also Engineering changes: LFO, S/H, ask others

AR-325 NORMALLED PREPATCH KIT

The AR-325 NORMALLED PREPATCH KIT consists of a set of instructions and a set of pressure sensitive adhesive back labels.

Setting up normal connections is a fairly easy procedure which allows the synthesizer user to play his instrument without patch cords, and at the same time retain the flexibility of his instrument because a normal connection can be overridden by the insertion of a patch cord into the appropriate input.

The AR-325 decal set is intended for a system of input normals--that is, a system in which the normal contact is used exclusively on inputs. Using this logic consistently makes it easier to keep track of signal flow. Wiring a normalled patch will not interfere with the removal of a module from the case, but will mean that the modules must be kept in the same module space in the cabinet.

The first step in setting up a normalled prepatch is to work out a block diagram of the basic patch you want to wire. Then repeat the following three steps until it's complete.

1) Run an insulated wire from the output terminal on the edge connector of the module producing the desired signal to a spare terminal on the module receiving that signal. Refer to chart of edge connector pin assignments.

2) On the P.C. board of the receiving module, locate the edge connector finger corresponding to the spare terminal you've connected. Run a wire from this terminal to the normal terminal on the input jack you wish to have the signal.

3) Find a pressure-sensitive adhesive backed label with the name of the output and fix it to the front panel near the input jack.

This completes a normalled connection. Simply repeat this procedure until the patch is complete.

NOTE: A four conductor cable can be run from the AR-313 keyboard interface to the main cabinet to bring keyboard signals there for normalled use.

Here are some suggestions for normalled connections:

1. KBD Voice voltage to VCO's control inputs; KBD Voice voltage to VCF's control inputs.
2. KBD Gate & trigger to envelope generators
3. KBD trigger to LFO inputs
4. VCO outputs to mixer
5. VCO outputs to balanced modulator
6. Mixer outputs to VCF
7. VCF outputs to VCA
8. VCA outputs to output module
9. Envelope generator outputs to VCF control input
10. Envelope generator to VCA control input
11. Envelope generator to floating attenuator & its output to VCO pulse modulation input
12. LFO triangle output to floating attenuator & its output to VCO pulse width modulation input
13. LFO triangle output to VCF

The list could go on and on---you get the idea.

P.C. Card Edge Connector Pin Assignments

Edge Conn. Pin	AR-312	AR-314	AR-315	AR-316	AR-317	AR-318	AR-323	AR-324	AR-327
A	+15v.	+15v.	+15v.	+15v.	+15v.	+15v.	+15v.	+15v.	+15v.
B	Gate Input	Audio Input	X Input	Audio Input	Control Input	S/H Input	Mixer A1 In.	LFO 1 Sync	Audio Input
C	Gate Input	Audio Input	Y Input	Audio Input	Control Input	S/H Output	Mixer A2 In.	Saw. 1 Output	Audio Input
D	Spare	Audio Input	Spare	Audio Input	Control Input	S/H Trig	Mixer A3 In.	Pulse 1 Output	Audio Input
E	Spare	Audio Input	Spare	Audio Input	Control Input	S/H Gate	Mixer A4 In.	Triangle 1 Output	Fc Mod. Input
F	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
H	Trig. Input	Control Input	Attn. 1 Input	Control Input	Sync Input	Pulse Output	Mixer B1 In.	LFO 2 Sync.	Fc Mod. Input
J	Trig Input	Control Input	Attn. 2 Input	Control Input	PWM Input	Saw. Output	Mixer B2 In.	Saw. 2 Output	Fc Mod. Input
K	Spare	Control Input	Spare	Control Input	Spare	FM Input	Mixer B3 In.	Pulse Output	Q Mod. Input
L	Spare	Control Input	Spare	Control Input	Spare	Sync Input	Mixer B4 In.	Triangle 2 Output	Q Mod. Input
M	GND.	GND.	GND.	GND.	GND.	GND.	GND.	GND.	GND.
N	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
P	ADSR Output	Output	Output	Output	Saw. Output	Wht. Output	A Output	Lag Input	Notch Output
R	ADSR Output	Output	Output	Output	Triangle Output	Pink Output	B Output	Lag Output	Highpass Output
S	ADSR Output	Output	Attn. 1 Out.	Spare	Sine Output	Random Output	A+B Output	INV. Output	Bandpass Output
T	ADSR Output	Test Output	Attn. 2 Out.	Spare	Pulse Output	Ck. Trig Output	A-B Output	INV. Input	Lowpass Output
U	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
V	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
W	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
X	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
Y	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare	Spare
Z	-15v.	-15v.	-15v.	-15v.	-15v.	-15v.	-15v.	-15v.	-15v.