



SM6000



SM1500N



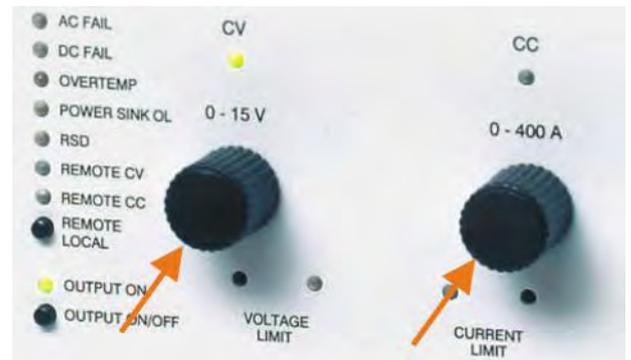
SM800



## DIGITAL ENCODERS

Models	Order Code
SM800	Option P236
SM1500N	Option P220
SM6000	Option P220

- Very long life time
- Variable operating resolution
- Extra safety with Start-up and KEYLOCK mode



*Digital encoders for CV and CC setting.*

With this option the unit has two digital encoders to set the voltage and the current on the front panel instead of the normal resistive potentiometers. This option features extra safety functions and a very long life time.

### Variable operating resolution

Operating resolution depending on the rotation speed. The encoder works as a standard 10-turn knob when rotated fast. When rotated slowly, the encoder works as a 64-turn (!) knob for fine tuning. It is then possible to set the output voltage and current with a 12 bit accuracy.

### Selectable Start-up mode

With this option it is possible to choose between always starting up at a safe 0 V - 0 A, or starting up with the last settings of the voltage and current.

### The KEYLOCK mode

Besides the REMOTE/LOCAL and the OUTPUT ON/OFF buttons, also the CV and CC knob are disabled in KEYLOCK mode.

When the CV and CC knobs are rotated in this mode, the settings do not change and the CV or CC LED flashes as an indication.

This prevents the unit from accidental shutdown or changing of the output and programming settings.

