

# **INSTALLATION GUIDE FOR A-DEC**

## **F02505 SATELEC MINILED CURING**

---

**O.E.M.**

**GUIDE D'INSTALLATION / INSTALLATION GUIDE**

SATELEC  
ACTION group

**RESPONSABILITE**

La responsabilité du fabricant ne sera pas engagée en cas :

- du non respect des recommandations du fabricant lors de l'installation,
- d'intervention ou de réparations effectuées par des personnes non autorisées par le constructeur,
- d'utilisation sur une installation électrique non conforme aux réglementations en vigueur,
- d'utilisations autres que celles spécifiées dans ce manuel.

Le fabricant se réserve le droit de modifier l'appareil et / ou les documents d'accompagnement sans préavis.

L'intégrateur et / ou l'installateur sont également responsables de la conformité du montage du dispositif dans son environnement, par rapport aux réglementations en vigueur.

**LIABILITY**

*The manufacturer accepts no liability in case of :*

- *failure to respect the manufacturer's instructions for installation,*
- *maintenance or repair performed by persons not authorized by manufacturer,*
- *use on an electrical installation not complying with the regulations in force,*
- *uses other than those specified in this manual.*

*The manufacturer reserves the right to modify the device and / or the accompanying documents without prior notice.*

*The dental equipment manufacturer and / or the installer are also responsible for the device mounting conformity in its environment, according to the regulations in force.*

**1 About This Install**

These instructions detail how to install the SATELEC MINILED CURING LIGHT on A-dec chairs.

For each configuration, follow the steps to achieve the installation.

**2 Recommended Tools**

Before starting, ensure all the tools are available:

- Pozidrive or Phillips head screwdriver
- Needle nose pliers
- Routing cable
- Wire cutters
- Wire strippers
- Voltmeter
- Hex key set

**3 Before You Begin**

**Before beginning the installation of the curing light, install the handpiece tubing.**

See instructions provided by A-dec.

Before beginning the installation , open the Mini LED installation kit, and verify there are no missing items. You should find:

- Curing light handpiece
- Control module
- Mounting bracket
- 2 mounting screws (power supply to bracket) Polyamide slotted head screw M3 and nylon washers
- 2 mounting screws (bracket to control head ) 3mm x 5mm tap tite pozidrive
- 2 wires for 24VAC hookup, one black and one grey, 22 AWG, 60 inches (152cm)
- Adhesive Velcro® tape if needed to mount the module on assistant side
- Installation instructions for A-dec models listed above
- 3 small cable ties, ~ 4 inches long (100mm x 2,5mm)
- 1 long cable tie ~ 12 inches long (300mm x 4,6mm)
- 2 terminal block for 3 conductors
- Ferrite filter for installation on handpiece wires
- 4 A-dec 500 QD plugs, 026.160.00
- Operating manual
- Jewelers style screwdriver to fit control module terminal screws

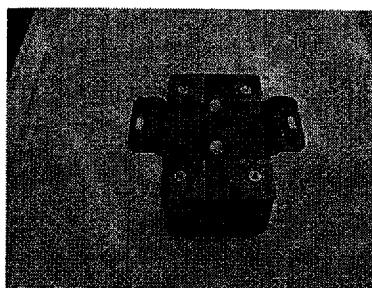
**4 How to install**

Find the configuration below, and follow the instructions:

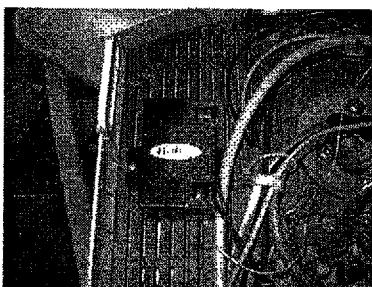
<b>A-dec 500 Delivery System</b>	<b>5</b>
<b>A-dec 500 Assistant's Instrumentation</b>	<b>6</b>
<b>A-dec 500 12 O'clock Delivery System (541)</b>	<b>7</b>
<b>A-dec 500 12 O'clock Assistant's Instrumentation (545)</b>	<b>8</b>
<b>Performer Assistant's Instrumentation</b>	<b>9</b>
<b>Performer Delivery System</b>	<b>10</b>
<b>Radius Assistant's Instrumentation</b>	<b>11</b>
<b>Radius Assistant's Without Cuspidor</b>	<b>12</b>
<b>Radius Delivery System</b>	<b>13</b>
<b>12 O'clock Delivery System 4631</b>	<b>14</b>

