

AGOM

CAT cables

for ACOM S-series amplifiers

Technical Information

Wiring diagrams

OUTSTANDING HF POWER PRODUCTS



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Technical Information Wiring diagrams

Type of Documentation Technical Information

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transceiver via CAT interface cable.

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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:

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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							
1 2 3 4 5 •6 •7 •8 •9 •10 •11 12 13 14 15	5 4 3 2 1 10• 9• 8• 7•6• 15 14 13 12 11							
Front view	Solder (rear) view	3D Front view						
	9-pin, 2-row, male							
1 2 3 4 5 6 7 8 9	5 4 3 2 1 9 8 7 6							
Front view	Solder (rear) view	3D Front view						
	9-pin, 2-row, female	II						
$\begin{pmatrix} 5 & 4 & 3 & 2 & 1 \\ 9 & 0 & 0 & 0 & 0 \\ 9 & 8 & 7 & 6 \\ 0 & 0 & 0 & 0 \end{pmatrix}$	$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 0 & 0 & 0 & 0 & 0 \\ 6 & 7 & 8 & 9 \\ 0 & 0 & 0 & 0 \end{pmatrix}$							
Front view	Solder (rear) view	3D Front view						
	15-pin, 2-row, male							
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	8 7 6 5 4 3 2 1 15 14 13 12 11 10 9							
Front view	Solder (rear) view	3D Front view						
	Phone plug, male connector							
	1 TIP 2 RING							
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								
30 40 50 60 70 80	20 10 50 40 30 80 70 60								
Front view	Solder (rear) view	3D Front view							
2	Mini DIN plug, 10-pin, male								
3 7 10 9 8	4 3 7 5 8 9 10 6 6								
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

ACOM S-	-series amplifier			ELECRAFT K3				
Re	ear panel	Connecting cable					transceiver / Rear panel	
CAT/A	UX connector						RS-232 connector	
_	1 RxD / RxTTL (IN)		1	Not connected	1		1 Not used	_
5 0 0 5	2 RxD / RxRS (IN)	15 0 5	2		2	• 9 • 4	2 RXD IN (OUT)	05 09 04
14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 14 13	3		3	• ω ω ω	3 TXD OUT (IN)	08 03 07
1 2 1 2 1 2	4 TxD / TxTTL (OUT)	12 7	4	Not connected	4	• 6 • 6 • 1	4 DTR	06 01
1 = 669-1	5 GND	11 66 61	5		5		5 Ground	
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	6	D-sub	6 Not used	D-sub
connector,	7 Band data 0 (IN)	connector,	7	Not connected	7	connector, 9-pin,	7 RTS	connector, 9-pin, female
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8	Not connected	8	male (Solder view)	8 Not used	
3-row, female	9 Band data 2 (IN)		9	Not connected	9		9 Not used	(Rear panel
(Rear	10 Band data 3 (IN)	(Solder view)	10	Not connected	-		Housing	front view)
panel	11 ON RMT (IN)		11	Not connected	-			
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			
		0 10 0 0 0		Cable shield	c ,	6 4 3 2 1 0 9 8 7 6 0		

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				ELECRAFT K3				
Rear panel			Co	transceiver / Rear panel				
CAT/A	UX connector			ACC connector				
	1 RxD / RxTTL (IN)		1	Not connected	1		1 FSK IN	
5 0 0 5	2 RxD / RxRS (IN)	15 0 5	2	Not connected	2	5 0 5	2 AUXBUS IN/OUT	5 0 0 5
9 8 3	3 TxD / TxRS (OUT)	4 3	3	Not connected	4	14 13 8 4 3	3 BAND1 OUT	90 8 13 13 13
1210 7 912	4 TxD / TxTTL (OUT)	12 7 7 2	4	Not connected	7	7 6 1 12 11	4 PTT IN	210 70 12
	5 GND		5		5	1000	5 Ground	=669-
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	8	D-sub	6 DIGOUTO	D-sub
connector,	7 Band data 0 (IN)	connector,	7		13*	connector,	7 K3 ON / TX INH	connector,
15-pin,	8 Band data 1 (IN)	15-pin,	8		3*	15-pin,	8 POWER ON	15-pin, 3-row, female (Rear panel front view)
3-row, female	9 Band data 2 (IN)	3-row, male (Solder view)	9		9*	3-row, male (Solder view)	9 BAND2 OUT	
(Rear	10 Band data 3 (IN)		10		14*		10 KEYOUT-LP	
panel	11 ON RMT (IN)		11		6		11 DIGOUT1	
front view)	12 Debug mode		12	Not connected	11		12 Ground	
	13 KEY-IN		13		10		13 BANDO 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	
		0 100		Cable shield	(o)	5 • • • • • • • • • • • • • • • • • • •		

