



User manual

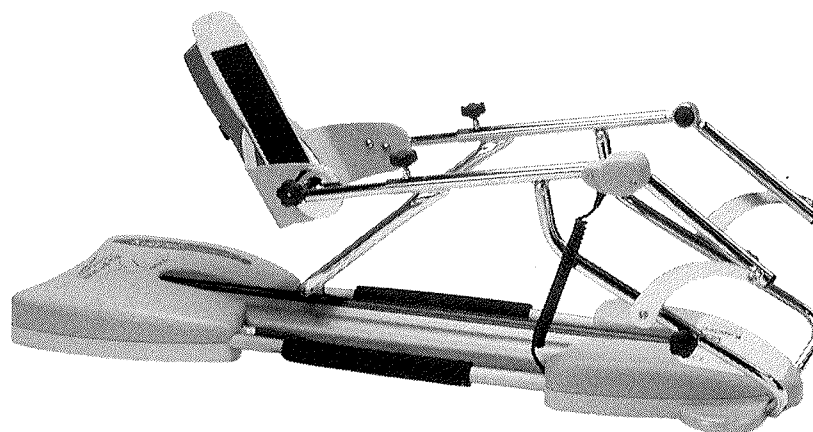
Before use, please read this document.
Kinetec reserves the right to effect technical modifications.

EN

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Serie 1 - 2

Spectra

Spectra DC (Data Capture)



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PATTERSON
MEDICAL

SUMMARY

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Definition

The KINETEC Spectra and Spectra DC (Data Capture) are devices for the PASSIVE mobilisation of the KNEE, enabling extension and flexion movements from -10° to 120°.

With the Spectra DC (Data Capture) linked to a computer, you can:

- program the device,
- monitor a list of patients,
- produce device usage reports per patient.

For more information, refer to the instruction manual for the Kinetec Data Capture software.

Indications

- Knee replacement surgery.
- Fractures (patellar, tibia plateau, femoral).
- Arthrolysis.
- Hip surgery, including hip replacement, hip pinning, osteotomy.
- Ligament repairs.
- Arthroscopic surgery (menisectomies, patellectomies).
- Burns, joints sepsis.

Clinical Benefits

- Breaks the cycle of trauma, inflammation and the loss of range of motion.
- Prevents joint stiffness.
- Speeds the recovery of post-operative range of motion.
- Maintains the quality of the joint surface.
- Reduces pain and oedema.
- Promotes joint cartilage healing.
- Reduces hospitalization time
- Reduces the need for pain medication.
- Provides immediate post-operative continuous passive motion.
- Digital ROM readout on the patient hand control for positive reinforcement.
- Maintains desired positions for stretching and muscular rest.

Contraindications

Bone Cancer, warped joint surfaces, spastic paralysies, unstable fractures, uncontrolled infection.
The machine is not suitable for patients over 2 m(6'7") or under 1,40m (4'7").

Warning and Safety instructions



- Warning: The physician/physiotherapist defines the protocol and ensures that it is correctly implemented (adjustments, session time and frequency of use).
- Warning: Run a cycle with the device unloaded before installing the patient on the machine.
- Warning: For optimum safety, always give the hand control to the patient before starting the system. The patient must know the start/stop/reverse function on the hand control, see page 5.
- Warning: To avoid the parameters being changed, lock the machine's hand control before giving it to the patient, see page 5.
- Warning: Danger, risk of explosion: Do not use the machine with anaesthetic gas or in an environment that is rich in oxygen.
- Warning: To avoid all risks of electric shock, the machine should only be connected to a power supply that has protective grounded pin.
- Warning: Before using this machine, always check that the electrical socket is in good condition and is suitable for the splint power supply cord. Only use the original cable supplied with the machine. Check that the cables remain free around the device so that they do not get damaged.
- Warning: Before using this machine, always check that the machine is not damaged, in particular the protective housings.
- Warning: In case of electromagnetic interference with other devices move the device.
- Warning: Please do not touch the moving parts while the unit is running, pinching risk.
- Warning: Modifying the machine in any way is strictly forbidden.
- Warning: Always check the motion parameters displayed on the remote control before starting the session.

Compliance:

The KINETEC Spectra and Spectra DC (Data Capture) comply with the standards of Directive 93/42/EEC, and bear the CE mark.

The KINETEC Spectra and Spectra DC (Data Capture) comply with the standards in force (IEC 601.1.2) concerning the electromagnetic compatibility of medical devices and IEC 60601-1 concerning electrical safety.

The KINETEC Spectra and Spectra DC (Data Capture) meet the requirements of the Machinery Directive No. 2006/42/EC.



With respect to electric shock, fire mechanical and other specified hazards only in accordance with CAN/CSA C22.2 NO. 601.1, medical equipment certified for Canada. 1QD5.