**A-dec 500 Delivery System (532, 533 and 542)**

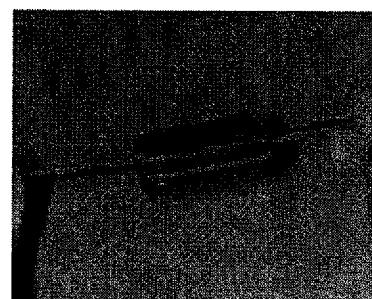
- 1) Attach the mounting bracket to the module using the plastic screws.



- 2) Mount the module to the structural platform using the self tapping screws.



- 3) Shorten the tubing and wires as necessary.



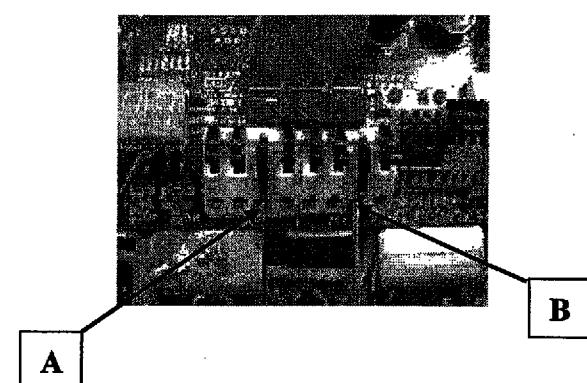
- 4) Route the handpiece tubing wires through the ferrite twice as near as possible to the curing light module connector.



- 5) Connect the handpiece tubing wires to the control module.

- 6) De-activate the handpiece holder if the curing light is being installed in a previously active holder position. The control block outlet for that position should be plugged.

- 7) Connect power wires to control head circuit board 24VAC terminal (grey to 24VAC and black to 0VAC).



- 8) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring)



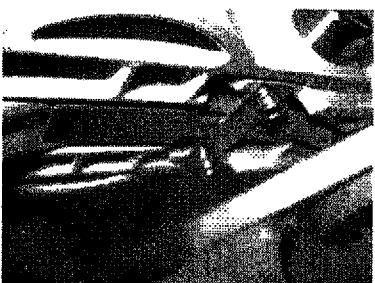
- 9) Replace the top cover.

**A-dec 500 Assistant's Instrumentation (551)**

- 1) Turn power off
- 2) Remove solids collector and vacuum pipe connector from the support link.



- 3) Remove the tubing bracket from the assistant's arm.



- 4) Use stringer to route the wires through the support link, down the chair lift arm and under the chair air / water manifold.

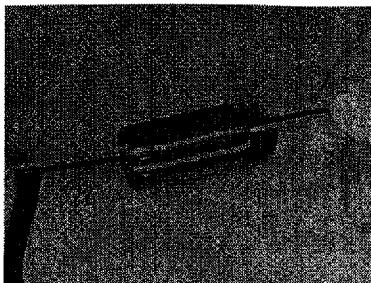


- 5) Attach the control module to the lift arm base with cable tie.

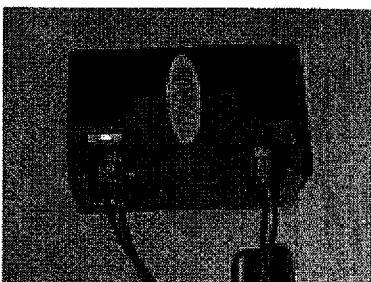


- 6) Shorten the tubing and wires as necessary.

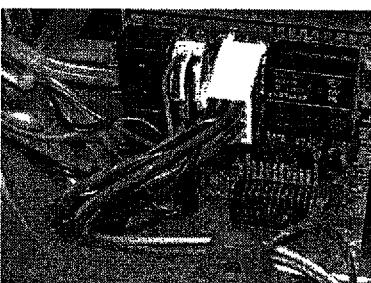
- 7) Route the handpiece tubing wires around the ferrite twice as near as possible to the curing light module connector.