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.

							ı	
ACOM S-	series amplifier						ICOM trans	ceiver
Re	ear panel	Connecting cable					Rear panel	
CAT/A	UX connector						CI-V Remote so	cket/jack
_	1 RxD / RxTTL (IN)		1* ₱		1		1 CI-V (IN/OUT)	_
5 0 0 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 RxD / RxRS (IN)	5 0 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2	Not connected	-	1 1 2	2 Ground	
5 4 3 0 0 0 80 100 90 80 15 14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 14 13	3	Not connected	-		Housing	Phone
125220	4 TxD / TxTTL (OUT)	12 2	4*	Not connected	-			socket,
3600-	5 GND	± • • • • • • • • • • • • • • • • • • •	5		2	1 1]		female
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	-			(Rear
connector,	7 Band data 0 (IN)	connector,	7	Not connected	-	Phone plug connector,		panel front view)
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8	Not connected	-	d=3.5 mm (1/8"), male (Side view)		
3-row,	9 Band data 2 (IN)		9	Not connected	-			
female (Rear	10 Band data 3 (IN)		10	Not connected	-			
panel	11 ON RMT (IN)		11	Not connected	-			
front view)	12 Debug mode		12	Not connected	-	1		
	13 KEY-IN		13	Not connected	-			
	14 KEY-OUT		14	Not connected	-	1		
	15 GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing	-		
				Cable shiel		2 RING		

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 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 CAT/AUX connector			Co	ICOM transceiver Rear panel				
	1 RxD / RxTTL (IN)		1* ₱		1	1—	CI-V Remote so	ocket/jack
5 0 0 5	2 RxD / RxRS (IN)	5 6 6 5	2	Not connected	-	2	1 CI-V (IN/OUT)	0
410 0 44	3 TxD / TxRS (OUT)	14 9 4 4	3	Not connected	-] 	2 Ground	Phone
3 2 6 80 70 13 12	4 TxD / TxTTL (OUT)	3 2 8 7 8 12	4*	Not connected	-	1		socket,
3609-	5 GND	=	5		2** •	d 2		female
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	-	Phone plug		(Rear
connector,	7 Band data 0 (IN)	connector,	7	Not connected	-	connector, d=3.5 mm		panel front view)
15-pin,	8 Band data 1 (IN)	15-pin,	8	Not connected	-	(1/8"), male		none view)
3-row,		3-row, male				(Side view)		
female	9 Band data 2 (IN)	(Solder view)	9	Not connected	1	Connector, 7 or 8 pin, male	ACC 1 or ACC	2 sockets
(Rear	10 Band data 3 (IN)		10	Not connected	2**		1	10 D D ES
panel front view)	11 ON RMT (IN)		11		7		2 Ground	Q \$ 5 D \$ 3 6 - T
mone view)	12 Debug mode		12	Not connected	4		3 SEND (OUT)	Socket, 7 or 8 pin, female (Rear
	13 KEY-IN		13		3		4	
	14 KEY-OUT		14	Not connected	5		5	
	15 GND		15	Not connected	6	(Solder view)	6	
	Housing		-	Not connected	8	(Solder View)	7 +13.8 V (OUT)	
			Housing	Cable shield	Housing		8	panel front view)
							Housing	,
		5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Cable shiel	d	2, RING		

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.

