

iPad Control Panel Operating Manual

UVee Therapy Systems

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Main Screen

(1.20) Manually control the system (not linked to a patient)

(1.19) Patient list

(1.18) Selected patient (press on a name to select another patient)

(1.17) Press here to modify the patient data or the active treatment profile

(1.16) When green, this indicates that the iPad is connected to the cabin

(1.15) The glowing silhouette indicates the operation of the UV lights

(1.14) Patient data

(1.13) Print a patient card

(1.12) Treatment Profile Presets

(1.11) Settings

(1.10) Total amount of radiation the patient has received so far

(1.9) List of all the past treatments for the selected patient

Buttons to:
 (1.6) confirm the dose value (Set),
 (1.7) start/pause the session (Start or Pause),
 (1.8) instantly abort a running session (Abort)

(1.5) You can follow the radiation intensity, time left and the Joule amount live during a treatment

(1.4) press to LOCK the screen, hold for 2 seconds to UNLOCK the screen

(1.3) Press here to manually change the dose

(1.2) Name + Treatment Profile of selected patient

(1.1) Press here to toggle between uvA and uvB

(1.21) Add a patient

Main Screen UI Elements:

- Top Bar: No Service, 13:32, 75% battery
- Section Header: Patients +
- Manual Control: Manual Control, Patients
- Patient List: Aguirre, Cedric; Bekaert, Neve; Cornelis, Robert; De Laet, Chris; De Mol, John; **Gucci, Viviane**; Hallaert, Marleen; Maynard, Eva; Morrison, Sylvia; Navarro, Alvin; Rios, Ben; Rojas, Nicole; Van Damme, Margo
- Selected Patient: **Ms Gucci, Viviane**
 - Via Calzaiuoli 24
 - 5436IT Firenze
 - 555 42685, 555 70980
 - viv@gucci.it
- UV B: 0.544 Joule
- Time Left: 0:26
- Intensity: 7.365 mW/cm2
- Lamps On: Set, Pause, Abort
- Treatments Table:

Date	Dose
Custom 14/08/2012	0.480 J uvB
Custom 14/08/2012	0.384 J uvB
Custom 8/08/2012	0.095 J uvB
Custom 8/08/2012	0.250 J uvB
Custom 30/07/2012	1.250 J uvB
Custom 27/07/2012	0.312 J uvB
Custom 27/07/2012	0.250 J uvB
- Total uvA 9 J, uvB 5 J
- Bottom Bar: Info, Home, Print, P, Settings

Prepare a Manually Controlled session

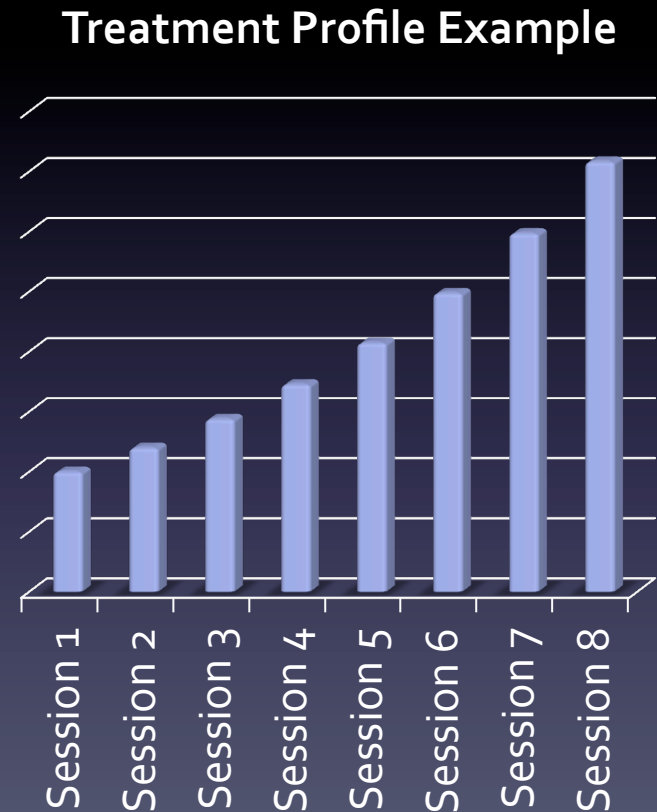
To manually control the UV Therapy System, follow these steps:

1. Press Manual Control (1.20)
2. Select UVA or UVB with (1.1)
3. Set dose with (1.3)
4. Press the Set button (1.6)

The dose and the selected UV-Type will appear on the display in the cabin. The system is now ready for the session to be started.

