the boundary between the numbers. The letter will also be read.

Expression	Reading
77B84	setenta e sete B oitenta e quatro
0092B87-B	zero zero noventa e dois B oitenta e sete B

## 5.8. Time of day

The colon is used to separate hours, minutes and seconds. [not SP] When there are no seconds, *H* or *h* can be used to separate hours and minutes. [not SP] The time words *pm* and *am* are recognized when occurring after an hour alone. When there are minutes and seconds, time words are recognized in front of the format, as well as after.

In the patterns below *h* = *hour*, *m* = *minute*, *s* = *second*. Possible patterns are:

a. *hh:mm* or *h:mm*

If the *mm*-part is equal to *00*, this part will not be read.

b. *hh:mm:ss* or *h:mm:ss*

An *e* will be inserted before the *ss*-part, and *segundos* will be added after it. If the *ss*-part is equal to *00*, this part will not be read.

c. [not SP] *hhHmm* or *hHmm*

Example: *12H30* and *3h30*

If the *mm*-part is equal to *00*, this part will not be read.

[not SP] The character *H* and *h* in a time expression such as *2h20* is read as *horas e*.

Expression	Reading	
08:20	oito horas e vinte minutos	
8:20	oito horas e vinte minutos	
08:22:33	oito horas vinte e dois minutos e trinta e três segundos	
8:22:33	oito horas vinte e dois minutos e trinta e três segundos	
12H30	doze horas e trinta minutos	[not SP]
3h30	três horas e trinta minutos	[not SP]
08:00	oito horas	
12:00	doze horas	
05:03:05	cinco horas três minutos e cinco segundos	

<b>Expression</b>	<b>Reading</b>	
08 a.m.	oito horas da manhã	[not SP]
08 p.m.	oito horas da noite	[not SP]
08-09 a.m.	oito às nove da manhã	[not SP]
08-09 p.m.	oito às nove da manhã	[not SP]

## 5.9. Dates

### 5.9.1. Valid formats

The valid formats for dates are:

1. *dd.mm.yyyy*, *dd/mm/yyyy*, and *dd-mm-yyyy*
2. *dd.mm.yy*, *dd/mm/yy*, and *dd-mm-yy*
3. *yyyy.mm.dd*, *yyyy-mm-dd*, and *yyyy/mm/dd*

*yyyy* is a four-digit number, *yy* is a two-digit number, *mm* is a month number between 1 and 12 and *dd* a day number between 1 and 31.

Hyphen, full stop or slash may be used as delimiters. In all formats, one or two digits may be used in the *mm* and *dd* part. Zeros may be used in front of numbers below 10.

Examples of valid formats and their readings:

<b>Type 1:</b>	<b>Reading</b>
10-02-2003 or 10-2-2003	dez de fevereiro de dois mil e três
10.02.2003 or 10.2.2003	dez de fevereiro de dois mil e três
10/02/2003 or 10/2/2003	dez de fevereiro de dois mil e três
<b>Type 2:</b>	<b>Reading</b>
10-02-03 or 10-2-03	dez de fevereiro de dois mil e três
10.02.03 or 10.2.03	dez de fevereiro de dois mil e três
10/02/03 or 10/2/03	dez de fevereiro de dois mil e três
<b>Type 3:</b>	<b>Reading</b>
2003-02-10 or 2003-2-10	dez de fevereiro de dois mil e três
2003.02.10 or 2003.2.10	dez de fevereiro de dois mil e três
2003/02/10 or 2003/2/10	dez de fevereiro de dois mil e três

Other possible formats include (see also *OrdinalNumbers*):

#### **Example**

segunda-feira, 15 de janeiro  
 terça, 30 de abril de 1999  
 3 de maio de 1953

### 5.9.2. Ranges of days and years [not SP]

Ranges of days and years are also supported.

<b>Expression</b>	<b>Reading</b>
1998-1999	mil novecentos e noventa e oito a mil novecentos e noventa e nove
1939-45	mil novecentos e trinta e nove a quarenta e cinco
2002/3	dois mil e dois a três
14-15 janeiro	quatorze a quinze de janeiro

### 5.9.3. Months and days abbreviations [not SP]

Abbreviations of months and days in date formats:

**Months:**

*jan., fev., mar., abr., mai., jun., jul., ago., set., out., nov. and dez..*

**Days:**

*seg., ter., qua., qui., sex., sáb., dom.*

The full stop '.' after the abbreviations is optional.

