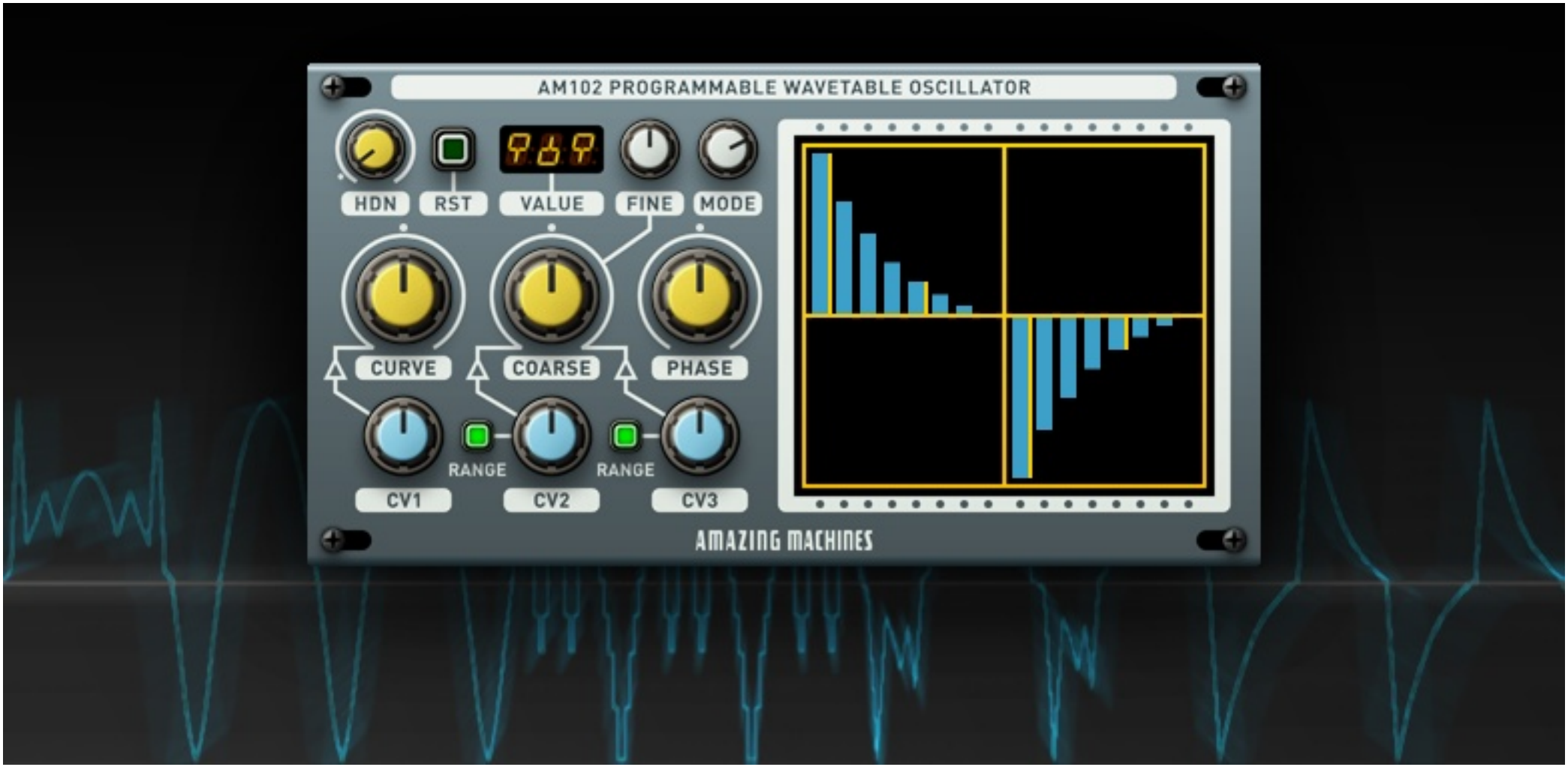
AM102 Programmable Wavetable Oscillator

User Manual • Version 1.0 • October 2015



AMAZING MACHINES

www.amazingmachines.com.br

INTRODUCTION

Thank you, and congratulations on your choice of the AM102 module.

