CAT cables

for ACOM S-series amplifiers

Technical Information

Wiring diagrams

OUTSTANDING HF POWER PRODUCTS

November 2021

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Title of Documentation CAT cables for ACOM S-series amplifiers
Technical Information
Wiring diagrams

Type of Documentation Technical Information

Purpose of Documentation This document explains connection between ACOM S-series amplifiers and transceiver via CAT interface cable.

Record of Revisions

Description	Release Date	Notes
CAT cables for ACOM S-series amplifiers	-	First edition
CAT cables for ACOM S-series amplifiers	-	Second edition
CAT cables for ACOM S-series amplifiers	-	Third edition, R01
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CAT cables for ACOM S-series amplifiers	09.11.2021	Fourth edition, R01

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Contents

1. GENERAL INFORMATION

Congratulations on using one of ACOM solid-state amplifiers.

ACOM is pleased that you have chosen one of our products, and we will endeavor to provide you with the information and support you need to enjoy your purchase for many years.

We urge you to read all of the following materials before you embark on operating your new amplifier.

Traditionally, the ACOM solid-state series amplifiers are named as **nnnS** or **nnnnS**, where **nnn/nnnn** is a model number (for example ACOM 700S or ACOM 1200S).

All these amplifiers feature CAT (Computer Aided Transceiver) interface for connection to your transceiver.

In this document ACOM solid-state amplifiers are also called ACOM S-series hereafter.

1.1. Introduction and Description

This document includes information (wiring diagrams) for the CAT connection cables for ACOM S-series amplifiers. This information will help you to assembly a right CAT cable to connect your ACOM S-series amplifier to your particular transceiver.

Most of the modern transceivers can be connected by CAT to the ACOM S-series amplifiers. This will allow the amplifier to track the transceiver frequency without any transmission and change the bands automatically when in OPERATE mode.

ACOM S-series amplifiers will operate normally with **CAT/AUX** unconnected if your transceiver has no such input.

ACOM S-series amplifiers require reliable CAT signal transmission between the amplifier and the transceiver. A key role in this is played by the cable and connecting element technology employed.

When you assembled a CAT connection cable by yourself, please, use a cable and connectors according to international and your local standards for trouble free operation.

1.2. Owner Assistance

If assistance is needed, you should contact your local dealer first. If necessary, your dealer will contact ACOM for additional guidance.
If you still have an issue you need to discuss with one of ACOM's specialists, the contact information is as follows:

ACOM Ltd.
E-mail: support@acom-bg.com

Bulgaria | Bozhurishte 2227
Sofia-Bozhurishte Economic Zone | 6 Valeri Petrov Str.
GPS coordinates: 42.748616° | 23.209801°

2. USED CONNECTING ELEMENTS

ACOM doesn't offer unassembled cable material or connectors. If you need these parts, please, contact your dealer or local electronic store.

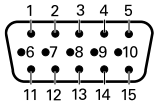
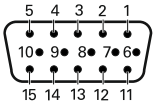
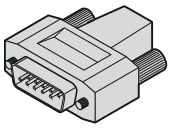
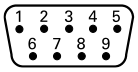
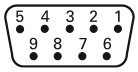
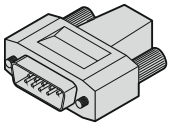
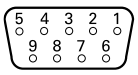
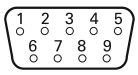
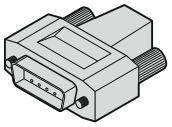
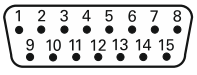
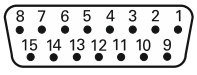
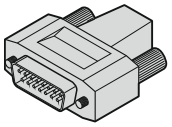
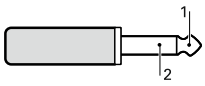
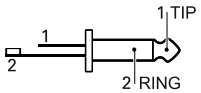
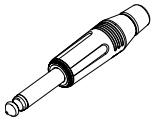
D-sub connectors		
15-pin, 3-row (high density), male		
 Front view	 Solder (rear) view	 3D Front view
9-pin, 2-row, male		
 Front view	 Solder (rear) view	 3D Front view
9-pin, 2-row, female		
 Front view	 Solder (rear) view	 3D Front view
15-pin, 2-row, male		
 Front view	 Solder (rear) view	 3D Front view
Phone plug, male connector		
 Side view	 Side view	 3D Front view

Table 2-1 Overview of the connectors used

(Continued on the next page)

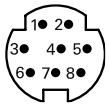
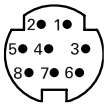
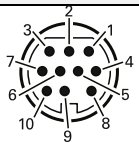
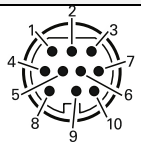
Circular connectors		
7 or 8 pin, male		
 Front view	 Solder (rear) view	 3D Front view
Horseshoe DIN plug, 8-pin, male		
 Front view	 Solder (rear) view	 3D Front view
Mini DIN plug, 8-pin, male		
 Front view	 Solder (rear) view	 3D Front view
Mini DIN plug, 10-pin, male		
 Front view	 Solder (rear) view	 3D Front view

Table 2-1 Overview of the connectors used

The D-sub connectors (15-pin, 3-row (high density), male) used for connection to CAT connector on ACOM S-series amplifiers correspond to IEC 60 807 / DIN 41652 standards.