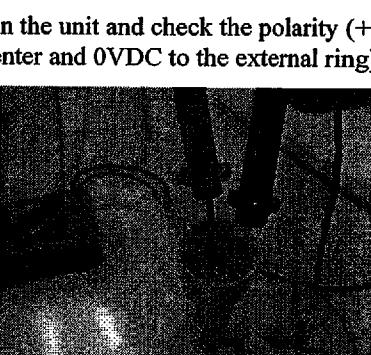
- 8) Connect the handpiece tubing wires to the control module.



- 9) Connect power wires to the chair circuit board 24VAC terminal (grey to 24VAC, black to 0VAC).



- 10) Secure the tubing strain relief string to the power supply with the screw from the kit.



- 11) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).

- 12) Switch off and replace solids collector and vacuum pipe.

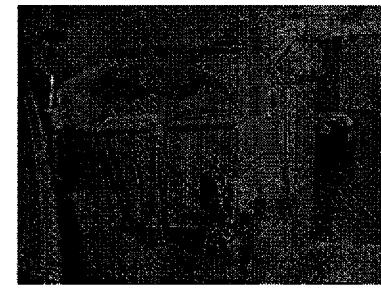
**A-dec 500 12 O'Clock Delivery System (541)**

- 1) Turn power off and remove the top cover of the arm assembly.

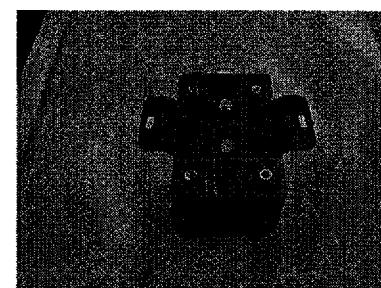
- 2) For deluxe touchpads, program holder position to "other." Press and hold program and A/B buttons for three seconds, and follow on screen instructions. For standard or no touchpads deactivate the holder position.



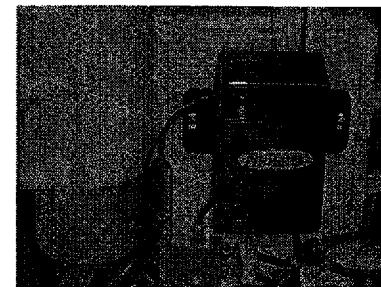
- 3) Route the handpiece tubing through the doctor's side support arm.



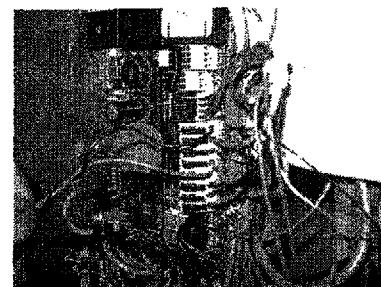
- 4) Attach the mounting bracket to the control module using the plastic screws.



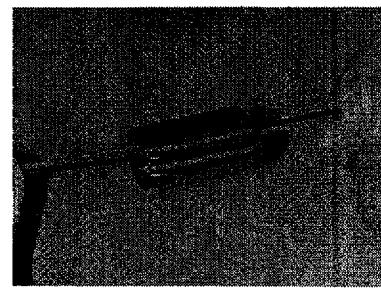
- 5) Mount the module to the control central frame using the self tapping screws.



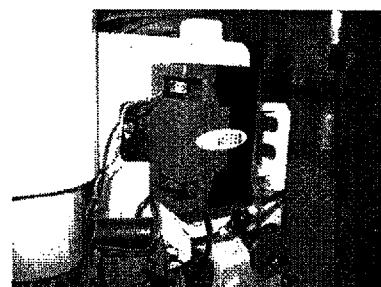
- 6) Connect the power wires to the delivery system circuit board 24VAC terminal (grey to 24VAC, black to 0VAC).



- 7) Shorten the tubing and wires as necessary.



- 8) Route the handpiece tubing wires through the ferrite twice as near as possible to the curing light module connector.



