CompuPack

Compulite Systems (2000) Ltd.
9 Hanagar St. Neve Ne'eman B Industrial zone Hod Hasharon, 45421, Israel
Tel: 972 9 744 6555 ~ Fax: 972 9 746 6515 ~ www.Compulite.com

Document version 2.0 March 2007

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Overview

CompuPack offers a simple and affordable 19”, 3 U digital dimming system, for fixed or mobile applications. CompuPack can operate as a stand alone unit or with any lighting control system.

Features

Hardware

- 12 x 2.5KW dimmers
- 19" x 3U
- Graphic (128x64) LCD display
- Seven Input buttons
- Twelve Tri-color status LEDs
- Control input: 2 DMX, Ethernet, Analog 0-10V, RS-232
- Status feedback to Compulite consoles via Ethernet (option)
- Software upgrade through RS232 (Ethernet optional)
- Software (DSP) regulated output specially designed for operating in unstable power input conditions.

Hardware options

- Dual-SCR or Triac
- 1 or 2 DMX inputs, Ethernet support, Analog (0-10V) support
- Outputs: Socapex, Harteng, Schuko terminals

Software

- Patch - DMX input port and offset settings for each individual dimmer.
- Test menu
- Fifty programmable scenes triggered via RS232, RS485, analog or Ethernet
- Nine programmable sequences (loops) triggered via RS232, RS485, analog or Ethernet
- Built in sequencer for stand alone operation
- Six pre-programmed dimmer curves
- Four programmable dimmer curves

Connecting CompuPack

End equipment is connected via:

- Socapex connectors
- Harting connectors
- Schuko connectors

Input can be:

- Direct DMX from a lighting console
- DMX over Ethernet (VCs) when teamed with Compulite consoles
- Analog 0-10 V - not implemented yet.
- RS-232- not implemented yet.

To connect CompuPack

1. Plug the 3- phase connector into its socket on CompuPack.
2. Connect to the mains supply.
3. Connect the end equipment to CompuPack.
4. Connect the DMX IN or Ethernet communication cables.
5. Switch on the power.

   The LEDs for L1, L2, and L3 indicate 3-phase status.

User interface and controls

CompuPack has a graphic 128 x 64 LCD for menu and value displays. There are user buttons for navigating and entering values.

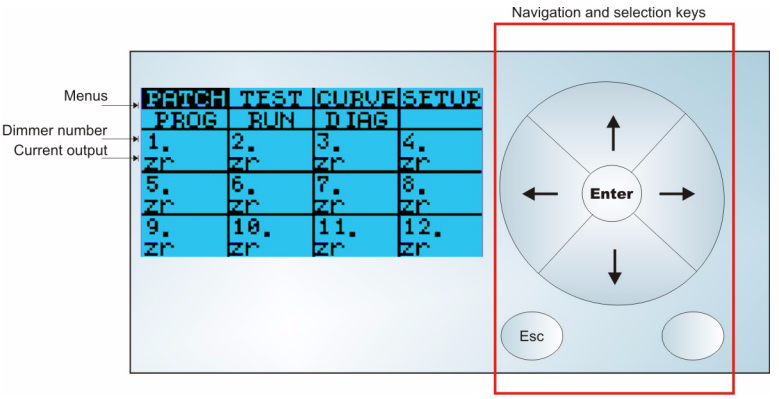

Figure 1: LCD main screen and buttons for navigation and programming

CompuPack programmer operation

The CompuPack programmer is menu driven software. CompuPack software has seven menus:

- Patch
- Prog(ramming)
- Test
- Run
- Curves
- Diag(nostics)
- Setup
- Page (available when the 24 dimmers option is enabled)

Navigating and selecting menus			
Menu State	***Arrows***	***Enter key***	***Esc key***
Idle	Navigate states	Select state	N/A
Selected state	Navigate sub-states	Select sub-state	Return to idle
Selected sub-state	Navigate items	Select item	Return to selected state
Selected item	Edit value	Store value	Discard change

Patch menu

You can change default DMX value in the Patch menu.

The default is one-to-one patch, offset from dimmer number 1. DMX values that are displayed in parentheses - () - are the default assignments.

Figure 2: CompuPack dimmers with default DMX values

DMX values that displayed without parentheses indicate that the dimmer's DMX values has been changed.

