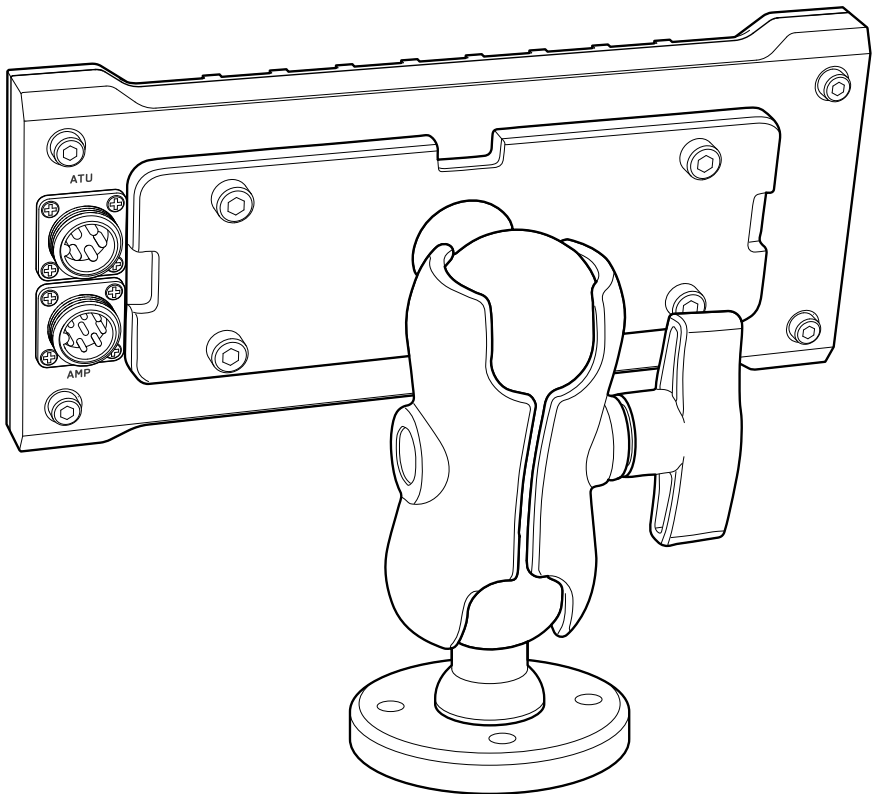




DS-550

DOCKING STATION



USER GUIDE

Version 1.0

General Information

DESCRIPTION

The DS-550 docking station is an interface module for the Lab599 TX-500 series transceivers, providing automatic control of external power amplifiers, including band switching and PTT control, as well as external antenna tuners.

The DS-550 docking station simplifies the integration of TX-500 transceivers with external tuners and power amplifiers, minimizes manual operation, and improves ease of use in both portable and fixed-station applications.

