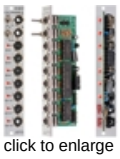
A-160-2 Clock/Trigger Divider II



click to enlarge

Standard Edition

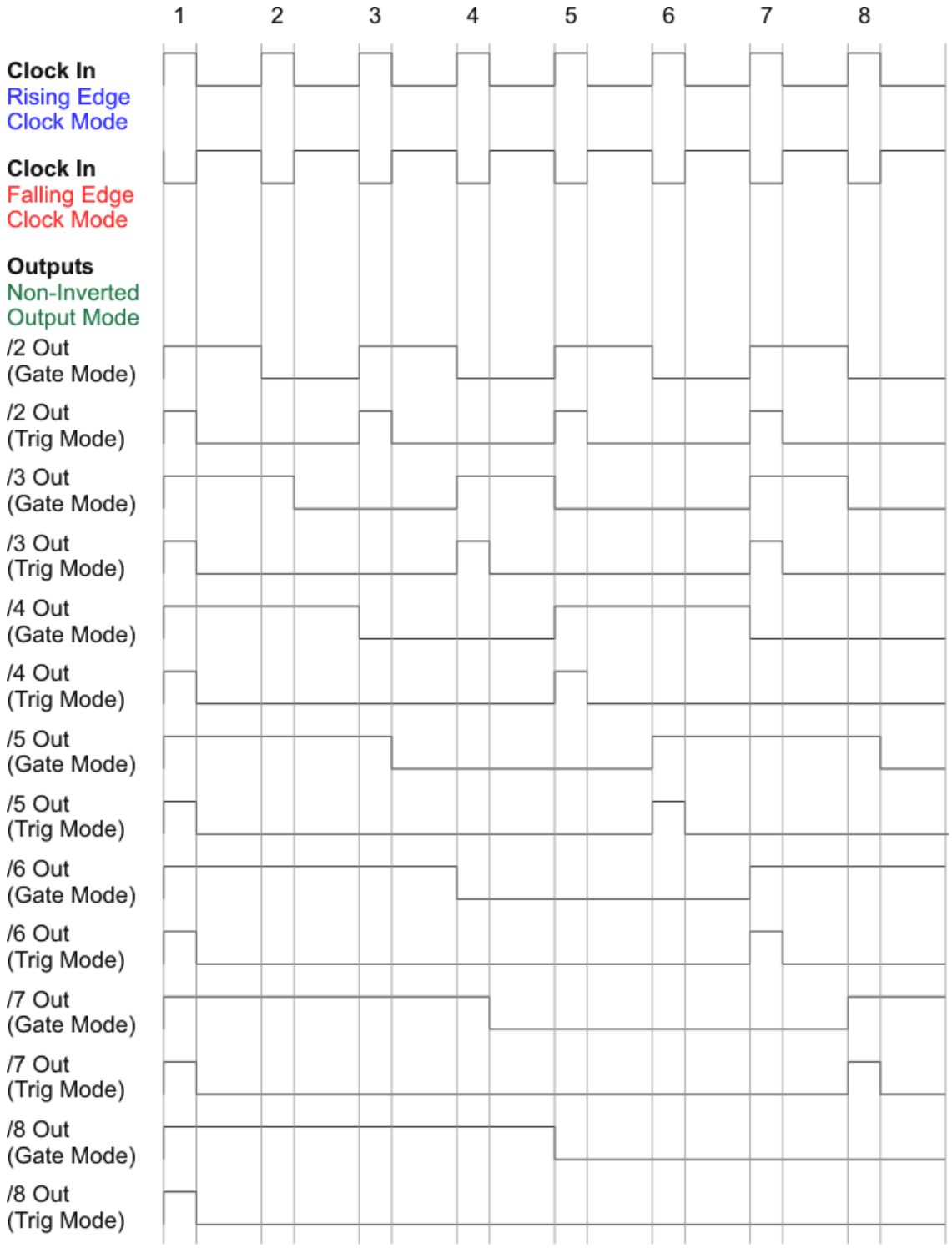
Vintage Edition

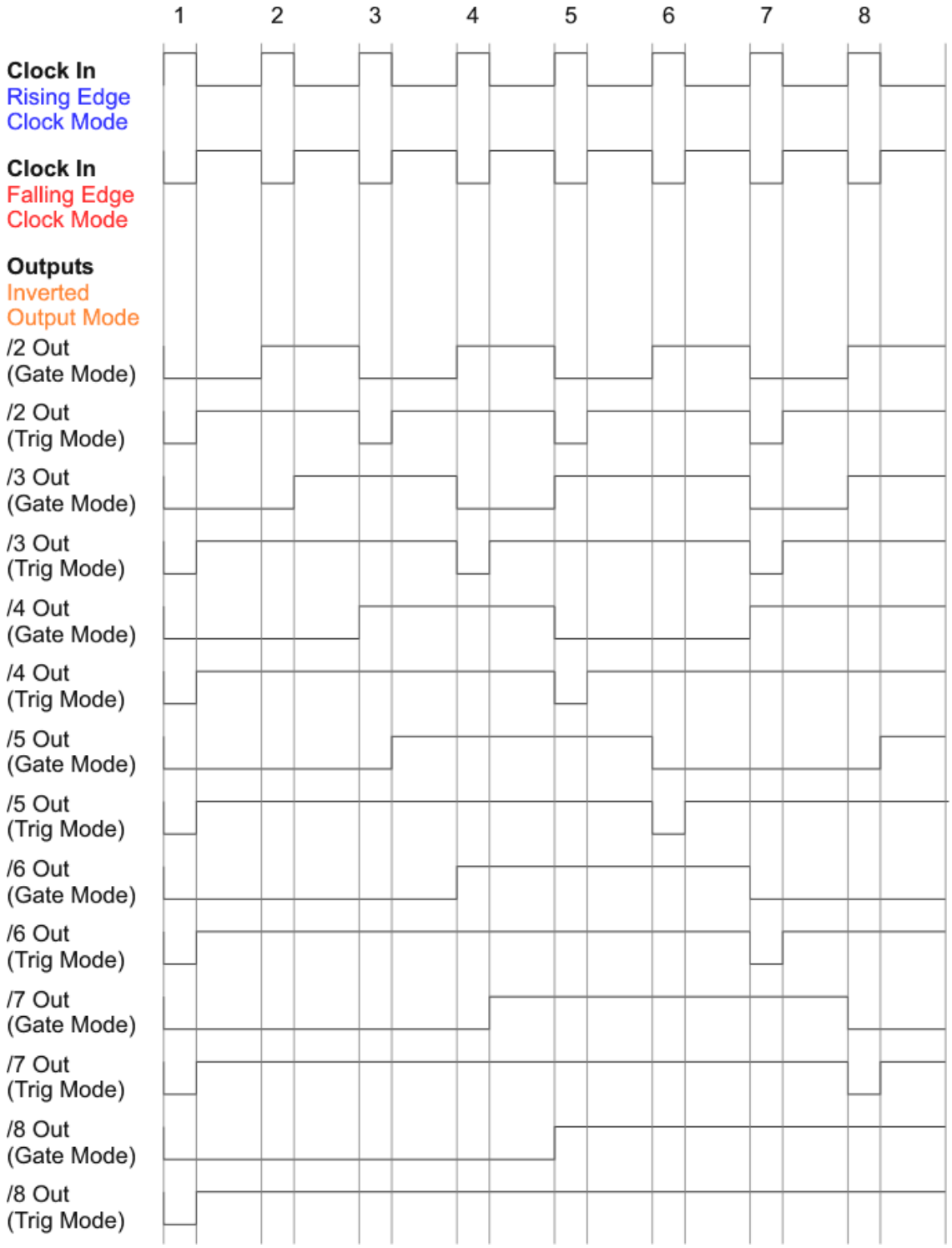
Module A-160-2 is an enhanced version of the standard clock divider A-160. The module is a frequency divider for clock/trigger/gate signals, designed to be a source of lower frequencies, particularly for rhythm uses. The Clock input will take any digital signal from, eg., an LFO, MIDI sync, or the gate from a MIDI-CV interface. At the outputs, you have access to three sets of seven different sub-divided clock signals, from half the clock frequency down to 1/128. The low/high levels of the output signals are 0V and about +10V.
The A-160-2 also has a reset input. Whenever a reset signal is sensed, all outputs are set to certain levels which depend upon the selected mode.