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

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

Re	ACOM S-series amplifier Rear panel CAT/AUX connector		Connecting cable					YAESU FT-920 transceiver / Rear panel CAT connector	
_	1 RxD / RxTTL (IN)	5 0 0 5	1	Not connected	1		1 Not used		
15 00 0 5	2 RxD / RxRS (IN)		2		2	• Ø	2 TxD (SERIAL OUT)	5 9 9	
90 80	3 TxD / TxRS (OUT)	4 3 9 8 14 13	3		3	-ω -ω	3 RxD (SERIAL IN)	8 7	
12 0 7 0 2	4 TxD / TxTTL (OUT)	12 7	4	Not connected	4	2 0 0 0 1	4 Not used	0 0 0 1	
1	5 GND	110001	5		5		5 Ground)	
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	6	D-sub	6 Not used	D-sub	
connector,	7 Band data 0 (IN)	connector,	7	Not connected	7	connector, 9-pin,	7 Not used	connector, 9-pin, female (Rear panel front view)	
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8	Not connected	8	male (Solder view)	8 Not used		
3-row,	9 Band data 2 (IN)		9	Not connected	9		9 Not used		
female (Rear	10 Band data 3 (IN)		10	Not connected	-		Housing		
panel	11 ON RMT (IN)		11	Not connected	-				
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				
	-	0 10 • • • • • • • • • • • • • • • • • •		Cable shield	[c	9.8.7.6.0			

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

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

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.

ACOM S-series amplifier							YAESU FT-1000	
Rear panel		Connecting cable					transceiver / Rear panel	
CAT/AUX connector							Band Data connector	
	1 RxD / RxTTL (IN)		1	Not connected	8		1 +13.8 V (OUT)	
5 0 0 5	2 RxD / RxRS (IN)	5 1 1 1 1 1 1 1 1 1 1	2	Not connected	-	a o s	2 TX GND (OUT)	(A) (D) (B)
5 4 3 100 90 80 105 14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 4 3 14 13	3	Not connected	-	10. 6 &	3 GND	(4) (5) (1) (1) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
1 2 2 2 2	4 TxD / TxTTL (OUT)	2 7 7 7 12 1	4	Not connected	-		4 Band A (OUT)	
366-	5 GND	366-	5		3	Horseshoe	5 Band B (OUT)	Horseshoe
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	-	DIN plug,	6 Band C (OUT)	DIN connector,
connector,	7 Band data 0 (IN)	connector,	7		4	8-pin,	7 Band D (OUT)	8-pin,
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8		5	male	8 LINEAR	female (Rear panel front view)
3-row, female	9 Band data 2 (IN)		9		6	(Solder view)	Housing	
(Rear	10 Band data 3 (IN)		10		7			
panel	11 ON RMT (IN)		11		1			
front view)	12 Debug mode		12	Not connected	1			
	13 KEY-IN		13		2			
	14 KEY-OUT		14	Not connected	ı			
	15 GND		15	Not connected	-			
	Housing		Housing	Cable shield	Housing			
		5 0 0 0 110	••••••••••••••••••••••••••••••••••••••	Cable shiel	d			

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

ACOM S-series amplifier Rear panel CAT/AUX connector			Co	YAESU FT-897 transceiver / Rear panel CAT/Tun/Lin connector/jack				
D-sub connector, 15-pin, 3-row, female (Rear panel front view)	1 RxD / RxTTL (IN) 2 RxD / RxRS (IN) 3 TxD / TxRS (OUT) 4 TxD / TxTTL (OUT) 5 GND 6 BAND voltage (IN) 7 Band data 0 (IN) 8 Band data 1 (IN) 9 Band data 2 (IN) 10 Band data 3 (IN) 11 ON RMT (IN) 12 Debug mode 13 KEY-IN 14 KEY-OUT 15 GND Housing	D-sub connector, 15-pin, 3-row, male (Solder view)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Housing	Not connected Connected Not connected Not connected Not connected Not connected Not connected	4 2 6 3 5 7 8 - - - - - 1 - - -	Mini DIN plug, 8-pin, male (Solder view)	1 TX GND (OUT) 2 +13.8 V 3 RX D (IN) 4 TX D (OUT) 5 GND 6 TX INH 7 Reset 8 Band C Housing	Mini DIN connector, 8-pin, female (Rear panel
		0 10 0 0 11		Cable shiel	d	20 10 05 04 30 80 70 06		

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.