KEY FEATURES

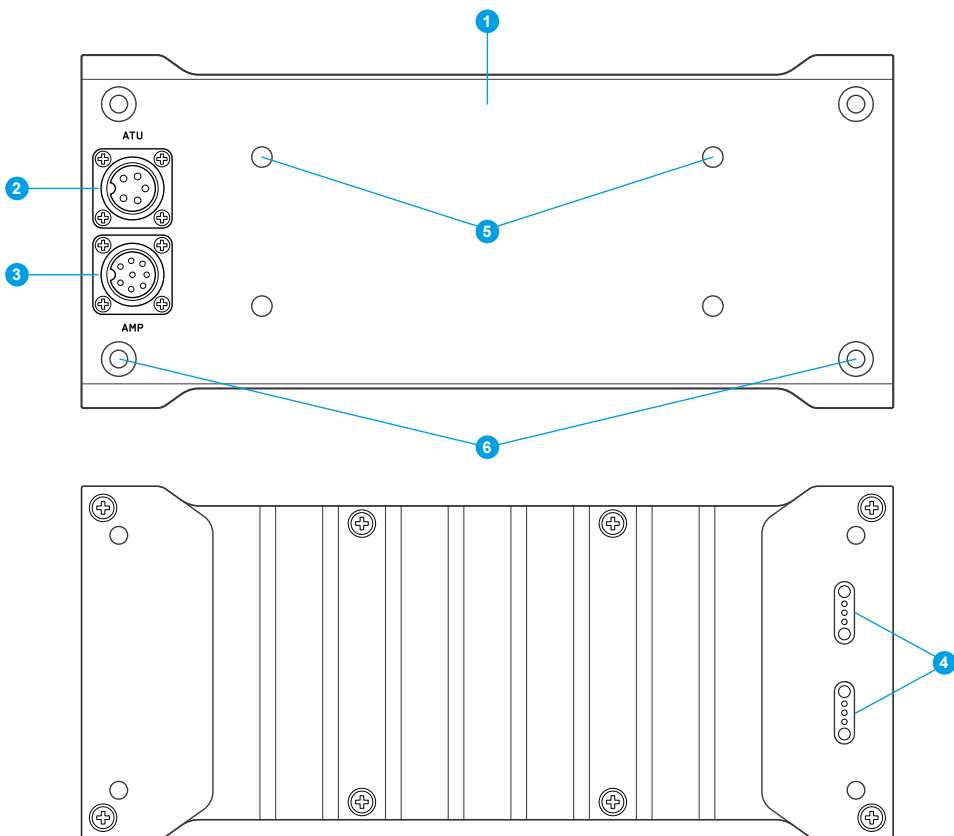
- Compatible with the following transceivers: TX-500 DISCOVERY, TX-500MP;
- Control of external tuners via the Kenwood protocol;
- Analog Band Data via voltage level output (compatible with Icom, Xiegu);
- Digital Band Data via BCD (Binary-Coded Decimal) output (compatible with Yaesu);
- PTT output for power amplifier control;
- M5 mounting holes for bracket installation;
- Impact-resistant plastic enclosure with a D16 aluminum alloy heatsink;
- Overall dimensions (W × L × H): 90 × 207 × 30 mm;
- Device weight (without bracket): 320 g;
- Kit weight with bracket: 670 g.

PACKAGE CONTENTS

1. DS-550 docking station – 1 pc.;
2. Swivel bracket – 1 pc.;
3. GX-16 5-pin plug – 1 pc.;
4. GX-16 8-pin plug – 1 pc.;
5. Mounting hardware kit.

MAIN DEVICE COMPONENTS

1. Device enclosure;
2. ATU connector (GX16, 5-pin) – for control of an external antenna tuner;
3. AMP connector (GX16, 8-pin) – for power amplifier control;
4. Contact interface for connection to the transceiver;
5. Mounting points for securing the unit to the transceiver, 4 pcs.;
6. Mounting points for bracket installation, 4 pcs.

