

Activ8 Critical Care Solutions



drive

DeVilbiss
HEALTHCARE

Simplified Solutions for the most complex of care

Delivering high quality critical care to patients with limited staff and financial resources demands a new approach in today's complex healthcare environment.

The Activ8 range of critical care beds has been developed to deliver outstanding patient care and safety, reduce manual handling and work related injuries for clinical staff, and also encompasses pulmonary therapies such as CLRT, which have been found to reduce re-admission rates, shorten length of stay and minimise costs.¹

The Activ8 range includes; the best-in-class Vivo, fully equipped as standard with therapies to care for the most complex of patients; the Vision, combining simple functions and high performance; and the functional, safety focused Sigma.



Reference

1. Swadener-Culpepper L; Skaggs R, VanGilder C, et al. The Impact of Continuous Lateral Rotation Therapy in Overall Clinical and Financial Outcomes of Critically Ill Patients. Critical Care Nursing Quarterly: July-September 2008 – Volume 31 – Issue 3 – p.270-279

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Activ8 Vivo



Exceptional
patient care
and safety,
as standard

The Activ8 Vivo has been developed for everyone involved in the critical care environment – the patient, the clinical teams and the trust/health board.

This bed has been designed to offer state of the art advanced clinical management solutions for critical care patients and helps create a safe and more comfortable environment.

One button functionality on the touchscreen control panel provides access to a full range of therapy, comfort and safety settings offering simplified solutions.



Pulmonary Therapies

Therapies to assist ventilated patients move and clear secretions from the lungs.

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Patient Anti-Slipping

Innovative function to reduce shear during Auto-Regression.

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Pressure Area Care

Functions to lower the risk of pressure ulcers and avoid shear damage.

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Patient Safety

Functions to help the patient feel as comfortable and safe as possible.

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Nurse Assist Functions

Optimal working conditions to prevent injuries and provide piece of mind for the nurse.

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Weigh Scales

Additional support to monitor weight fluctuations and calculate fluid loss.

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Pulmonary Therapies

The Vivo's Continuous Lateral Rotational Therapy (CLRT) has a tilt angle of up to 15° which can assist in the treatment of respiratory conditions related to immobility such as; pneumonia and atelectasis, as well as loosening and reducing lung secretions. CLRT can help patients get a more comfortable sleep and assist in reducing care costs for the hospital.



In addition to programmable CLRT, Pulmonary Expansion Therapy increases the expansiveness of the thoracic cage of the patients in intensive care, who have undergone mechanical assisted ventilation.

The Vivo bed is equipped with a pneumatic system, located at the back of the patient, which progressively swells to allow further extension of the thoracic cage, causing the patient's shoulders to retract. By arching the patient's torso, the internal volume of the thoracic cage is further increased which facilitates the expansion of pulmonary capacity.

“
Research states that the earlier the patient receives CLRT to treat pulmonary complications the shorter the stay in the critical care ward, lower re-admission rates and reduced care costs are achieved²
”

“
CLRT is highly cost-effective compared to standard care by preventing ventilator-associated infections and pressure ulcers in an critical care setting⁴
”

“
By mobilising patients sooner not only is their physical functioning improved, but also their emotional and social wellbeing³
”

References

2. Swadener-Culpepper L; Skaggs R, VanGilder C, et al. The Impact of Continuous Lateral Rotation Therapy in Overall Clinical and Financial Outcomes of Critically Ill Patients. Critical Care Nursing Quarterly: July-September 2008 – Volume 31 – Issue 3 – p.270-279
3. Kalisch BJ; Lee S; Dabney BW, et al. Outcomes of inpatient mobilization: a literature review. Journal of Clinical Nursing: 2013
4. Kang S, DiStefano MJ, Yehia F, Luthra K, Waters D, Padula WV. The Value Of Beds With Continuous Lateral Rotation Therapy To Prevent Ventilator-Associated Pneumonia And Pressure Injuries: A Cost-Effectiveness Analysis

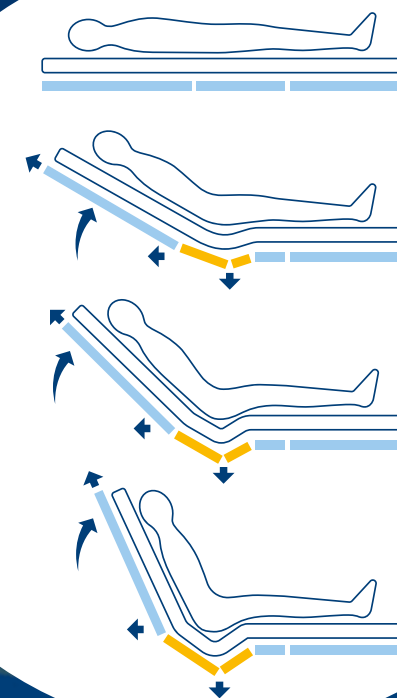
Patient Anti-Slipping (PAS)

Vivo includes the innovative PAS System (Patient Anti-Slipping) which reduces shear and the risk of tissue damage during Auto-Regression backrest adjustment. The PAS System comprises of a concealed opening in the mattress platform which opens during backrest adjustment, seating the mattress and the patient comfortably with minimum movement or discomfort.

