**TO:**        T10 Membership
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**DATE:**     23 February 2004
**SUBJECT:**  T10/04-062r1, ADT Port Operating Parameters Clarification


**Revision 1:**

Changes from 23 February 2004 teleconference, minutes 04-066r0, discussion item e:

- Now that ADT rev. 10a is available, changed clause numbers to match ADT rev. 10a.

- 3.1.x: Changed "default starting parameters" to "starting parameters."

- 4.3.3: Removed requirement to change operating parameters to default.

**Revision 0:**

- Initial version

## 1. Background

ADT Revision 10 and T10/369r3 contain inconsistent use of terminology for port operating parameters. In some cases the existing text states that Login IUs are to be transmitted containing default operating parameters, which would cause the ports to operate at 9600 baud, Maximum ACK Offset of 1, and Maximum Payload Size of 256. The intent of the text is actually that the port operate at these parameters during negotiation, while attempting to negotiate the highest supported values for the parameters.

## 2. Changes to ADT Rev. 10a

### 3.1 Definitions

Add the following definitions:

**3.1.x starting parameters:** The maximum values of operating parameters of which the port is capable.

**3.1.y operating parameters:** The current settings under which the port is operating, including but not limited to maximum ACK offset, maximum payload size, and baud rate.

### 4.3.2.3.1 State description (of P1:Login state)

The **first paragraph** contains the sentences:

> Following a hard reset or a Port Logout condition, the Port Login IU shall be sent using default parameters (see 4.2). If the port is already logged in, the Port Login IU shall be sent using current operating parameters unless the port is initiating the exchange as part of error recovery.

Change this to:

> Following a hard reset or a Port Logout condition, the port shall set its operating parameters to default values before sending the Port Login IU (see 4.2). If the port is already logged in, the current operating parameters shall not be changed before sending the Port Login IU. However, if the port is initiating the exchange as part of error recovery, the port operating parameters shall be changed to default if required elsewhere in this standard.

### 4.3.3.4.1 State description (of N1:Negotiating state)

The **first paragraph** is:

> If the port transitioned to this state due to an Initiate Login message, the port shall send a Port Login IU in a new exchange. If the AOE bit is set, the Port Login IU shall be sent with default starting parameters as the contents.

Delete "default" in the second sentence:

If the port transitioned to this state due to an Initiate Login message, the port shall send a Port Login IU in a new exchange. If the AOE bit is set, the Port Login IU shall contain starting parameters.

The **second paragraph** is:

If the port transitioned to this state due to a negotiation error, the port shall send a Port Login IU in a new exchange with default starting parameters as the contents.

Delete "default":

If the port transitioned to this state due to a negotiation error, the port shall send a Port Login IU in a new exchange.  The Port Login IU shall contain starting parameters.

The **fifth paragraph** is:

If the port receives a Port Login IU with the ACCEPT bit set to one with parameter values that are different from the last Port Login IU sent, the port shall send a NAK IU with a status value of NEGOTIATION ERROR. The port shall initiate a new Port Login exchange with default starting parameters as the contents.

Change this to:

If the port receives a Port Login IU with the ACCEPT bit set to one with parameter values that are different from the last Port Login IU sent, the port shall send a NAK IU with a status value of NEGOTIATION ERROR and abort the Port Login exchange. The port shall send a Port Login IU in a new exchange.  The Port Login IU shall contain starting parameters.

### 4.6.2.2 Retryable error

**List item 5)** contains the phrase:

"…set the operating parameters of the interface to default settings, …"

Change this to:

"…set its operating parameters to default, …"

### 4.6.2.7 Error recovery for symbol framing errors

The **first paragraph** contains the phrase:

"…set the operating parameters of the interface to default settings, …"

Change this to:

"…set its operating parameters to default, …"

### 6.5.5 Port logout information unit

**List item d)** does not begin with a verb, unlike the other list items:

Port operating parameters revert to default settings following receipt of the ACK IU for the Port Logout IU (see 4.2).

Change this to:

Set port operating parameters to default following receipt of the ACK IU for the Port Logout IU (see 4.2).