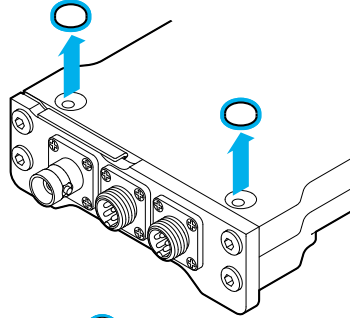


Connections

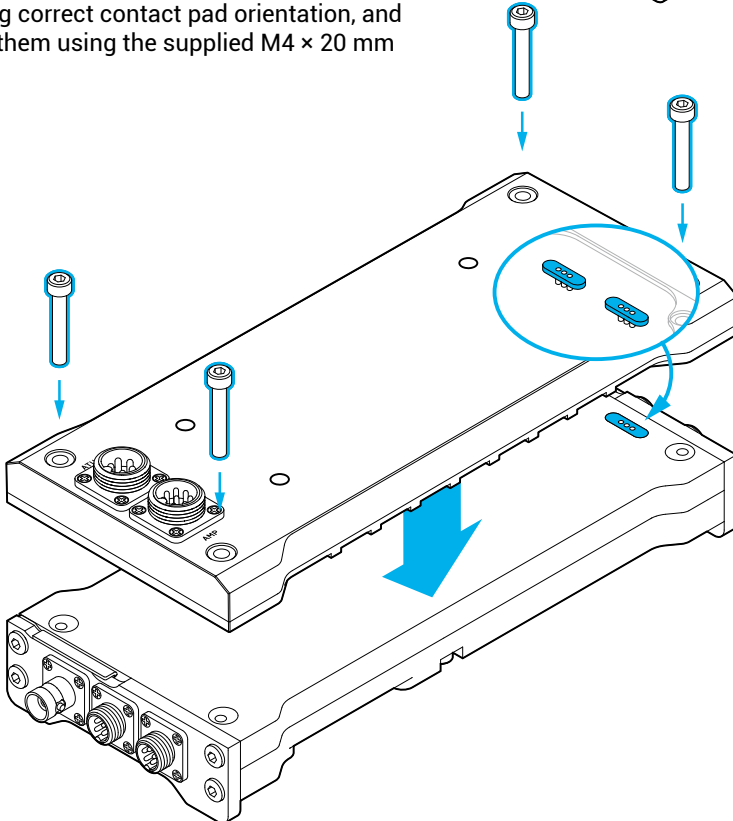
CONNECTION TO THE TRANSCEIVER

! *Note: Before installing the docking station, make sure that the transceiver is switched off and disconnected from all power sources.*

1. Remove the rubber feet from the rear panel of the transceiver that cover the mounting holes.

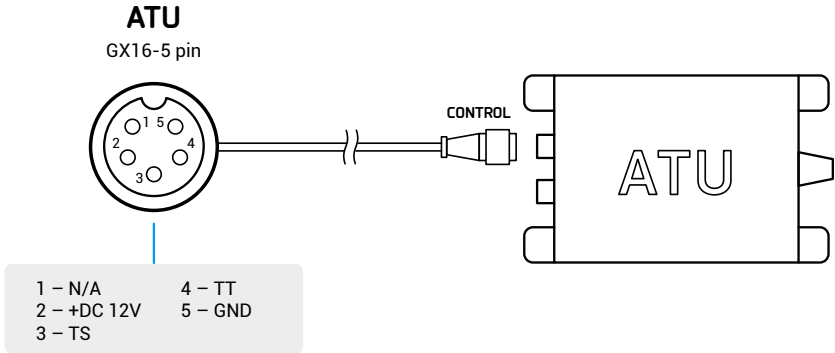


2. Align the transceiver with the docking station, ensuring correct contact pad orientation, and secure them using the supplied M4 × 20 mm screws.



CONNECTION OF THE ANTENNA TUNER

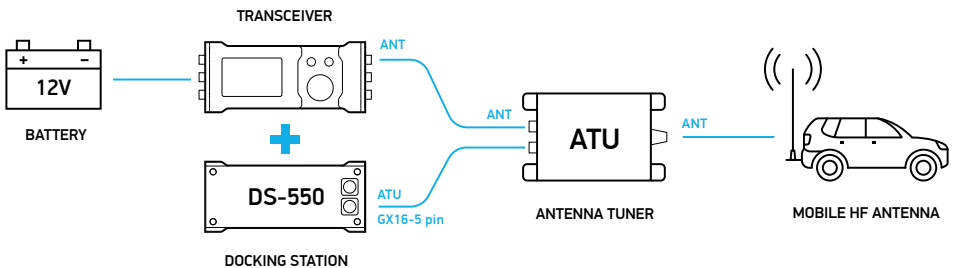
Connect the ATU connector of the DS-550 docking station to the control input of the antenna tuner using a control cable wired in accordance with the equipment manufacturer's specifications.



After the antenna tuner is connected to the docking station, the transceiver will automatically detect the device. The **TUNE** item will become available in the lower line of the on-screen menu instead of **TONE**. Pressing the corresponding function key starts the antenna matching procedure performed by the external tuner.

