

OWNER'S MANUAL of ASR401 MODULATION TOOLS



The unit designed for generating and processing modulation signals includes a Sync LFO, a White Noise Generator, a Sample & Hold, a VC Glide, and a VCA & Inverter or Ring Modulator circuits. These submodules are internally pre-wired and closely integrated, but the internal connections can be broken using the front-panel jack connectors, allowing each section to operate independently.

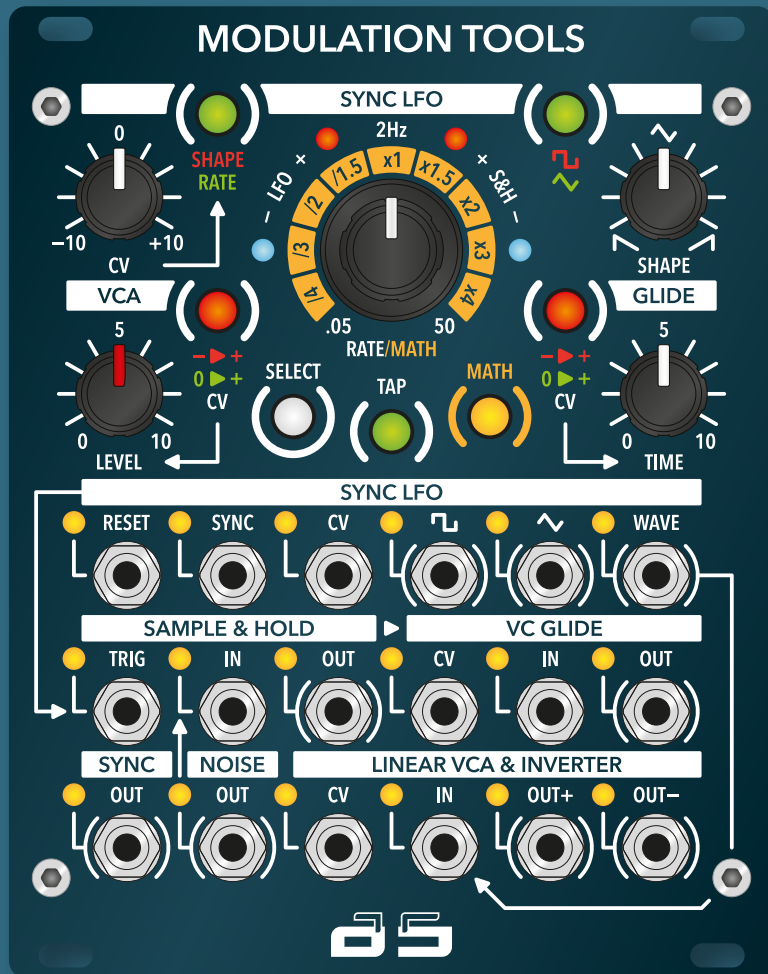
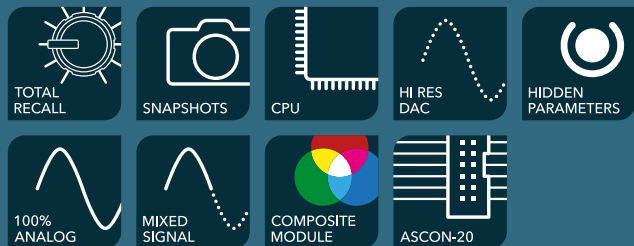
The Sync LFO simultaneously generates two distinct waveforms: triangle (TRI) and square (SQR). These are available on separate outputs, along with a third output offering a selectable waveform. The module features RESET, SYNC, and CV inputs. The CV input can be used to control the waveform shape, the LFO frequency, or its divider. The frequency range is adjustable between 0.05 Hz and 50 Hz. The TRI waveform can be continuously morphed from SAW to RAMP, while the SQR waveform's pulse width is also adjustable.

