Remote Antenna Switches for HAM RADIO

StackMatch "SM3-3kW-Mono Band"

Three Antenna Phasing Relay Unit, Mono Band, 3-port, 3 kW, 160-10 meters

For combining three directional antennas or splitting power to drive three power amplifiers with optimal features

SKU: SM3-3kW-Band

- Three antenna ports in phase, default with no power to control console;
- Ability to switch any single or any two antennas out of the array;
- Multiplexer technology ready © - unselected ports terminated to 8W, 50 ohm resistor;
- Laser markings of ports and control connections, lasts forever;
- LED indication of unused antenna;
- Phoenix pluggable terminal block (6 pins, 5.08mm pitch);
- Feedlines to each antenna from the relay unit must be the same cable of the same length and match the antenna impedance;

- LowBandSystem`s control console suggested:

    - control consoles CC-SM4B series;
    - control consoles CC-UCC8B series;

Features:

RF design:	MonoBand LC matching
Antenna inputs:	Three
Power handling (1.8-30 MHz, antennas SWR <1.5:1)	3kW ICAS
RF Connectors	PTFE SO-239 (UHF) connectors, (other types on custom order)
Insertion loss	≤ -0,06 dB
VSWR on any band, Single antenna	≤ 1,1:1
VSWR on any band, Two antennas	≤ 1,1:1
VSWR on any band, Three antennas	≤ 1,1:1
Control voltage	12VDC (24VDC on custom order)
MOV surge protection on control lines	
Control wire required	Six conductor
Size:	190 x 210 x 85 mm / 7,5" x 8,3" x 3,4"
Net weight:	≤1,0 kg / 2,2 lbs.

Multiplexer Technology Ready

** Subject to change without notice*

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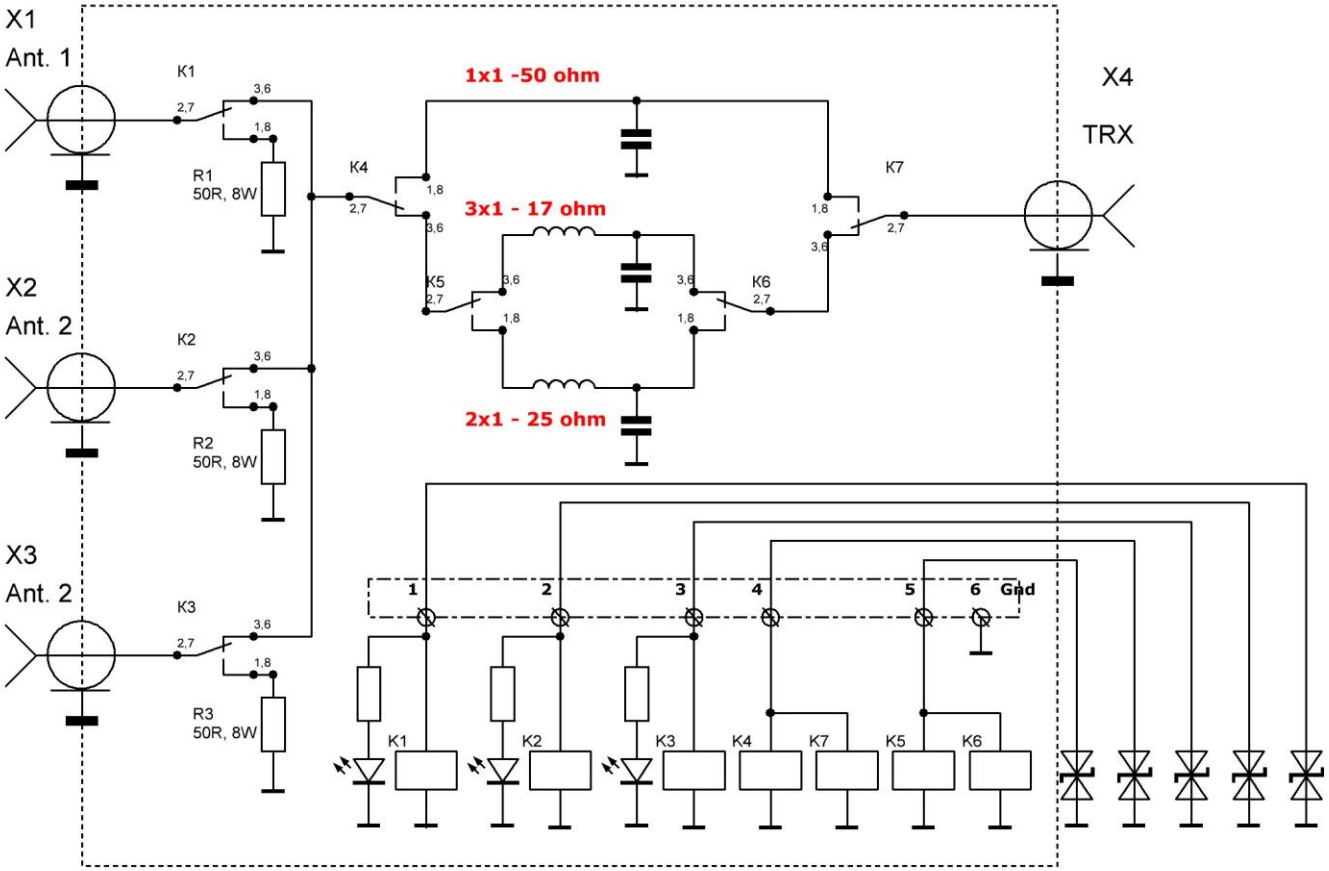
Schematic:



Truth table:

Control connector, pin #, :							1	2	3	4	5	6
Relays:							K1	K2	K3	K4, K7	K5, K6	Common
Matching selection							*Ant.1*	*Ant.2*	*Ant.3*	*Three High Stack*	*Two High Stack*	
	Control console LEDs:			*RF board LEDs:*								
Antenna selection:	LED1	LED2	LED3	LED1	LED2	LED3						
A1	ON				ON	ON		+12VDC	+12VDC	+12VDC		
A2		ON		ON		ON	+12VDC		+12VDC	+12VDC		
A3			ON	ON	ON		+12VDC	+12VDC		+12VDC		
A2+A3		ON	ON	ON			+12VDC				+12VDC	
A1+A2	ON	ON				ON			+12VDC		+12VDC	
A1+A3	ON		ON		ON			+12VDC			+12VDC	
Three High Stack = A1+A2+A3	*no/on*	*no/on*	*no/on*	*no*	*no*	*no*						

PCB : SM3-3kW-B-v2

It is very important to ensure 12VDC at the Stack Match terminals, counting loses in a control line!

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