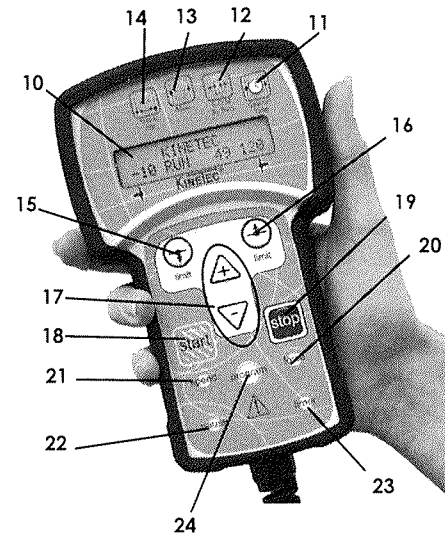
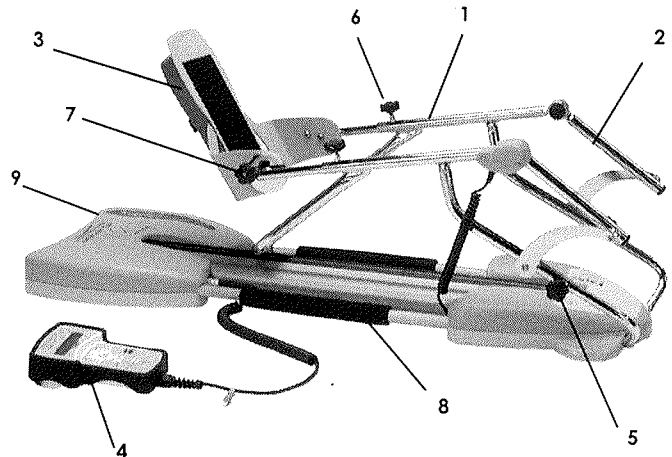
With respect to electric shock, fire and mechanical hazards only in accordance with UL 2601-1 1QD5.



Description

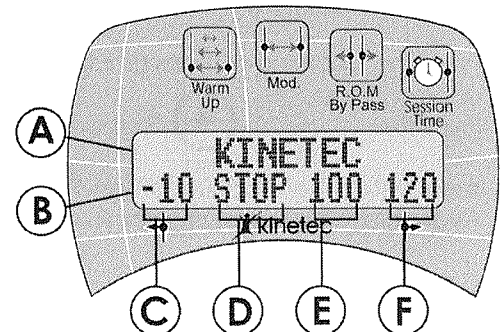
The KINETEC Spectra and Spectra DC consist of the following components:

- 1 • Lower limb support.
- 2 • Thigh support.
- 3 • Foot support and hand control location for transport.
- 4 • Hand control.
- 5 • Thigh support setting lock.
- 6 • Lower limb support setting lock.
- 7 • Foot support positioning setting lock.
- 8 • Transport handle.
- 9 • ON/OFF switch and fuses.
- 10 • Liquid-crystal display (2 lines of 16 characters).
- 11 • SESSION TIME display key
- 12 • BYPASS mode key.
- 13 • MODULATION key.
- 14 • WARM UP key.
- 15 • EXTENSION setting key.
- 16 • FLEXION setting key.
- 17 • Increase / decrease keys.
- 18 • START key.
- 19 • STOP key.
- 20 • FORCE key.
- 21 • SPEED key.
- 22 • PAUSE key.
- 23 • TIMER key.
- 24 • PROGRAM access key.



Display Details:

- A • 16-character line, used to display various messages when starting up the machine, then the type of movement during operation (Kinetec or Warm UP).
- B • 16-character line, used to display various messages when starting up the machine; then it displays the operational parameters.
- C • 3-character area showing the extension limit.
- D • 4-character area showing various messages: RUN, STOP, EXT, FLEX ...
- E • 3-character area showing the real-time angle of the knee; this value changes in line with the movement.
- F • 3-character area showing the flexion limit.

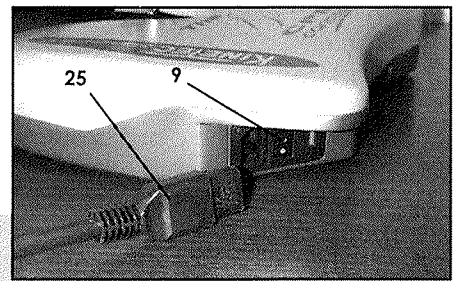


Electrical connection: SAFETY FIRST.

The KINETEC Spectra and Spectra DC are type B, class I devices. Before connecting the device to the power supply, check that the mains voltage matches that shown on the identification plate (100-240 V~ 50-60Hz).

Connect the hand control (4)

Connect the power supply cable (25).



IMPORTANT

Check that the electrical socket is in good condition and is suitable for the splint power supply cord. The latter complies with current standards and has a grounding socket.

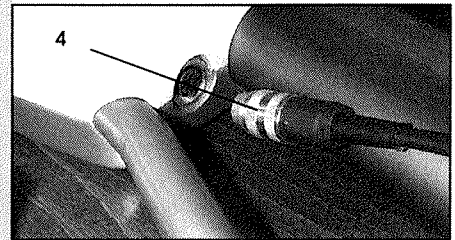
The plug may be connected to any standard socket.