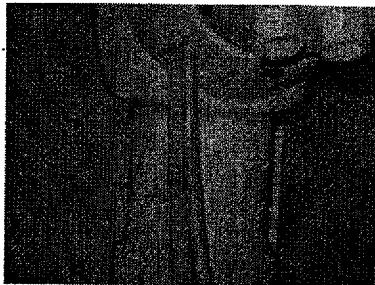
- 11) Switch on the unit and check the polarity (+5VDC on the center and 0V DC to the external ring).



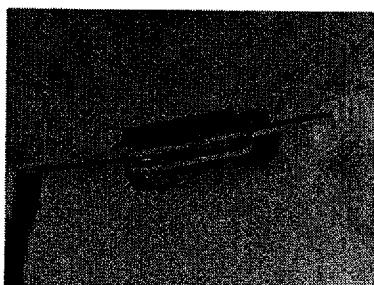
- 12) Replace the top cover of the arm assembly.

**A-dec 500 12 O'Clock Assistant's Instrumentation**  
**(545)**

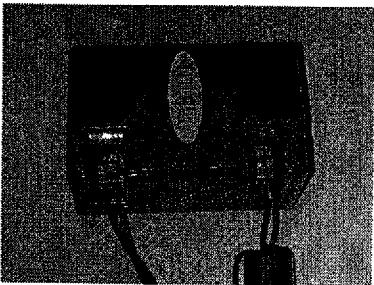
- 1) Turn power off
- 2) Remove the two screws holding the work surface and remove it.
- 3) Route the handpiece tubing through the syringe tubing hole.



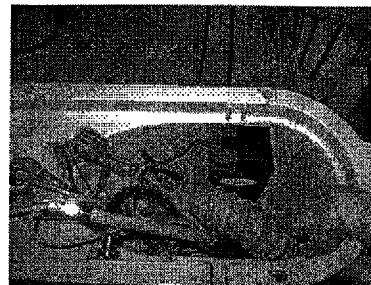
- 4) Adjust the length of the handpiece tubing and wires as necessary
- 5) Route the wires through the ferrite twice



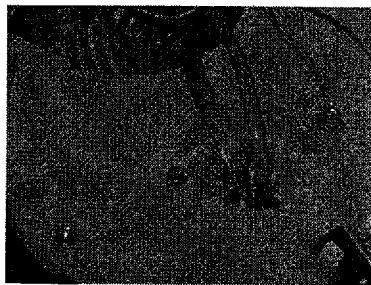
- 6) Connect the wires to the control module



- 7) Attach the control module to the inside wall of the work surface support housing using Velcro.



- 8) Secure the tubing strain relief string with the screw from the kit.



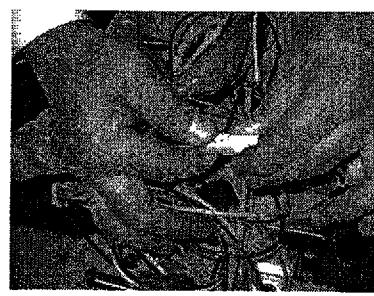
- 9) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).



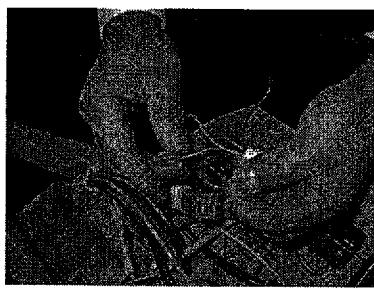
- 10) Switch off the unit and replace work surface

**Performer Assistant's Instrumentation**

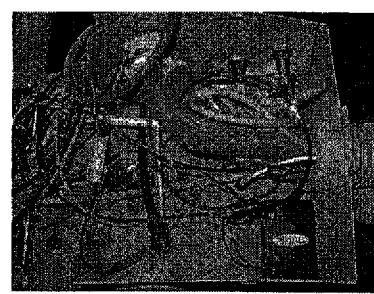
- 1) Turn power off and remove seat upholstery.
- 2) Install handpiece tubing.
- 3) Open the junction box and disconnect the white connector.