We would recommend the use of the integral mattress for the PAS System to work to its full potential and give maximum patient comfort and skin protection. The specialist mattress combined with the PAS System is a preventative measure to reduce pressure friction and shear forces on the sacral area which are known to be contributory pressure ulcer developments.⁵

By reducing shear forces in the sacral area patient discomfort is reduced

By centring the patient and reducing their migration towards the foot end of the bed, even sedated patients will benefit from PAS when nursed at a 30° backrest angle



References

5. Gosnell DJ, Johannsen J, Ayres M. Decubitus 1992;5:56-62. Pressure ulcer incidence and severity in a community hospital.

Pressure Area Care

The Vivo has a lateral tilt therapy angle of up to 15°. Research states that the majority of critically ill patients are not repositioned every 2 hours.⁶

Our Programmable Continuous Lateral Rotational Therapy (CLRT) ensures the patient re-positioning schedule is maintained by simply programming the tilt angle and time frame needed in the touchscreen control.

The specially designed dual therapy mattress can be easily switched between alternating and continuous low pressure (CLP). The intuitive touchscreen display controls all the mattress comfort settings. For convenience and a more streamlined design the mattress pump is integrated into the foot end of the bed.

Patients' heels are particularly prone to both pressure and shear. When the heels are in contact with the bed surface they are more prone to pressure ulcers.⁸ A dedicated heel-zone included within the mattress provides additional support to this vulnerable area.

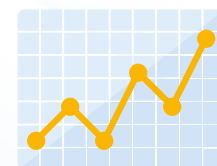
Immobility is a risk factor of major importance for pressure ulcer development among adult hospitalised patients⁷

References

6. Lindgren M1, Unosson M, Fredrikson M, Ek AC. Immobility- A major risk factor for development of pressure ulcers among adult hospitalized patients: a prospective study; Scand J Caring Sci. 2004 Mar;18(1):57-64
7. Sreenandh Krishnagopalan, MD; E. William Johnson, MPH; Lewis L. Low, MD, FACP; Larry J. Kaufman, MD, FCCP. Body positioning of intensive care patients: Clinical practice versus standards; Crit Care Med 2002; 30:2588-2592
8. Cooper K. Evidence – Based Prevention of Pressure Ulcers in the Intensive Care Unit: 2013 American Association of Critical-Care Nurses

Weigh Scales

Class III weigh scales are integrated discreetly underneath the Vivo's mattress platform which are controlled using the touchscreen panel on the foot end of the bed. It displays an accurate weight reading and gives an insight into the patient's food intake and fluid levels.



The Activ8 Vivo is equipped to store and record patient weight history to monitor weight fluctuations and hypervolemia. Alarms can be set to sound when a set weight, such as maximum or minimum have been reached.

“The weigh scales provide accurate patient weight readings, enabling clinical staff to calculate medication dosages.”



Patient Safety

The Activ8 Vivo reduces the risk of falls in hospital by having a mattress platform that lowers to 48cm. Split side-rails also reduce the risk of patients falling out of bed and includes integrated controls for both the patient and nursing staff.

For the clinician's piece of mind the Vivo includes restless patient and patient exit warning alarms to help reduce falls and increase patient safety.

Integrated patient controls are situated inside the side rails and for patient safety a nurse call button can be activated to sound an alarm. Both the light and the alarm are only deactivated when the nurse attends to the patient and switches off the alarms.

Independent head side-rail maintains patient safety whilst allowing access to head and airway management



Nurse Assist Functions



The Activ8 Vivo has a lateral rotation of up to 15° which can assist when re-positioning and handling patients. This function can also be used for many different general duties, such as changing bedding and patient care and hygiene.

The double-sided lateral tilt can be used as a moving and handling aid to support patient care; reduce physical handling and minimise effort and stress during general nursing duties.

When treating patients at the side of the bed clinicians can also use the integrated outer side rail controls. This simple handset includes all the most commonly used functions, such as raising or lowering the bed to avoid stooping and bending when attending to the patient.

Other functions included are:

- ▶ Cardiac chair
- ▶ Vascular position
- ▶ CPR
- ▶ Trendelenburg/ reverse trendelenburg
- ▶ Lateral tilt
- ▶ Bed extension
- ▶ Knee-break function
- ▶ Synchronised backrest and knee break function
- ▶ Safe exit position



Infection Control

Activ8 Vivo has been designed for easy cleaning and improved infection control. The mattress provides antimicrobial protection and is water resistant and vapour permeable.