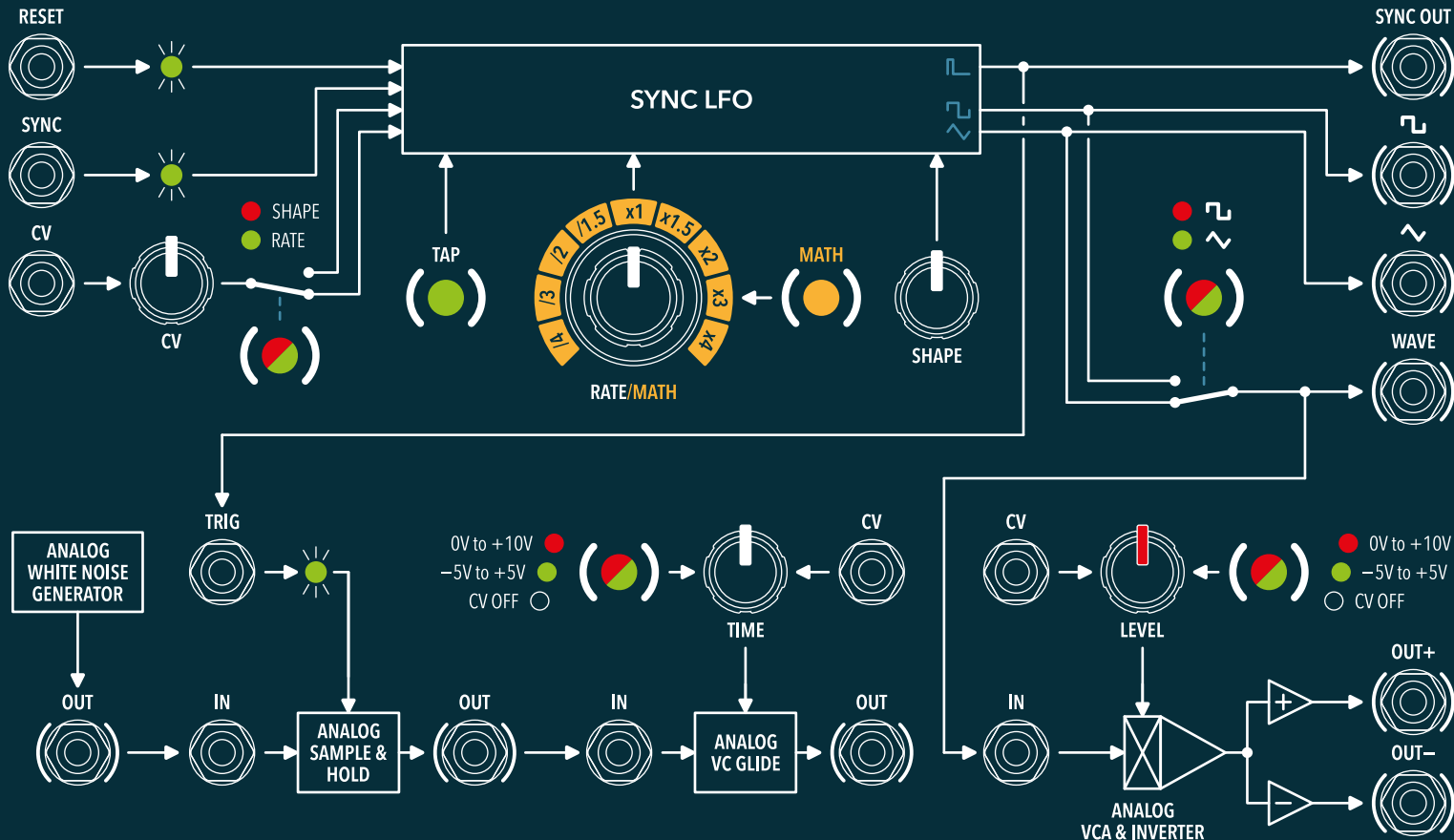
The output of the Sync LFO is routed to the input of the VCA & Inverter, enabling control over the LFO's modulation depth. Additionally, the VCA can operate in Ring Modulator mode.

Sync LFO also includes a SYNC output, whose frequency can match the LFO frequency or be a multiple or division of it. This output drives the TRIG input of the Sample & Hold circuit, with its behavior configurable via the Hidden Parameter menu.