What is a Treatment Profile? (1)

A treatment profile determines the doses that a patient will receive over multiple sessions (called a “treatment”). Each session advances the treatment profile automatically to the next dose.



What is a Treatment Profile? (2)

A treatment profile has the following parameters:

1. UV Type (A or B)
2. Start dose value (in Joule)
If not specified, starts at zero.
3. End dose value (in Joule)
If not specified, ends at max (20 J uvA or 5 J uvB)
4. Increment each session with a fixed amount of Joule or with a percentage of the previous dose
5. Whether each dose has to be given twice before incrementing it
6. How many extra sessions (if any) need to be given when the end dose is reached

The operator can ALWAYS override the calculated dose and UV type using (1.1) and (1.3).

The dose for the next session is always calculated based on the previous dose, if it was overridden by the operator.

Prepare a Patient's Session without a Treatment Profile

To start a session for a patient without a treatment profile, follow these steps:

1. Select a patient without a Treatment Profile from the patient list (1.19)
2. Select UVA or UVB with (1.1)
3. Set dose with (1.3)
4. Press the Set button (1.6)

The name of the patient, the dose and the selected UV-Type will appear on the display in the cabin. The system is now ready for the session to be started.

Prepare a Patient's Session with a Treatment Profile

To start a session for a patient who has a treatment profile, follow these steps:

1. Select a patient with a Treatment Profile from the patient list (1.19)
2. The UV type and the automatically calculated dose value are shown in (1.1) and (1.3)
3. Optionally, the operator can override the calculated dose using (1.3) (in that case, the dose for the next session will be recalculated automatically)
4. Press the Set button (1.6)

The name of the patient, the dose and the selected UV-Type will appear on the display in the cabin. The system is now ready for the session to be started.

Start a Session

Once a session is prepared, the Start button (1.7) becomes active.

1. The patient enters the cabin and puts on appropriate eye protection
2. The door is closed (the session cannot be started otherwise)
3. A) the patient presses the physical red Start/Stop switch in the cabin, or
B) the operator presses the Start button (1.7) on the iPad

The lamps will now turn on.

As an emergency stop, the patient can simply push open the door of the cabin. The lamps will turn off immediately.

Pause a Session

When a session is started (i.e. lamps are on), it is possible to temporarily stop (pause) the session in three different ways:

- A) the patient or operator opens the door, or
- B) the patient presses the physical red Start/Stop switch in the cabin, or
- C) the operator presses the Pause button (1.7)

In either of these cases, the lamps will switch off immediately. The session can be restarted by following the instructions of "Start a Session".

Abort a Session

When a session is in progress, the system is locked until the session ends (reaches value 0.00) or until the session is aborted. To interrupt a running session you need to abort it to regain control of the control panel:

1. Press the Abort button (1.8)

The Abort button is only active when a session is in progress.

If the lamps were on, they will switch off immediately.

Lock / Unlock the Screen

To prevent an unauthorized person to operate the system, the operator can lock the screen. The Start/Pause button (1.7) and the Abort button (1.8) are operational whether the screen is locked or not, due to security reasons.

To lock the screen:

1. Press the Lock button (1.4)

To unlock the screen:

1. Press and hold the Lock button (1.4) for 2 seconds

Note: in an upcoming version, the press and hold will be replaced by a code lock keypad.

Treatment Profile Presets

(2.1) Press the Done button when you're finished editing the Presets

Edit Treatment Profile Presets Done

Select a Preset

uvA	A1	A2	A3	A4	A5	A6
uvB	B1	B2	B3	B4	B5	B6

Edit Settings for Preset

Start Value	0.00 - 20.00 J
End Value	0.00 - 20.00 J
Increment Type	% Joule
Increment / Session	0 - 100 %
Each Session Twice	<input type="checkbox"/> OFF
Extra Sessions at End Value	0 - 15 Sessions

(2.2) Select one of 6 uvA and uvB Presets to edit.