3. CAT CABLES WIRING DIAGRAMS

3.1. For ELECRAFT Transceivers

3.1.1. ACOM S-series to ELECRAFT K3 RS-232 CAT connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

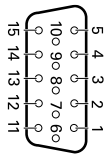
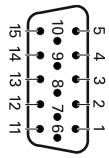
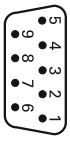
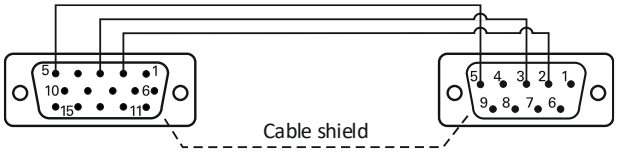
ACOM S-series amplifier Rear panel CAT/AUX connector		Connecting cable				ELECRAFT K3 transceiver / Rear panel RS-232 connector	
 D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 | RxD / RxTTL (IN)	 D-sub connector, 15-pin, 3-row, male (Solder view)	1	Not connected	1	 D-sub connector, 9-pin, male (Solder view)	1 | Not used
	2 | RxD / RxRS (IN)		2	————	2		2 | RXD IN (OUT)
	3 | TxD / TxRS (OUT)		3	————	3		3 | TXD OUT (IN)
	4 | TxD / TxTTL (OUT)		4	Not connected	4		4 | DTR
	5 | GND		5	————	5		5 | Ground
	6 | BAND voltage (IN)		6	Not connected	6		6 | Not used
	7 | Band data 0 (IN)		7	Not connected	7		7 | RTS
	8 | Band data 1 (IN)		8	Not connected	8		8 | Not used
	9 | Band data 2 (IN)		9	Not connected	9		9 | Not used
	10 | Band data 3 (IN)		10	Not connected	-		Housing
	11 | ON RMT (IN)		11	Not connected	-		
	12 | Debug mode		12	Not connected	-		
	13 | KEY-IN		13	Not connected	-		
	14 | KEY-OUT		14	Not connected	-		
	15 | GND		15	Not connected	-		
	Housing		Housing	Cable shield	Housing		
							

Table 3-1 Connection cable wiring

3.1.2. ACOM S-series to ELECRAFT K3
BCD Band Data + Keying + Power On connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

Be careful not to swap the connectors, because they are of the same type.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

* Earlier K3 may require external Pull-up resistors to 5 V on lines 3, 9, 13, and 14 (transceiver connector side), typically 2.2÷10 kOhm (before Ser.N. 2370), after Dec. 10, 2008, Rev B KIO3 Digital Board.

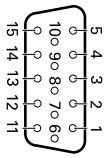
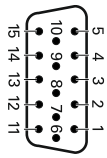
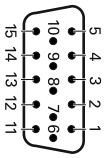
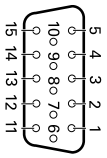
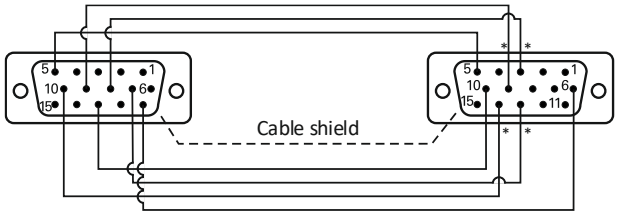
ACOM S-series amplifier Rear panel		Connecting cable				ELECRAFT K3 transceiver / Rear panel	
CAT/AUX connector						ACC connector	
	1 | RxD / RxTTL (IN)		1	Not connected	1		1 | FSK IN	
	2 | RxD / RxRS (IN)		2	Not connected	2		2 | AUXBUS IN/OUT	
	3 | TxD / TxRS (OUT)		3	Not connected	4		3 | BAND1 OUT	
	4 | TxD / TxTTL (OUT)		4	Not connected	7		4 | PTT IN	
	5 | GND		5	————	5		5 | Ground	
	6 | BAND voltage (IN)		6	Not connected	8		6 | DIGOUT0	
	7 | Band data 0 (IN)		7	————	13*		7 | K3 ON / TX INH	
	8 | Band data 1 (IN)		8	————	3*		8 | POWER ON	
	9 | Band data 2 (IN)		9	————	9*		9 | BAND2 OUT	
	10 | Band data 3 (IN)		10	————	14*		10 | KEYOUT-LP	
	11 | ON RMT (IN)		11	————	6		11 | DIGOUT1	
	12 | Debug mode		12	Not connected	11		12 | Ground	
	13 | KEY-IN		13	————	10		13 | BAND0 OUT	
	14 | KEY-OUT		14	Not connected	12		14 | BAND3 OUT	
	15 | GND		15	Not connected	15		15 | EXT ALC input	
	Housing		Housing	Cable shield	Housing		Housing	
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				D-sub connector, 15-pin, 3-row, male (Solder view)		D-sub connector, 15-pin, 3-row, female (Rear panel front view)
								