The socket must however have a grounded pin.

To connect the power supply, only use the original cable supplied with the machine.

Check that the cables remain free around the device so that they do not get damaged.

Check that the machine is not damaged, in particular the protective housings.



Starting the unit

Switch on the unit (9).

The display comes on, the machine carries out a self-test and the display shows in succession

KINETEC
Spectra Vxx.x

Then

Movement Verify.
Please Wait

Then,

Nom xx
Prenom xx

Only for Kinetec Spectra DC*

Then

KINETEC
30 STOP 15 70

Your KINETEC Spectra or Spectra DC is ready to be used with the parameters from the previous session, unless you are using an optimised program on the Spectra DC (see the instruction manual for the Kinetec Data Capture software).

WARNING: Always check the motion parameters displayed on the remote control before starting the session.

*Note: Before using the device with data recording, please refer to the instruction manual for the Kinetec Data Capture software. The splint can be used immediately without being connected to a computer, but the movement data will be recorded under patient 01 and may be incomplete. See page 6 on selecting the patient.

Changing the display language

Press the following buttons simultaneously: **speed** and **force**, followed by **+** or **-** to change the display language.

Press the  button to confirm,


then switch the machine off and then on again to apply the changed display language.

Available languages: English, French, German, Italian and Spanish.

START/STOP/REVERSE function

As with all KINETEC systems, the KINETEC Spectra and Spectra DC devices are equipped with ON/OFF/INVERT functions.


Press the  key of the hand control. The movement stops,

Press the  key of the hand control. The movement starts in the opposite direction.

Caution:

For optimum safety, always give the hand control to the patient before starting the system.

Procedure to stop the machine:

To stop the machine's movement: Press the  key

To switch power off: press the ON / OFF switch (9) (see page 4)

Locking the hand control setting

The hand control allows the patient to control the machine as appropriate.



Simultaneously press the  and  keys to lock the hand control,

The display reads **LOCK**, you cannot change the parameters, if you try the display reads **LOCK SOFT**. To unlock the hand control, simultaneously press the same keys, The display reads **UNLOCK**.

We recommend that you lock the hand control when you give it to the patient.

Note: The hand control locking is preserved when you switch the unit ON/OFF.

Possible values for each parameter

	Possible values	Default setting
• Treatment Mode		Normal
• Extension limit	-10 to 115°	30°
• Flexion limit	-5° to 120°	70°
• Speed	1 to 5 (from 45° to 155° per minute)	2
• Force	1 to 6	6
• Extension pause	0 to 900 seconds (15minutes)	0
• Flexion pause	0 to 900 seconds (15minutes)	0
• Timer	No timer(00H00) to 24H00	0
• Number of Programs	16	Empty
• Number of Patients *	16	Empty

* Spectra DC only

Session Time




This function shows the running time (in minutes) of the session (motor functioning).

It directly accessible by the key , the display shows **TIME 02H35**

This counter is reset each time the unit is switched ON.

Quick Start - Kinetec Spectra

Set up the patient and proceed as below:









Beginning	Keys to press	Display	Remarks
Switch the unit ON	OI	KINETEC Spectra Vxx.x	
		Movement Verif. Please Wait	
		KINETEC 30 STOP 35 70	Or, according to the mode selected during the previous session.
		Warm up 30 STOP 35 70	
Starting the session with the parameters from the previous session.		KINETEC 30 RUN 45 70	The value change at the speed of the movement.

Note: the values in the display column are given as an example. In actual use, they will come from stored programs or previous sessions.

Quick Start - Kinetec Spectra DC

The Kinetec Spectra DC continuously records the session data (with no memory limits). However, if you do not want to analyse the current session later on, or for the session of a new patient where you do not wish to create a report, we recommend that you use the 1st patient in the list. This will not affect other patients' sessions.

Set up the patient and proceed as below:

Beginning	Keys to press	Display	Remarks
Switch the unit ON	OI	KINETEC Spectra Vxx.x	
		Movement Verif. Please Wait	
		Nom xx Prenom xx	When the machine is switched on, the patient selected is always the first on the list.
		KINETEC 30 STOP 35 70	Or, according to the mode selected during the previous session.
		Warm up 30 STOP 35 70	Check if the hand control is not blocked (See page 5).
Selecting the patient		PROGRAM Nr8 EMPTY	Displaying stored programs.
Selecting the patient index	 Or 	Patient List	The index is after program Nr16 or before Nr1.
Entering the index		Nom xx Prenom xx	Displaying the patient
Changing the name, if needed	 Or 	Nom 04 Prenom 04	Displaying a patient's name or a number if it has not been added to the Kinetec Data Capture software.
Confirming the patient		KINETEC 30 STOP 35 70	Exiting index mode.
Starting the session with the parameters from the previous session, unless you are using an optimised program (see the instruction manual for the Kinetec Data Capture software). The session will be recorded for the selected patient.		KINETEC 30 RUN 45 70	The value change at the speed of the movement.