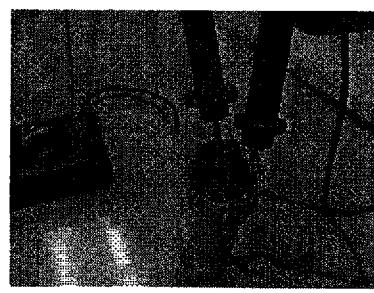
- 4) Cut back wire insulation five inches on the male connector side.
- 5) Cut the black and grey power wires, and strip back  $\frac{1}{4}$  inch.
- 6) Install the black wires to one terminal strip, and the grey wires to the other terminal strip.



- 10) Adjust the length of the handpiece tubing wires as necessary and connect them to the control module.
- 11) Adjust the length of the handpiece tubing wires as necessary and connect them to the control module.
- 12) Attach the control module to the bottom of the junction box with Velcro.

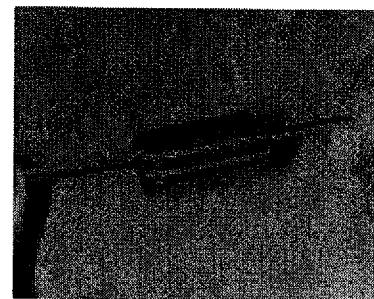


- 13) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).



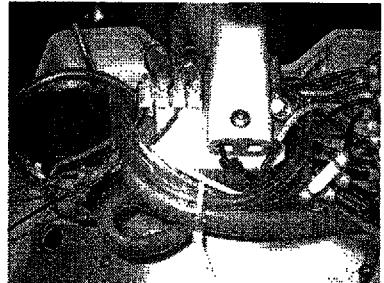
- 14) Switch off and close the junction box.

- 7) Connect the black and grey power wires to the control module and the terminal strip.
- 8) Shorten the tubing and wires if needed.
- 9) Route the handpiece tubing wires around the ferrite twice as near as possible to the curing light module connector.



**Performer Delivery System**

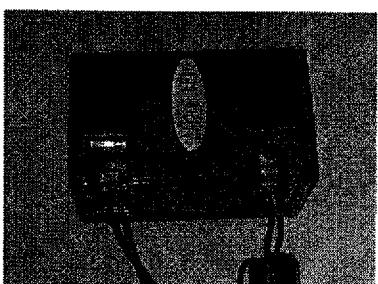
- 1) Turn power off and remove the covers.
- 2) Install the handpiece tubing.
- 3) Attach Velcro onto the drive air pressure gauge and connect the power wires to the terminal strip.



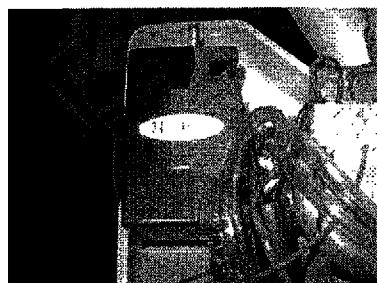
- 4) Shorten the tubing and wires if needed.
- 5) Secure the tubing strain relief string with the screw from the kit.
- 6) Route the handpiece tubing wires around the ferrite twice as near as possible to the curing light module connector.



- 7) Connect the handpiece tubing wires to the control module.



- 8) Attach the control module on top of the drive air pressure gauge with Velcro.



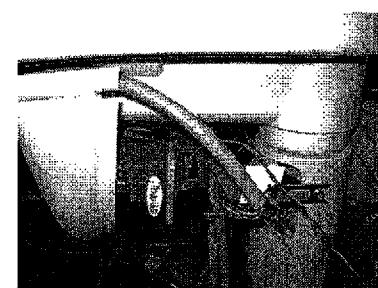
- 9) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).



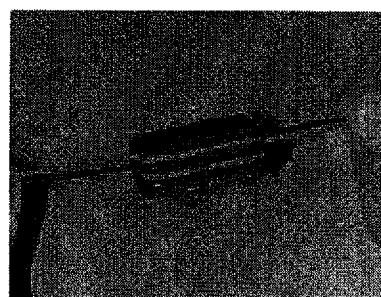
- 10) Switch off and replace the covers.