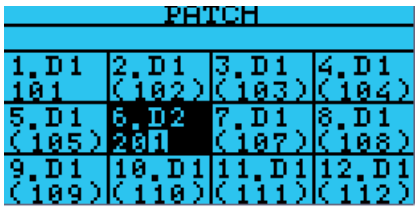

Figure 3: Dimmer 6 has a new DMX value

You can set the dimmers in CompuPack to listen to DMX In 1, DMX In 2, or VCs over Ethernet.

To change a DMX value

1. Use the arrows to navigate to the Patch menu and press **ENTER**.

   The Patch menu opens.
2. Use the arrows to select a dimmer and press **ENTER**.
3. Use ▲or ▼ to set a value for units and press **ENTER** to store.
4. Press ◀ to access the tens and then use ▲or ▼ to set a value.
5. Press ◀ to access the hundreds and then use ▲or ▼ to set a value.
6. Press **ENTER** to store.

To change the input source

If the input source is currently DMX In 1, set the DMX value to 513. The input source switches to D2 001.

To set Ethernet as the input, set D2 to 513. The input source switches to E 001.

To reset one dimmer to the default patch

1. Navigate to the dimmer and press **ENTER**.
2. Press ◀ to access the hundreds and then use ▲or ▼that cycles the input source (D1, D2, E).

   When reaching the default source the DMX value jumps to its correct default value.
3. Press **ENTER** to store.

To reset the patch

See “Reset Patch” on page 8.

Test menu

The Test menu allows you to test dimmers sequentially starting from a selected dimmer or test a range of dimmers. When testing is active, the selected dimmers fades repeatedly from zero to full.

To test dimmers

1. Use the arrows to navigate to the Test menu and press **ENTER**.

   The Test menu opens.

2. Use the arrows to highlight the first dimmer.

   The first dimmer repeatedly fades from zr to FL.

3. Use ▶ and◀ to move from dimmer to dimmer.
4. Press **ENTER** or **ESC** to stop the test.

To test a range of dimmers

Example: Test dimmers 6 through 10 together.

1. Use the arrows to navigate to the Test menu and press **ENTER**.

   The Test menu opens.

2. Press ▶ to select Dimmer Range.
3. Navigate to dimmer 6, the first dimmer in the range as per this example, and press **ENTER**.

   Dimmer 6 appears on a dark field.

4. Press ▶ to select dimmer 7.

   Dimmer 7 appears on a dark field.

5. Continue pressing ▶ until all required dimmers are selected.
6. Press **ENTER**.

   The selected range of dimmers repeatedly fade from zr to FL.

7. Press **ESC** to stop the test.

Note: To pause a test, press **ENTER**.

Curve menu

In the curve menu you can:

- Set curves for selected dimmers
- Program custom curves for selected dimmers

There are 6 pre-programmed curves and 4 programmable custom curves available.

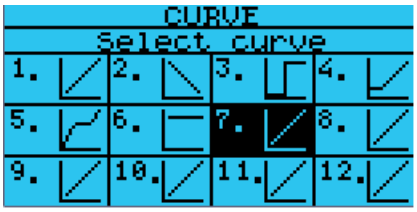

Figure 4: Dimmers displayed with their curves

Setting curves

CompuPack has six pre-programmed curves.

Icon	Curve
	Linear
	Inverted
	Non-Dim - when reaching 50%, jump to FL
	Preheat - maintain lamp at 5%
	S
	Park - at 100%

To set a curve for selected dimmers

1. Use the arrows to navigate to the Curve menu and press **ENTER**.

   The Curve menu opens to the Select Curve sub-menu.
2. Use the arrows to select a dimmer and press **ENTER**.
3. Use ▼ or ▲ to select the required curve.
4. Press **ENTER** to store the curve to the selected dimmer.

To program a custom curve

1. Use the arrows to navigate to the Curve menu.
2. Press **ENTER** to select the menu.

3 Navigate to the Program Curve sub-menu.

4 Navigate to Curve Number and press **ENTER**.

5 Use ▼ or ▲ to select the curve number and press **ENTER**.

Four programmable curves are available.

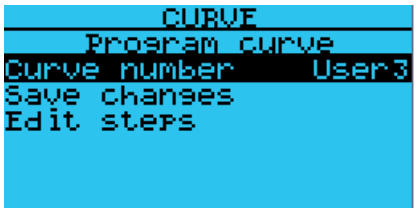

Figure 5: Program curve sub-menu

6 Navigate to Edit Steps and press **ENTER**.

The curve steps are displayed.