Note: the patient selection will remain the same unless the machine is switched off and then on again (back to the 1st patient on the list) or until it is changed. See the instruction manual for the Kinetec Data Capture software for more information.

WARNING: Always check the motion parameters displayed on the remote control before starting the session.

How to adjust the basic parameters of the movement?

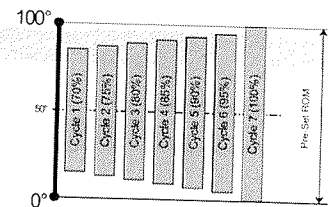
Beginning	Keys to press	Display	Remarks
To stop the unit		KINETEC 30 STOP 45 70	Check if the hand control is not blocked (See page 5).
To display the extension or flexion limit of the movement	Or	KINETEC 30 EXT 45 70	The value blinks.
		KINETEC 40 FLEX 45 70	
To change the limit if necessary	Or	KINETEC 40 FLEX 45 110	The new value blinks.
To validate the new value, press another key or wait more than 3 seconds.		KINETEC SPEED 2	While the value blinks press the or key to change if necessary.
		KINETEC LOAD -----	
		KINETEC TIMER 00H00MIN	
Or Or to display pause in extension or flexion limit		KINETEC PAUSE FLEX 0S	Successive presses on this key selects the pause at the extension or flexion limit.
		KINETEC PAUSE EXT 0S	
To change the pause if necessary	Or	KINETEC PAUSE EXT 15S	The new pause value blinks.
To validate the new value press another key or wait more than 3 seconds. The display shows the selected mode		KINETEC 40 STOP 45 110	The unit is ready to start with the new parameters.

How to use the WARM UP key?



Warm Up rules.

The Kinetec Spectra starts at 70% of the full ROM, increasing 5% of the range every other cycle until the pre-set ROM is reached.



Beginning	Keys to press	Display	Remarks
To stop the unit		KINETEC 40 STOP 45 110	Check if the hand control is not blocked (See page 5).
To select the Warm Up mode		WARM UP Please Wait.P	
		Nom xx Prenom xx	Spectra DC only.
		WARM UP 40 STOP 45 110	To change the movement value if necessary (see page 6).
Start the movement		WARM UP 40 RUN 50 110	The value change at the speed of the movement.

Comments:

- The parameters modification should always be done while the unit is stopped.
- Pauses and By-Pass mode are not available during warm up cycles.
- The Warm Up cycles are only working when the movement is firstly run.
- To start new Warm Up sessions press twice the « Warm Up » key.
- The calculation mode used enables reaching the pre-set ROM in approximately seven full cycles.

Example:

For a Warm Up treatment with a pre-set ROM from 0° to 100°.
The first cycle starts from 15° to 85° to 15° and increase 5% each cycle.



This function, MODULATION Mode is a way to set within the tolerance of a patient at the beginning of a session.

Set up the patient and proceed as below:

Beginning	Keys to press	Display	Remarks
Switch the unit ON		KINETEC 40 STOP 50 110	Check if the hand control is not blocked (See page 5). If the Warm Up mode is selected, switch OFF this mode by pressing on the key «Warm Up».
To select the MODULATION Mode		MODUL. : use +or- 40 STOP 50 110	The display indicates the keys to be used to drive the machine, this message is displayed 3 seconds.
To select the pain level (for flexion, for extension)	 Or Continuous press	MODUL. : use +or- 40 MANUAL 60 110	The unit is moving to the selected way. It is waiting for you to select new limits.
To set the pain level when reached, immediately press	 Or	MODUL. : use +or- 40 MANUAL 60 30	The new limit of the movement is recorded.
To start the session with the new movement limits		KINETEC 40 STOP 55 60	To start the session with the new movement limits.

Comments: When the maximum or minimum range of motion of the machine is reached, this limit is recorded and the MODULATION Mode is automatically switched OFF.



This function, The BY-PASS MODE is a way to address the pain threshold of a patient during a session, which allows you to work on increasing amplitude.





















IMPORTANT: Can be used only when the machine RUN.








Beginning	Keys to press	Display	Remarks
The unit is running		KINETEC 40 RUN 55 60	Check if the hand control is not blocked (See page 5).
		WARM UP 40 RUN 55 60	If the Warm Up mode is selected, switch OFF this mode by pressing on the key «Warm Up».
To select the BYPASS mode		BYPASS : use +or- 40 RUN 55 60	The display indicates the keys used to run the machine. This message is displayed 3 seconds.
To select the NEW pain level	 Or Continuous press	BYPASS : use +or- 40 BYPASS 72 60	The unit is moving to the selected way. It is waiting for you to select new limits.
To set the NEW pain level when reached, immediately press	 Or	BYPASS : use +or- 40 BYPASS 72 72	The new limit of the movement is recorded.
Continue the session with the new movement limits.		KINETEC 40 RUN 64 72	The angle display changes with current movement.