**Radius Assistant's Instrumentation with Cuspidor**

- 1) Turn power off and remove the cuspidor housing cover.
- 2) Install the handpiece tubing.
- 3) Shorten the tubing and wires as necessary.
- 4) Route the light cable wires around the ferrite twice as near as possible to the curing light module connector.



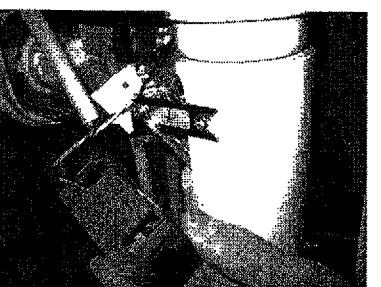
- 8) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring)



- 5) Connect the wires to the control module



- 6) Strip back the power wires and connect them to the control module.

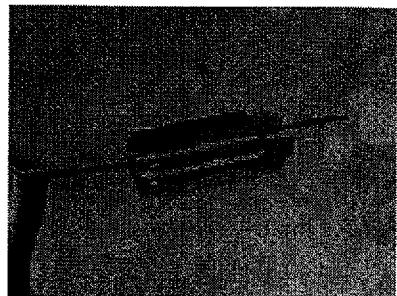


- 7) Attach the control module with zip tie to the mounting bracket.

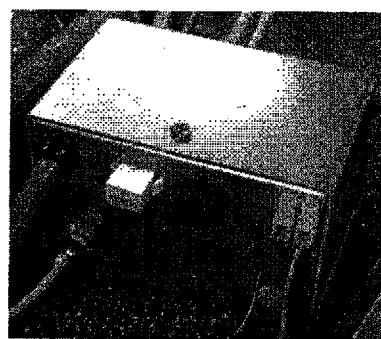


**Radius Assistant's Instrumentation without Cuspidor**

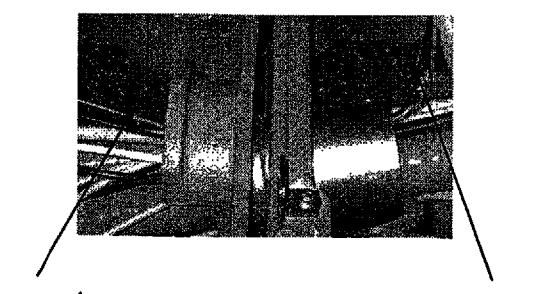
- 1) Turn power off and remove covers.
- 2) Install handpiece tubing.
- 3) Route the light cable wires around the ferrite twice as near as possible to the curing light module connector.



- 4) Connect the black and grey power wires to the power supply located in the floor box

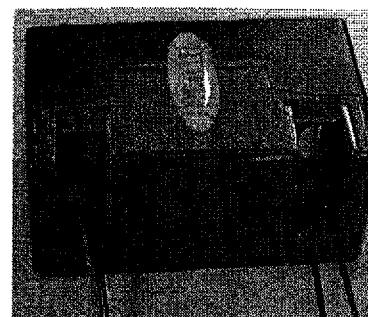


- 5) Route the power wires from the floor box to the chair base

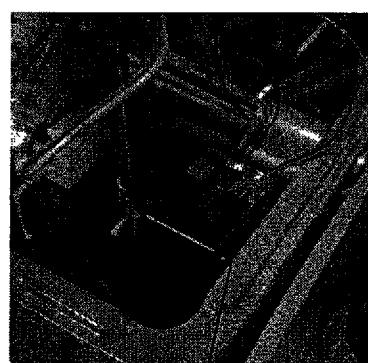


- 6) Adjust the length of handpiece tubing wires and power wires as necessary.

- 7) Connect wires to control module



- 8) Attach the control module with Velcro to the chair base.



Control module

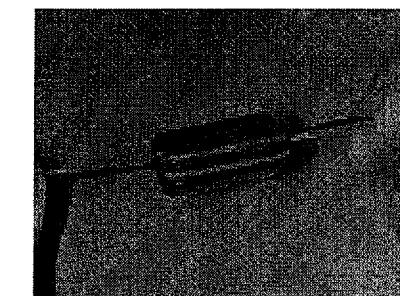
- 9) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring)



- 10) Turn power off and replace the covers.

