



IA2R Switch

User Manual

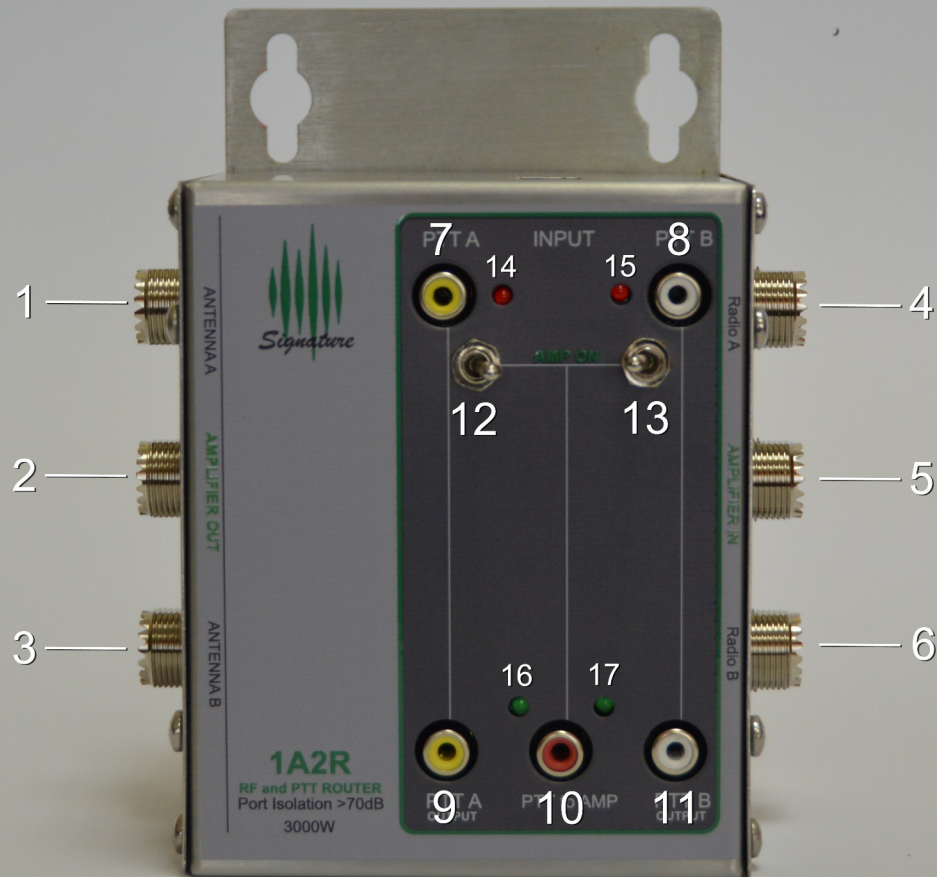
1. Overview

1A2R switch is an RF and PTT router which routes one amplifier between two radios.

Using a switch on the device you can route the amp between two radios using the first one wins principle.

The power connector is found on the top. Power requirements are 12–14 VDC at 300 mA.

2. Connectors



1	Antenna A Output
2	Amplifier Output
3	Antenna B Output
4	Radio A Input
5	Amplifier Input
6	Radio B Input
7	PTT A Input
8	PTT B Input
9	PTT A Output
10	PTT To AMP Output
11	PTT B Output
12	A side Switching ON/OFF If the switch is in the left position the PTT signal gets forwarded to the PTT A output port. If the switch is in the right position the PTT signal is being routed to the PTT to AMP switch.
13	B side Switching ON/OFF If the switch is in the right position the PTT signal gets forwarded to the PTT A output port. If the switch is in the left position the PTT signal is being routed to the PTT to AMP switch.
14	PTT A Input Active/Inactive
15	PTT B Input Active/Inactive
16	PTT TO Amp side A Active/Inactive
17	PTT TO Amp side B Active/Inactive

3. Testing

There is no dedicated power LED to indicate that the device is turned on.

To verify the device is working properly connect one of the PTT's to a GND source.

The corresponding red LED (14 or 15) will turn on.

Toggling the amp switch (12 or 13) will turn the corresponding green LED (16 or 17) on and off.

4. Specification

Isolation between ports:	>70dB at 30MHz in worst case
Maximum power rating:	3000W with SWR 1:1

4. Interconnection Diagram

The diagram below shows how you can share an amplifier between two radios.

Once you connect it you will not need to rewire the setup and your amp is routed permanently.

In the case of failure while running SO2R, you can switch the amplifier from radio B to radio A as a backup.