Comments: When the maximum or minimum range of motion of the machine is reached, this limit is recorded and the BYPASS Mode is automatically switched OFF.

The KINETEC Spectra allows you to store up to 16 programs, including the type of treatment, ROM, speed, load, pauses and timer.








The original parameter values of the program are empty.
 These values can be modified and saved at any time by following the procedure below or by using the Kinetec Data Capture software (only with the Kinetec Spectra DC).

Beginning	Keys to press	Display	Remarks
To switch off the unit			Check if the hand control is not blocked (See page 5).
Press the two keys at the same time and switch the unit ON	 	KINETEC SPECTRA VXX.X	Welcome text during 3 seconds
Then		PROGRAM Nr2 EMPTY	The program number blinks.
To change the program if necessary	  Or	PROGRAM Nr10 25 KINETEC 110	The new program number blinks.
To choose the treatment mode		PROGRAM Nr10 30 WARM UP 90	The display indicates the selected treatment mode, the program number blinks again.
Or		PROGRAM Nr10 30 KINETEC 90	
To display the extension or flexion limit of the movement	 Or 	PROGRAM Nr10 30 KINETEC 90	The value blinks.
To change the limit of movement if necessary	  Or	PROGRAM Nr10 30 KINETEC 120	The new value blinks.
To validate the new value, press another key or wait more than 3 seconds		PROGRAM Nr10 SPEED: 2	While the value blinks press the  or  key to change if necessary.
		PROGRAM Nr10 LOAD: _ _ _ _	
		PROGRAM Nr10 TIMER 00H00MIN	
		PROGRAM Nr10 PAUSE EXT 0S	
To record the program 10		PROGRAM Nr10 SAVE:+ CLEAR:-	
Then		PROGRAM Nr10 SAVING PROGRAM Nr11 EMPTY	The program 10 has been recorded and the display indicates the next program so you can change another program.
OR		PROGRAM Nr10 CLEARING PROGRAM Nr11 EMPTY	The program 10 has been cancelled and the display indicates the next program so you can change another program.
To cancel the program			
To exit program mode, switch OFF and switch ON the unit.		KINETEC SPECTRA VXX.X	To use the modified program see page 10.

Beginning	Keys to press	Display	Remarks
To stop the unit		KINETEC 40 STOP 45 110	Check if the hand control is not blocked (See page 5).
To access the program mode		PROGRAM Nr1 EMPTY	The program number blinks.
To change the program if necessary	 Or 	PROGRAM Nr7 30 WARM UP 90	The new program number blinks.
To exit and validate the selected program		WARM UP Please Wait	The current parameters have been recorded in program 7.
To exit without validation of selected program		KINETEC 40 STOP 45 110	Back to the starting parameters.
Start the unit		WARM UP 30 RUN 50 90	The value change at the speed of the movement.

WARNING: Always check the motion parameters displayed on the remote control before starting the session.

Reading the values of a program: example SPEED

Beginning	Keys to press	Display	Remarks
To stop the unit		KINETEC 40 STOP 45 110	Check if the hand control is not blocked (See page 5).
To access the program mode		PROGRAM Nr1 EMPTY	The program number blinks.
To change the program if necessary	 Or 	PROGRAM Nr7 30 WARM UP 90	The new program number blinks.
To read the speed value		PROGRAM Nr7 SPEED : 2	Displays the speed value.
After 5 seconds or after pressing on another key		KINETEC 40 STOP 45 110	
To exit and validate the selected program		WARM UP 30 STOP 45 90	The current parameters have been recorded in program 7.
Start the unit		WARM UP 30 RUN 50 90	The value change at the speed of the movement.

Comments: The current movement parameters can be changed while using that program but no data will be stored in the original program. See the programming mode (page 9) to modify programs.

Using the Plastic Comfort Case kit

Specially designed to improve comfort and hygiene for the patient.

Plastic Comfort Cases come with clips, fixed directly on the tubes of the machine's thigh and lower limb support segments, and straps with protection stops to precisely and quickly adjust to the patient's leg dimensions.

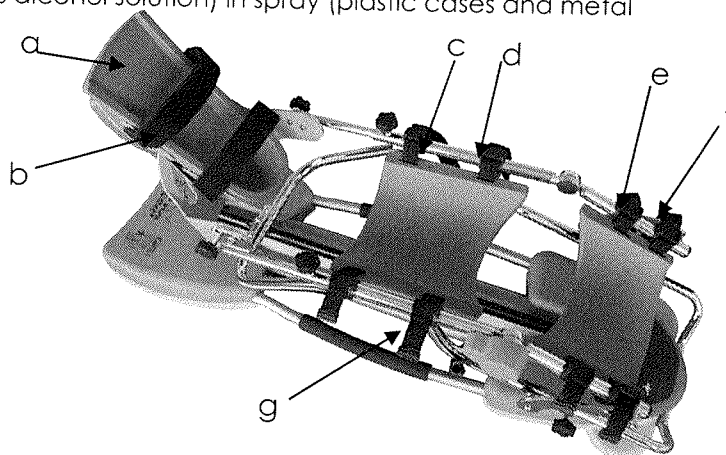
CLEANING

To ensure optimal hygiene, clean the supports after each patient use

Use a DISINFECTANT product (alcohol-free or <5% alcohol solution) in spray (plastic cases and metal components).