Table 3-2 Connection cable wiring

3.2. For ICOM Trasceivers

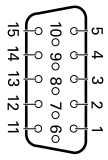
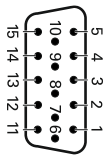
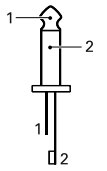
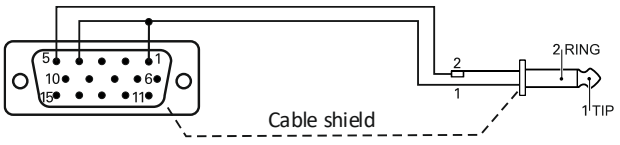
3.2.1. ACOM S-series to ICOM CI-V CAT connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

* The pins 1 and 4 on ACOM's side 15-pin male connector must be connected.

ACOM S-series amplifier Rear panel		Connecting cable			ICOM transceiver Rear panel	
CAT/AUX connector					CI-V Remote socket/jack	
 D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 | RxD / RxTTL (IN)	 D-sub connector, 15-pin, 3-row, male (Solder view)	1*	————	1	 Phone plug connector, d=3.5 mm (1/8"), male (Side view)
	2 | RxD / RxRS (IN)		2	Not connected	-	
	3 | TxD / TxRS (OUT)		3	Not connected	-	
	4 | TxD / TxTTL (OUT)		4*	Not connected	-	
	5 | GND		5	————	2	
	6 | BAND voltage (IN)		6	Not connected	-	
	7 | Band data 0 (IN)		7	Not connected	-	
	8 | Band data 1 (IN)		8	Not connected	-	
	9 | Band data 2 (IN)		9	Not connected	-	
	10 | Band data 3 (IN)		10	Not connected	-	
	11 | ON RMT (IN)		11	Not connected	-	
	12 | Debug mode		12	Not connected	-	
	13 | KEY-IN		13	Not connected	-	
	14 | KEY-OUT		14	Not connected	-	
	15 | GND		15	Not connected	-	
	Housing		Housing	Cable shield	Housing	
						

1 | CI-V (IN/OUT)	Phone socket, female (Rear panel front view)
2 | Ground	
Housing	

Table 3-3 Connection cable wiring

3.2.2. ACOM S-series to ICOM
CI-V CAT + Keying + Power On connection cable

This connection (interface) cable uses two connectors in its transceiver side.

NOTICE

The connection cable must be shielded.

* The pins 1 and 4 on ACOM's side 15-pin male connector must be connected.
** The pin 2 on ICOM's side phone plug and pin 2 on ICOM's side 7(8)-pin male connector must be connected.