**Radius Delivery System (2122 and 2132)**

- 1) Turn power off and remove covers.
- 2) Install handpiece tubing.
- 3) Route the handpiece tubing wires around the ferrite twice as near as possible to the curing light module connector.

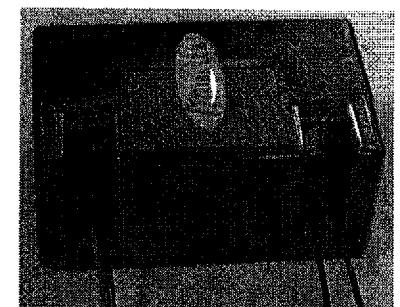


- 7) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).



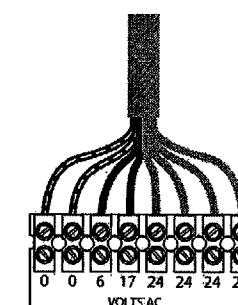
- 8) Turn power off and replace covers.

- 4) Connect the wires to the control module.



- 5) Mount the module to the control head platform using Velcro.

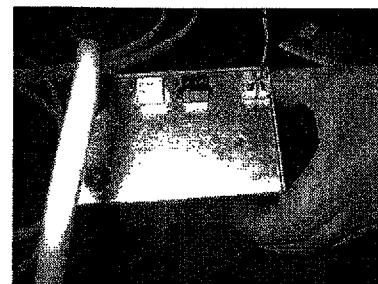
- 6) Connect the power wires to the terminal strip.



12 O'Clock Delivery System 4631

Note: A 25 Watt power supply must be installed to operate the curing light.

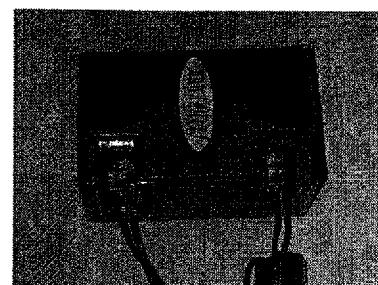
- 1) Turn power off.
- 2) Install handpiece tubing.
- 3) Connect the power cable to the power supply (Black to 0VAC and grey to 24AC).



- 4) Route the power wires from the power supply under the control center frame.
- 5) Trim the power wires as necessary. Strip the wires back  $\frac{1}{4}$ " and connect the black and grey power wires to the control module.
- 6) Adjust the length of the handpiece tubing wires. Route the handpiece tubing wires around the ferrite twice as near as possible to the curing light module connector.



