SKALMAN® v7

• A Complete System Solution for Harvester Calibration by Haglöf Sweden® - Full Compliance with New Standard

Skalman® is a market leading system used to calibrate harvester merchandise computers. Together with Haglöf Sweden’s new, slim, lightweight computer caliper the DP II, calibration routines and processes will be even more efficient. With all data registered and secured in one value chain, the entire process from standing tree to logyard and ready made board is optimized.

The DP II, the Digitech Tape and Skalman together form a user friendly system with rugged and reliable hardware. The system is designed for quick learning and easy use, also for complete beginners.

- Dimensions measured by the harvester head are transferred to the DP II. Control measurements are performed with the caliper and the Digitech Tape for automatic registering of log lengths in the DP II.
- The measurements obtained with the DP II are compared with the values registered by the harvester computer.
- Deviations in the compared values indicate a need for calibration of the harvester head.
- Skalman® offers a calibration suggestion.

The Skalman® system is the only complete harvester calibration system that fully complies with the new StanForD standard. Developed in cooperation with leading industry representatives, harvester operators and scientists, Skalman has been refined and developed to a system where every detail is optimized to the purpose.

Flex Scaling: Skalman v7 enables a flexible method called Flex Scaling. The operator can avoid certain areas on the stem (knot clusters, areas without bark). Assemble the Digitech Tape and measure at optional place for less waste.

Non-Circular Diameter: The stem may be non-circular; or a branch may get in-between the caliper and the stem while measuring, causing incorrect measurement results. Skalman v7 includes an adjustable quote limit. The operator is alerted when the first measured diameter differs from the second diameter when cross scaling. The quote limit is set in percentages (%: Dmax/Dmin).

Decreasing Diameter: Skalman v7 alerts the operator when the merchandise computer has detected a decreasing diameter. The size of the decrease and the determined section length can be set in the caliper (0.99mm/0..10dm).

Plane Section: Skalman v7 alerts when in a plane section (section of the stem where no narrowing of the diameter is registered by the harvester. The cause may be poor grip around the stem. Plane section areas should not be included in the caliper scaling control. The plane section length is set from 5dm-10dm.

Potential Calibration: Skalman v7 offers an alternative to calibrate the harvester computer. The potential calibration calculates possible improvement for diameters and lengths in percentage (%). As shown in image above, 20% of the diameters could potentially be within ±4mm. The quote limits are adjustable.

Results based on selected stems: The operator can choose to see results for selected stem or at optional intervals, for example Stem 5 - Stem12.

Decrease Warning: Skalman v7 alerts when detecting a stem with abnormal decrease (>3ea). The maximal allowed diameter decrease can be set on a section of 3dm.
The Digitech® Tape is the digital tape that enables flexible scaling on the tree stem. The controls are quicker and more accurate compared to when working with standard tapes. The Digitech Tape is standard accessory in a complete Skalman v7 packet.

Skalman v7 is the updated version of the well-known Skalman system and adapted for Haglöf Sweden’s new, slim and efficient DP II caliper. Data handling is secure and data is always safe. With the DP II you can work without interruption, in difficult, dark cold and damp environments, always getting a correct result. No special operation drivers or installation routines are required in the merchandise computer.

The Smart Scale measuring scale and the DP II Computer Terminal have separate, built-in rechargeable Li-Ion batteries and is charged through the new standard caliper holder in the caliper cockpit. The DP II will automatically enter USB mode when placed in the holder. With the secure USB 2.0 communication interface, file transfer is automatic, making life a little easier for the harvester operator.

Skalman v7 supports the new HQC-files standard, StanFord 2010, used in new harvesters machines.* Skalman also works with all concurrent methods within the calibration area in different regions and countries, such as Finnish Standard measurement, Danish full stem measuring and the efficient Flex Scaling with the digital tape. With Skalman v7 accreditation controls of calibration routines can be correctly performed.

The digital tape Digitech® Tape uses the DP II terminal battery and display and will feature log lengths up to 7.5 meters. Electronic registration of lengths with the Digitech® Tape have many upsides, as improved accuracy, easy operation and quicker and safer work compared to traditional mechanical tapes. The Digitech Tape can remain assembled also when the caliper is in its holder.

Maybe you need more than the calibration application in your computer caliper? That is no problem, the DP II has room for several different applications - combine with for example thinning follow-up program and make optimal use for your equipment investments.

All Haglöf Sweden produced software applications are smart, efficient and made to the point for the job you need to do in the forest. Hardware is produced in strict guidance with quality protocols, and backed-up by Haglöf Sweden’s long experience of manufacturing rugged and reliable precision instruments for everyday use in forests around the world.

*For older harvester machine models we recommend Skalman v6, that works with regular STM/KTR files.

The Digitech® Professional, DP II and Skalman® are used by all major harvester manufacturers and often factory installed in harvesters. The Skalman system has been developed in cooperation with the Swedish Forestry Research Institute (Skogforsk). Skalman fully complies with StanFord 2010 standard and Finnish SPP standard 2007. Made in Sweden by Haglöf Sweden® AB. Certified, tested and approved by independent institutions and authentical user groups.

---

**SKALMAN® & DP II**

Skalman v7 is the updated version of the well known Skalman system and adapted for Haglöf Sweden’s new, slim and efficient DP II caliper. Data handling is secure and data is always safe. With the DP II you can work without interruption, in difficult, dark cold and damp environments, always getting a correct result. No special operation drivers or installation routines are required in the merchandise computer.

The Smart Scale measuring scale and the DP II Computer Terminal have separate, built-in rechargeable Li-Ion batteries and is charged through the new standard caliper holder in the caliper cockpit. The DP II will automatically enter USB mode when placed in the holder. With the secure USB 2.0 communication interface, file transfer is automatic, making life a little easier for the harvester operator.

The digital tape Digitech® Tape uses the DP II terminal battery and display and will feature log lengths up to 7.5 meters. Electronic registration of lengths with the Digitech® Tape have many upsides, as improved accuracy, easy operation and quicker and safer work compared to traditional mechanical tapes. The Digitech Tape can remain assembled also when the caliper is in its holder.

Maybe you need more than the calibration application in your computer caliper? That is no problem, the DP II has room for several different applications - combine with for example thinning follow-up program and make optimal use for your equipment investments.

All Haglöf Sweden produced software applications are smart, efficient and made to the point for the job you need to do in the forest. Hardware is produced in strict guidance with quality protocols, and backed-up by Haglöf Sweden’s long experience of manufacturing rugged and reliable precision instruments for everyday use in forests around the world.

---

**SKALMAN 7**

<table>
<thead>
<tr>
<th>Operating system:</th>
<th>DPII Version 2.x or later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvester model:</td>
<td>State brand and model to obtain the correct version and/or harvester calibration packet</td>
</tr>
<tr>
<td>Language:</td>
<td>Swedish, English, German, Finnish, Russian, French, Spanish, Portuguese, Estonian, Czech</td>
</tr>
</tbody>
</table>