(2.3) and (2.4): Enter a start (2.3) and end value (2.4) for the dose (the minimum and maximum values are shown)

(2.7): Increase the dose at each session in percentage or with a fixed value in Joule

(2.8) Enter the increment value (in % or in Joule as set by (2.7))

(2.9) Turn on this switch to run each session twice with the same dose before increasing the dose

(2.10) Optionally add a number of extra sessions with the maximum dose once the end dose has been reached

Define/Edit Treatment Profile Presets

There are 12 Treatment Profile Presets which can be defined by the doctor. 6 are for UVA and 6 for UVB. To define a preset, follow these steps (all steps are optional):

1. Select the Preset which you want to edit (2.2)
2. Set a Start and End dose for the treatment using (2.3) and (2.4)
3. Choose whether you want to increment the dose in each session in percentage or with a fixed Joule value (2.5)
4. Set the increment amount using (2.6), based on (2.5)
5. Turn (2.7) on if you want each session twice with the same dose
6. Choose the amount of extra session you want the patient to have when the end dose has been reached (2.8)

You can change multiple presets by selecting a different preset using (2.2). When done with all modifications, press the Done button (2.1).

Add/Modify Patient

(3.1) Press the Cancel button to undo any changes you made

(3.2) Press the Save button to store the patient

Personal Information about the patient: Title (3.3), First (3.4) and Last Name (3.5), and Sex (3.6)

(3.7) Reference ID to link the patient to an existing patient database

(3.8) Open the Treatment Profile selection controls

Address Information of the patient: Street + Nr (3.9), Postal Code (3.10), and City (3.11)

Contact Information of the patient: Phone (3.12), Mobile phone (3.13), and Email address (3.14)

The screenshot shows a mobile application window titled "Add Patient". At the top left is a "Cancel" button and at the top right is a "Save" button. The form is organized into several sections: "Name" with fields for Title (Mr/Mrs), First Name, Last Name, Sex (Male/Female), and Reference ID (Reference Identifier); "Treatments" with a dropdown menu for "Treatment Profile (Off)"; "Address" with fields for Street + Nr, Postal Code, and City; and "Contact Information" with fields for Phone (Phone Number), Mobile (Mobile Number), and Email (email@address.com). Lines connect the annotations to the corresponding UI elements.

Name	
Title	Mr/Mrs
First Name	First Name
Last Name	Last Name
Sex	<input checked="" type="radio"/> Male <input type="radio"/> Female
Reference ID	Reference Identifier

Treatments	
Treatment Profile (Off)	>

Address	
Street + Nr	Street + Nr
Postal Code	Postal Code
City	City

Contact Information	
Phone	Phone Number
Mobile	Mobile Number
Email	email@address.com

Add a Patient

To add a new patient to the patient database, follow these steps:

1. Press the +-sign (1.21) to open the Add Patient control
2. Fill in the Add Patient form (scroll down to see all the fields (3.3) until (3.14)) – All fields are optional.
3. Note that pressing the Treatment Profile button (3.8) opens the Treatment Profile selection control
4. Press the Save button (3.2) to store the patient in the database

If you do not want to save the patient, simply press the Cancel button (3.1) instead.

Modify a Patient

To modify an existing patient, follow these steps:

1. Find the patient in the Patient List (1.19)
2. Press the blue arrow next to the patient's name (1.17)
3. Modify any of the fields as you see fit (scroll down to see all the fields (3.3) until (3.14))
4. Note that pressing the Treatment Profile button (3.8) opens the Treatment Profile selection control
5. Press the Save button (3.2) to store the changes in the database

If you do not want to save the changes, simply press the Cancel button (3.1) instead.

