

## Manual

### DSII Module with “Pressure Tuner” for LS130MT Telescopes

Congratulations and thank you on your purchase of a Lunt Solar Systems instrument! The Lunt Solar Systems are a new generation of solar viewing instruments utilizing the most current technologies to provide the highest quality contrast and resolution in their class.

#### **Warning**

There are inherent dangers when looking at the Sun thru any instrument. Please note the safety instructions in the manual of your LS130MT telescope.

#### **Handling and Cleaning**

Please also note the relevant instructions in the manual of your LS130MT telescope. These also apply to the DSII module.

### The DSII Module with “Pressure Tuner” for LS130MT Telescopes

The DSII module is an upgrade to the standard LS130MT solar telescope.

The DSII module contains a specially designed re-collimating and refocus lens set that will only work in the LS130MT. The module contains a precisely tuned narrowband interference filter in a sealed cavity. This filter will reduce the bandwidth of the LS130MT to <0.5 Angstroms. The DSII system utilizes our advanced “Pressure Tuner” technology, allowing for easy tuning of the finest details.

The DSII module is designed to provide enhanced surface detail, allowing for higher contrast views of the filaments and active regions. Some dimming will be noted due to the narrowing of the bandwidth.

**Attention: Because the DSII module is designed ONLY for use in LS130MT telescopes, and in these telescopes all necessary energy filters are already installed, the DSII module has no extra energy filters. Therefore never use the DSII module without a LS130MT telescope! IR and UV radiation can damage your eyes when the DSII module is used without LS130MT telescope!**

#### **What is delivered with the system?**

- DSII module for LS130MT telescopes
- Internal Etalon with “Pressure Tuner”
- 6 thumbscrews for easy installation and removal
- Shipping box with die cut foam insert
- Instruction manual



### Setting up the DSII module

#### **Safety First!**

- **Always check any solar telescope before use. Do not use any telescope or filter that appears to be damaged. Verify that all glass and filters are in place.**
- **The Blocking Filter diagonal or extension tube must always be used with the Lunt telescope or filter.**

At first follow the instructions for your normal LS130MT telescope without DSII. If you have sharp focused the sun you would tune the built-in H-alpha filter. Note where the LS130MT pressure-tuner was correctly tuned on its brass cylinder.

**Installing the DSII module at the telescope:** Take the LS130MT back from the mount, and put it on a clean table.

First remove the 3 grub screws on the outer ring of the DSII module and replace them with 3 of the knurled screws supplied.



The installation of the DSII module starts with the removal of the focuser including the conical adapter from the red H-alpha unit on the LS130MT telescope.



Attach the DSII unit to the red LS130MT pressure tune assembly. Then attach the cone/focuser to the DSII unit.



If you loosen the knurled screws slightly, the DSII module can be turned into any desired position. Now tighten the knurled screws firmly, the installation of the DSII module on the LS130MT is completed.

Install the telescope now again on your mount, and point it to the sun. Move the handle of the originally Pressure-Tuner back into the position which you have previously noticed. Re-focus the system. Tuning of the DSII module is accomplished by first re-setting the Pressure-Tuner cylinder as described in the telescope manual or to the previous gap setting. Turn the Pressure-Tuner handle on the DSII module in, while viewing the sun through the scope. Adjust the Pressure-Tuner for the best view of solar surface details.

The user may now adjust the Pressure-Tuner on the LS130MT telescope to achieve the maximum contrast.

The DSII module is designed to provide an enhanced, narrowband, higher contrast view of the sun's surface. The user will note a dimming of the image while using the scope in the double-stack mode. This is a normal effect.

**Lunt-Solar-Systems - Exclusive European Distributor**  
**Bresser GmbH**  
**Gutenbergstrasse 2, D-46414 Rhede, Germany**  
**Phone: +49 (0) 2872 – 80 740**  
**E-Mail: info@bresser.de**  
**www.bresser.de**