



## **INSTRUCTION MANUAL**

# **Upload Software to Argus RET Antennas and TMAs using PCUW**

**This Document Covers**

**Uploading of software within the same AISG version  
And Uploading of Software between AISG1.1 and AISG2.0**

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### 3. OVERVIEW

This document describes the procedures for uploading new software to Argus RET antennas and TMAs using Argus software PCUW, which is available on Argus Website [www.argusantennas.com](http://www.argusantennas.com). Please check and download the latest versions of PCUW from this website. There are two current versions of PCUW. These two versions are for AISG1.1 and AISG2.0, respectively.

### 4. SYSTEM REQUIRMENTS

The following software and hardware are required to do the software uploading:

- PCUW latest versions for AISG1.1 and AISG2.0
- A laptop or desktop computer running Windows XP<sup>1</sup>
- An interfacing unit for communication between the computer and RET antennas/TMAs. This interfacing unit can be CTXD-30-H, CTXD-60-H, PCU-60, or PCU-30A
- A USB cable<sup>2</sup> for the interconnection between the computer and the interfacing unit
- An AISG cable for interconnection between the RET antennas/TMAs and the interfacing unit

Note 1: The uploading procedure under Windows XP is fully tested. The uploading procedure is expected to work with other 32-bit Windows operating systems.

Note 2: Use the USB cable supplied in the package of CTXD-30-H, CTXD-60-H, PCU-30A or PCU-60.

Note 3: Refer to the instruction manual of this interfacing unit for the details of operation. This instruction manual can be found in the package of this interfacing unit.

The instruction manual for each interfacing unit can be found in the following Argus controlled documents:

CTXD-30-A: A178-6005

CTXD-60-H: A178-6120

PCU-30A: A997-0039

PCU-60: A997-0053

Note 4: Refer to Argus controlled document A178-9000 for the details of using PCUW.

### 5. INTERCONNECTING THE EQUIPMENT

#### 5.1. Interconnection

Connect the computer to the interfacing unit using the USB cable. Connect the interfacing unit to the RET antennas/TMAs using the AISG cable. Refer to the instruction manual of this interfacing unit for details.

## 5.2. The Computer

If the interfacing unit is CTXD-30-H, no USB driver is required if the computer is running Windows XP. **Otherwise, a USB driver needs to be installed.** The procedures for installing this USB driver can be found in Argus controlled documents A178-6120 for CTXD-60-H, A997-0053 for PCU-60 and A997-0039 for PCU-30A.

## 6. UPLOAD SOFTWARE TO RET antennas/TMAs within the same AISG version

Argus RET antennas/TMAs can be configured to support AISG1.1 or AISG2.0 communication depending on the requirement from the customer. Accordingly, there are two versions of PCUW to communication with RET antennas/TMAs. These two versions are PCUW2 for AISG2.0 and PCUW11 for AISG1.1. In order to communicate with these RET antennas/TMAs, the operator needs to know the AISG version of the RET/TMA software so PCUW application software with the same AISG version can be used to do the uploading.

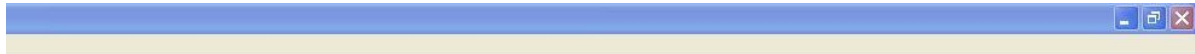
### 6.1. Determine if upload is required

Run the PCUW application software to do a Scan to find the RET antennas/TMAs. Refer to Argus controlled document A178-9000 *PCUW Application User Guide* for the details of operation. The software version of each RET antenna/TMA can be found after Scan and Assign Address. If the installed software version is different from the current version, a software upload is required. If the installed software is already the latest version, then there is no need for upload.

**Warning: Never try to upload a software version older than the installed one. It may cause permanent damage to the RET/TMA hardware!!!**

**Note: RET/TMA software versions strictly follow the alphabetical order within the same AISG version. For example, version 212C is later than version 212B. Version 212 is later than version 211A.**

**Tips: Write down the serial number, HDLC address and software version of each device for further reference in the uploading.**