Bed Extension

Taller patients are accommodated using the Activ8 Vivo's electronically adjustable bed extension which extends by a further 23cm for total patient comfort.

X-ray Compliant

Vivo offers a wide radio transparency area for x-ray examination. The backrest can be quickly equipped with an x-ray cassette holder for chest x-rays without the requirement to move the patient. The mattress platform also facilitates x-rays with c-arm equipment.

Safe and Easy Manoeuvrability

The Vivo has a reduced size wheelbase for easy manoeuvrability. 150mm anti-static castors to ensure easy and safe movement in clinical areas. For added piece of mind an alarm sounds when the brakes are not applied.



Activ8 Vivo Specifications

- Overall Bed Length: 219cm
- Overall Bed Width: 108cm
- Mattress Platform Length: 198cm
- Mattress Platform Width: 90cm
- Maximum Height: 82mm
- Minimum Height: 48cm
- Trendelenburg / Reverse Trendelenburg: +16 / -15°
- Lateral Tilt: +15 / -15°

Vivo bed with specialist mattress: **ACTIV8/VIVO/DYN/MAT**
Vivo bed only: **ACTIV8/VIVO**

Lockable Handset

4-Section

Safe Working Load

Maximum Patient Weight

Warranty (Years)

Full service contracts available



Activ8 Vision

The Activ8 Vision range of critical care beds have been designed to meet the challenges of the critical care environment. The range can be customised for patient and ward requirements.



Optional extras:
Continuous lateral rotational therapy (CLRT) with an angle of up to 30° / Weigh scales / Lateral tilt with angle of up to 20°

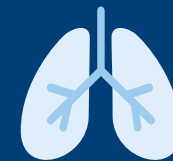


Pulmonary Therapies

- ▶ Continuous lateral rotational therapy is beneficial for patients at risk of respiratory and lung complications. The tilt aims to reduce atelectasis and loosen lung secretions.
- ▶ The Activ8 Vision has a tilt angle of up to 30° – the largest in our critical care range.

Pressure Area Care

- ▶ Auto regression to reduce shear and risk of tissue damage when profiling.



Weigh Scales

- ▶ Factory fitted class III weigh scales to align patient fluid levels with weight. The weigh scales also track and monitor patient weight fluctuations by using graphical charts to visually show changes.

Patient Safety

- ▶ Low mattress platform for ease of use and falls prevention.
- ▶ Full length split side-rails for safe and easy ingress and egress.
- ▶ Patient controls set inside the side rails for easy accessibility.
- ▶ Underbed light signifies when the bed is in its lowest position.
- ▶ One touch egress safe exit button which automatically positions the bed frame into an optimum profile for exiting the bed.

Nurse Assist Functions

- ▶ Head and foot ends are easily removed, giving fast access to patients for emergency procedures.
- ▶ Lateral tilt provides easy access for daily patient care and nursing procedures without physical strain or over exertion to reduce staff injuries.

Other Activ8
Vision Functions

Infection Control

The Vision beds are designed around hygiene and infection control procedures and include rounded edges and accessible, moulded mattress panels. All metal components are powder coated to resist UV radiation, mechanical damage and disinfecting agents.

X-ray Compliant

X-ray translucent mattress platform to facilitate c-arm and other x-ray procedures. Channels are located under the backrest for chest x-rays without the requirement to disturb the patient. Other channels are placed in the fixed platform section and femoral sections.

Bed Extension

Mattress platform extends the bed a further 20cm to ensure the comfort of taller patients.



Activ8 Vision
Specifications

Activ8 Vision:

Bed only: **ACTIV8/V**

Bed with lateral tilt & CLRT: **ACTIV8/V/LT/LTT**

Bed with CLRT & weigh scales: **ACTIV8/V/LT/LTT/WS**

Bed with lateral tilt & weigh scales: **ACTIV/V/LT/WS**

Bed with weigh scales: **ACTIV8/V/WS**

Overall Bed Length: **222cm**

Overall Bed Width: **105cm**

Mattress Platform Length: **200cm**

Mattress Platform Width: **90cm**

Max Mattress Platform Height: **84cm**

Min Mattress Platform Height: **44cm**

Trendelenburg /
Reverse Trendelenburg: **+16° / -16°**

Lateral Tilt: **+30° / -30° (available for beds with CLRT)**
+20° / -20° (available for beds with lateral tilt)



Full service
contracts
available

Activ8 Sigma



The Activ8 Sigma has been developed to encompass high performance with safety resulting in a bed which simplifies the treatment of the patient.



Weigh Scales

Removable class III weigh scales provide accurate readings for patient weight monitoring and calculating fluid levels.