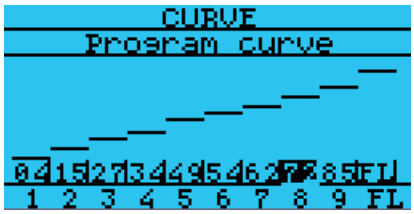

Figure 6: Each programmable curve has ten steps.

7 Use ◀ or ▶ to select a step.

8 Use ▼ or ▲ to set the step's level.

9 Repeat 7 and 8 for each curve step.

10 Press **ENTER**.

11 Navigate to Save Changes and press **ENTER**.

12 Press **ESC** to return to the main screen.

Setup menu

Setup submenus	Submenu options	
General	Merge Inputs	Yes - Not implemented yet. No- Dimmers receive input only from the source set in the Patch menu.
	Input regulation	All settings (180v, 190v, 200v, 210v, 220v) - Keep the output reliable at the selected voltage. None - the input is not regulated **Note:** Unsteady input may result, for instance, from power supplied by a generator.
	24 dimmers	Not implemented yet
	DMX trigger	Yes - Trigger scenes or sequences via DMX. No - DMX trigger is disabled. **Note:** Pressing **ENTER** cycles through the options: None, Scenes, Seqs.
Reset Patch		Yes - Reset the patch to D1and start from DMX value 001. No - This is the default setting.
Clear All Data		Delete all scenes and sequences.
On Loss of DMX	Hold DMX values	Yes - Retain last received values. No - Dimmers fade to zero.
	Fade to Scene	Fade to the selected scene.
	Wait time	Wait time before fading to a scene or to zero.
Power up options	Run Scene	When a scene or sequence is selected, CompuPack automatically runs it when powered up.
	Run Sequence	
Network	IP	Set IP address and Subnet mask to receive input via Ethernet.
	Subnet	
	Input VC	VC (Virtual Connector) is Compulite's protocol for DMX over Ethernet.

To set general options

1. Use the arrows to navigate to the Setup menu and press **ENTER**.

   The Setup menu opens.

2. Use ▼or ▲ select the option.
3. Press **ENTER** to toggle Yes (enabled) or NO (disabled).

To set behavior when losing DMX input

1. Use the arrows to navigate to the Setup menu and press **ENTER**.

   The Setup menu opens.

2. Navigate to On Loss of DMX and press **ENTER**.

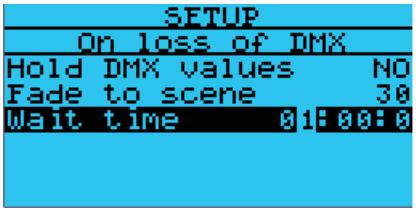

Figure 7: Loss of DMX options

3. For Hold DMX Values - press **ENTER** to toggle Yes (enabled) or NO (disabled).

   For Fade to Scene - use the arrows to select the scene number and press **ENTER**.

   For Wait - use the arrows to set the wait time and press **ENTER**.

Note: When DMX input is restored, the active scene must be cleared before CompuPack can resume normal operation. See "stop active scenes and sequences" on page 13.

To set power up behavior

1. Use the arrows to navigate to the Setup menu and press **ENTER**.

   The Setup menu opens.

2. Navigate to Power Up Options and press **ENTER**.

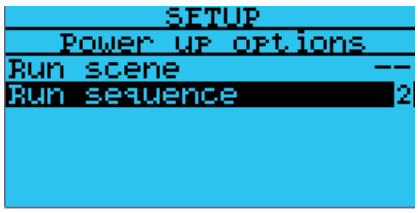

Figure 8: Run lighting states on power up options

3 Navigate to Run Scene and press **ENTER**. Then use the arrows to set the scene number and press **ENTER**.

Or

Navigate to Run Sequence and press **ENTER**. Then use the arrows to set the sequence number and press **ENTER**.

When CompuPack powers up, the selected scene or sequence automatically begins running.

To set network parameters

1 Use the arrows to navigate to the Setup menu and press **ENTER**.

The Setup menu opens.

2 Navigate to Network and press **ENTER**.

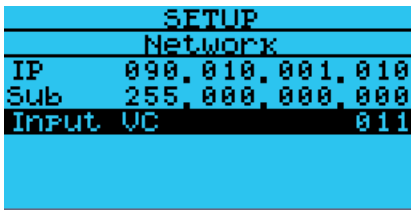

Figure 9: Network setup

3 For IP - use the arrows to set the IP address and press **ENTER**.

For Sub - use the arrows to set the subnet and press **ENTER**.