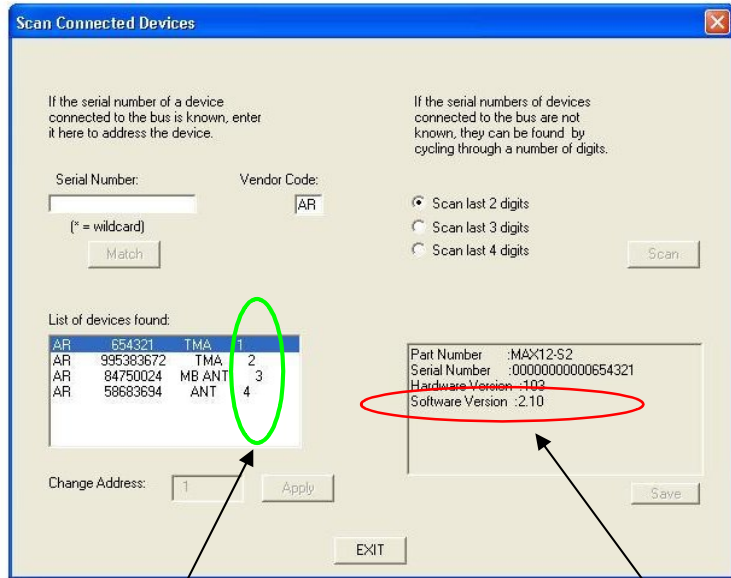


3934020104E9BA

040101802D

3638333639

0036353433



HDLC Address

Software Version

## 6.2. Uploading New Software

If software uploading is required, follow the procedure described in A178-9000 to do the uploading. The following rules apply to software uploading using PCUW.

- (1) If the RET/TMA software is AISG1.1 compatible, use PCUW11 for uploading. The software files that can be uploaded have the following format: XXXX**f1.bin**. The number of characters preceding **f1.bin** can be different for different software versions. XXXX**f1.bin** should be an RET/TMA software version for AISG1.1
- (2) If the RET/TMA software is AISG2.0 compatible, use PCUW2 for uploading. The software files that can be uploaded have the following format: XXXX**f2.bin** or XXXX**.hex**. The number of characters preceding **f2.bin** or **.hex** can be different for different software versions. XXXX**f2.bin** or XXXX**.hex** should be an RET/TMA software version for AISG2.0.
- (3) Do NOT use the computer for any other tasks when software uploading is in progress. Do NOT operate the keyboard or mouse in uploading process.
- (4) If there are more than one RET antennas/TMAs connected to the interfacing unit, each device will have a unique HDLC address. Before start uploading, check whether the HDLC address is correct.

!3EB7E

!00000A2107E

!8FA7E

!000000000000000000000000

'E

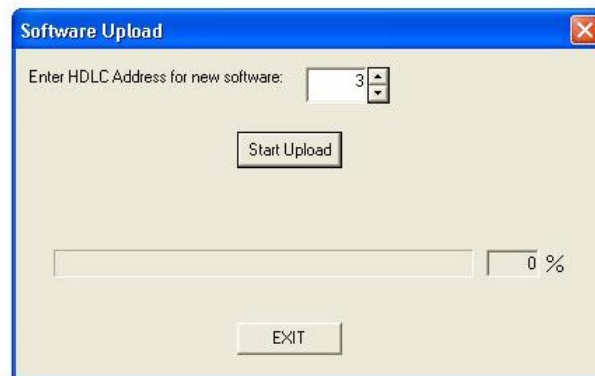
!58E7E

!000000000000000000000000

'E

!C9F7E

46F7E



!7AD7E

46F7E

**Warning: Do NOT upload software to the wrong device. It may cause permanent damage to that device!!!**

**Tips: If possible, avoid connecting multiple devices to the interfacing unit.**

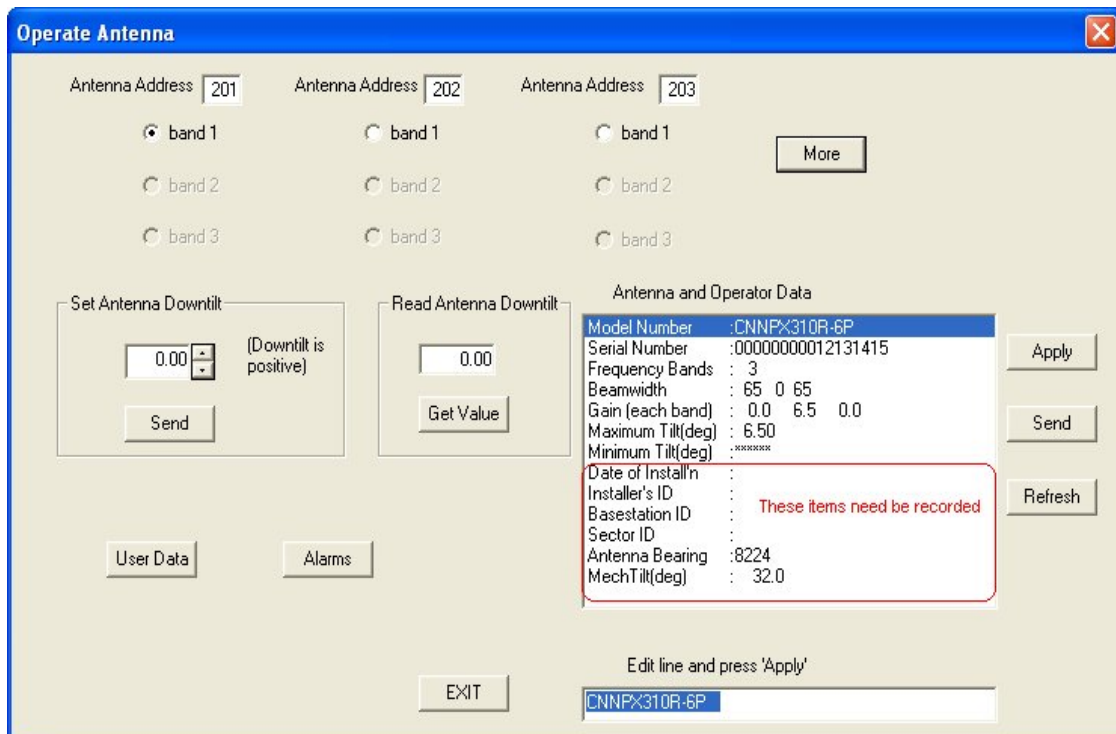
**Note: For each RET/TMA software version, there are three files for uploading.**