AM102 is a Block module for use with the Native Instruments' Reaktor Blocks Modular System.

A Programmable Wavetable Oscillator, featuring a 16 Stages Wavetable with 3 selectable Playback Modes and 3 types of Output Curves, AM102 is a Shape Shifter yet to be rivalled.

You must accept the license agreement to use this product.
Please see www.amazingmachines.com.br/software_eula.html for details.

Reaktor is a trademark of Native Instruments GmbH, all other trademarks and copyrights are property of their respective owners.

TABLE OF CONTENTS

Chapter 1 - System Requirements 1
Chapter 2 - Installation Guide 2
Chapter 3 - Connections and Interface 4
Chapter 4 - Module Flow Chart 7

CHAPTER 1 - SYSTEM REQUIREMENTS

Windows

- Windows 7, Windows 8 or Windows 10 (latest Service Pack, 32/64-bit).
- Intel Core 2 Duo or AMD AthlonTM 64 X2, 4 GB RAM.

Mac

- Mac OS X 10.9 or 10.10 (latest update, 64-bit only).
- Intel Core 2 Duo, 4 GB RAM.

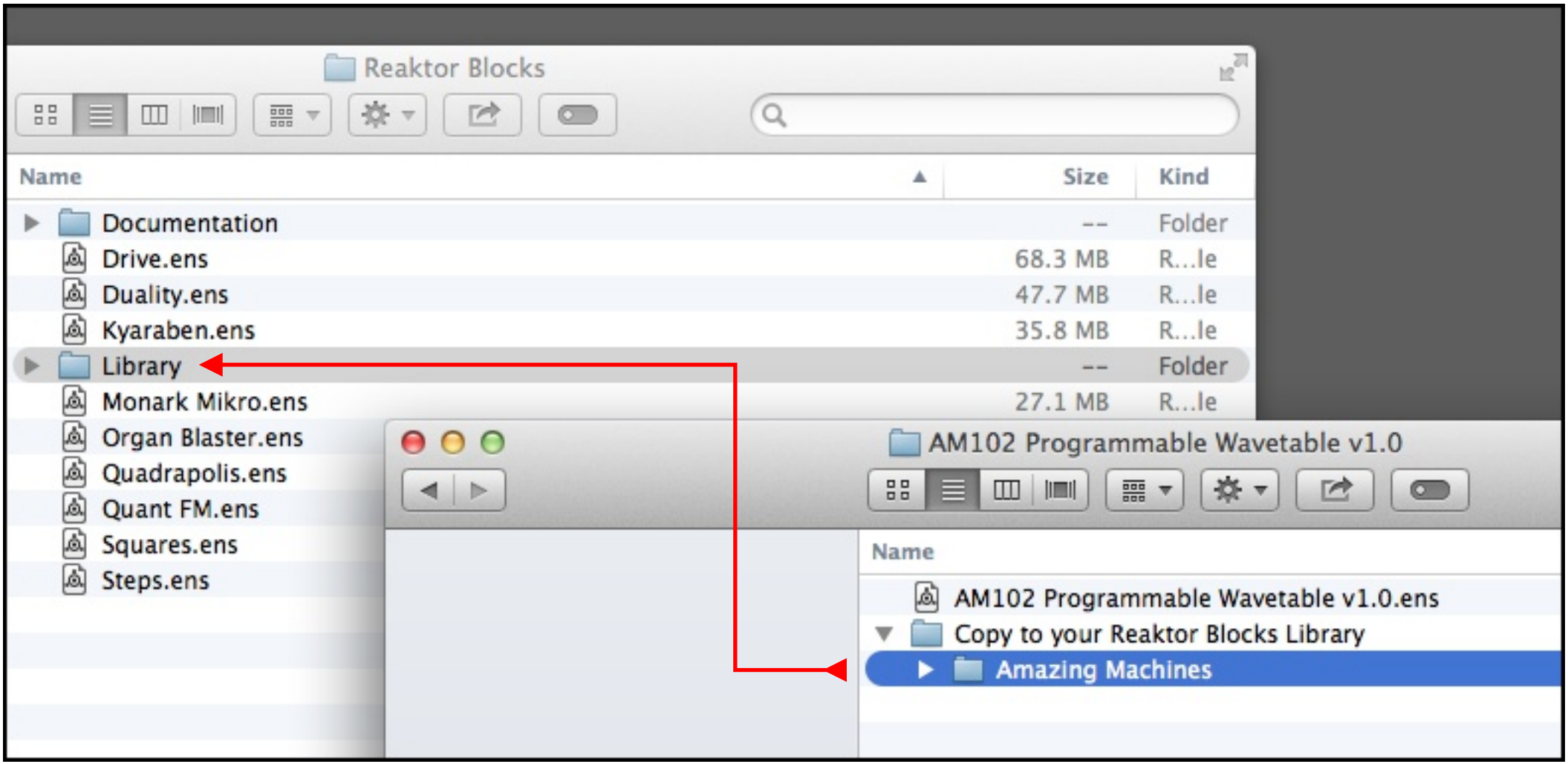
General System Requirements

- Native Instruments’ Reaktor 6.0 or Newer.

