Encore guide

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The first number represents time duration of total compliance. The second number represents total blower hours.
Long-term usage

Compliance Information 5/19/2009 – 5/25/09

- Displays the average humidifier and Flex value and the last setting
- Compliance threshold (here 4 hours) but can be set differently using the Encore software preferences settings.
- Daily compliance
  - Displays the hours of usage per day
  - Irregular pattern may indicate issues such as patient discomfort

Average Pressure Support (PS) per night. PS = IPAP - EPAP

90% EPAP: Patient spent 90% of the night at or below this expiratory pressure

Residual AHI per night

Average AHI: 8.9—Residual AHI averaged over the total period
Long-term trends will allow you to evaluate how patient therapy progressed.

All values in the column are averaged over total period

- Average pressure support (PS) per night
- Percentage of Periodic Breathing
- CAI: clear airway apnea index (opened upper airways)
- OAI: obstructed airway apnea index (closed upper airways)
- Total AHI = CAI + OAI + HI
- HI: hypopnea index
- Flow limitation index
- Vibratory snoring index
- Percentage of time in large leaks

All values in the column are averaged over total period

- Percentage of patient-triggered breaths (here 90.4%): indicates if patient is breathing spontaneously (high percentage) or relying on the backup rate (low percentage)
- Spontaneous breathing frequency
- Minute ventilation: volume of air inspired into or expired out of the lungs in 1 min. It is expressed as:
  - Tidal volume x breathing frequency
  - Example: 500ml (Tidal volume) x 12 bpm = 6 l/min
Short-term trend analysis is a ‘close-up’ look at one night vs. the long term trends.

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**Footnotes:**
- **AHI:** Apnea Hypopnea Index
- **PB:** Periodic Breathing
- **VS:** Vibratory Snore
- **PS:** Pressure Support
- **OA:** Obstructed Airway Apnea
- **CA:** Clear Airway Apnea
- **FL:** Flow Limitation
- **H:** Hypopnea

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**Legend:**
- **PB** – Periodic Breathing
- **FL** – Flow Limitation
- **CA** – Clear Airway Apnea
- **OA** – Obstructed Airway Apnea

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**Sleep Therapy Daily Details**

- **Pressure (cm H2O):**
  - IPAP
  - EPAP
  - Max pressure setting
  - Min. EPAP setting
  - IPAP range

- **Leaks (L/min):**

- **Minute ventilation:**

- **Indices:**
  - **AHI:** 8.0
  - **FL:** 1.0
  - **H:** 6.0
  - **OA:** 1.0
  - **CA:** 1.0

- **Current backup rate:** 5 bpm
  - **Avg. minute vent:** 7.2

- **Max pressure setting:** 20.0 cm H2O
  - **Min. EPAP:** 10.0 cm H2O
  - **Avg. IPAP:** 10.0 cm H2O
  - **Room trace:** 20.0 cm H2O

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**Graphical Representation:**

- **IPAP Range:** IPAP pressure changes during a 2-min. window
- **IPAP:** Average IPAP over a 2-min. window
- **EPAP:** Average EPAP over a 2-min. window
- **Minimum EPAP:** this is the minimum EPAP setting (the pressure will never go below this value)

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Maximum pressure setting: this is the maximum IPAP (the pressure will never go above this value)

The blue area shows IPAP range during a 2-min. window
Here IPAP went from 5 cm H2O to 15 cm H2O

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All values in the column are averaged over total period
See detail in illustration below
Percentage of patient spontaneous breaths (here 99.2%)
Percentage of Periodic Breathing
Residual respiratory events during the night are split into categories
Mask fit indicator: green = good fitting, black = large leak period
Patient breathing rate
Device backup rate
Minute ventilation

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The blue area shows IPAP range during a 2-min. window
Here IPAP went from 5 cm H2O to 15 cm H2O
Sample of daily trends

Example: Important leaks

Patient switched off 3 times probably due to discomfort induced by large leaks (as illustrated below)

Large leaks periods are displayed in the ‘Mask fit indicator’

→ Check patient interface
Our detailed Patient Flow and Event report found with the BiPAP autoSV Advanced allows you to view on a weekly basis every breath your patient takes and how the BiPAP autoSV Advanced responded.

Colored indicator flags are available to indicate events that are identified by the device.

The blue line is an indication of the patient's flow waveform.

Below the patient waveform line, the red line documents the pressure delivered to the patient. The dots indicate a change in EPAP pressure (either increase or decrease).
### Compliance Summary – All Data

#### Compliance Statistics

<table>
<thead>
<tr>
<th>Data Range</th>
<th>22/09/2009 – 18/10/2009 (27 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days with Device Usage</td>
<td>24 days</td>
</tr>
<tr>
<td>Days without Device Usage</td>
<td>3 days</td>
</tr>
<tr>
<td>Percent Days with Device Usage</td>
<td>88.9%</td>
</tr>
<tr>
<td>Cumulative Usage</td>
<td>5 days 12 hrs. 35 mins. 36 secs.</td>
</tr>
<tr>
<td>Maximum Usage (1 Day)</td>
<td>9 hrs. 11 mins. 28 secs.</td>
</tr>
<tr>
<td>Average Usage (All Days)</td>
<td>4 hrs. 54 mins. 39 secs.</td>
</tr>
<tr>
<td>Average Usage (Days Used)</td>
<td>5 hrs. 31 mins. 29 secs.</td>
</tr>
<tr>
<td>Minimum Usage (1 Day)</td>
<td>5 mins. 54 secs.</td>
</tr>
<tr>
<td>Percent of days with Usage &gt;= 4 hours</td>
<td>70.4%</td>
</tr>
<tr>
<td>Percent of days with Usage &lt;= 4 hours</td>
<td>29.6%</td>
</tr>
<tr>
<td>Total Blower Hours</td>
<td>5 days 12hrs. 49 mins. 10 secs.</td>
</tr>
</tbody>
</table>

#### BiPAP autoSV Advanced Summary

- **Average Device EPAP Pressure <= 90% of Time**: 6.0 cm H20
- **Average Percent of Night in Periodic Breathing**: 0.1%
- **Average Time in Large Leak Per Day**: 2 secs.
- **Average Breath Rate**: 16.6 bpm
- **Average Minute Vent**: 7.3

#### Settings

- **Min. EPAP**: 4.0
- **Max. EPAP**: 10.0
- **Min. Pressure Support**: 0.0
- **Max. Pressure Support**: 10.0
- **Max. Pressure**: 25.0
- **Min. Pressure Support**: Auto
- **Flex Setting**: 2.0

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Summary of all compliance data

Patient usage is very good

Percentage of the night the patient has a periodic breathing waveform pattern

Reminder of all therapy settings
Tips and suggestions:

• Always pay attention to diagnostic night before setting/checking an Encore report.
• Choose the patient interface that suits your patient – there is no efficient therapy without a good mask fit!
• Clinical follow-up.

Usages:

BiPAP autoSV Advanced–System One is intended to provide noninvasive ventilation support to treat:

• Adult patients with obstructive sleep apnea
• Respiratory insufficiency caused by central and/or mixed apneas and periodic breathing.

It is to be used in hospital, or home.
This guide is not a substitute for a physician’s decision and is not intended to replace the Encore manual, but is intended to be used in addition to the manual for reading the Encore report with the Philips Respironics BiPAP autoSV Advanced–System One. This product can only be prescribed by a physician.