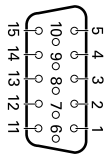
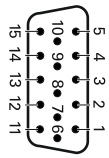
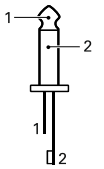
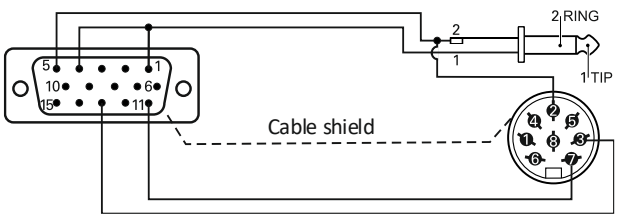
ACOM S-series amplifier Rear panel		Connecting cable				ICOM transceiver Rear panel	
CAT/AUX connector						CI-V Remote socket/jack	
 D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 | RxD / RxTTL (IN)	 D-sub connector, 15-pin, 3-row, male (Solder view)	1*	———	1	 Phone plug connector, d=3.5 mm (1/8"), male (Side view)	1 | CI-V (IN/OUT)
	2 | RxD / RxRS (IN)		2	Not connected	-		2 | Ground
	3 | TxD / TxRS (OUT)		3	Not connected	-		 Phone socket, female (Rear panel front view)
	4 | TxD / TxTTL (OUT)		4*	Not connected	-		
	5 | GND		5	———	2**		
	6 | BAND voltage (IN)		6	Not connected	-		
	7 | Band data 0 (IN)		7	Not connected	-		
	8 | Band data 1 (IN)		8	Not connected	-		
	9 | Band data 2 (IN)		9	Not connected	1		ACC 1 or ACC 2 sockets
	10 | Band data 3 (IN)		10	Not connected	2**	 Connector, 7 or 8 pin, male (Solder view)	1 |
	11 | ON RMT (IN)		11	———	7		2 | Ground
	12 | Debug mode		12	Not connected	4		3 | SEND (OUT)
	13 | KEY-IN		13	———	3		4 |
	14 | KEY-OUT		14	Not connected	5		5 |
	15 | GND		15	Not connected	6		6 |
	Housing		-	Not connected	8		7 | +13.8 V (OUT)
			Housing	Cable shield	Housing		8 |
							Housing
							 Socket, 7 or 8 pin, female (Rear panel front view)

Table 3-4 Connection cable wiring

3.3. For KENWOOD Transceivers

3.3.1. ACOM S-series to KENWOOD TS-480 RS-232 CAT connection cable

This connection (interface) cable is applicable with KENWOOD TS-480, TS-590, TS-890, TS-990, TS-2000, and other compatible transceivers.

NOTICE

Connection cable must be shielded.

* The pins 7 and 8 on KENWOOD's side 9-pin female connector must be connected.

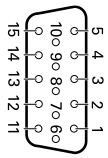
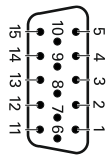
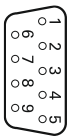
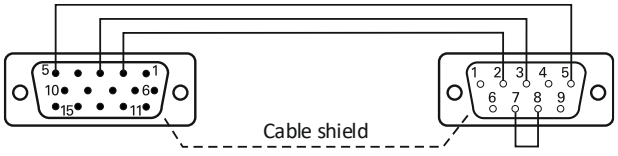
ACOM S-series amplifier Rear panel		Connecting cable				KENWOOD transceiver / Rear panel	
CAT/AUX connector						COM connector	
	1 | RxD / RxTTL (IN)		1	Not connected	1		1 | Not used
	2 | RxD / RxRS (IN)		2	————	2		2 | TxD (OUT)
	3 | TxD / TxRS (OUT)		3	————	3		3 | RxD (IN)
	4 | TxD / TxTTL (OUT)		4	Not connected	4		4 | Not user
	5 | GND		5	————	5		5 | GND
	6 | BAND voltage (IN)		6	Not connected	6		6 | Not used
	7 | Band data 0 (IN)		7	Not connected	7*		7 | RTS (IN)
	8 | Band data 1 (IN)		8	Not connected	8*		8 | CTS (OUT)
	9 | Band data 2 (IN)		9	Not connected	9		9 | Not used
	10 | Band data 3 (IN)		10	Not connected	-		Housing
	11 | ON RMT (IN)		11	Not connected	-		
	12 | Debug mode		12	Not connected	-		
	13 | KEY-IN		13	Not connected	-		
	14 | KEY-OUT		14	Not connected	-		
	15 | GND		15	Not connected	-		
	Housing		Housing	Cable shield	Housing		
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				D-sub connector, 9-pin, female (Solder view)	D-sub connector, 9-pin, male (Rear panel front view)
							