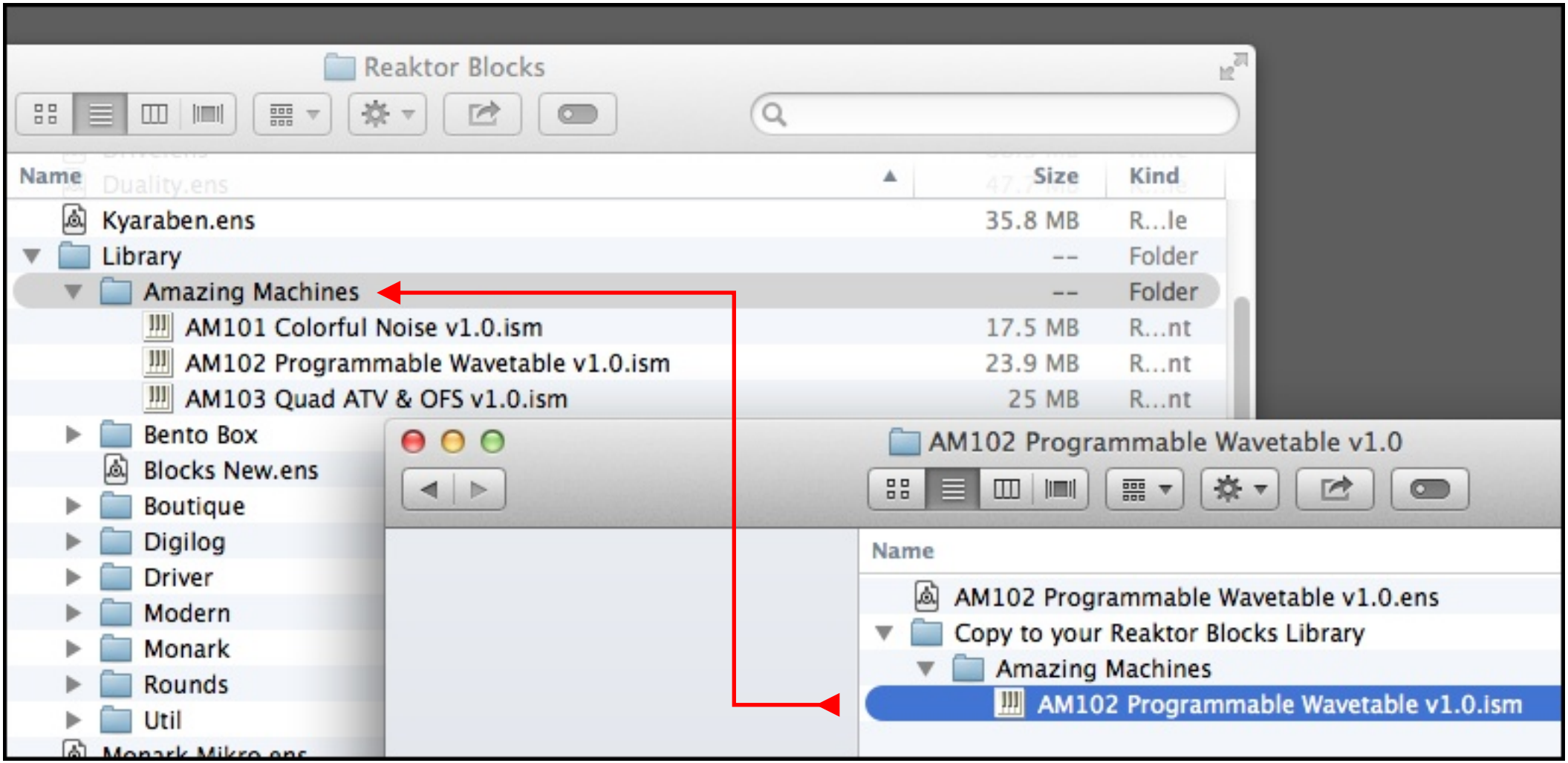
CHAPTER 2 - INSTALLATION GUIDE

To install and use the AM102 module, simply extract the contents of the provided ".ZIP" archive to your prefered location on your Computer, using an extraction tool such as WinZip.

Then copy the folder "Amazing Machines" to your Reaktor Blocks Library folder.



If you have other Amazing Machines modules installed in your System, simply copy the file "AM102 Programmable Wavetable v1.0.ism" to the folder "Amazing Machines" located in your Reaktor Blocks Library folder.



Alternatively the provided "AM102 Programmable Wavetable v1.0.ens" file can be used to copy and paste the module between Ensembles.

