



OEM Board Evaluation Kit

Application Notes

Version 1.4

Last Revised July 3, 2017

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WEEE Directive

The following information is for EU-member states only:

The use of the symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the take-back and recycling of this product, please contact your supplier where you purchased the product or consult.



Technical Assistance

If you have a problem and cannot find the information you need in the product documentation, contact your local dealer.

Alternatively, request technical support using the JAVAD GNSS World Wide Web site at: www.javad.com. To contact JAVAD GNSS Customer Support use the QUESTIONS button available on the www.javad.com:

PRODUCTS	SUPPORT	SALES	JAVAD	MY
Receivers	Activate	Dealers	Contact	Login
Radios	Update	Options	News	Profile
Antennas	Upgrade	Pricing	RSS	Cart
Software	Knowledge	Events	Photos	Orders
Accessories	Publications	Arts&Slides	Videos	Questions



OEM Board Evaluation kit

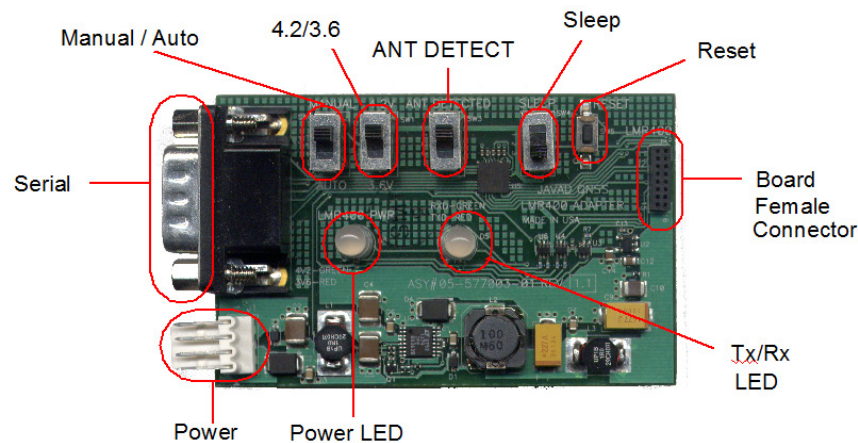
Kit packaging

The Evaluation OEM Kit provides an easy connection to any of JAVAD ArWest AW100Tx, AW400Tx, AW400Rx, and AW900Tx OEM boards. It is designed for use in laboratories and allows::

- JAVAD ArWest OEM boards testing;
- evaluating all the features of JAVAD ArWest OEM boards;
- developing applications based on JAVAD ArWest OEM boards.

The kit consists of:

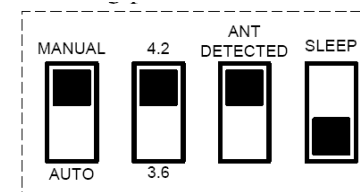
- 1) OEM Adapter p/n 05-572211-01;



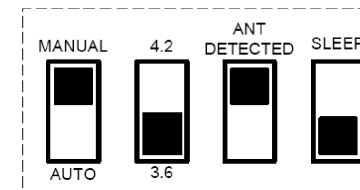
Parameter	Description
MAUAL/AUTO	MANUAL - nominal voltage can be switched with the 4.2/3.6 switch AUTO - nominal voltage is selected according the V_CTRL pin. (Optional. Please contact support)
4.2/3.6	Allows selecting the voltage if the MANUAL/AUTO switch is set to MANUAL (Optional. Please contact support)

Parameter	Description
ANT DETECT	Antenna detected signal (Optional. Please contact support)
SLEEP	Signal for the SLEEP pin (Optional. Please contact support)
RESET	Modem hardware reset
PWR	Green- the voltage is 4.2 V Red- the voltage is 3.6 V
Tx/Rx LED	Reserved

To start successfully operating with adapter for AW100Tx/AW400Tx please make sure that the switches are set to the following positions:



To start successfully operating with adapter for AW400Rx/AW900Tx please make sure that the switches are set to the following positions:



- 2) 4-Pin Header to Banana Plugs Power Cable;



3) TNC to MMCX RA Antenna cable;

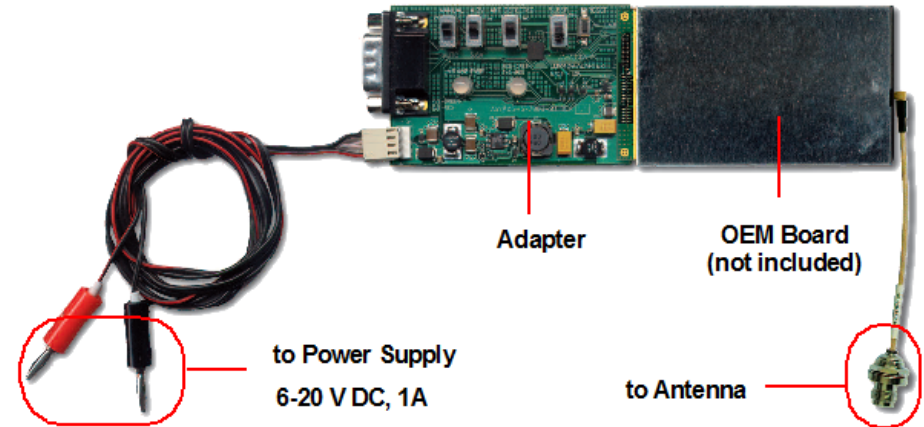


4) DB9 Female - DB9 Female Serial Cable.



