

# PORTA

Along with Trithemius and Vignère, Porta is generally regarded as one of the founders of modern cryptography.



This first edition of his encyclopaedic work on the subject includes historical sections on deciphering, and on cryptography in the ancient world. Porta is know chiefly for his invention of a series of twelve alphabet ciphers in which letters of the second half of the alphabet are made to stand for letters of the first half, a key word indicating what substitutes are used. The earliest know cipher of its kind, its chief value lies in its compactness and convenience to prepare. Porta's work may have been known to Vigenère, and is acknowledged by Matteo Argenti (fl. 1610), cryptographer of the Papal States, as the chief source of his own work.

LITERAE SCRIPTI													
LITERAE CLAVIS	A B	a	b	c	d	e	f	g	h	i	l	m	
		n	o	p	q	r	s	t	v	x	y	z	
	C D	a	b	c	d	e	f	g	h	i	l	m	
		z	n	o	p	q	r	s	t	v	x	y	
	E F	a	b	c	d	e	f	g	h	i	l	m	
		y	z	n	o	p	q	r	s	t	v	x	
	G H	a	b	c	d	e	f	g	h	i	l	m	
		x	y	z	n	o	p	q	r	s	t	v	
	I L	a	b	c	d	e	f	g	h	i	l	m	
		v	x	y	z	n	o	p	q	r	s	t	
	M N	a	b	c	d	e	f	g	h	i	l	m	
		t	v	x	y	z	n	o	p	q	r	s	
	O P	a	b	c	d	e	f	g	h	i	l	m	
		s	t	v	x	y	z	n	o	p	q	r	
	Q R	a	b	c	d	e	f	g	h	i	l	m	
		r	s	t	v	x	y	z	n	o	p	q	
	S T	a	b	c	d	e	f	g	h	i	l	m	
		q	r	s	t	v	x	y	z	n	o	p	
	V X	a	b	c	d	e	f	g	h	i	l	m	
		p	q	r	s	t	v	x	y	z	n	o	
	Y Z	a	b	c	d	e	f	g	h	i	l	m	
		o	p	q	r	s	t	v	x	y	z	n	

2. An alphabet cipher of Giovanni Battista della Porta (No. 5)

plain

		A	B	C	D	E	F	G	H	I	J	K	L	M	
key		N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
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A,B		N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
C,D		O	P	Q	R	S	T	U	V	W	X	Y	Z	N	
E,F		P	Q	R	S	T	U	V	W	X	Y	Z	N	O	
G,H		Q	R	S	T	U	V	W	X	Y	Z	N	O	P	
I,J		R	S	T	U	V	W	X	Y	Z	N	O	P	Q	
K,L		S	T	U	V	W	X	Y	Z	N	O	P	Q	R	
M,N		T	U	V	W	X	Y	Z	N	O	P	Q	R	S	
O,P		U	V	W	X	Y	Z	N	O	P	Q	R	S	T	
Q,R		V	W	X	Y	Z	N	O	P	Q	R	S	T	U	
S,T		W	X	Y	Z	N	O	P	Q	R	S	T	U	V	
U,V		X	Y	Z	N	O	P	Q	R	S	T	U	V	W	
W,X		Y	Z	N	O	P	Q	R	S	T	U	V	W	X	
Y,Z		Z	N	O	P	Q	R	S	T	U	V	W	X	Y	

cipher

P: encipherment is reciprocal

K: PORTA

K = | P O R T A

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P = | e n c i p

| h e r m e

| n t i s r

| e c i p r

| o c a l

C = | Y G X R C

| O Y J V R

| G M Q J E

| Y W Q G E

| H W V U

C: YGXRC OYJVR GMQJE YWQGE HWVU

[Excerpt from “Books on Cryptography” from The Arnold Semeiology Collection]