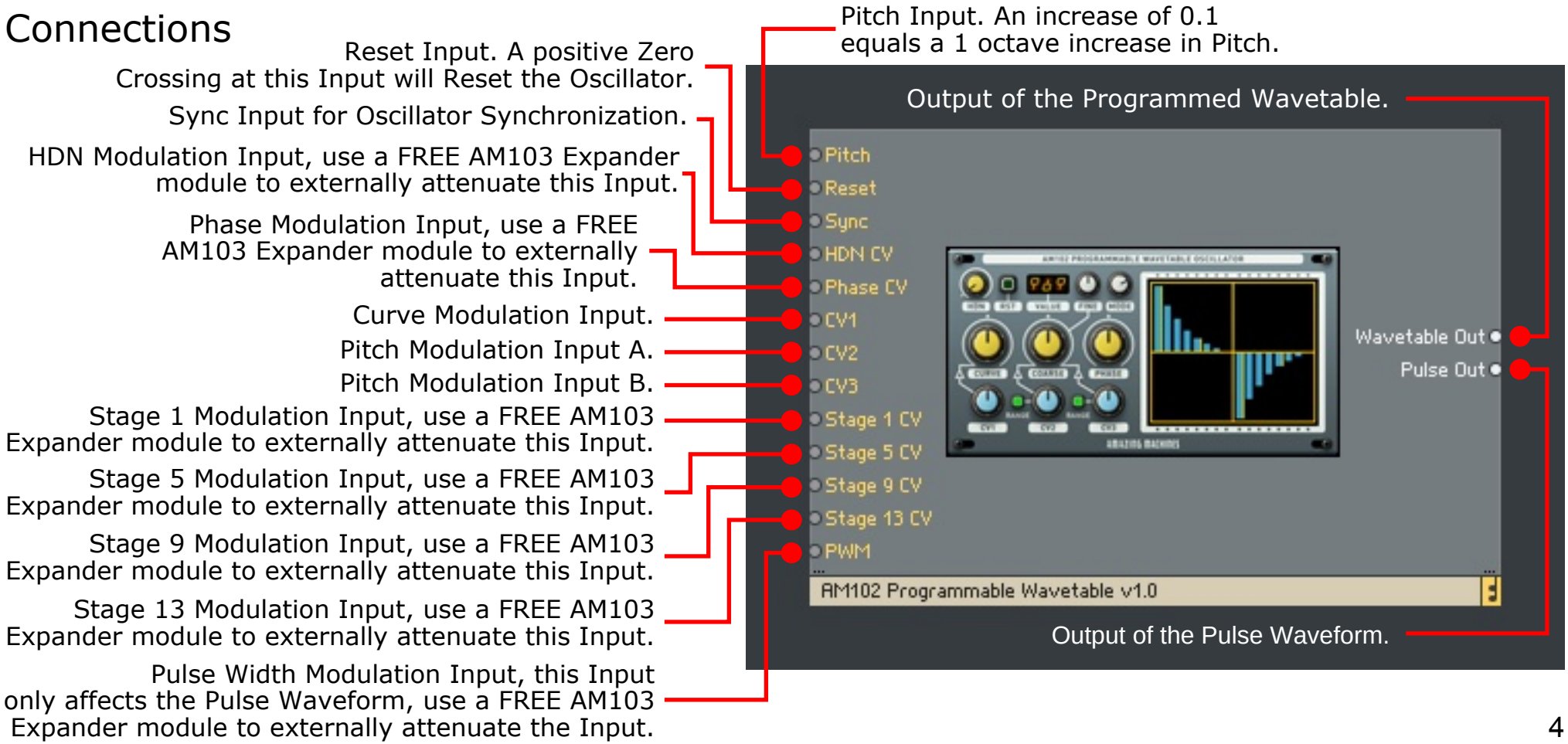
CHAPTER 3 - CONNECTIONS AND INTERFACE

AM102 is a Programmable Wavetable Oscillator, featuring a 16 Stages Wavetable with 3 selectable Playback Modes and 3 types of Output Curves, AM102 is a Shape Shifter yet to be rivalled.

Click and drag the faders in the Wavetable Display to draw your own Waveforms, use the CURVE and MODE controls to modify Waveforms even further, connect AM102 to a FREE