Replacement parts

- a 4670024048 Complete foot support
 - b 4635010561 Foot support strap kit
 - c 4635010157 Tibia case only
 - d 4670024329 Tibia case with straps
 - e 4635010165 Femur case only
 - f 4670024337 Femur case with straps
 - g 4650001876 Single strap
- Part number to order a complete kit:
- fastening with clips: 4670024345
 - fastening without clips: 4670023701 (if your machine is not fitted with clips).



Use of the Kinetec Patient Pad Kit

The KINETEC Patient Pad Kit is designed for rapid fitting, optimal hygiene and maximum patient comfort.

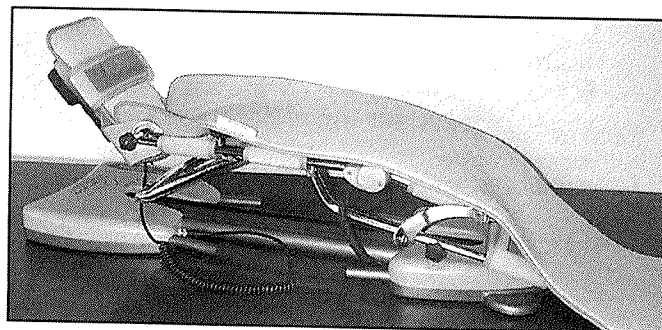
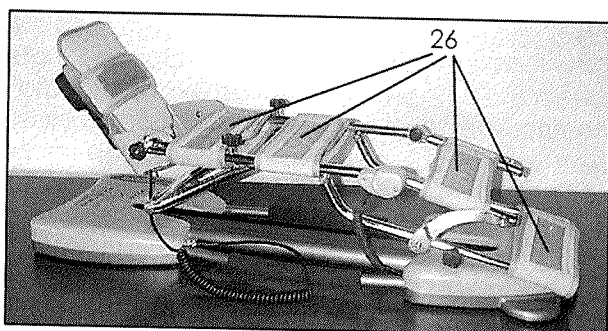
- For using and positioning the straps, please refer to here under. Make sure that the self-adhesive parts (26) are visible.
- Place the sponge side next to the skin.

FOR OPTIMAL HYGIENE, A NEW SET OF PADS SHOULD BE USED FOR EACH PATIENT.

The KINETEC Spectra is delivered with a complete set. Components:

- 4 straps (4650001107)
- 1 foot support (4650001420)
- 1 cover (4650001090)

Part number to order the complete set: 4650001868



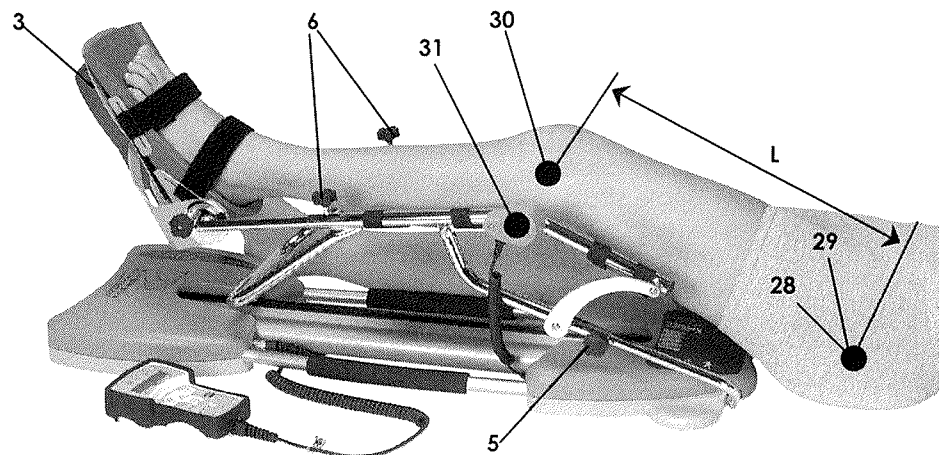
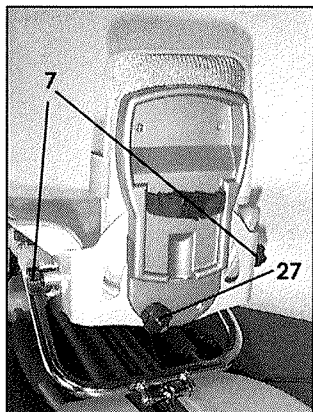
Setting up the patient

Place the unit in a position that will be comfortable for the patient.