## USER MANUAL

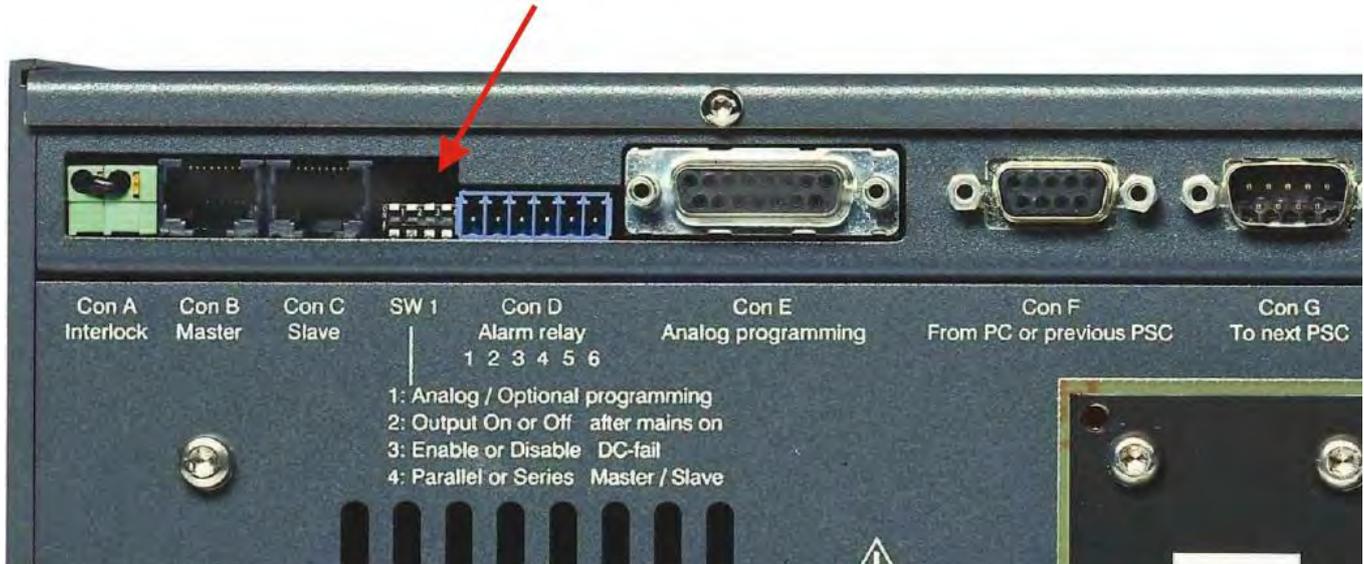
### SM6000 with P220

Instead of the normal 10-turn resistive potentiometers, with this option the unit has two digital encoders to set the voltage and the current on the front panel. These encoders enable several intelligent functions and have a very long life time. For full specifications, check the datasheet on [www.DeltaPowerSupplies.com](http://www.DeltaPowerSupplies.com).

### Setting the Start-up mode

With this option it is possible to choose between starting up at 0 V - 0 A, or starting up and remember the previous settings of the voltage and current.

At the rear side of the unit switch SW1 is located (see picture below).



Set dip switch 5 of switch SW1 in the position 'down'. After switching mains on, the unit will always start up with a voltage setting of 0 V and a current setting of 0 A. Once the unit is switched on, the voltage and current can be set to the preferred value.

Set dip switch 5 in the position 'up'. After switching mains on, the unit will start with the same settings for the voltage and the current as it had before switching mains off.

### Setting the KEYLOCK-mode

Normally when a unit is set in KEYLOCK, the REMOTE/LOCAL and the OUTPUT ON/OFF button are disabled (see manual). With Option P220 also the digital encoders are disabled. This means the settings of the voltage and current do not change when the encoders are operated.

This prevents the unit from accidental ShutDown or accidental changing of the programming and output settings.

#### Activate Keylock:

Pressing the buttons DISPLAY SETTINGS and DISPLAY LIMITS at the same time for more than 3 seconds, activates the function KEYLOCK. The moment this function is activated, the LED's for REMOTE CV / CC and for OUTPUT ON will blink a few times.

#### De-activate Keylock:

Pressing the same buttons again for 3 seconds, disables the Keylock function. The LED's for REMOTE CV / CC and for OUTPUT ON will blink again to indicate the new setting.