Treatment Profile Selection for a Patient

(4.1) Press the "Add Patient" button to return to the Add/Modify Patient control

(4.2) Select OFF to disable the treatment profile for this patient

(4.3) Select Custom to enter a specific treatment profile which will be used for this patient alone (set by fields (4.5) to (4.9))

The screenshot shows the 'Patient Treatment Profile' screen. At the top left is an 'Add Patient' button. Below it is the 'Treatment Profile' section with four buttons: 'OFF', 'Custom', 'uvA Preset', and 'uvB Preset'. The 'Custom' button is selected. Below these are 'uvA Preset' buttons labeled A1 through A6. The 'UVA/B Treatment Settings' section includes: 'UV Type' with 'UVA' and 'UVB' buttons (UVB is selected); 'Start Value' and 'End Value' both set to '0.000 - 5.000 J'; 'Increment Type' with '%' and 'Joule' buttons (% is selected); 'Increment / Session' set to '0 - 100 %'; 'Each Session Twice' with an 'OFF' toggle switch; and 'Extra Sessions at End Value' set to '0 - 15 Sessions'.

(4.4) and (4.5): Select whether you want to use an UVA (4.4) or UVB (4.5) preset

(4.6) Select which UVA preset to use (if (4.4) was selected), or which UVB preset to use (if (4.5) was selected)
This setting is not available for OFF (4.2) or Custom (4.3)

(4.7) for Custom only: select the UV Type: UVA or UVB

(4.8) and (4.9) for Custom only: Enter a start (4.8) and end value (4.9) for the dose (the minimum and maximum values are shown)

(4.10) for Custom only: Increase the dose at each session in percentage or with a fixed value in Joule

(4.11) for Custom only: Enter the increment value (in % or in Joule as set by (4.10))

(4.12) for Custom only: Turn on this switch to run each session twice with the same dose before increasing the dose

(4.13) for Custom only: Add a number of extra sessions with the maximum dose once the end dose has been reached

Add a Custom Treatment Profile to a Patient

If you have a patient who requires a specific treatment profile (i.e. not one the presets), you can add a custom treatment profile to that patient.

1. Follow the first steps in "Add"- or "Modify a Patient" and press the Treatment Profile button (3.8)
2. Select Custom (4.3)
3. Choose the UV Type UVA or UVB (4.7)
4. Set a Start and End dose for the treatment using (4.8) and (4.9)
5. Choose whether you want to increment the dose in each session in percentage or with a fixed Joule value (4.10)
6. Set the increment amount using (4.11), based on (4.10)
7. Turn (4.12) on if you want each session twice with the same dose
8. Choose the amount of extra session you want the patient to have when the end dose has been reached (4.13)
9. Press Add Patient (4.1)
10. Continue with the last step(s) of "Add"- or "Modify a Patient" to Save the settings

Attach a Preset Treatment Profile to a Patient

To make sure that a patient uses one of your predefined Treatment Profile Presets, you can easily select a preset for that patient:

1. Follow the first steps in "Add"- or "Modify a Patient" and press the Treatment Profile button (3.8)
2. Select UVA Preset (4.4) or UVB Preset (4.5)
3. Choose the Preset number A1 to A6 (for UVA) or B1 to B6 (for UVB) in (4.6)
4. The fields (4.7) to (4.13) will show the settings for the selected preset. However, you cannot modify the preset here.
5. Press Add Patient (4.1)
6. Continue with the last step(s) of "Add"- or "Modify a Patient" to Save the settings

Print a Patient Card

Note: To be able to print using the iPad, an Apple AirPrint compatible printer has to be attached to the same (Wireless) network as the iPad

1. Select the patient from the patient list (1.19)
2. Press the Print button (1.13) (note: if no printer is found, this button is not visible!)
3. Select the printer (and optionally change the printer settings)
4. Press Print

A print out with the details of the patient and the treatment history will be produced.

Print the List of Patients

Note: To be able to print using the iPad, an Apple AirPrint compatible printer has to be attached to the same (Wireless) network as the iPad

1. Press (1.11) to open the Settings control
2. Scroll down to the bottom of the control and press the Print Patient List button
3. Select the printer (and optionally change the printer settings)
4. Press Print

A print out with a list of the patient database and a summary of the patients' treatments will be produced.