These are the most important features of the module:

- Three different sets of dividing factors, selected by a three-position switch at the front panel:
  - power of two: 2, 4, 8, 16, 32, 64, 128
  - prime numbers: 2, 3, 5, 7, 11, 13, 17
  - integer: 2, 3, 4, 5, 6, 7, 8
- Two output modes, selected by a two-position switch at the front panel:
  - Gate mode: outputs act like the outputs of typical binary dividers
  - Trigger mode: in this mode the outputs are AND-wired with the clock signal (i.e. the clock pulsewidth affects the pulsewidth of the outputs)
  - (the center position labelled "Cst" has no meaning so far, please refer to the note at the bottom of the page)
- Clock edge type selected by a jumper on the pc board:
  - positive: the rising edge of the clock signal triggers the state change of the outputs
  - negative: the falling edge of the clock signal triggers the state change of the outputs
- Reset behaviour by two jumpers on the pc board:
  - level triggered: the level at the Reset input triggers the Reset
  - edge triggered: the edge of the signal at the Reset input triggers the Reset
  - positive: a high level (> 2.5V) or the rising edge at the Reset input triggers the Reset
  - negative: a low level (< 1 V) or the falling edge at the Reset input triggers the Reset
- Output polarity selected by a jumper on the pc board:
  - positive: non-inverted outputs
  - negative: all seven outputs are inverted

The sketches show the behaviour of the outputs for the different modes:


1
2
3
4
5
6
7
8
Clock In
Rising Edge
Clock Mode
Clock In
Falling Edge
Clock Mode
Outputs
Non-Inverted
Output Mode
/2 Out
(Gate Mode)
/2 Out
(Trig Mode)
/3 Out
(Gate Mode)
/3 Out
(Trig Mode)
/4 Out
(Gate Mode)
/4 Out
(Trig Mode)
/5 Out
(Gate Mode)
/5 Out
(Trig Mode)
/6 Out
(Gate Mode)
/6 Out
(Trig Mode)
/7 Out
(Gate Mode)
/7 Out
(Trig Mode)
/8 Out
(Gate Mode)
/8 Out
(Trig Mode)



The document A160_2_jumpers.pdf shows the position and the function of the jumpers in question.

Note: In the final version of the module the upper toggle switch (i.e. the switch which is used to select between Gate and Trigger outputs) is also a 3-position switch. The center position is labelled "Cst" as an abbreviation for "Custom" mode. So far the custom mode is not yet implemented. For future firmware versions a custom mode is planned that can be selected by means of two unused jumpers (probably inverted gate output mode or inverted trigger output mode).

Note: It is not possible to connect the A-161 to the A-160-2 as the conception of the A-160-2 is totally different compared to the A-160 with it's fixed binary dividing.

Breite/Width: 4 TE / 4 HP / 20.0 mm
Tiefe/Depth: 35 mm (gemessen ab der Rückseite der Frontplatte / measured from the rear side of the front panel)
Strombedarf/Current: +50mA (+12V) / -0mA (-12V)

Preise / Prices:
Standard Version : Euro 110.00
Vintage Edition : Euro 120.00
The price in US$ depends upon the exchange rate between Euro and US$ at the payment day.