## USER MANUAL

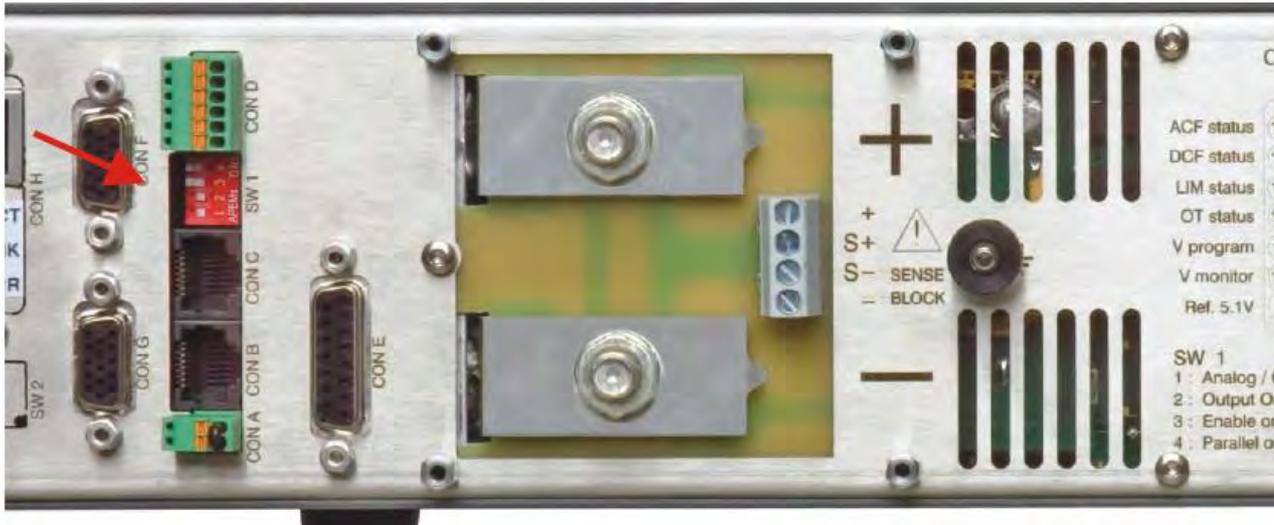
### SM1500N with P220

Instead of the normal 10-turn resistive potentiometers, with this option the unit has two digital encoders to set the voltage and the current on the front panel. These encoders enable several intelligent functions and have a very long life time. For full specifications, check the datasheet on [www.DeltaPowerSupplies.com](http://www.DeltaPowerSupplies.com).

### Setting the Start-up mode

With this option it is possible to choose between starting up at 0 V - 0 A, or starting up and remember the previous settings of the voltage and current.

On the rear side of the unit switch SW1 is located (see picture below).



Set dip switch 5 of switch SW1 in the position 'down'. After switching mains on, the unit will always start up with a voltage setting of 0 V and a current setting of 0 A. Once the unit is switched on, the voltage and current can be set to the preferred value.

Set dip switch 5 in the position 'up'. After switching mains on, the unit will start with the same settings for the voltage and the current as it had before switching mains off.

### Setting the KEYLOCK-mode

Normally when a unit is set in KEYLOCK, the REMOTE/LOCAL and the OUTPUT ON/OFF button are disabled (see manual). With Option P220 also the digital encoders are disabled. This means the settings of the voltage and current do not change when the encoders are operated.

This prevents the unit from accidental ShutDown or accidental changing of the programming and output settings.

#### Activate Keylock:

Pressing the buttons DISPLAY SETTINGS and DISPLAY LIMITS at the same time for more than 3 seconds, activates the function KEYLOCK. The moment this function is activated, the LED's for REMOTE CV / CC and for OUTPUT ON will blink a few times.

#### De-activate Keylock:

Pressing the same buttons again for 3 seconds, disables the Keylock function. The LED's for REMOTE CV / CC and for OUTPUT ON will blink again to indicate the new setting.

## USER MANUAL

### SM800 with P236

Instead of the normal 10-turn resistive potentiometers, with this option the unit has two digital encoders to set the voltage and the current on the front panel. These encoders enable several intelligent functions and have a very long life time. For full specifications, check the datasheet on [www.DeltaPowerSupplies.com](http://www.DeltaPowerSupplies.com).

### Setting the Start-up mode

With this option it is possible to choose between starting up at 0 V - 0 A, or starting up and remember the previous settings of the voltage and current.

On the rear side of the unit switch SW1 is located (see picture below).



Set dip switch 5 of switch SW1 in the position 'down'. After switching mains on, the unit will always start up with a voltage setting of 0 V and a current setting of 0 A. Once the unit is switched on, the voltage and current can be set to the preferred value.

Set dip switch 5 in the position 'up'. After switching mains on, the unit will start with the same settings for the voltage and the current as it had before switching mains off.

### Setting the KEYLOCK-mode

Normally when a unit is set in KEYLOCK, the REMOTE/LOCAL and the OUTPUT ON/OFF button are disabled (see manual). With Option P236 also the digital encoders are disabled. This means the settings of the voltage and current do not change when the encoders are operated.

This prevents the unit from accidental ShutDown or accidental changing of the programming and output settings.

#### Activate Keylock:

Pressing the buttons DISPLAY SETTINGS and DISPLAY LIMITS at the same time for more than 3 seconds, activates the function KEYLOCK. The moment this function is activated, the LED's for REMOTE CV / CC and for OUTPUT ON will blink a few times.

#### De-activate Keylock:

Pressing the same buttons again for 3 seconds, disables the Keylock function. The LED's for REMOTE CV / CC and for OUTPUT ON will blink again to indicate the new setting.