# AISG Specification: Standard No. AISG- Layer 2 Array Identification v1.0 31<sup>st</sup> of January, 2013



# AISG Specification Layer 2 Array Identification

#### **Revision History**

DATE	ISSUE	NOTES
31 January 2013	1.0	First release

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#### 1. FOREWORD

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The Antenna Interface Standards Group (AISG) published the AISG standard to facilitate the introduction of antenna line products with remote control and monitoring facilities. The purpose of this standard is to define an array identification scheme in Layer 2 of the AISG protocol. In association with the colours of the antenna ports, the use of this scheme will help the installer/rigger and site manager to identify the antenna array that each ALD is connected to.

For purposes of compliance, users should note that this entire Standard is *optional*. However, once a given standard is elected for inclusion in a device, the entire option becomes mandatory.

#### 2. SCOPE

This document contains additions to Layer 2 of AISG specifications for ALDs implementing Antenna Port Colour Coding [2].

#### 3. REFERENCES

This AISG Standard incorporates references to other publications. These are cited in the text and the referenced publications are listed below. Where references are listed with a specific version or release, subsequent amendments or revisions of these publications apply only when specifically incorporated by amendment or revision of this AISG specification. For references listed without a version or release, the latest edition of the publication referred to applies.

- 1 [Not used]
- 2 AISG "Antenna Port Colour Coding v2.0"

#### 4. ABBREVIATIONS

Where abbreviations or acronyms are used in this document they have the following meanings:

ALD Antenna Line Device
RET Remote Electrical Tilting

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#### 5. TERMINOLOGY AND DEFINITIONS

Where the following terms are used in this document, they have the meaning listed below.

Antenna Line A group of logical devices associated with one or more antenna

systems, which may include antenna control actuator, amplifiers

and other equipment.

Antenna Line Device A generic term for an addressable physical device, such as an

antenna drive or amplifier.

Array An array is a logical group of single or dual polarized radiators

inside the antenna radome supporting a common frequency

band and a common beam shape and tilt.

Array ID The 2 characters identifying the array, as defined in [2].

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#### 6. INCORPORATION OF THE ARRAY ID IN THE UNIQUE ID

The following general rules shall apply:

- (1) The 2 right-most octets of the Unique ID are reserved to contain the Array ID of the antenna array that the ALD controls. The right-most one contains the digit and the 2<sup>nd</sup> right-most contains the colour letter.
- (2) In the case of Multi-RET, the 2 right-most octets of the Unique ID shall be set to "MM".
- (3) If the Array ID is unknown, the 2 right-most octets of the Unique ID shall be set to "XX".

NOTE: The 3<sup>rd</sup> right-most octet is vendor-specific and may be used as a separator, such as '- ' or ' '.

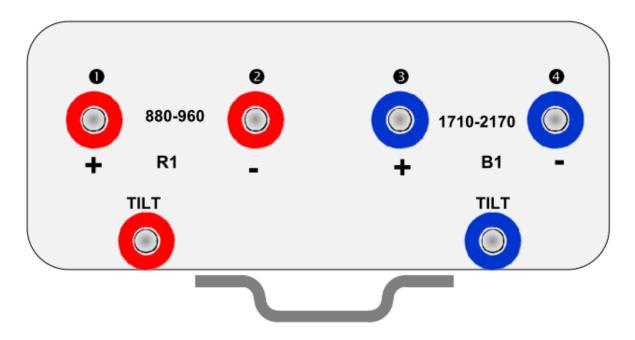
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# ANNEX: EXAMPLES OF UNIQUE ID (INFORMATIVE)

This Annex shows the setting of the Array ID in various configurations of antenna arrays.

#### (1) Dual Band Antenna 880-960/1710-2170 MHz with external RETs

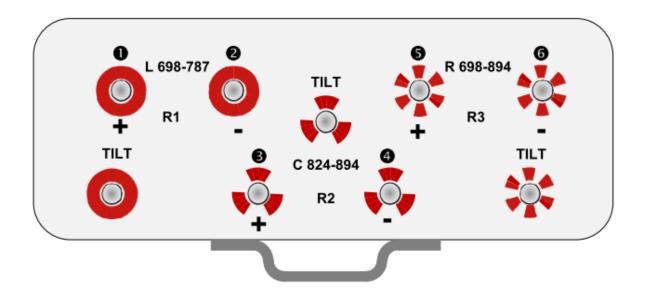


UID #1: XY12345R1 UID #2: XY12346B1

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#### (2) Triple band antenna 800 MHz / 900 MHz / 800+900 MHz with external RETs

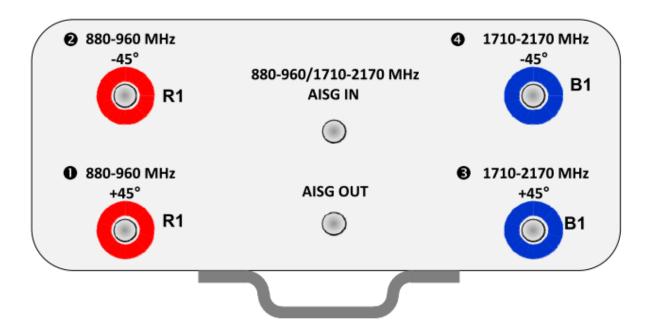


Unique ID #1: XY12345678901234-R1 Unique ID #2: XY12345678901235-R2 Unique ID #3: XY12345678901236-R3

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(3) Dual Band Antenna 880-960/1710-2170 MHz with a integrated multi-RET interface for both bands and AISG OUT port for ALD cascading

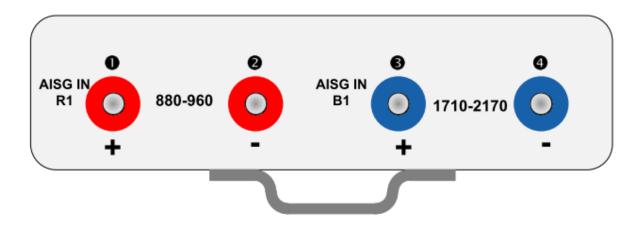


Unique ID #: XY12345MM

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(4) Dual Band Antenna 880-960/1710-2170 MHz with integrated BIAS-T and integrated RETs



UID #1: XY12345R1 UID #2: XY12345B1