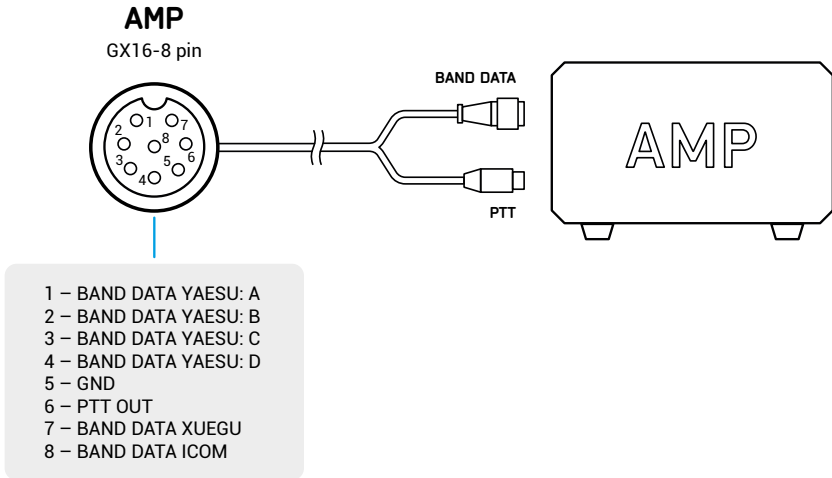


Example equipment configuration:

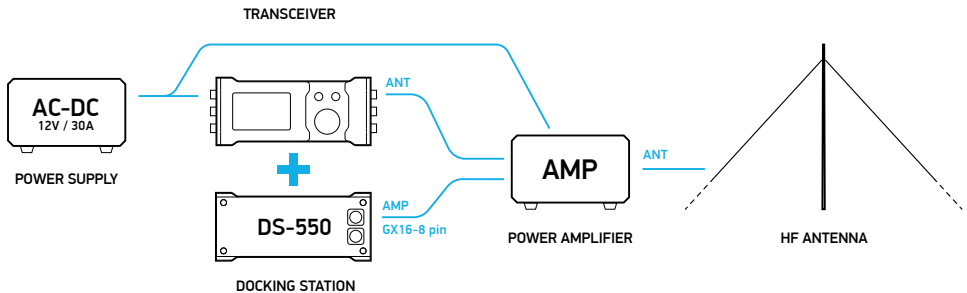


CONNECTION OF THE POWER AMPLIFIER

Connect the **AMP** connector of the DS-550 docking station to the control input of the power amplifier and to its **PTT-IN** input using a control cable wired in accordance with the equipment manufacturer's specifications.



Example equipment configuration:



Note: Make all connections with the power turned off. Make sure that the connector types and wiring match the equipment manufacturer's requirements.

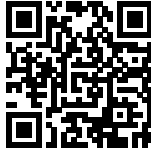
Reference Information

Supported Band Data Protocols:

Band	Analog, Voltage (V)		Digital BCD (Yaesu)			
	ICOM	XUEGU	A	B	C	D
160 м / 1.8 МГц	7.0–8.0	0.23	H	L	L	L
80 м / 3.5 МГц	6.0–6.5	0.46	L	H	L	L
40 м / 7 МГц	5.0–5.5	0.92	H	H	L	L
30 м / 10 МГц	0.1–1.2	1.15	L	L	H	L
20 м / 14 МГц	4.0–4.5	1.38	H	L	H	L
17 м / 18 МГц	3.0–3.5	1.61	L	H	H	L
15 м / 21 МГц	3.0–3.5	1.84	H	H	H	L
12 м / 24 МГц	2.0–2.5	2.07	L	L	L	H
10 м / 28 МГц	2.0–2.5	2.30	H	L	L	H
6 м / 50 МГц	1.2–2.0	2.53	L	H	L	H
NA	0	0	L	L	L	L

Contents are subject to change.

The latest version of this manual can be downloaded from:
<https://lab599.com/downloads/>



If you have any questions regarding this document,
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