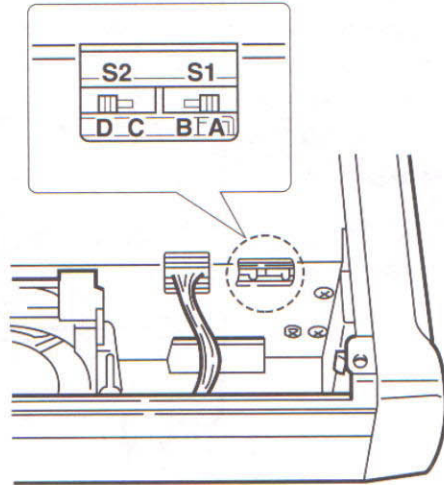# ■ AT-180 internal switch description

The optional AT-180 has 3 operating conditions for HF band operation. Select a suitable condition according to your antenna system.

① Remove the top cover of the AT-180.
② Set the tuner switches to the desired positions according to the table below.

SW	Position	Operation
S1	A (default)	The tuner operating condition is set by S2 described below.
S1	B	THROUGH INHIBIT The tuner tunes the antenna even when the antenna has poor SWR (up to VSWR 3:1 after tuning). In this case, manual tuning is necessary each time you change the frequency although the tuner automatically starts tuning when the VSWR is higher than 3:1. This setting is called "through inhibit," however, the tuner is set to "through" if the VSWR is higher than 3:1 after tuning.
S2	C	TUNER SENSITIVE CONDITION The tuner tunes each time you transmit (except SSB mode). Therefore, the lowest SWR is obtained at any given time. For SSB mode, the same condition as the "D" position.
S2	D (default)	NORMAL CONDITION The tuner tunes when the SWR is higher than 1.5:1. Therefore, the tuner activates only when tuning is necessary.

• **Specifications for the AT-180**

• Frequency coverage : 1.9–54 MHz
• Input impedance : 50 Ω
• Maximum input power : 120 W
• Minimum tuning power : 8 W
• Matching impedance range : 16.7–150 Ω (HF band) 20–125 Ω (50 MHz band)
• Tuning accuracy : Less than SWR 1.5:1
• Insertion loss : Less than 1.0 dB (after tuning)
• Power supply requirements : 13.8 V DC/1 A (supplied from the transceiver's ACC socket)
• Dimensions (mm/in) : 167(W) × 58.6(H) × 225(D) 6⁹⁄₁₆(W) × 2⁵⁄₁₇(H) × 8⁷⁄₈(D)
• Weight : 2.4 kg; 5 lb 4 oz
• Supplied accessories : coaxial cable (1 m), ACC cable (DIN 13 pins)

• **AT-180 inside top cover**

• **Connector information for ACC(2) socket**

ACC 2

PIN NO./ NAME	DESCRIPTION
① 8 V	Regulated 8 V output. (10 mA max.)
② GND	Connects to ground.
③ SEND	Input/output pin. Goes to ground when transmitting (20 mA max). When grounded, transmits.
④ BAND	Band voltage output. (Varies with amateur band; 0 to 8.0 V).
⑤ ALC	ALC output voltage (–4 to 0 V).
⑥ NC	No connection.
⑦ 13.8V	13.8 V output when power is ON (1 A max).