Table 3-5 Connection cable wiring

3.4. For YAESU Transceivers

3.4.1. ACOM S-series to YAESU FT-920 RS-232 CAT connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

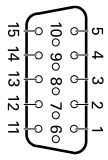
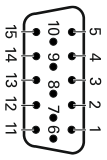
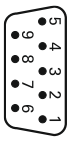
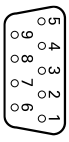
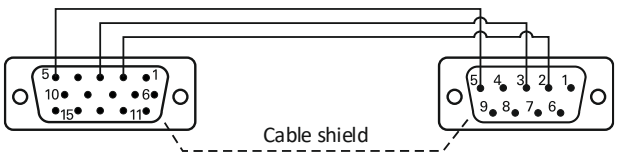
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-920 transceiver / Rear panel	
CAT/AUX connector						CAT connector	
 D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 | RxD / RxTTL (IN)	 D-sub connector, 15-pin, 3-row, male (Solder view)	1	Not connected	1	 D-sub connector, 9-pin, male (Solder view)	1 | Not used
	2 | RxD / RxRS (IN)		2	———	2		2 | TxD (SERIAL OUT)
	3 | TxD / TxRS (OUT)		3	———	3		3 | RxD (SERIAL IN)
	4 | TxD / TxTTL (OUT)		4	Not connected	4		4 | Not used
	5 | GND		5	———	5		5 | Ground
	6 | BAND voltage (IN)		6	Not connected	6		6 | Not used
	7 | Band data 0 (IN)		7	Not connected	7		7 | Not used
	8 | Band data 1 (IN)		8	Not connected	8		8 | Not used
	9 | Band data 2 (IN)		9	Not connected	9		9 | Not used
	10 | Band data 3 (IN)		10	Not connected	-		Housing
	11 | ON RMT (IN)		11	Not connected	-		 D-sub connector, 9-pin, female (Rear panel front view)
	12 | Debug mode		12	Not connected	-		
	13 | KEY-IN		13	Not connected	-		
	14 | KEY-OUT		14	Not connected	-		
	15 | GND		15	Not connected	-		
	Housing		Housing	Cable shield	Housing		
							

Table 3-6 Connection cable wiring

3.4.2. ACOM S-series to YAESU FT-1000 RS-232 CAT connection cable

This connection (interface) cable is applicable with YAESU FT-1000, FT-450, FT-2000, FTDX3000, FT5000, FTDX101, FTDX10, FT-991, and other compatible transceivers.

NOTICE

The connection cable must be shielded.

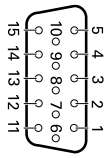
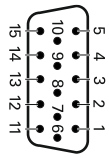
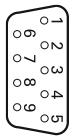
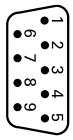
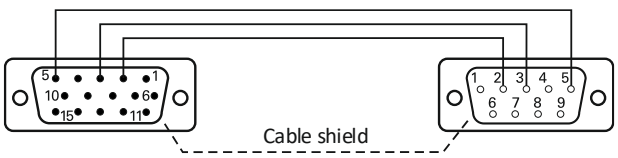
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-1000 transceiver / Rear panel	
CAT/AUX connector						CAT connector	
	1 | RxD / RxTTL (IN)		1	Not connected	1		1 | Not used	
	2 | RxD / RxRS (IN)		2	————	2		2 | TxD (SERIAL OUT)	
	3 | TxD / TxRS (OUT)		3	————	3		3 | RxD (SERIAL IN)	
	4 | TxD / TxTTL (OUT)		4	Not connected	4		4 | Not used	
	5 | GND		5	————	5		5 | Ground	
	6 | BAND voltage (IN)		6	Not connected	6		6 | Not used	
	7 | Band data 0 (IN)		7	Not connected	7		7 | RTS	
	8 | Band data 1 (IN)		8	Not connected	8		8 | CTS	
	9 | Band data 2 (IN)		9	Not connected	9		9 | Not used	
	10 | Band data 3 (IN)		10	Not connected	-		Housing	
	11 | ON RMT (IN)		11	Not connected	-			
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	Not connected	-			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)	Housing	D-sub connector, 15-pin, 3-row, male (Solder view)	Housing	Cable shield	Housing	D-sub connector, 9-pin, female (Solder view)	Housing	D-sub connector, 9-pin, male (Rear panel front view)
								

Table 3-7 Connection cable wiring

3.4.3. ACOM S-series to YAESU FT-1000
BCD Band Data + Keying + Power On CAT connection cable

NOTICE

The connection cable must be shielded.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

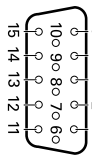
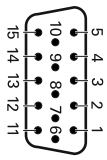
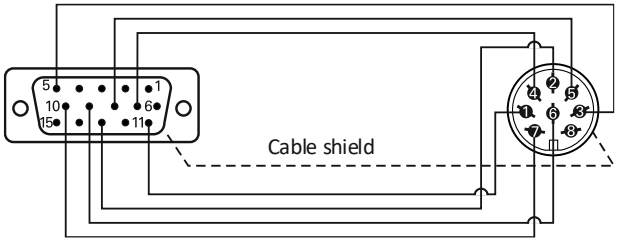
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-1000 transceiver / Rear panel	
CAT/AUX connector						Band Data connector	
	1 | RxD / RxTTL (IN)		1	Not connected	8		1 | +13.8 V (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	-		2 | TX GND (OUT)	
	3 | TxD / TxRS (OUT)		3	Not connected	-		3 | GND	
	4 | TxD / TxTTL (OUT)		4	Not connected	-		4 | Band A (OUT)	
	5 | GND		5	————	3		5 | Band B (OUT)	
	6 | BAND voltage (IN)		6	Not connected	-		6 | Band C (OUT)	
	7 | Band data 0 (IN)		7	————	4		7 | Band D (OUT)	
	8 | Band data 1 (IN)		8	————	5		8 | LINEAR	
	9 | Band data 2 (IN)		9	————	6		Housing	
	10 | Band data 3 (IN)		10	————	7			
	11 | ON RMT (IN)		11	————	1			
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	————	2			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				Horseshoe DIN plug, 8-pin, male (Solder view)		Horseshoe DIN connector, 8-pin, female (Rear panel front view)
								