AM103 Expander Module in order to control the Modulation Inputs of Stages 1, 5, 9 and 13.

AM102 also features a Pulse Waveform Output with a PWM Input, in Backward (BWD) and Forward (FWD) Playback Modes the Pulse Waveform is tuned 1 Octave below the Wavetable, serving as a Sub Oscillator or a Synchronization Source for other Oscillators.

Connections



Controls

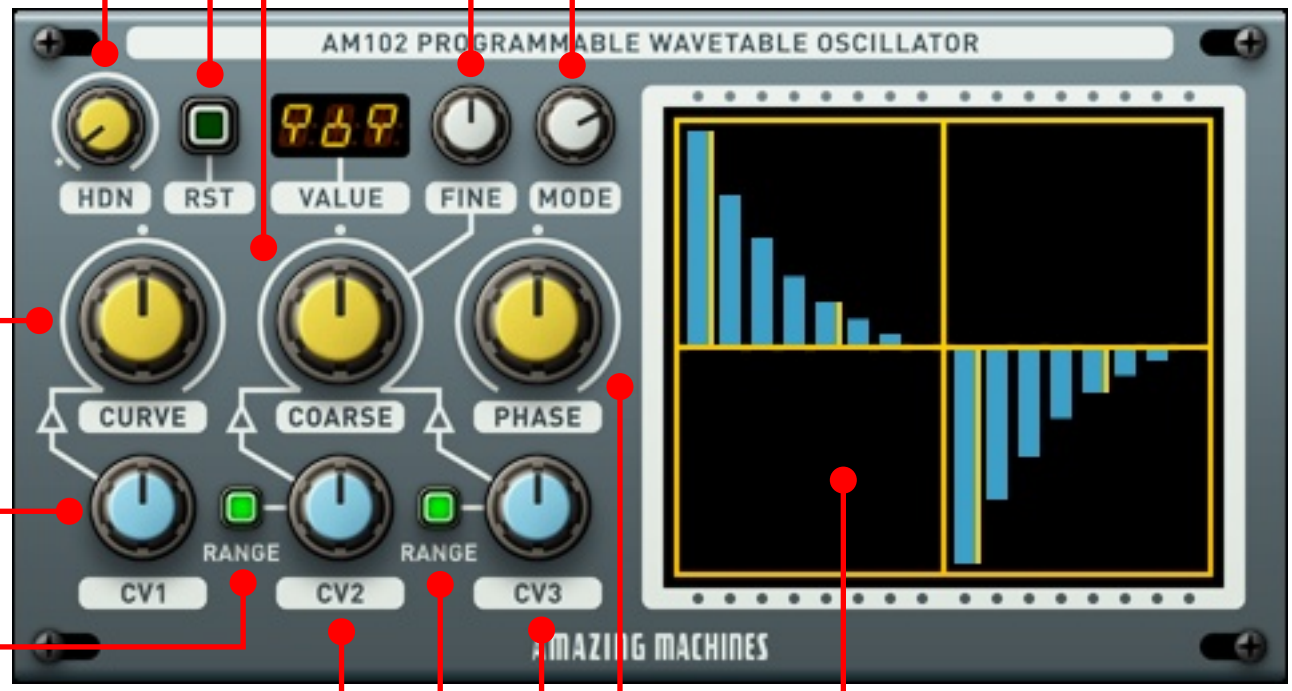
Enables the Reset Input.