Patient Safety

The Sigma has a simple yet effective visual aid for clinicians to clearly see from a distance when the bed is in its lowest position. The amber under bed light changes to green to signal the bed is at its lowest point.

Independent head side-rails maintain patient safety whilst allowing access to head and airway management.

Nurse Assist Functions

The nurse control handset allows the operator to make all necessary adjustments to the bed. As an added safety feature the patient handset can be locked out for piece of mind and fits into the linen tray to avoid unsolicited setting adjustments.

A secondary nurse control handset is integrated into the side rails to assist the clinician when attending to the patient. With the push of a button the height of the bed is adjusted to avoid unnecessary back strain and injuries to the clinical team.



Infection Control

Activ8 Sigma provides easy access to those hard to reach places for easy cleaning, as well as a slatted mattress platform to aid infection control procedures.

Bed Extension

Mattress platform extends a further 18cm to facilitate taller patients

X-ray Compliant

An x-ray translucent backrest for chest x-rays with no need to disturb the patient and reduce moving and handling requirements.



Activ8 Sigma Specifications

Activ8 Sigma:
ACTIV8/SIGMA

Overall Bed Length: **223cm**

Overall Bed Width: **105cm**

Mattress Platform Length: **201cm**

Mattress Platform Width: **87cm**

Max Mattress Platform Height: **82cm**

Min Mattress Platform Height: **45cm**

Trendelenburg /
Reverse Trendelenburg: **+17 / -17°**



Lockable
Handset



4-Section



Safe Working
Load



Maximum
Patient Weight



Warranty
(Years)

Full service
contracts
available



Activ8 Range Comparisons

	Activ8 Vivo		Activ8 Vision					Activ8 Sigma
	With in-Built Mattress	Bed Only	With Lateral Tilt Therapy and Weigh Scales	With Lateral Tilt and Weigh Scales	With Lateral Tilt Therapy	With Weigh Scales	Bed Only	Activ8 Sigma
	ACTIV8/VIVO/DYN/MAT	ACTIV8/VIVO	ACTIV8/V/LT/LTT/WS	ACTIV8/V/LT/WS	ACTIV8/V/LT/LTT	ACTIV8/V/WS	ACTIV/V	ACTIV8/SIGMA
Continuous Lateral Rotational Tilt Therapy (CLRT)	✓	✓	✓					
Lateral Tilt (LT)	✓	✓	✓	✓	✓			
Weigh Scales	✓	✓	✓	✓		✓	✓	✓
In-Built Mattress	✓							
Pulmonary Expansion	✓							
X-Ray Translucent	✓	✓	✓	✓	✓	✓	✓	✓
Foot Controls	✓	✓	✓	✓	✓	✓		✓
One-Button Functionality	✓	✓	✓	✓	✓	✓	✓	✓
Nurse Call	✓	✓						
Electric Bed Extension	✓	✓	✓					
30 Degree Head Angle Indicator	✓	✓	✓	✓	✓	✓	✓	✓
Minimum Bed Height Indicator	✓	✓	✓					✓
In-Built Cylinder Holder	✓	✓						
Trendelenburg / Reverse Trendelenburg	+16 / -15°	+16 / -15°	+16 / -16°	+16 / -16°	+16 / -16°	+16 / -16°	+16 / -16°	+17 / -17°
Lateral Tilt	+15 / -15°	+15 / -15°	+30 / -30°	+20 / -20°	+30 / -30°			
Maximum Platform Height	82cm	82cm	84cm	84cmm	84cm	84cm	84cm	82cm
Minimum Platform Height	48cm	48cm	44cm	44cm	44cm	44cm	44cm	45cm
Overall Bed Length	219cm	219cm	222cm	222cm	222cm	222cm	222cm	223cm
Overall Bed Width	108cm	108cm	105cm	105cm	105cm	105cm	105cm	105cm
Mattress Platform Length	198cm	198cm	200cm	200cm	200cm	200cm	200cm	201cm
Mattress Platform Width	90cm	90cm	90cm	90cm	90cm	90cm	90cm	87cm
Safe Working Load	260kg	260kg	300kg	300kg	300kg	300kg	300kg	260kg
Maximum Patient Weight	200kg	200kg	235kg	235kg	235kg	235kg	235kg	195kg
Warranty	1 year	1 year	2 year	2 year	2 year	2 year	2 year	1 year

drive



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Leaflet Code: LL441

All sizes and weights stated are nominal. All errors and omissions excepted. Due to the limitations of photography and the printing process colours shown may not be 100% accurate. All equipment should be used in conjunction with clinical judgement and assessments dependent on individual patient morphology. Essential nursing care is pivotal in providing the optimum pressure ulcer prevention plan. *The risk factors stated in this brochure are used in conjunction with the NICE Guidelines