

Forest Management Tech Tips

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DIGITAL TALLY METER

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INTRODUCTION

This Tech Tip discusses two digital tally meters, one developed by the San Dimas Technology and Development Center (SDTDC) through Gateworks Corporation, and one developed by Haglof of Sweden. Each meter has different features and uses, depending on field requirements.

This project was the result of a field request for an electronic digital counter. A market search was conducted and, at the time, no digital tally meters were available. Now, one year later the Digital Tally Meter (DTM) has been developed and tested incorporating many of the features requested by the field. During the period that SDTDC was developing and testing this tally meter another company, Haglof of Sweden, introduced a product of their own, the TallyTax.

DISCUSSION

TM-100 Digital Tally Meter

The DTM shown in figure 1 is a microprocessor-controlled instrument designed specifically for the USDA Forest Service for tree counting. The DTM maintains counting statistics and cruise notification for up to nine species or strata of trees. A programmable interface permits flexible customization of parameters such as fixed or random number cruise notification, individual counter reset and power-saving options.

The SDTDC design, shown in figure 2, is a pocket-size, 7.0 ounce (198g) electronic instrument that counts, records, and stores field data. The stored data can be downloaded to a computer and printed for a permanent hard copy record. It is lightweight, durable, water-resistant and rechargeable. A lanyard ring is attached to the bottom of the meter so it can be worn around the neck for quick accessibility.



Figure 1. TM-100 Digital Tally Meter developed by SDTDC and Gateworks Corporation.

Features

- 2 line x 12 character backlit LCD display
- 12 key membrane keypad for "one touch" tally of up to 9 species or strata
- Automatic LCD contrast eliminates manual adjustment



For additional information contact : Forest Management Program Leader, San Dimas Technology & Development Center, 444 East Bonita Avenue, San Dimas, CA 91773-3198; Phone: 909-599-1267; TDD: 909-599-2357; FAX: 909-592-2309; DG—SDTDC: WO7A. IBM: Mailroom/wo,sdtcdc FS web: <http://fsweb.sdtcdc.wo.fs.fed.us> E-mail: Mailroom/wo_sdtcdc@fs.fed.us

- Tactile push button feedback
- Fixed or random cruise notification for each species or strata
- Storage for height, diameter and defect percentage for up to 100 trees standard version, 1500 trees on expanded version
- Audible alarm to indicate cruising required
- Menu driven programming interface
- Programmable power-saving operation
- Programmable tree species/strata identifiers
- Low battery/recharge indicator
- Automatic self testing

- Embossed keys for operation by touch
- RS232 port for data transfer to computer
- 1 year warranty
- High impact ABS plastic case.

Pricing

TM-100 Digital Tally Meter	\$269.00*
Set of 2 Long Life AA NiCad Batteries	\$15.00
TM-100 Battery Charger	\$25.00
RS-232 Serial Data Cable	\$20.00
TM-100 Digital Tally Meter Starter Kit	\$299.00*
(Includes TM-100, 2 AA NiCad Batteries, and Charger)	

* When ordered directly from Gateworks Corporation.

Specifications

Dimensions	6 x 2.5 x 1 in.(152 x 64 x 25 mm)
Weight	7.0 ounces (198 g)
Battery Type	2 AA NiCad
Battery Life	30 hours continuous use
Mean Time Between Failure.....	50,000 hours minimum
Flash Memory	Retains data during battery change/recharge
Operating Temperature	-20° to 50° C (-4° to 122° F)
Storage Temperature	-30° to 60° C (-22° to 140° F)
Side Viewing Angle.....	45 degrees
Character Size	0.10 x 0.22 in.(2.5 x 6 mm)
Character Format.....	5 x 7 dot matrix
Shock.....	20 G (196 m/s ²)

Distributor

Gateworks Corporation
 7631 Morro Road
 Atascadero, CA 93422
 Phone: 805-461-4000
 Fax: 805-461-4001
 E-mail: sales@gateworks.com

Any questions regarding their DTM should be directed to Gateworks Corporation. They will also be happy to discuss any unique applications with you.



Figure 2. The TM-100 Digital Tally Meter is pocket-size and has a lanyard ring on the bottom of the case so it's easily carried around one's neck.

TallyTax Electronic Counter

The TallyTax, shown, in figure 3, is an electronic counter with six separate counting units. The same display is used by all six counters. The TallyTax is small enough to fit in a pocket.

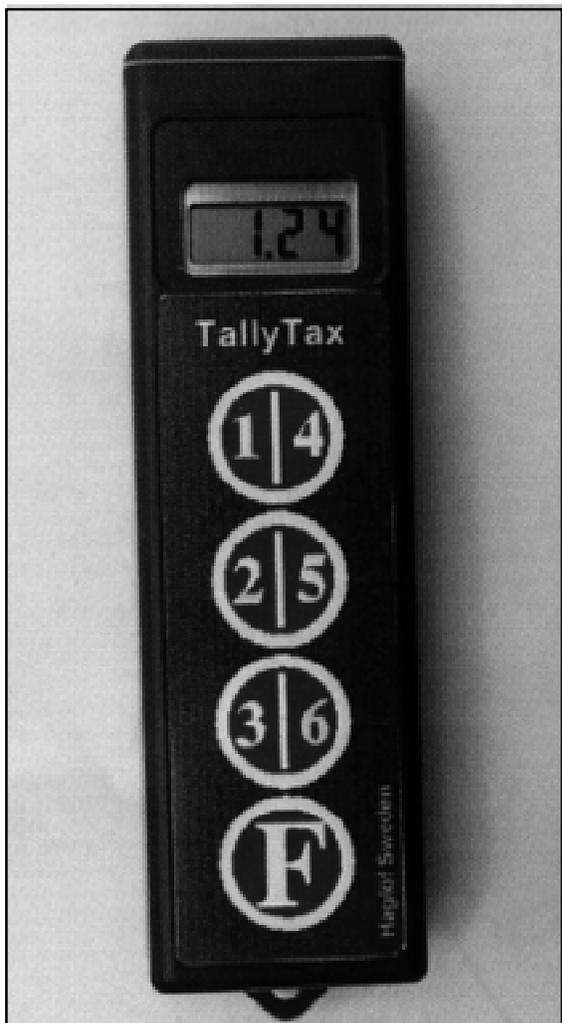


Figure 3. TallyTax Electronic Counter developed by Haglof/USA.

The following is an example of how the TallyTax operates:

- Press button “2|5” and counter number 2 will add one (1) step.
- Press button “F” and button “2|5” simultaneously, and counter number 5 will add one (1) step.
- Reading and controlling a separate counter can easily be done during work.
- Zero-setting is made by pressing all 6 buttons simultaneously.

The TallyTax counter can be used in a number of situations such as inventory, production, planning, etc. The unit costs less than \$120.00.

Specifications

Dimensions	30 x 40 x 125 mm
Weight	215 g
Battery Type	9V alkaline
Battery Life	4 months continuous use
Flash Memory	Will maintain data when battery is down.

Distributor

Haglof/USA
P.O. Box 2548
Madison, MS 39130-2548
Phone: 601-856-5119
Fax: 601-856-9075

Information on TallyTax was obtained from the manufacturer’s literature and was not tested by SDTDC.



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