The abbreviations above are only expanded to names of months and days when appearing in correct date contexts.

<b>Expression</b>	<b>Reading</b>
10 de fev. de 2002	dez de fevereiro de sois mil e dois
10 de fev. de 2002	dez de fevereiro de dois mil e dois
10 fev, 2002	dez de fevereiro de dois mil e dois
Seg. 10 de fev. de 2002	segunda dez de fevereiro de dois mil e dois
qua. 10 de fev. 2002	quarta dez de fevereiro, dois mil e dois
2ª feira 10 fev. 2002	segunda-feira dez de fevereiro de dois mil e dois
3ª feira 10 de fev. de 2002	terça-feira dez de fevereiro de dois mil e dois

## 5.10. Phone numbers [not SP]

In this section the patterns of digits that are recognised as phone numbers are described. In the pronunciation of phone numbers each group of digits is spelled out, with pauses between groups of numbers.

### 5.10.1. Ordinary phone numbers

Sequences of digits in the following formats are treated as phone numbers:

**Format**

(xx)xxx-xxxx  
 (xx)xxxx-xxxx  
 (xx xx)xxx-xxxx  
 (xx xx)xxxx-xxxx

The above formats can have an optional space after the closing bracket.

The following formats are also recognised:

**Format**

xx xxx xxxx  
 xx xx xxxx-xxxx

**Expression**

(48)332-5003  
 (48)3321-5003  
 (55 11) 3235-0055  
 48 33 5003 0055

**Reading**

quatro oito três três dois cinco zero zero três  
 quatro oito três três dois um cinco zero zero três  
 cinco cinco um um três dois três cinco zero zero cinco  
 cinco  
 quatro oito três três cinco zero zero três zero zero cinco  
 cinco

Any sequence composed of three groups of digits separated by hyphens is treated as a phone number format, with the exception of the date formats in section *OrdinalNumbers* .

568-123548-12                      cinco seis oito um dois três cinco quatro oito um dois

**5.10.2. International phone numbers**

International phone numbers follow the patterns below:

*International Prefix + Country number + Regional number + Local number (as seen above).*

*International Prefix:*                      00 or +  
*Country code:*                              1-3 digits

The international prefix, country code, and local number may be separated by a space or a hyphen.

**Example**

00 32 (12)123-4567  
 00 33 (25 35) 5834-2850  
 00-33-25 648 3695

**Reading**

zero zero três dois um dois um dois três quatro cinco  
 seis sete  
 zero zero três três dois cinco três cinco cinco oito três  
 quatro dois oito cinco zero  
 zero zero três três dois cinco seis quatro oito três seis  
 nove cinco



---

## Chapter 6. How to change the pronunciation

---

### 6.1. User lexicon

Words that are not pronounced correctly by the text-to-speech converter can be entered in the user lexicon (see *User's guide*). When writing translations for entries in the user lexicon to change the way a word is pronounced, one method is to modify the spelling of the word (see section *Alternative spelling*) and another is to write a phonetic transcription of the word (see chapter *Brazilian Portuguese Phonetic Text*). Phonetic transcriptions can also be entered directly in the text, using the *PRN* or *PRX* tag (see *User's guide*).

### 6.2. Alternative spelling

Sometimes, the quickest way of changing the pronunciation of the word is to change the spelling of the word directly in the text. Changing a single letter, or adding a hyphen, can often make it sound better. This is specially useful when it comes to foreign words. Try to write the foreign words as they sound.

<b>Correct spelling</b>	<b>Alternative spelling</b>
Renault	Renó
Paul	Pól

---

## Chapter 7. Brazilian Portuguese Phonetic Text

---

The Brazilian Portuguese text-to-speech system uses the Brazilian subset of the SAMPA phonetic alphabet (*Speech Assessment Methods Phonetic Alphabet*) with some modifications. The symbols are written with a space between each phoneme.