ACOM S-	series amplifier						YAESU F	Γ-897
Rear panel		Connecting cable					transceiver / Rear panel	
CAT/A	UX connector				CAT/Tun/Lin cor	nnector/jack		
	1 RxD / RxTTL (IN)		1	Not connected	6		1 TX GND (OUT)	
5 0 0 5	2 RxD / RxRS (IN)	5 0 0 5	2	Not connected	-	20 10 L 50 40 30	2 +13.8 V	20 10 L 50 40 30
5 4 3 100 90 80 15 14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 4 3 14 13	3	Not connected	-	80 70 60	3 Band B (OUT)	80 70 60
1 2 5 2 6 2	4 TxD / TxTTL (OUT)	12 7 2	4	Not connected	-		4 Band A (OUT)	7 0
	5 GND	36.0	5		5	Mini DIN	5 GND	Mini DIN connector,
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected		plug, 8-pin,	6 TX INH	8-pin,
connector,	7 Band data 0 (IN)	connector,	7		4	male	7 Band D (OUT)	female (Rear panel front view)
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8		3	(Solder view)	8 Band C (OUT)	
3-row, female	9 Band data 2 (IN)		9		8		Housing	
(Rear	10 Band data 3 (IN)		10		7			
panel	11 ON RMT (IN)		11		2			
front view)	12 Debug mode		12	Not connected	-			
	13 KEY-IN		13		1			
	14 KEY-OUT		14	Not connected	-			
	15 GND		15	Not connected	ı			
	Housing		Housing	Cable shield	Housing			
		0 100	1) O	Cable shield		92 10 95 94 30 98 97 96		

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.

ACOM S-series amplifier							YAESU FT-817		
Rear panel		Connecting cable					transceiver / Rear panel		
CAT/A	CAT/AUX connector							ACC connector	
	1 RxD / RxTTL (IN)		1	Not connected	2		1 TX GND (OUT)		
5 4 100 90 15 14	2 RxD / RxRS (IN)	5 0 0 5	2	Not connected	3	20 10 L 50 40 30	2 +13.8 V	20 10 150 40 30	
90 80	3 TxD / TxRS (OUT)	4 3 9 8 4 3 14 13	3	Not connected	4	8● 7● 6●	3 RXD	80 70 60	
12102012	4 TxD / TxTTL (OUT)	2 7 7 12 1	4	Not connected	6		4 TXD	NATION DINI	
3 6 6 9 1	5 GND	3600-	5		5	Mini DIN	5 GND	Mini DIN connector,	
D-sub	6 BAND voltage (IN)	D-sub	6		8	plug, 8-pin,	6 TX INH	8-pin,	
connector,	7 Band data 0 (IN)	connector,	7	Not connected	7	male	7 ALC	female (Rear panel front view)	
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8	Not connected	-	(Solder view)	8 Band Data (OUT)		
3-row, female	9 Band data 2 (IN)		9	Not connected	-		Housing		
(Rear	10 Band data 3 (IN)		10	Not connected	-				
panel	11 ON RMT (IN)		11	Not connected	-				
front view)	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				
		0 100 0 011	, , ,	Cable shiel	d	•21• •5 •4 3• •8 •7 •6			

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.