Table 3-8 Connection cable wiring

3.4.4. ACOM S-series to YAESU FT-897 TTL CAT + Keying connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

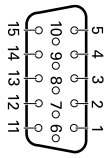
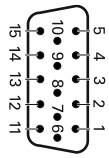
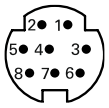
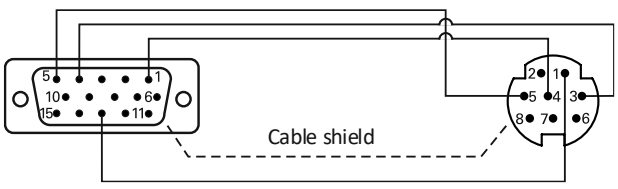
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-897 transceiver / Rear panel	
CAT/AUX connector						CAT/Tun/Lin connector/jack	
	1 | RxD / RxTTL (IN)		1	————	4		1 | TX GND (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	2		2 | +13.8 V	
	3 | TxD / TxRS (OUT)		3	Not connected	6		3 | RX D (IN)	
	4 | TxD / TxTTL (OUT)		4	————	3		4 | TX D (OUT)	
	5 | GND		5	————	5		5 | GND	
	6 | BAND voltage (IN)		6	Not connected	7		6 | TX INH	
	7 | Band data 0 (IN)		7	Not connected	8		7 | Reset	
	8 | Band data 1 (IN)		8	Not connected	-		8 | Band C	
	9 | Band data 2 (IN)		9	Not connected	-		Housing	
	10 | Band data 3 (IN)		10	Not connected	-			
	11 | ON RMT (IN)		11	Not connected	-			
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	————	1			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				Mini DIN plug, 8-pin, male (Solder view)		Mini DIN connector, 8-pin, female (Rear panel front view)
								

Table 3-9 Connection cable wiring

3.4.5. ACOM S-series to YAESU FT-897 BCD Band Data + Keying CAT connection cable

This connection (interface) cable is applicable with YAESU FT-897, and FT-991.

NOTICE

The connection cable must be shielded.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

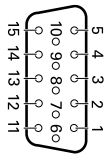
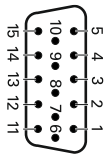
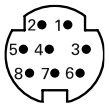
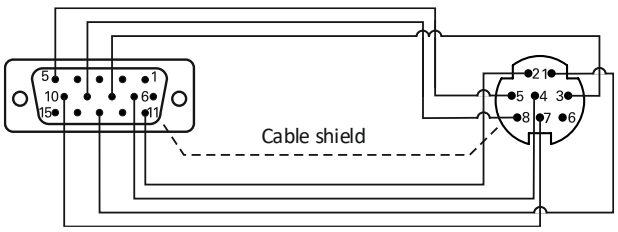
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-897 transceiver / Rear panel	
CAT/AUX connector						CAT/Tun/Lin connector/jack	
	1 | RxD / RxTTL (IN)		1	Not connected	6		1 | TX GND (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	-		2 | +13.8 V	
	3 | TxD / TxRS (OUT)		3	Not connected	-		3 | Band B (OUT)	
	4 | TxD / TxTTL (OUT)		4	Not connected	-		4 | Band A (OUT)	
	5 | GND		5	————	5		5 | GND	
	6 | BAND voltage (IN)		6	Not connected			6 | TX INH	
	7 | Band data 0 (IN)		7	————	4		7 | Band D (OUT)	
	8 | Band data 1 (IN)		8	————	3		8 | Band C (OUT)	
	9 | Band data 2 (IN)		9	————	8		Housing	
	10 | Band data 3 (IN)		10	————	7			
	11 | ON RMT (IN)		11	————	2			
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	————	1			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				Mini DIN plug, 8-pin, male (Solder view)		Mini DIN connector, 8-pin, female (Rear panel front view)
								

Table 3-10 Connection cable wiring

3.4.6. ACOM S-series to YAESU FT-817 Analog Band Data CAT + Keying connection cable

This connection (interface) cable is applicable with other compatible transceivers.