**These three files are as follows:**

- (1) XXXXf1.bin is for uploading from a previous AISG1.1 version to the current version XXXX. PCUW11 needs to be used for uploading.**
- (2) XXXXf2.bin is for uploading from a previous AISG2.0 version to the current version XXXX. PCUW2.0 needs to be used for uploading.**
- (3) XXXX.hex is for uploading from a previous AISG2.0 version to the current version XXXX. PCUW2.0 needs to be used for uploading.**

**Note: For AISG2.0 RET software version 2.07 and earlier versions, only XXXX.hex file can be used for uploading to the current version XXXX. The latest version PCUW2 needs to be used for uploading.**

**Note: It is strongly recommended that the operator records the items shown in the following screenshot before uploading. After uploading, check whether these items were changed. If any of these items were changed, use the recorded data to recover the original information. Refer to Section 6.3 of A997-1001 for details.**



### 6.3. Finishing the Upload

At the end of software uploading, do NOT turn off the power of the interfacing unit. It may take 10 to 15 seconds to install the new software. After 15 seconds, use PCUW to do a Scan and check the software version of the RET/TMA. It should be running the current software version now. If it is still running the previous software version, it means the uploading was unsuccessful. Try to do an upload again. If this problem still persists, call Argus technical support.

**Note: Uploading failure is very rare (<0.1%) if the instructions are strictly followed.**

## 7. UPLOAD SOFTWARE between AISG1.1 and AISG2.0

Argus RET antennas and TMAs support software uploading between AISG1.1 and AISG2.0. Both PCUW11 and PCUW2 are required to do software uploading between different AISG versions. For software uploading within the same AISG version, refer to Section 6.

### 7.1. Determine if upload is required

Run PCUW to obtain the software version of the RET antenna/TMA. Refer to Section 6.1 for the details of operation. If the RET antenna/TMA already has the correct AISG version, no software upload is required. Otherwise, follow the procedure described below to do software uploading.

**Note 1: Always upload the latest RET/TMA software version unless a customised software version is specified!!!**

**Note 2: RET/TMA software versions strictly follow the alphabetical order within the same AISG version. For example, version 212C is later than version 212B. Version 212 is later than version 211A.**

**Tips: Write down the serial number, HDLC address and software version of each device for further reference in the uploading.**

## **7.2. Uploading New Software**

If software upload is required, follow the procedure described in **A178-9000** to do the uploading. Refer to Argus controlled document **A997-1001** for detailed instruction of uploading RET antenna software from AISG1.1 to AISG2.0. The following rules apply to software upload between AISG1.1 and AISG2.0.

- (1) If the RET/TMA software is AISG1.1 compatible, use PCUW11 for uploading. The software files that can be uploaded have the following format: xxxx**f1.bin**. The number of characters preceding **f1.bin** can be different for different software versions. xxxx**f1.bin** should be an RET/TMA software version for AISG2.0. This file is for uploading from AISG1.1 to AISG2.0.
- (2) If the RET/TMA software is AISG2.0 compatible, use PCUW2 for uploading. The software files that can be uploaded have the following format: xxxx**f2.bin** or xxxx**.hex**. The number of characters preceding **f2.bin** or **.hex** can be different for different software versions. xxxx**f2.bin** or xxxx**.hex** should be an RET/TMA software version for AISG1.1. This file is for uploading from AISG2.0 to AISG1.1.
- (3) Do NOT use the computer for any other tasks when software uploading is in progress. Do NOT operate the keyboard or mouse in uploading process.
- (4) If there are more than one RET antennas/TMAs connected to the interfacing unit, each device will have a unique HDLC address. Before start uploading, check whether the HDLC address is correct.