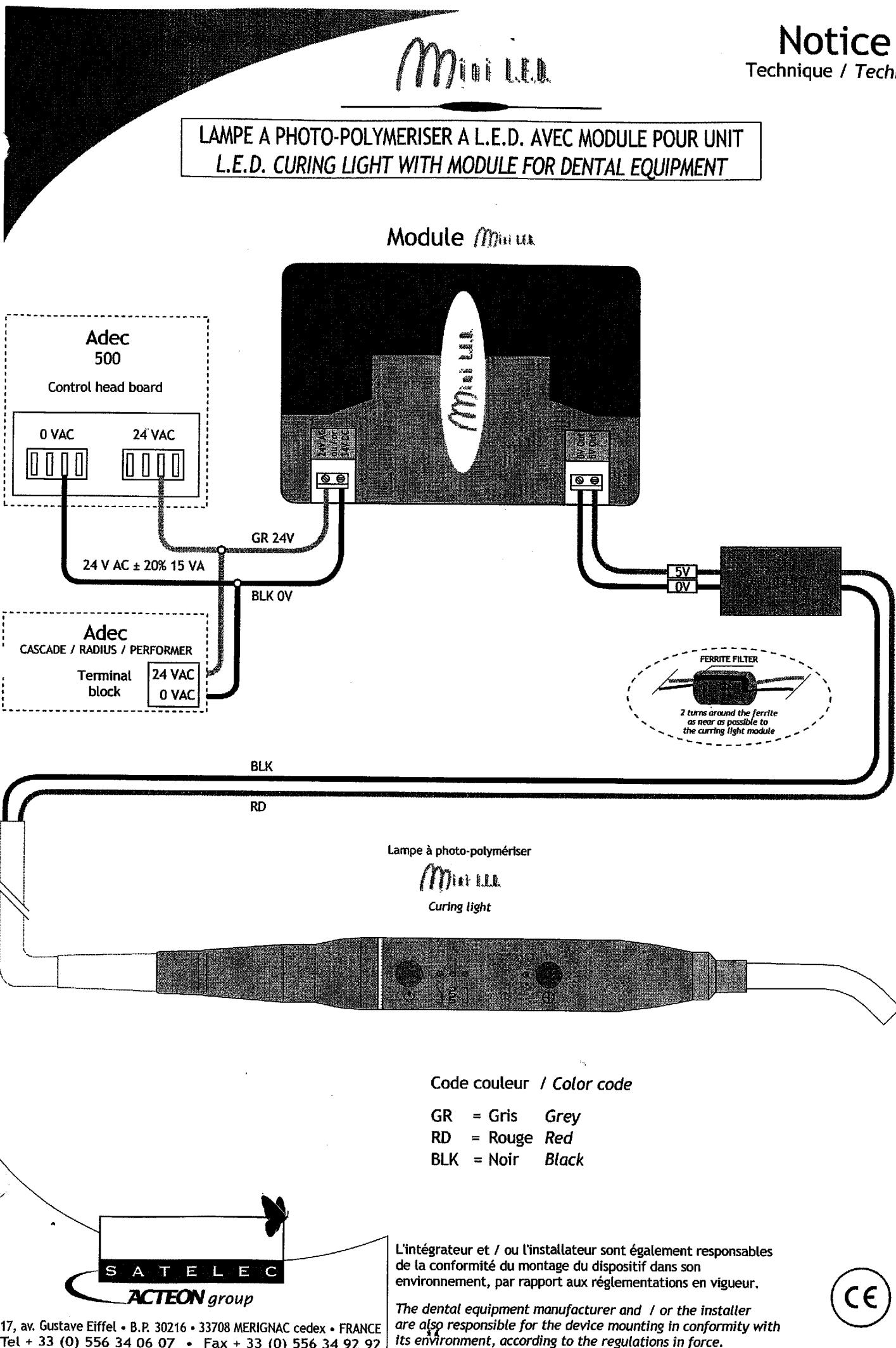
- 7) Strip back and connect the power and handpiece tubing wires to the control module.



- 8) Attach the control module to the control center frame with Velcro.
- 9) Switch on the unit and check the polarity (+5VDC on the center and 0VDC to the external ring).



- 10) Turn power off and replace covers.



# F02505 PARTS LIST

SCHEMA	QTE	DESIGNATION	DESCRIPTION
	1	Module Mini LED OEM	Mini LED curing light module
	1	Support Newtron kit A-dec	Mounting bracket
	2	Vis TCF M3x6	Plastic screw TCF M3x6
	2	Vis taptite M3 x5	3mm x 5mm taptite pozidrive
	1	Bande Velcro crochet	Hooks adhesive Velcro tape
	1	Bande Velcro boucle	Loops adhesive Velcro tape
	1	Cordon silicone	Silicone Handpiece tubing
	1	Guide optique Mini LED	Mini LED light guide
	1	Piece à main Mini LED	Mini L.E.D. OEM handpiece
	1	Ecran de protection	Light Shield
	1	Tournevis	Jewelers style screwdriver
	4	Bouchon laiton	A-dec 500 QD plugs
	2	Bloc de jonction	Terminal block
	3	Collier Tyrap	Cable tie (100 x 2.5mm)
	1	Collier Tyrap	Cable tie (300 x 4.6mm)
	1	Ferrite	Ferrite filter
	1	Fil gris UL Jauge 22	UL grey wire AWG22
	1	Fil gris noir Jauge 22	UL black wire AWG22
	1	Notice Mini LED	Mini LED notice
	1	Guide d'installation	Installation guide