NOTICE

The connection cable must be shielded.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

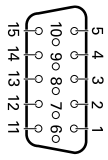
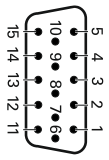
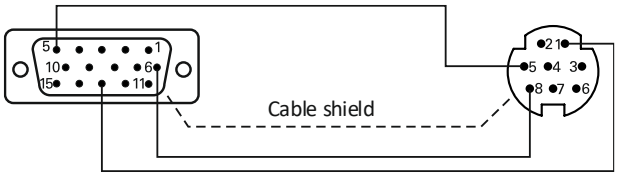
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FT-817 transceiver / Rear panel	
CAT/AUX connector						ACC connector	
	1 | RxD / RxTTL (IN)		1	Not connected	2		1 | TX GND (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	3		2 | +13.8 V	
	3 | TxD / TxRS (OUT)		3	Not connected	4		3 | RXD	
	4 | TxD / TxTTL (OUT)		4	Not connected	6		4 | TXD	
	5 | GND		5	————	5		5 | GND	
	6 | BAND voltage (IN)		6	————	8		6 | TX INH	
	7 | Band data 0 (IN)		7	Not connected	7		7 | ALC	
	8 | Band data 1 (IN)		8	Not connected	-		8 | Band Data (OUT)	
	9 | Band data 2 (IN)		9	Not connected	-		Housing	
	10 | Band data 3 (IN)		10	Not connected	-			
	11 | ON RMT (IN)		11	Not connected	-			
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	————	1			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				Mini DIN plug, 8-pin, male (Solder view)		Mini DIN connector, 8-pin, female (Rear panel front view)
								

Table 3-11 Connection cable wiring

3.4.7. ACOM S-series to YAESU FTDX-101
BCD Band Data + Keying + Power On connection cable

NOTICE

The connection cable must be shielded.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

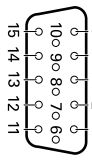
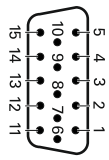
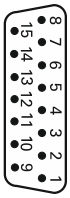
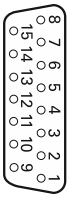
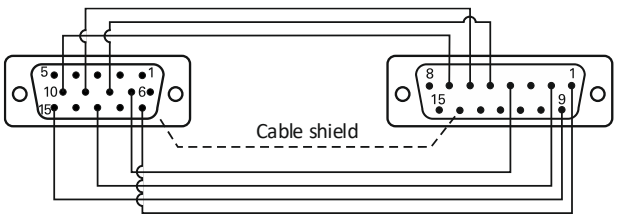
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FTDX-101 transceiver / Rear panel	
CAT/AUX connector						LINEAR connector	
	1 | RxD / RxTTL (IN)		1	Not connected	3		1 | +13.8 V (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	8		2 | TX GND (OUT)	
	3 | TxD / TxRS (OUT)		3	Not connected	-		3 | GND	
	4 | TxD / TxTTL (OUT)		4	Not connected	-		4 | Band A (OUT)	
	5 | GND		5	Not connected	-		5 | Band B (OUT)	
	6 | BAND voltage (IN)		6	Not connected	-		6 | Band C (OUT)	
	7 | Band data 0 (IN)		7	————	4		7 | Band D (OUT)	
	8 | Band data 1 (IN)		8	————	5		8 | TX INH	
	9 | Band data 2 (IN)		9	————	6		9 | GND	
	10 | Band data 3 (IN)		10	————	7		10 | Not used	
	11 | ON RMT (IN)		11	————	1		11 | TX REQ	
	12 | Debug mode		12	Not connected	-		12 | Not used	
	13 | KEY-IN		13	————	2		13 | Not used	
	14 | KEY-OUT		14	Not connected	-		14 | EXT ALC	
	15 | GND		15	————	9		15 | GND	
D-sub connector, 15-pin, 3-row, female (Rear panel front view)	Housing	D-sub connector, 15-pin, 3-row, male (Solder view)	Housing	Cable shield	Housing	D-sub connector, 15-pin, male (Solder view)	Housing	D-sub connector, 15-pin, female (Rear panel front view)
								

Table 3-12 Connection cable wiring

3.4.8. ACOM S-series to YAESU FTDX-10
BCD Band Data + Keying + Power On connection cable

This connection (interface) cable is applicable with YAESU FTDX-10, FT-950, and FT-450.

NOTICE

The connection cable must be shielded.

NOTICE

The Band Data cables (either BCD or Voltage) must not be used if ACOM 04AT remote automatic antenna tuner and switch is a part of the system.

