



OEM Board Evaluation Kit

Application Notes

Version 1.3

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TABLE OF CONTENTS

Preface	3
Terms and Conditions.....	3
WEEE Directive	5
Technical Assistance	6
Return Material Authorization	6
Chapter 1. Introduction	7
Chapter 2. Connection	9
2.1. OEM board connection	9
2.2. Antenna connection	9
2.3. Power connection.....	10
2.4. Serial RS-232 connection	10
Appendix A. Safety Warnings	11
General Warnings.....	12
Appendix B. Warranty Terms	13

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Preface

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SAFETY – Improper use of the AW100Tx/AW400Tx OEM boards can lead to injury to persons or property and/or malfunction of the product. The OEM Board Evaluation Kit should only be repaired by authorized ArWest warranty service centers. Users should review and heed the safety warnings in Appendix A on page 11.

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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.



Preface

Technical Assistance

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 ArWest World Wide Web site at: www.arwestcom.com.

The support area of the website www.arwestcom.com provides access to frequently asked questions, configuration procedures, manuals, e-mail support, etc. Should you have any problems with OEM Board Evaluation Kit, please contact ArWest Customer Support support@arwestcom.com. Generally, you will receive a response within 24 hours or less, depending on the severity of the problem.

Return Material Authorization

Initially, the customer contacts support to report a problem. Please refer to support: support@arwestcom.com

If support determines the problem cannot be resolved over e-mail/internet, it will authorize the return of the unit for repair or replacement, depending on the nature of the problem.

INTRODUCTION

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

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

The kit consists of:

1. OEM Adapter;

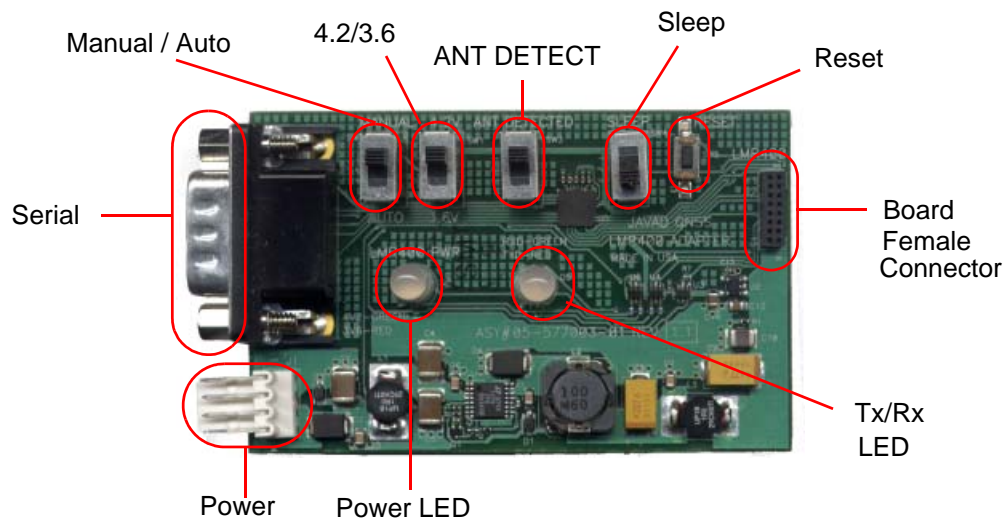
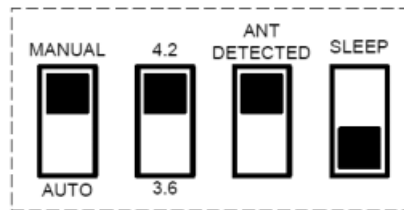


Figure 1-1. Adapter

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)
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

Introduction

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;



Figure 1-2. 4-Pin Header to Banana Plugs Power Cable

3. TNC to MMCX RA Antenna cable;



Figure 1-3. TNC to MMCX RA Antenna cable

4. DB9 Female - DB9 Female Serial Cable.



Figure 1-4. DB9 Serial Cable

CONNECTION

2.1. OEM board connection

The OEM board connected directly to Evaluation Kit by its 16-Lead Header Connector, ECS Corp., as it shown on the Figure 2-1.

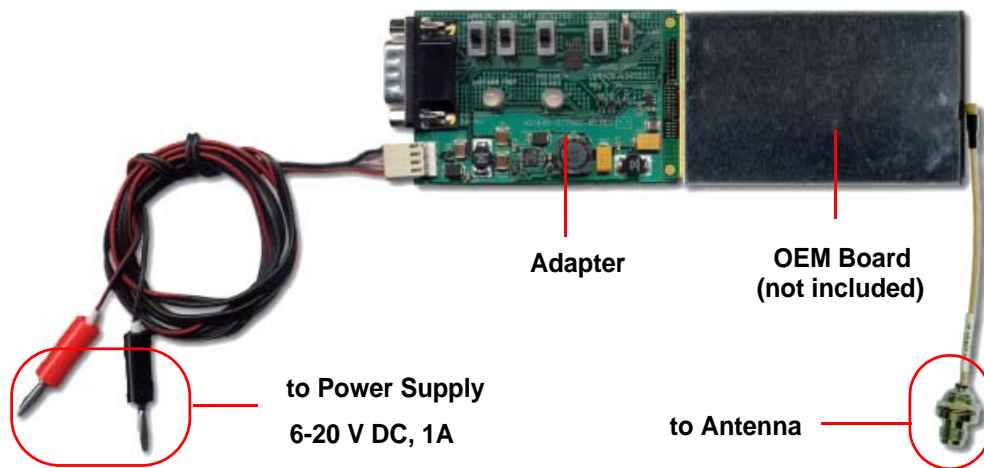


Figure 2-1. OEM board connected to Evaluation Kit

2.2. Antenna connection

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

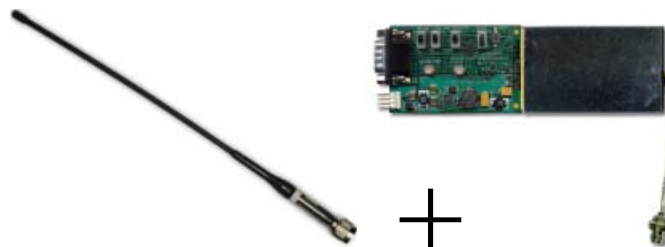


Figure 2-2. Antenna Connection

Connection

Power connection

2.3. 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.

2.4. 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 2-3.

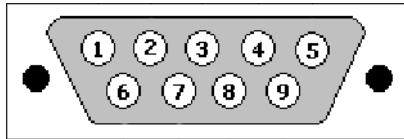


Figure 2-3. DB-9 Male connector

Table 2-1. DB-9 Male Connector Specification

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.

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.

Safety Warnings

General Warnings

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.

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

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Warranty Terms

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for _____

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1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree

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I can find the information I want.	1	2	3	4	5
The information in the manual is accurate.	1	2	3	4	5
I can easily understand the instructions.	1	2	3	4	5
The manual contains enough examples.	1	2	3	4	5
The examples are appropriate and helpful.	1	2	3	4	5
The layout and format are attractive and useful.	1	2	3	4	5
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