For Input VC - use the arrows to set the VC that CompuPack is listening to and press **ENTER**.

Programming menu

Through the Programming menu, program scenes and sequences that can be played back by CompuPack. When programming scenes, external values (DMX or Ethernet) are merged (HTP) with CompuPack programmer values.

Scenes and sequences are activated through the Run menu or can be triggered via DMX transmission. See “Playing back scenes and sequences” on page 13.

Scenes

You can store up to 50 scenes. Scene properties include:

- Dimmer levels and timing data
- Fade up, down, and wait times
- Time range is 00:00.1 (0.1 sec.) – 30.00.0 (30 minutes)

To program scenes

1. Use the arrows to navigate to the Prog(ramming) menu and press **ENTER**.

   The Scene Levels screen is displayed.
2. Use the arrows to select a dimmer and press **ENTER**.
3. Use ▼or ▲to set a the dimmer level and press **ENTER** to store.

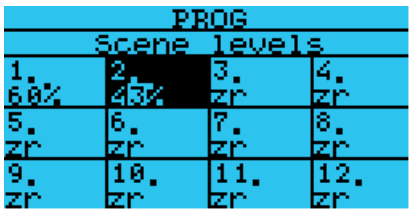

Figure 10: Setting dimmer levels in the Programming menu

4. Repeat steps 3 and 4 until the entire scene is programmed.
5. Press **ESC** to return the main Prog menu.
6. Select Scene Properties and press **ENTER**.
7. Use ▼to select Number.
8. Use ▼or ▲to set the scene number and press **ENTER**.
9. Set scene fade times.
10. Navigate to the Save Changes option and press **ENTER** to store the scene properties.

To set scene properties

1. On the main Prog menu screen, navigate to Scene Properties and press **ENTER**.
2. Use ▼or ▲ to select an option and press **ENTER**.
3. Use the arrows to set values and press **ENTER** to store.

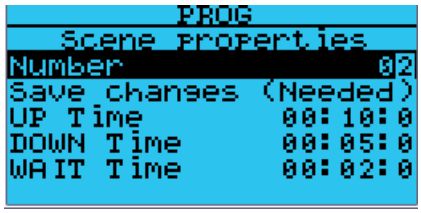

Figure 11: Setting scene properties

4. Navigate to the Save Changes option and press **ENTER** to store the scene properties.

Sequences

Sequences are a collection of scenes that run in loops.

You can store up to 9 sequences.

Sequence properties include:

- Start scene, end scene, and number of loops
- Number of loops: 1-999 or infinite
- Nested loops - not implemented yet

To program sequences

1. On the main Prog menu screen, navigate to Sequence and press **ENTER**.
2. Navigate to Number and use the arrows to set the sequence number.

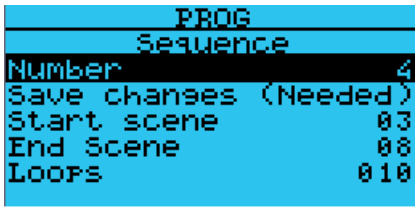

Figure 12: Setting sequence properties

3. Navigate to Start Scene and use the arrows to select the first scene in the sequence.

4 Navigate to End Scene and use the arrows to select the last scene in the sequence.

5 Navigate to Loops and use the arrows to enter the number of times the sequence will repeat.

6 Navigate to the Save Changes option and press **ENTER** to store the scene properties.

Playing back scenes and sequences

Scenes and sequences can be activated in two ways:

- Through the RUN menu
- Through DMX triggering

Run menu activation

The Run menu plays back pre-programmed scenes and sequences. Scenes and sequences are programmed in the Programming menu. See “Programming menu” on page 11.

To run scenes and sequences via the Run menu

1 Use the arrows to navigate to the Run menu and press **ENTER**.

The Run menu opens.