Only serial CAT cables (either RS-232 or TTL) can be used in such a case.

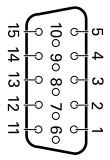
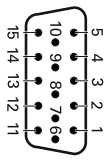
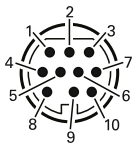
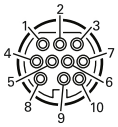
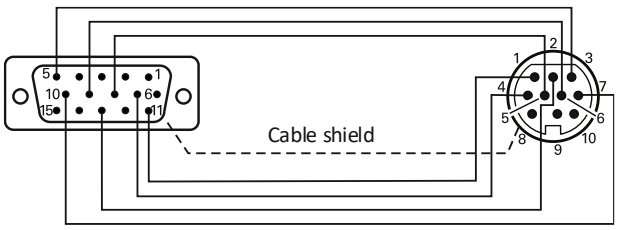
ACOM S-series amplifier Rear panel		Connecting cable				YAESU FTDX-10 transceiver / Rear panel	
CAT/AUX connector						LINEAR connector	
	1 | RxD / RxTTL (IN)		1	Not connected	8		1 | +13.8 V (OUT)	
	2 | RxD / RxRS (IN)		2	Not connected	9		2 | TX GND (OUT)	
	3 | TxD / TxRS (OUT)		3	Not connected	10		3 | GND	
	4 | TxD / TxTTL (OUT)		4	Not connected	-		4 | Band A (OUT)	
	5 | GND		5	————	3		5 | Band B (OUT)	
	6 | BAND voltage (IN)		6	Not connected	-		6 | Band C (OUT)	
	7 | Band data 0 (IN)		7	————	4		7 | Band D (OUT)	
	8 | Band data 1 (IN)		8	————	5		8 | TX INH	
	9 | Band data 2 (IN)		9	————	6		9 | EXT ALC	
	10 | Band data 3 (IN)		10	————	7		10 | TX REQ IN	
	11 | ON RMT (IN)		11	————	1		Housing	
	12 | Debug mode		12	Not connected	-			
	13 | KEY-IN		13	————	2			
	14 | KEY-OUT		14	Not connected	-			
	15 | GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
D-sub connector, 15-pin, 3-row, female (Rear panel front view)		D-sub connector, 15-pin, 3-row, male (Solder view)				Mini DIN plug, 10-pin, male (Solder view)		Mini DIN connector, 10-pin, female (Rear panel front view)
								

Table 3-13 Connection cable wiring

3.5. For ACOM S-series to USB–RS-232 Adapter CAT connection cable

The USB–RS-232 adapter is used to connect ACOM S-series amplifier to PC's USB port, if your PC hasn't integrated RS-232 serial port.

NOTICE

The connection cable must be shielded.

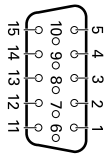
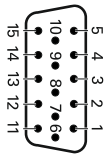
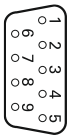
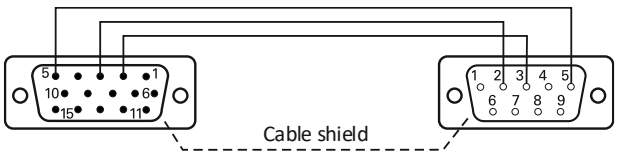
ACOM S-series amplifier Rear panel		Connecting cable				USB–RS-232 adapter	
CAT/AUX connector						RS-232 connector	
 D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 | RxD / RxTTL (IN)	 D-sub connector, 15-pin, 3-row, male (Solder view)	1	Not connected	1	 D-sub connector, 9-pin, female (Solder view)	1 | Not used
	2 | RxD / RxRS (IN)		2	————	3		2 | RxD (IN)
	3 | TxD / TxRS (OUT)		3	————	2		3 | TxD (OUT)
	4 | TxD / TxTTL (OUT)		4	Not connected	4		4 | Not used
	5 | GND		5	————	5		5 | Ground
	6 | BAND voltage (IN)		6	Not connected	6		6 | Not used
	7 | Band data 0 (IN)		7	Not connected	7		7 | Not used
	8 | Band data 1 (IN)		8	Not connected	8		8 | Not used
	9 | Band data 2 (IN)		9	Not connected	9		9 | Not used
	10 | Band data 3 (IN)		10	Not connected	-		Housing
	11 | ON RMT (IN)		11	Not connected	-		
	12 | Debug mode		12	Not connected	-		
	13 | KEY-IN		13	Not connected	-		
	14 | KEY-OUT		14	Not connected	-		
	15 | GND		15	Not connected	-		
	Housing		Housing	Cable shield	Housing		
							

Table 3-14 Connection cable wiring

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