Only the symbols listed here may be used in phonetic transcriptions. Symbols not listed here are not valid in phonetic transcriptions and will be ignored if included in the user lexicon or in a *PRN* or *PRX* tag.

### 7.1. Consonants

The table below lists the phonetic symbols used for the Brazilian consonants along with example words and their transcriptions.

**Table 7.1. Brazilian Portuguese consonants**

Symbol	Word	Phonetic text	Comment
w	água	a1 g w a	
j	ciência	s j e~1 s j a	
p	pai	p a j1	
t	tenho	t e1 J u	
k	com	k o~	
b	barco	b a1 r k u	
d	doce	d o1 s i	
g	grande	g r 6~1 dZ i	
f	falo	f a1 l u	
v	verde	v e1 r dZ i	
s	céu	s Ew1	
z	casa	k a1 z a	
S	chapéu	S a p Ew1	
Z	jóia	Z Oj1 a	
l	labor	l a b o1 r	
L	trabalho	t r a b a1 L u	
r	carro	k a1 r u	
R	rua	R u1 a	
m	mar	m a1 r	
n	nadar	n a d a1 r	
J	vinho	v i1 J u	
dZ	dia	dZ i1 a	
tS	tio	tS i1 u	

### 7.2. Vowels

The table below lists the phonetics symbols used for the Brazilian vowels and diphthongs along with example words and their transcriptions.

**Table 7.2. Brazilian Portuguese vowels**

Symbol	Word	Phonetic text	Comment
a	falo	f a1 l u	
á	ana	á1 n a	
e	fazer	f a z e1 r	
E	belo	b E1 l u	
i	íamos	i1 á m u s	
o	lobo	l o1 b u	
O	aborda	a b O1 r d a	
u	duro	d u1 r u	
ô	ambo	ô~1 b u	
í	fim	f i~1	
e~	emprego	e~ p r e1 g u	
o~	bom	b o~1	
u~	um	u~	
aw	aula	aw1 l a	
iw	mil	m iw1	
ew	museu	m u z ew1	
Ew	céu	s Ew1	
ow	sou	s ow1	
Ow	sol	s Ow1	
uw	adulto	a d uw1 t u	
aj	mais	m aj1 s	
ej	gostei	g o s t ej1	
Ej	idéia	i d Ej1 a	
oj	loiro	l oj1 r u	
Oj	abóia	a b Oj1 a	
uj	aleluia	a l e l uj1 a	
ô~j~	mãe	m ô~j~1	
e~j~	em	e~j~	
o~j~	nações	n a s o~j~1 s	
u~j~	muito	m u~j~1 t u	
ô~w~	cão	k ô~w~1	

### 7.3. Lexical stress

A lexical accent is used to indicate the level of prominence (or emphasis) of a syllable in a word. In Brazilian Portuguese, all words that do not follow normal accentuation rules have a lexical accent to indicate a stressed syllable. It is therefore important to include stress marks when writing phonetic transcriptions.

In the phonetic transcriptions, the lexical accent is indicated by the symbol 1 placed directly after (no space) the accented vowel or diphthong.

## 7.4. Pause

An underscore /\_/\_ in a phonetic transcription generates a small pause.

---

## Chapter 8. Abbreviations

---

In the current version of the Brazilian Portuguese text-to-speech system, the abbreviations in table 4 below are recognised in all contexts. These abbreviations are mostly case-insensitive and require no full stop in order to be recognised as an abbreviation.

As previously mentioned, there are also abbreviations for the days of the week and the months (see chapter *Ordinal numbers* .)