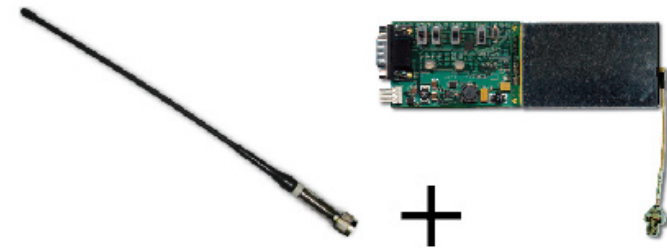
OEM board connection

The OEM board connected directly to Evaluation Kit by its 16-Lead Header Connector, ECS Corp., as it shown on the picture below:



Antenna connection

The OEM board may be connected to external antenna using TNC to MMCX RA Antenna cable (included in the Kit):



Power connection

The OEM board powered through Evaluation Kit and Power Cable (included in Kit). The Banana plugs of power cable may be connected to any available laboratory power supply, battery or other power source with power parameters, suitable for particular OEM board power specifications.

CAUTION: Evaluation Kit does not provide any over-voltage protection. Connecting Evaluation Kit to voltage exceeding particular OEM board power voltage range may cause damage of OEM board and Evaluation Kit board.

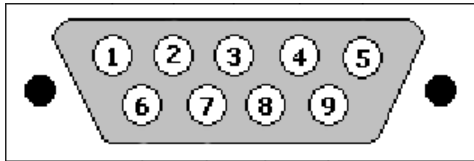
CAUTION: Evaluation Kit provides reverse polarity protection only in voltages range,

specified for particular OEM board.

Serial RS-232 connection

A standard Null-Modem cable (included in Kit) with DB-9 Female connectors on both ends may be used to connect PC COM_X port with Serial port on adapter.

Adapter's DB-9 male connector external view and pinout is shown on the figure below:



Please, refer to particular external device Serial port specification to select and use right Serial cable for proper connection.

Pin	Signal Name	Dir	Description
1	-	-	Not used
2	RXD	I	Receive Data
3	TXD	O	Transmit Data
4	DTR	O	Data Terminal Ready
5	GND	-	Signal Ground
6	DSR	I	Data Set Ready
7	RTS	O	Request To Send
8	CTS	I	Clear To Send
9	-	-	Not used

Please, refer to particular external device Serial port specification to select and use right Serial cable for proper connection.

Appendix

Safety Warnings

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Clean only with a damp cloth.
- Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or has been dropped.
- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, shall be placed on the apparatus.

General Warnings

This product should never be used:

- Without the user thoroughly understanding operator's manual.
- After disabling safety systems or altering the product.
- With unauthorized accessories.
- Contrary to applicable laws, rules, and regulations.

Warning: THE EVALUATION KIT SHOULD NEVER BE USED IN DANGEROUS ENVIRONMENTS.

Power Supply

Connect the supplied adapter to the side of the unit in the slot marked "PWR". Plug the two-prong end of the power cord to an AC100-240V outlet. If you have difficulty inserting the plug, turn it over and reinsert it. If the unit will not be used for a long time, disconnect the plug from the outlet.

Note: Before plugging the power cord into an AC outlet, make sure that all the connections have been made.

CAUTION: To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

CAUTION: To avoid the introduction of hazards when operating and installing, before connecting of the equipment to the supply, make sure that the supply meets local and national safety ordinances and matches the equipment's voltage and current requirements.

CAUTION: Never attempt any maintenance or cleaning of the supply while plugged in. Always remove supply from AC power before attempting service or cleaning.

CAUTION: If the voltage supplied is below the minimum specification, the TRE/TR Evaluation Kit will suspend operation. If the voltage supplied is above the maximum specification, the TRE/TR Evaluation Kit may be permanently damaged, voiding your warranty.

Make sure cords are located so that will not be stepped on, tripped over, or otherwise subjected to damage or stress. Do not operate equipment with a damaged cord or plug – replace immediately. To reduce the risk of damage to the equipment, pull by the plug body rather than the output cord when disconnecting the equipment. Do not operate the supply if it has received a sharp blow, been dropped, or otherwise damaged. Do not disassemble the supply.

CAUTION: Before connecting the external power source and the TRE/TR Evaluation Kit, make sure that the power source matches the TRE/TR Evaluation Kit's voltage and current requirements.

Usage Warnings

If this product has been dropped, altered, transported or shipped without proper packaging, or otherwise treated without care, erroneous measurements may occur. Inform JAVAD GNSS immediately if this product does not function properly. Only allow authorized JAVAD GNSS warranty service centers to service or repair this product.

Note: Do not connect or disconnect equipment with wet hands, you are at risk of electric shock if you do!



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