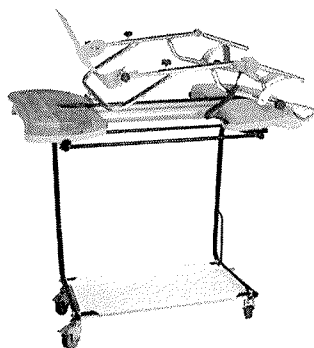
- Measure in cm or inches the length of the patient's femur (L); adjust the thigh support to this measurement using knobs (5)
- To install the patient on the unit.
- Push the foot plate (3) up to the patient and tighten the knobs (6).
- Adjust the plantar flexion (40°) or the dorsal flexion (30°) of the foot, with the knobs (7).
- Adjust the internal (30°) or external (30°) flexion of the foot, with the knob (27).

IMPORTANT

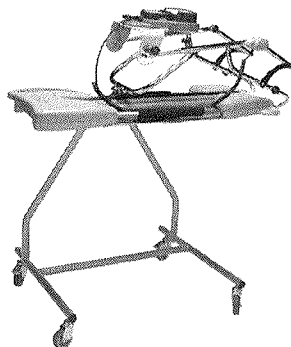
Adjust the axis of the patient's hip (28) with the axis rotation (29) of the unit, and the axis of the patient's knee (30) with the axis rotation (31) of the unit.



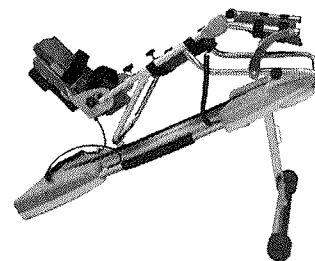
Options



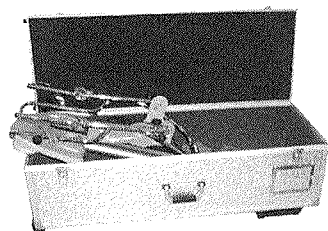
Trolley for all CPM
Part number to order:
4655001053



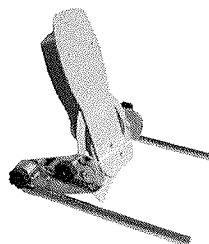
Cart for bed use
Part number to order:
4665003297



Seat Adaptor
Part number to order:
4670024098



Transport box
Part number to order:
4640001927





Paediatric foot plate
Part number to order:
4670023777


Maintenance

After 2,000 hours of operation, the KINETEC Spectra and Spectra DC require lubrication and maintenance operations (lubrication of the joints, pointer stops and ball screws).

The need for maintenance is indicated by display of the message **SERV. MOTOR** when the system is switched on.

Despite that warning, you can continue to use your machine by pressing **START**, but you should contact your nearest KINETEC technician to have the maintenance operations conducted as soon as possible. When the machine is no longer in working condition, please return it to us, together with its accessories, for destruction.

A motor running time counter is available. Simultaneously press keys  and , the displays shows **RESET TIME 215H** (this is an example),

this counter can be reset by pressing the key .

Troubleshooting

A spare parts list and technical catalog are available to you on request from your KINETEC distributor.

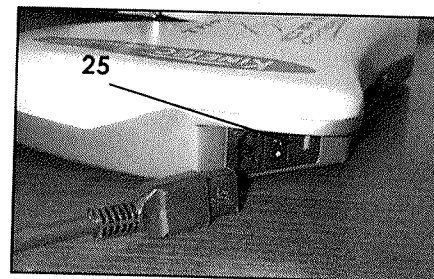
If, after connecting the power supply cable to the power supply and switching on the machine:

- The display does not indicate any information:
 - Check that the electrical socket is live using another device.
 - Replace the fuse(s) (25) of the connector with fuses of the same type and calibre: 2 fuses T 750 mA 250V (6.3 x 32) (KINETEC order: 4610007434).
- If the display still does not indicate any information, contact your nearest KINETEC technician.
- Your machine does not work and the display indicates **50 STOP 25 115**. Press **START** again.

Your machine still does not function: Contact your nearest KINETEC technician.

- Your machine does not function and the display indicates:
 - SERVICE D1: angle measurement function failure,
 - or SERVICE D2: no movement,
 - or SERVICE D3: abnormal consumption,
 - or SERVICE D4: power failure or disconnected motor,

Contact your nearest KINETEC technician if the same message is displayed after having switched the device off, then on, and started it by pressing **START**



Cleaning

Before conducting any cleaning operation, **SWITCH** the unit **OFF** and disconnect the power supply.

In order to ensure optimal hygiene, you are advised to clean the machine for each new patient. Cleaning should be carried out in the environmental conditions specified in the "Technical Specifications" section below.

