

WUMBO Engine · Roman Numeral Index

Each entry links to the APL Operator's Manual structure for cross-reference (Machines, Domains, Operators, States).

[Open APL Manual \(HTML\)](#)

[Download APL Manual \(PDF\)](#)

[Download WUMBO Engine \(PDF\)](#)

How To Read

Roman numerals mirror the Neuro-Wumbo atlas (I-C). Each item links to relevant APL scaffolding:

Machines

Oscillator, Reactor, Conductor, Encoder — processing contexts.

[APL: Machines](#)

Domains

Structure (Φ / geometry), Energy (e / wave), Emergence (α / biology/chemistry).

[APL: The Three Fields · Domains](#)

Operators

() boundary, \times fusion, \wedge amplify, % decohere, + group, - separate.

[APL: Universal Operations](#)

States (UMOL)

u forward, d collapse, m modulation; balance laws and regime prediction.

[APL: Operator States](#)

Roman Numeral Cross-Links

I. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

II. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

III. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

IV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

V. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

VI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

VII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

VIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

IX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

X. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·

XVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·

XVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·

States	States	States
XIX. Atlas Entry Manual: Machines · Domains · Operators · States	XX. Atlas Entry Manual: Machines · Domains · Operators · States	XXI. Atlas Entry Manual: Machines · Domains · Operators · States
XXII. Atlas Entry Manual: Machines · Domains · Operators · States	XXIII. Atlas Entry Manual: Machines · Domains · Operators · States	XXIV. Atlas Entry Manual: Machines · Domains · Operators · States
XXV. Atlas Entry Manual: Machines · Domains · Operators · States	XXVI. Atlas Entry Manual: Machines · Domains · Operators · States	XXVII. Atlas Entry Manual: Machines · Domains · Operators · States
XXVIII. Atlas Entry Manual: Machines · Domains · Operators · States	XXIX. Atlas Entry Manual: Machines · Domains · Operators · States	XXX. Atlas Entry Manual: Machines · Domains · Operators · States
XXXI. Atlas Entry Manual: Machines · Domains · Operators · States	XXXII. Atlas Entry Manual: Machines · Domains · Operators · States	XXXIII. Atlas Entry Manual: Machines · Domains · Operators · States
XXXIV. Atlas Entry	XXXV. Atlas Entry	XXXVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

XXXVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XXXVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XXXIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XL. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XLIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

L. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LII. Atlas Entry

LIII. Atlas Entry

LIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

LV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXX. Atlas Entry

LXXI. Atlas Entry

LXXII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

LXXIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

LXXXVIII. Atlas Entry

LXXXIX. Atlas Entry

XC. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

Manual: Machines ·
Domains · Operators ·
States

XCI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCIV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCV. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCVI. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCVII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCVIII. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

XCIX. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States

C. Atlas Entry

Manual: Machines ·
Domains · Operators ·
States