**Warning: Do NOT upload software to the wrong device. It may cause permanent damage to that device!!!**

**Tips: If possible, avoid connecting multiple devices to the interfacing unit.**

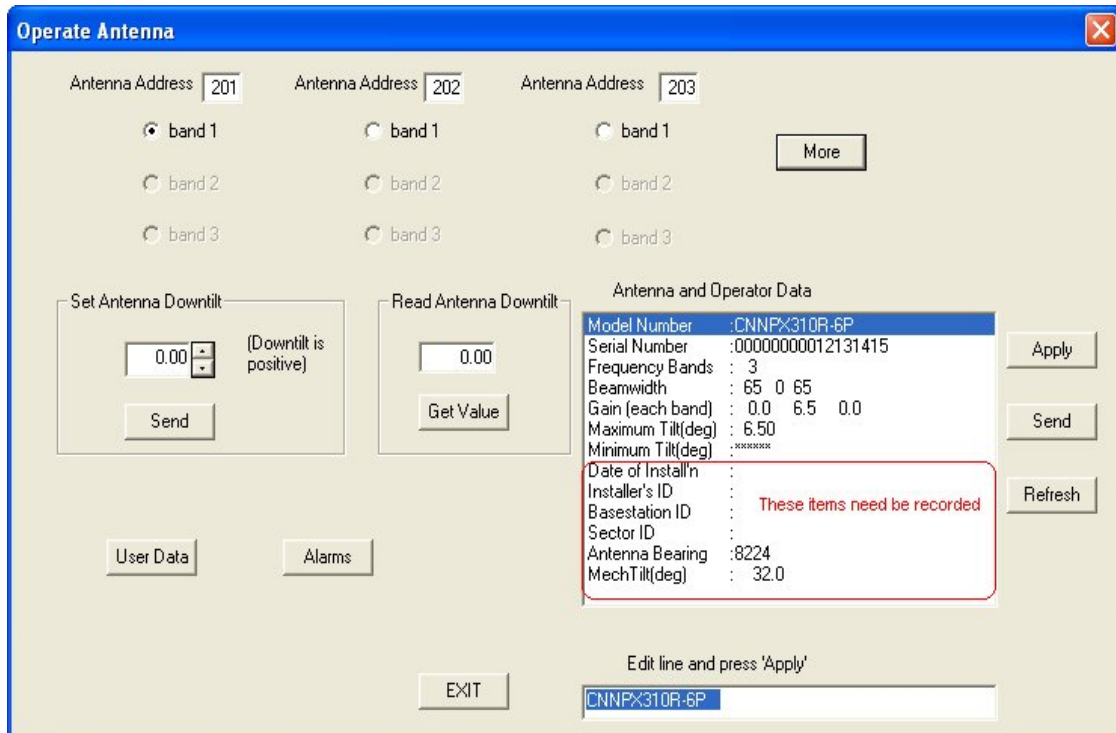
**Note: For each RET/TMA software version, there are three files for uploading. These three files are as follows:**

- (4) **XXXXf1.bin** is for uploading from a previous AISG1.1 version to the current version **XXXX**. PCUW11 needs to be used for uploading.
- (5) **XXXXf2.bin** is for uploading from a previous AISG2.0 version to the current version **XXXX**. PCUW2.0 needs to be used for uploading.
- (6) **XXXX.hex** is for uploading from a previous AISG2.0 version to the current version **XXXX**. PCUW2.0 needs to be used for uploading.

**Note: For AISG2.0 RET software version 2.07 and earlier versions, only XXXX.hex file can be used for uploading to the current version XXXX. The latest version PCUW2 needs to be used for uploading.**

**Note: It is strongly recommended that the operator records the items shown in the following screenshot before uploading. After uploading, check whether these**

items were changed. If any of these items were changed, use the recorded data to recover the original information. Refer to A997-1001 for details.



### 7.3. Finishing the Upload

At the end of software upload, do NOT turn off the power of the interfacing unit. It may take 10 to 15 seconds to install the new software. After 15 seconds, use PCUW<sup>1</sup> to do a Scan and check the software version of the RET/TMA. It should run the current software version now. If it is still running the previous software version, it means the uploading was unsuccessful. Try to upload again. If this problem still persists<sup>2</sup>, call Argus technical support.

**Note 1: For uploading from AISG1.1 to AISG2.0, use PCUW2 to do the scan at this stage. For uploading from AISG2.0 to AISG1.1, use PCUW11 to do the scan.**

**Note 2: Upload failure is very rare (<0.1%) if the instructions are strictly followed.**