Use a **DISINFECTANT** product (alcohol-free or <5% alcohol solution) in spray (plastic cases and metal components).

Elimination and recycling

- Packing:** Packing must be separated from the components plastic and paper/cardboard and given to the specific sites for recycling.
- KINETEC PATIENT PAD KIT:** Clean with disinfectant then to give it to the specific sites for recycling.
- Unit:** It contains electronic components, cables, aluminium, steel and plastic parts. When the splint is not operational any more, to dismount and separate in groups from materials and to give them to correct unit of recycling or return the machine to Kinetec for destruction.

Technical specifications

Product :

Weight: 12Kg (24 pounds)
 Splint dimensions:
 95cm (37 inches) x 33cm (13 inches) x 33cm (13 inches)
 Angular limits: -10° to 120°
 Speed: from 45 to 155° per minute.
 Patient height: full leg: 71 to 99 cm (28 to 39 inches)
 Tibia: 38 to 53 cm (15 to 23 inches)
 Femur: 33 to 46 cm (13 to 18 inches)

Electricity:










Power supply: 100-240 V~
 Frequency: 50-60 Hz
 Power consumption: 50 VA
 Device of type B class I
 IP 20.
 Fuse T 750mA 250V 6.3x32mm (KINETEC order: 4610007434)










Environment:









- Storage/transport conditions: Temperature: -40 to 70°C / -40 to 160°F
 Relative humidity: up to 90%

- Operating conditions: Room temperature: 10 to 40°C / 50 to 105°F
 Relative humidity: up to 80%.

Symbols used

	TYPE B device (protection against electric shocks)
	Warning or CAUTION (check accompanying documentation)
	STOP (power off)
	ON (power on)
	Program access
	Warm Up
	Session time
	Right way up when box is stored
	Contains electric and electronic components; not to throw in the dustbins of household refuse

	Speed
	Pause
	Increase
	Decrease
	Timer
	Modulation
	Temperature Limit during storage or transport
	Fragile
	Refer to the operating instructions

	Flexion limit
	Extension limit
	Start movement
	Stop movement
	Force
	Bypass
	Alternative current
	Keep dry during storage or transport

Warranty

The KINETEC warranty is strictly limited to the replacement free of charge or repair in the plant of the component or components found to be defective.
 KINETEC guarantees its joint passive mobilization systems for 2 years against all defects of manufacture from the date of purchase by the consumer.
 KINETEC is the only organization able to assess the application of the warranty to its systems.
 The warranty will be considered null and void if the device has been used abnormally or under conditions of use other than those indicated in the user's manual.
 The warranty will also be considered null and void in the event of deterioration or an accident due to negligence, inappropriate surveillance or inappropriate maintenance, or due to transformation of the equipment or an attempt to repair the equipment.

Electromagnetic emissions

The « KINETEC Spectra or Spectra DC » is intended for use in the electromagnetic environment specified below. The customer or the user of the « KINETEC Spectra or Spectra DC » should ensure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
Radio electric-Frequency emissions CISPR 11	Group 1	The « KINETEC Spectra or Spectra DC » uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment
Radio electric-Frequency emissions CISPR 11	Class B	The « KINETEC Spectra or Spectra DC » is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / Flicker emissions IEC 61000-3-3	Complies	

Electromagnetic immunity

The « KINETEC Spectra or Spectra DC » is intended for use in the electromagnetic environment specified below. The customer or the user of the « KINETEC Spectra or Spectra DC » should ensure that it is used in such an environment.

Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±2 kV, ±4 kV, ±6 kV contact ±2 kV, ±4 kV, ±8 kV air	±2 kV, ±4 kV, ±6 kV contact ±2 kV, ±4 kV, ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient / burst IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV between lines ±2 kV between line and earth	±1 kV between lines ±2 kV between line and earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage interruptions CEI 61000-4-11	< 5% U_T (>95% dip in U_T) for 5 seconds	< 5% U_T (>95% dip in U_T) for 5 seconds	At the interruption, there is a reset of the « KINETEC Spectra or Spectra DC ». After turning on, push START to begin the session.
Voltage dips and voltage variations on power supply input lines CEI 61000-4-11	< 5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles	< 5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the « KINETEC Spectra or Spectra DC » requires continued operation during power supply interruptions, it is recommended that the « KINETEC Spectra or Spectra DC » be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.


NOTE : U_T is the a.c. mains voltage prior to application of the test level.

KINETEC Spectra and Spectra DC machines

Programming help sheet

To use pre-recorded programs:

- Stop the machine's movement by pressing the [stop] button,
- Press the [program] button,
- Select the required program by using the [+] and [-] buttons
- Start the movement by pressing the [start] button twice.

Program number	Treatment Mode	Flexion limit	Extension limit	Speed	Force	Flexion Pause	Extension Pause	Timer
								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
Example	Warm Up	112	18	5	Maxi	15s	15s	00H30Min

For more information, refer to the instruction manual (see page 9 for programming mode).



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