Synchronization Hardness:
0 = No Sync [OFF]
1 to 99 = Various degrees of Soft Sync [SFT = 50%]
100 = Hard Sync [HRD]

Coarse Tune of the Oscillator in Semitones.

Fine Tune of the Oscillator in Cents.

Sets the Playback Mode of the Wavetable, choose BWD for Backward playback, ALT for Alternating playback or FWD for Forward playback.



Wavetable Output Curve:
-100 = Stepped Curve [STP]
0 (Default) = Linear Curve [LIN]
100 = Exponential Curve [EXP]

Controls the amount of CV1 Modulation that is applied to the Curve Crossfader.

Sets the Range of the CV2 Modulation Input. Choose Narrow (NRW) to set the amount of modulation in Cents or Wide (WDE) to set the amount of modulation in Semitones.

Controls the amount of CV2 Modulation that is applied to the Pitch of the Oscillator.

Sets the Range of the CV3 Modulation Input. Choose Narrow (NRW) to set the amount of modulation in Cents or Wide (WDE) to set the amount of modulation in Semitones.

Controls the amount of CV3 Modulation that is applied to the Pitch of the Oscillator.

Wavetable Display:
Click and drag the Blue Faders to draw your own Waveforms.

Sets at which point, in its cycle, the Oscillator Restarts, upon the receival of a positive Zero Crossing at the Reset Input.

Mouse Areas, Value Display and Modulation Indicators

The areas marked in red are Mouse Areas, they activate the Value Display for the selected Control, everytime a Knob or Switch is changed the Value Display automatically updates the Status of the Control, but sometimes you may want to check the Status of a Control without changing its current position, the Mouse Areas serve this purpose.

The white dots that circle around the HDN, Curve, Coarse and Phase knobs are Modulation Indicators, they move away from the knobs indicators depending on how the HDN CV, CV1, CV2, CV3 and Phase CV Inputs are set.

Unified Value Display, the Controls on the AM102 GUI report their current Status to this Display.

The yellow lines that follow the Stages 1, 5, 9 and 13 faders are Modulation Indicators, they move away from the faders indicators depending on how the Stages 1, 5, 9 and 13 CV Inputs are set.