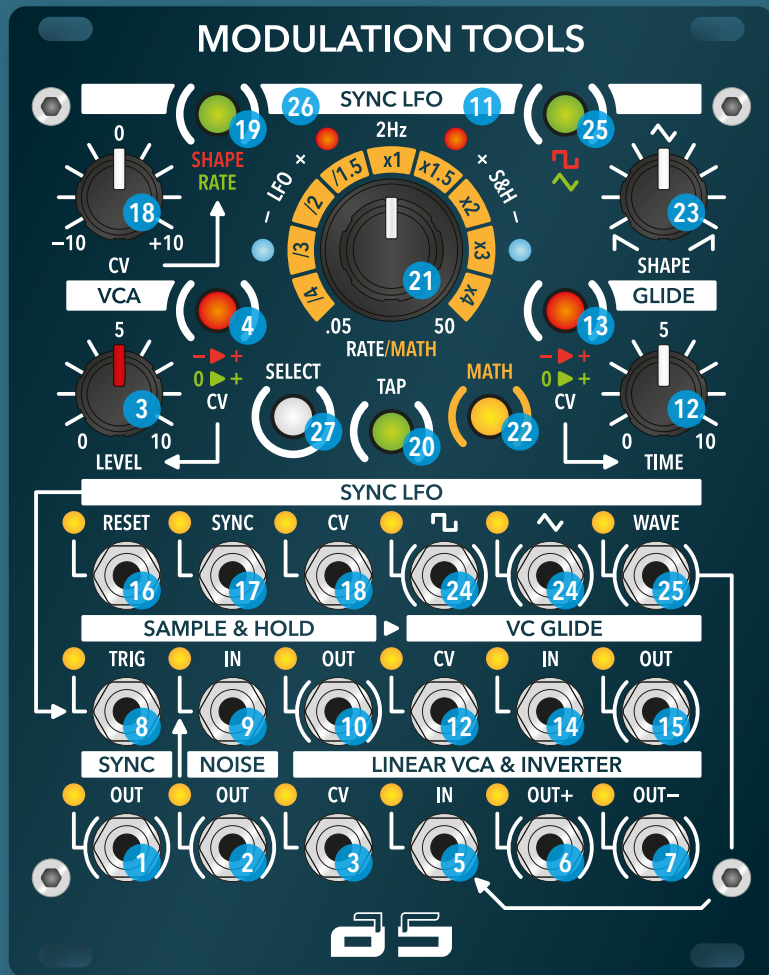
The analog White Noise Generator is directly connected to the input of the Sample & Hold. The output of the Sample & Hold is then routed to the input of the VC Glide. The VC Glide allows adjustment of both the glide time and the amount of control voltage (CV) applied.

Features:

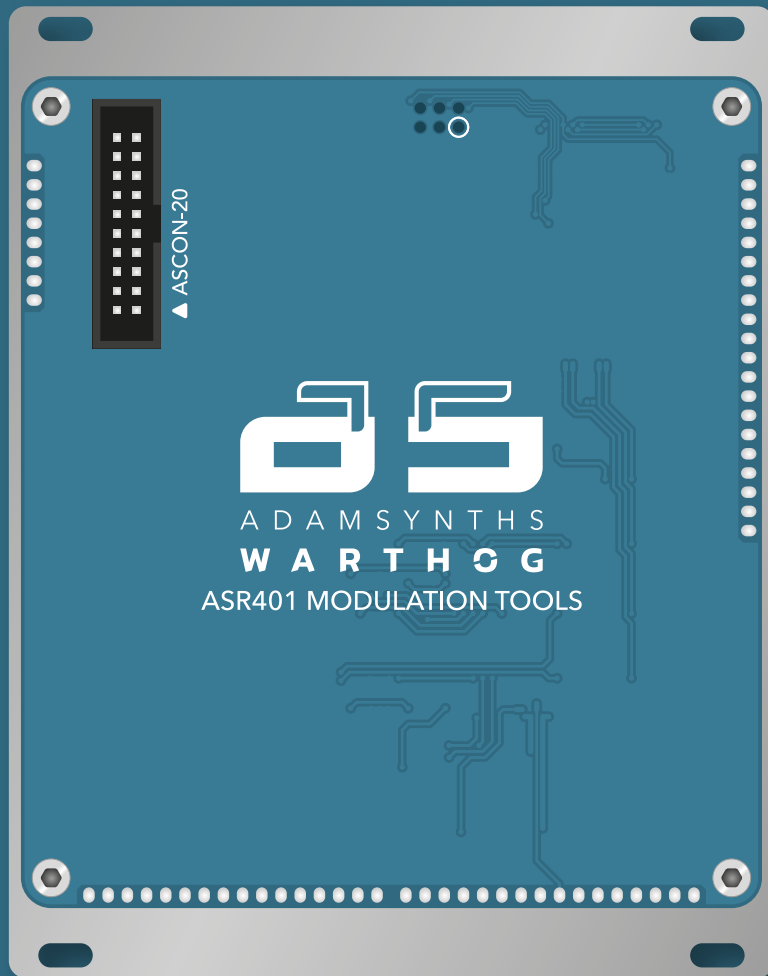




FRONT PANEL of ASR401 MODULATION TOOLS



- Sync Output (TTL, 2ms) & Indicator**
Sync pulse divider accessible in Hidden Parameters
 - White Noise Out (10Vpp)**
 - VCA CV Input (0V to +10V, or -5V to +5V) & Amount (0 to 100%)**
 - VCA CV Mode & Offset Selector**
(Dark: CV Off / Green: 0V to +10V / Red: -5V to +5V)
 - VCA Input (-10V to +10V)**
 - VCA Positive Output (-10V to +10V)**
 - VCA Negative Output (-10V to +10V)**
 - S&H Trig Input (TTL, min 1ms)**
 - S&H Input (-10V to +10V)**
 - S&H Output (-10V to +10V)**
 - S&H Output Indicator**
 - Glide CV Input (0V to +10V, or -5V to +5V) & Time**
 - Glide CV Mode & Offset Selector**
(Dark: CV Off / Green: 0V to +10V / Red: -5V to +5V)
 - Glide Input (-10V to +10V)**
 - Glide Output (-10V to +10V)**
 - LFO Reset Input (TTL, min 1ms) & Indicator**
 - LFO Sync Input (TTL, min 1ms) & Indicator**
 - LFO CV Input (-5V to +5V) & Amount (-100% to +100%)**
 - LFO CV Target (Rate / Shape)**
 - LFO TAP Tempo Button**
 - LFO Rate / Divider**
(0.05Hz to 50Hz / Sync Divider:)
 - LFO Mode (RATE / MATH)**
 - LFO Shape (SAW to TRI to RAMP / PULSE to SQR to PULSE)**
 - LFO Individual Wave Outputs**
(SQR & TRI -5V to +5V)
 - LFO Wave Selector (SQR / TRI) & Output (-5V to +5V)**
 - LFO Output Indicator**
 - Select This Module**
(Access to Hidden Parameters)
- The yellow LEDs by the Jack Sockets show where to plug the cables when loading patch.



BACK PANEL of ASR401 MODULATION TOOLS



Power Consumption: -12V / N/A mA, +12V / N/A mA, +5V1 / N/A mA, +5V2 / N/A mA,
System Connector: ASCON-20 (Use only Adamsynths ASR-RAILS & ASR-PSU for this module.)
Module Dimension: 20HP / Depth: 33mm, Module Weight: N/A g

SAFETY AND WARRANTY GUIDELINES

Please follow the instructions below regarding the use of Adamsynths™ devices, as only these ensure proper operation and the validity of the Adamsynths™ warranty.

- Use Adamsynths™ modules exclusively with the power supply (ASR-PSU) and rails (ASR-RAILS) provided with the Adamsynths™ system. Using power supplies or rails from other manufacturers may result in malfunction or permanent damage.
- No liquid substances (such as water or alcohol) or solid, conductive materials may enter the Adamsynths™ modules, as these may cause electrical short circuits or permanent damage. If this occurs, immediately disconnect the device from power and contact us via the SUPPORT page at www.adamsynths.com.
- Never attempt to repair the device or modify, delete, or hack the control firmware or software, as these actions will result in immediate loss of warranty.
- Do not expose Adamsynths™ modules to temperatures above +40°C or below -10°C. If the device has been transported at a temperature lower than room temperature, allow it to acclimate until all moisture has evaporated. This may take several hours. Only then should you connect it to power and begin operation.
- Always transport Adamsynths™ modules with care. Never allow them to fall or tip over. The warranty does not cover visually damaged products.
- Modules must be transported only in their original packaging. Products returned for replacement and/or warranty repair must be sent in their original packaging. All other shipments will be rejected and returned to you. Please ensure you retain the original packaging and technical documentation.

Adamsynths™ modules may become warm during several hours of operation – this is normal and not a cause for concern.

CLEANING AND MAINTENANCE: Clean the device daily. Always use a dusting brush and a soft, dry or slightly damp, non-abrasive cloth. Then wipe the device with a soft, dry cloth. Never use alcohol, benzene, thinner, acetone, or other solvents, nor alkaline or acidic cleaning agents, as these may cause discoloration or deformation.

WASTE DISPOSAL: Adamsynths™ devices comply with EU directives and are manufactured without the use of lead, mercury, cadmium, or chromium. They meet RoHS requirements. Nevertheless, these products are considered special waste and should not be disposed of with household waste.

Copying, distributing, or using the user manual for any commercial purpose is strictly prohibited and requires written permission from Adamsynths™. Specifications are subject to change without prior notice.

If you have any questions, feel free to contact us via the SUPPORT page at www.adamsynths.com/support

Detailed safety and warranty information is available at www.adamsynths.com/support.

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