2 Use ▼or ▲ to select Scene or Sequence and press **ENTER**.

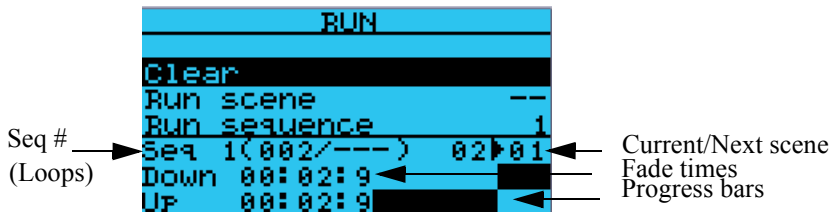

Figure 13: The Run screen with sequence details

3 Use the arrows to set the scene or sequence number and press **ENTER**.

The scene or sequence begins its fade.

To stop active scenes and sequences

1 Use the arrows to navigate to the Run menu and press **ENTER**.

2 Navigate to Clear and press **ENTER**.

Or

Press **ENTER** twice at any point in the Run menu.

ATTENTION! If CompuPack was set to run a scene after losing the DMX signal, you must clear the scene when DMX reception is restored.

DMX trigger

Either scenes or sequences can activated through a DMX trigger. DMX channel 1 triggers scene 1, DMX channel 2 triggers scene 2, and so on, up to 50 scenes. When a scene or sequence is active, external input (from DMX or Ethernet) are ignored.

When DMX triggering is enabled:

- A scene or sequence is activated if the input value for the matching dimmer rises to more than 5%.
- The scene or sequence stops when the input value falls below 5%.

To run scenes or sequences via DMX triggers

Enable DMX trigger seq in the Setup menu ▸ General tab.

Diagnostics menu

Check the status of:

- Phase 1 - voltage input
- Phase 2 - voltage input
- Phase 3 - voltage input
- Rack temperature
- Software version

Upgrading CompuPack software

Upgrading CompuPack software is done directly through the serial RS-232 port.

Upgrading via RS-232

Requirements:

- Serial RS-232 cable
- SDFlash Serial RS232 utility (version 1.63.00 or higher) - included in CompuPack installation disk
- Laptop or PC with serial RS-232 port
- Laptop or PC with SDFlash Serial installed
- New project set up in SDFlash Serial

To prepare the hardware

1. Turn off CompuPack.
2. Remove the top cover.
3. Identify the jumper labeled J1.
4. Move the J1 jumper from pins 2 and 3 to pins 1 and 2.
5. Connect CompuPack to the laptop or PC via the RS-232 serial port.
6. Power up CompuPack.

   The screen is blank.
7. Open the SDFlash utility on the laptop or PC.
8. Follow the SDFlash instructions for flash programming.
9. When the update is complete, turn off CompuPack.
10. Move J1 back to pins 2 and 3.
11. Replace the top cover.
12. Power up CompuPack.

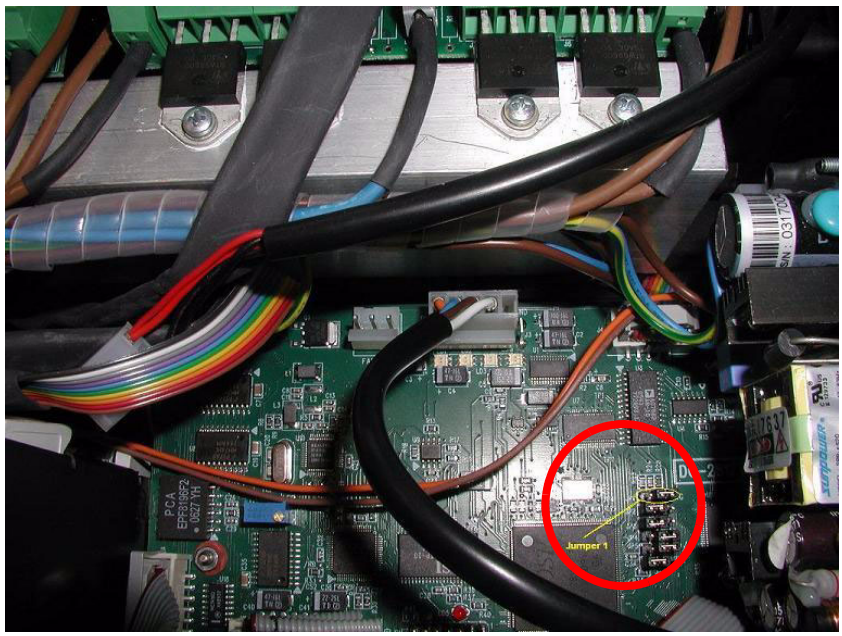

Figure 14: Jumper location