ACOM S-series amplifier							YAESU FTDX-101		
Rear panel		Connecting cable					transceiver / Rear panel		
CAT/A	UX connector						LINEAR cor	LINEAR connector	
	1 RxD / RxTTL (IN)		1	Not connected	3		1 +13.8 V (OUT)		
5 0 0 5	2 RxD / RxRS (IN)	15 10 s 5	2	Not connected	8	15 0 N	2 TX GND (OUT)	8 7 6 0 0 0 15 14 1	
5 4 3 100 90 80 10 90 80 15 14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 9 8	3	Not connected	-	●4 0 5 14 13 0 5	3 GND	U ₀ ω	
1 2 5 2 2 5	4 TxD / TxTTL (OUT)	7 2	4	Not connected	-	•12 • 4	4 Band A (OUT)	0204	
369-	5 GND		5	Not connected	-	0 3 2 1 0 9 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 Band B (OUT)	loa°°al	
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	-		6 Band C (OUT)	901	
connector,	7 Band data 0 (IN)	connector,	7		4	D-sub	7 Band D (OUT)	D-sub connector, 15-pin, female (Rear panel front view)	
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8		5	connector, 15-pin, male (Solder view)	8 TX INH		
3-row, female	9 Band data 2 (IN)		9		6		9 GND		
(Rear	10 Band data 3 (IN)		10		7		10 Not used		
panel	11 ON RMT (IN)		11		1		11 TX REQ		
front view)	12 Debug mode		12	Not connected	-		12 Not used		
	13 KEY-IN		13		2		13 Not used		
	14 KEY-OUT		14	Not connected	1		14 EXT ALC		
	15 GND		15		9		15 GND		
	Housing		Housing	Cable shield	Housing		Housing		
		0 10 6		Cable shield	0 8 15				

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.

ACOM S-	series amplifier						YAESU FT	DX-10
Rear panel		Connecting cable					transceiver / Rear panel	
CAT/A	UX connector			LINEAR cor	nnector			
	1 RxD / RxTTL (IN)		1	Not connected	8	2	1 +13.8 V (OUT)	
5 0 0 0 5	2 RxD / RxRS (IN)	15 6 5	2	Not connected	9	1×2 = 3	2 TX GND (OUT)	
5 4 3 100 90 80 115 14 13 1	3 TxD / TxRS (OUT)	4 3 9 8 14 13	3	Not connected	10	4	3 GND	4//0000/7
125070	4 TxD / TxTTL (OUT)	2 3 7 12 1	4	Not connected	-	5 6	4 Band A (OUT)	8 10
=66-	5 GND		5		3	9 9	5 Band B (OUT)	Mini DIN
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	-	Mini DIN	6 Band C (OUT)	connector,
connector,	7 Band data 0 (IN)	connector,	7		4	plug,	7 Band D (OUT)	10-pin, female (Rear panel front view)
15-pin,	8 Band data 1 (IN)	15-pin, 3-row, male (Solder view)	8		5	10-pin, male (Solder view)	8 TX INH	
3-row, female	9 Band data 2 (IN)		9		6		9 EXT ALC	
(Rear	10 Band data 3 (IN)		10		7		10 TX REQ IN	
panel	11 ON RMT (IN)		11		1		Housing	
front view)	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			
		5 10 10 15		Cable shiel	d	4 5 8 9 10		

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

ACOM S-series amplifier Rear panel CAT/AUX connector		Connecting cable					USB-RS-232 adapter RS-232 connector	
	1 RxD / RxTTL (IN)		1	Not connected	1		1 Not used	
5 4 100 90 15 14	2 RxD / RxRS (IN)	15 0 0 5	2		3	0000	2 RxD (IN)	• 6 • 2
90 80	3 TxD / TxRS (OUT)	4 3 9 8 9 8	3		2	07 08	3 TxD (OUT)	7 8
1 2 6 7 6 1 2	4 TxD / TxTTL (OUT)	12 7	4	Not connected	4	40 00 00 00 00 00 00 00 00 00 00 00 00 0	4 Not used	• • • • • • • • • • • • • • • • • • •
1569-	5 GND	3 6 6 1	5		5		5 Ground	
D-sub	6 BAND voltage (IN)	D-sub	6	Not connected	6	D-sub	6 Not used	D-sub connector, 9-pin, male (Rear panel front view)
connector,	7 Band data 0 (IN)	connector, 15-pin, 3-row, male (Solder view)	7	Not connected	7	connector, 9-pin, female (Solder view)	7 Not used	
15-pin,	8 Band data 1 (IN)		8	Not connected	8		8 Not used	
3-row, female	9 Band data 2 (IN)		9	Not connected	9		9 Not used	
(Rear	10 Band data 3 (IN)		10	Not connected	-		Housing	
panel	11 ON RMT (IN)		11	Not connected	-			
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			
		0 10 0 0 0		Cable shield	[c	2 3 4 5 6 7 8 9 6 0 8 9		

Table 3-14 Connection cable wiring



NOTES







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