**Table 8.1. Abbreviations**

Abbreviation	Reading
n°	número
n°s	números
a.C.	antes de Cristo
d.C.	depois de Cristo
esq.	esquerdo
ár.	árabe
arc.	arcaico
dir.	direito
arc°	arcebispo
arqt	arquiteto
arquit	arquitetura
arr.	arroba
asp.	aspirante
atm.	atmosfera
av	avenida
al.	alameda
b.-art.	Belas Artes
BB	Banco do Brasil
bibliog	bibliografia
BN	Biblioteca Nacional
brig.	brigadeiro
cel.	celular
exmo	excelentíssimo
exmos	excelentíssimos
exma	excelentíssima
exmas	excelentíssimas
dr. <sup>a</sup>	doutora
dr.as	doutoras
dr	doutor
drs	doutores
v.exa	vossa excelência
s. ex.a	sua excelência
ss. ex.as	suas excelências

Abbreviations

<b>Abbreviation</b>	<b>Reading</b>
ext.	exterior
lic. <sup>o</sup>	licenciado
lic. <sup>a</sup>	licenciada
mme.	madame
mr.	mister
srtá	senhorita
srtas.	senhoritas
mons.	monsenhor
etc.	et cetera
D. <sup>a</sup>	dona
dig.mo	digníssimo
S.S. <sup>a</sup>	sua senhoria
V.S. <sup>a</sup>	vossa senhoria
ltda.	limitada
prof.	professor
profs.	professores
Prof.a	professora
prof.as	professoras
sto.	santo
stos.	santos
sta.	santa
stas.	santas
atm.	atmosfera
eng	engenheiro
enga.	engenheira
jr.	júnior
sra.	senhora
sras.	senhoras
sr.	senhor
srs.	senhores
vol.	volume
vols.	volumes
p.f.	por favor
obg. <sup>o</sup>	obrigado
obg. <sup>a</sup>	obrigada
kl	quilolitrus
hl	hectolitrus
kg	quilos
hg	hectogramas
dg	decigramas
cg	centigramas

<b>Abbreviation</b>	<b>Reading</b>
mg	miligramas
dag	decagramas
dgr	decígrado
cgr	centígrado
mgr	milígrado
°C	graus centígrados
°F	graus Farenheit
mW	miliwatt
dB	decibel
gr	grosa
cm	centímetros
dm	decímetros
mm	milímetros
cl	centilitros
dl	decilitros
ml	mililitros
km/h	quilómetros por hora
min.	minuto
pág.	página
págs.	páginas
pp.	páginas
caps.	capítulos
cat.	catálogo
cats.	catálogos
cit.	citado
loc. cit.	no lugar citado
cf.	confira
cód.	código
ob.	obra
ob.cit.	obra citada
op.cit.	obra citada
doc.	documento
docs.	documentos
col.	coleção
ed.	edição
eds.	edições
tel.	telefone
i. e.	Isto é
e.g.	por exemplo
v.g.	por exemplo
supl.	suplemento

<b>Abbreviation</b>	<b>Reading</b>
supls.	suplementos
fig.	figura
figs.	figuras
tip.	tipografia
tít.	título
gloss.	glossário
trad.	tradução
livr.	livro
livrs.	livros
bol.	boletim
ok.	okey
obs.	observação
abrev	abreviatura
ram.	ramal
NB	note bem
cf.	confira
c.-alm	contra-almirante
cap.frag.	capitão de fragata
cap.-ten.	capitão tenente
card.	cardeal
cap.m.g.	capitão de mar e guerra
c/c	conta corrente
C.D.	corpo diplomático
CEB	Comunidades Episcopais de Base
cfr	confira
Ds	Deus
m/o	minha ordem
Dec.	decreto
LTN	Letras do Tesouro Nacional
UF	Unidade Federativa
V.P.	vossa paternidade
V.T.	Velho Testamento



---

## Chapter 9. Web-addresses and email

---

Web-addresses and email-addresses are read as follows:

- *www* is spelled letter by letter.
- Full stops are read as *ponto*, hyphens as *traço*, underscore '\_' as *traço inferior*, slash '/' as *barra*.
- *br*, *uk*, *fr* and all the other abbreviations for countries are spelled out letter by letter.
- The '@' is read *arroba*.
- Words/strings (including *org*, *com* and *edu*) are pronounced according to the normal rules of pronunciation in the system and in accordance with the lexicon.

### String

www.acapela-group.com

http://www.acapela-group.com

rios@yahoo.br

diego\_rios@yahoo.br

### Reading

w w w ponto acapela traso group ponto com

h t t p dois pontos barra barra w w w ponto acapela  
traso group ponto com

rios arroba yahoo ponto b r

diego traço inferior rios arroba yahoo ponto b r