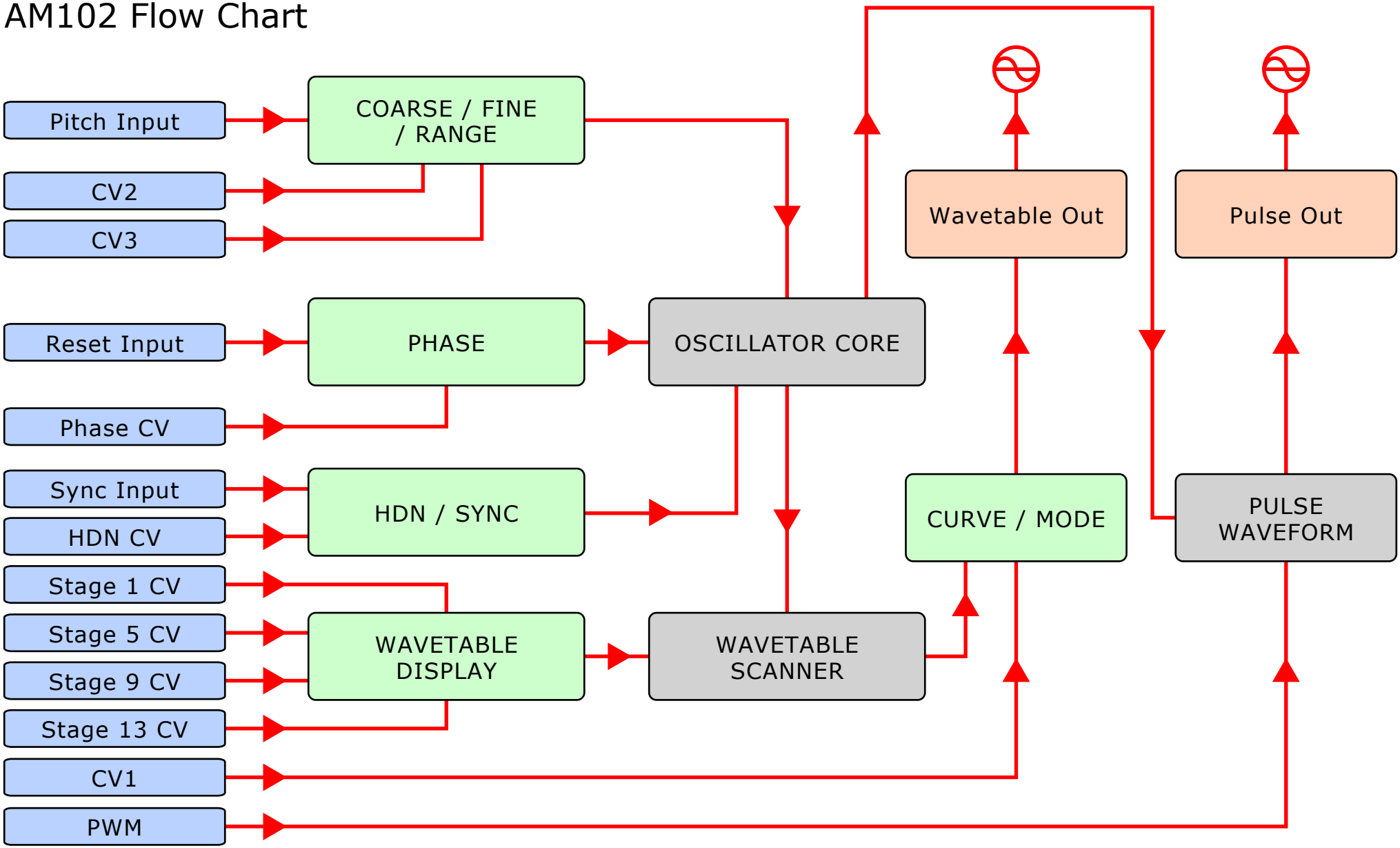
General Controls

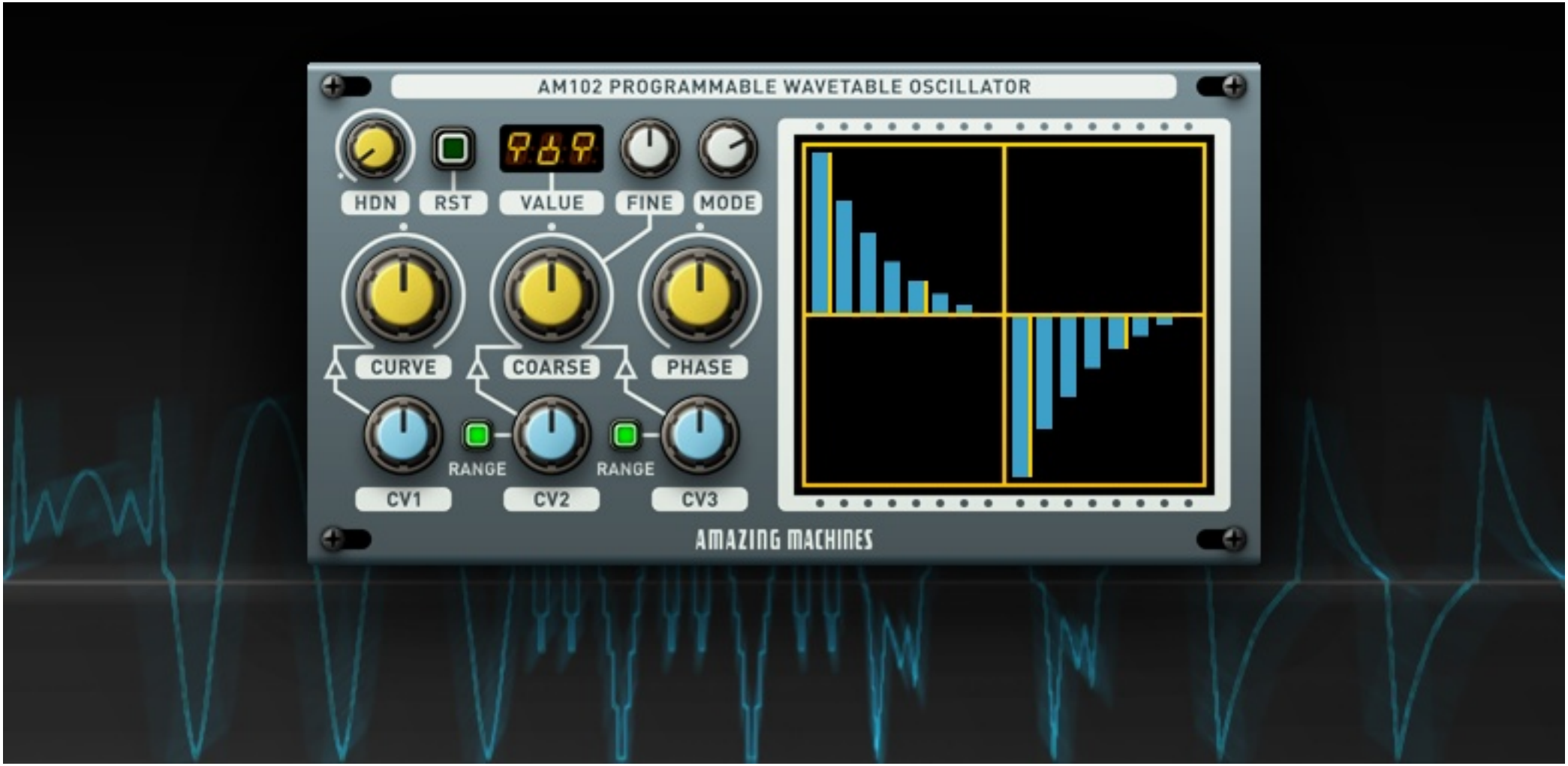
To set a Knob or Switch back to it's Default Position, control+click the desired Knob or Switch and select "Set to Default" from the drop down menu. Double-clicking a Knob will also set it back to it's Default Position.

MIDI Learn

To set a Knob or Switch to respond to a specific MIDI Continuous Controller, control+click the desired Knob or Switch and select "MIDI & OSC Learn" from the drop down menu, then move the desired MIDI Controller to assign.

AM102 Flow Chart




AM102 PROGRAMMABLE WAVETABLE OSCILLATOR
HDN
RST
VALUE
FINE
MODE
CURVE
COARSE
PHASE
RANGE
RANGE
CV1
CV2
CV3
AMAZING MACHINES