**DEVISER**

# Deviser S30 Miernik satelitarny

- *• w pełni zaspokaja potrzeby instalatora*
- *• można go zaprogramować przy pomocy PC*
- *• bardzo krótki czas reakcji ułatwia ustawianie anten*
- *• dużą niespodzianką jest przydatny tryb analizatora widma*
- *• ma opcję wysyłania komend DiSEqC*

**DEVISER S30**
Handheld Satellite Meter

**RECOMMENDED PRODUCT BY** ▼

**TELE-audiovision**
THE WORLD'S LARGEST DIGITAL TV TRADE MAGAZINE

**VIP**
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S30 Satellite Meter

RF-IN

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# Very Useful Tool For a Professional Installer or Amateur

It is difficult to spot differences between S30 and its older brother S20 we presented some time ago. Except for the model number, only the name has changed from Satellite Finder to Satellite Meter. However, when we started using it, it became obvious that the changes are not only cosmetic.
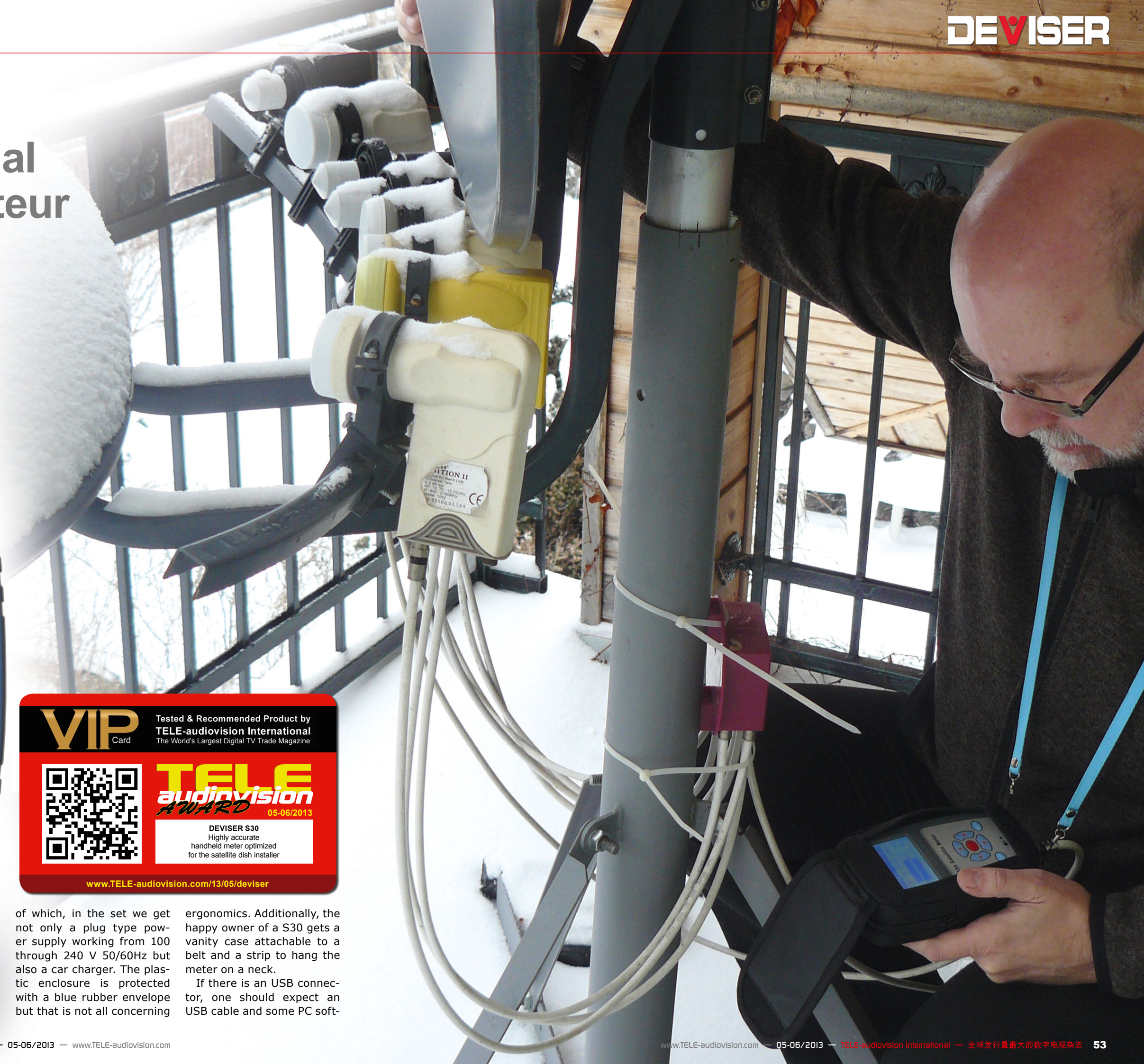
The look and feel of S30 is practically the same as its predecessor's – what is a good thing because nothing has been lost in its ease of use and sharp learning curve the first user experiences. S30 has a very clear 128x64 backlit LCD and seven buttons. There are three connectors for the antenna cable, USB cable and a power supply unit. Speaking
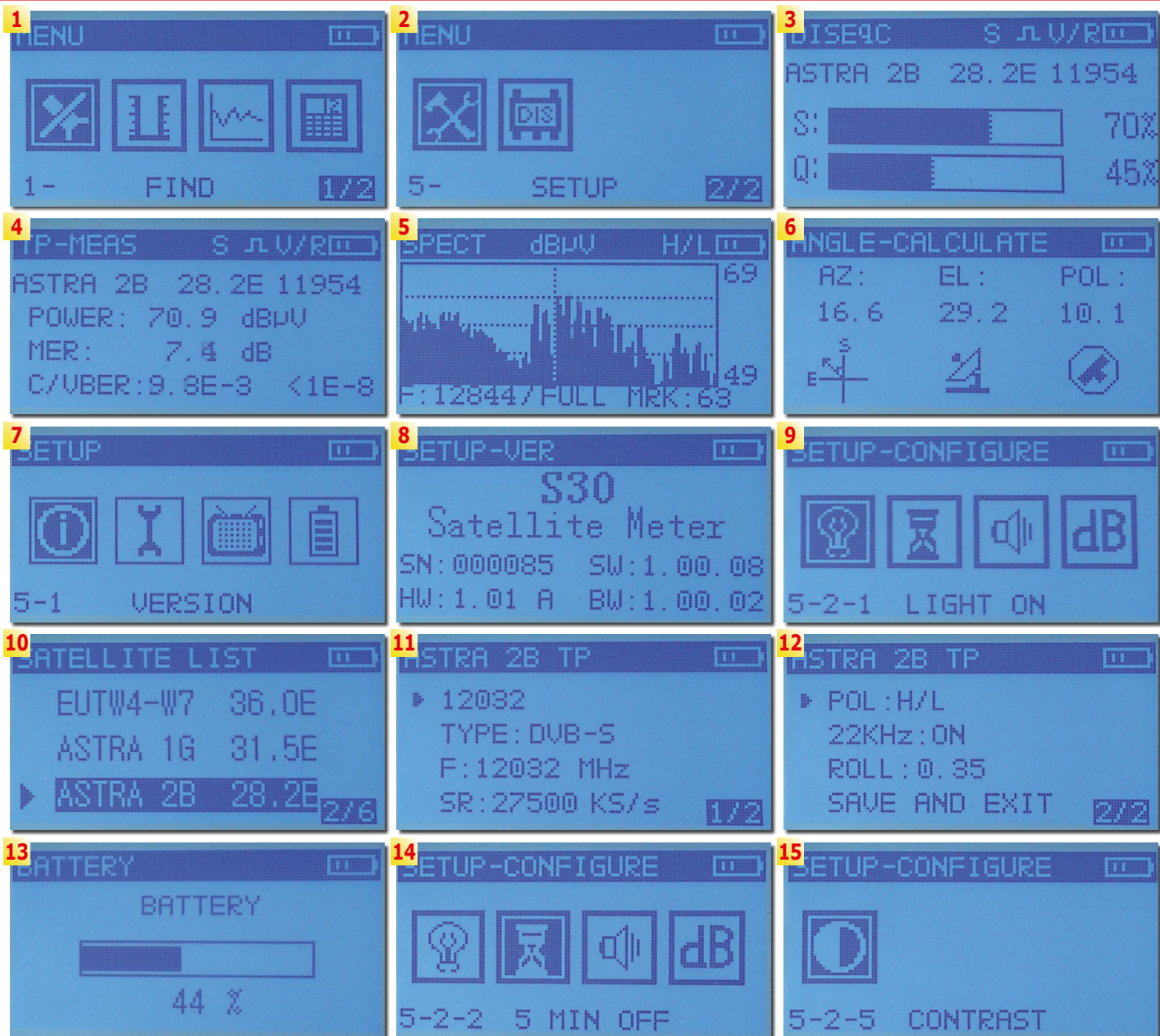


of which, in the set we get not only a plug type power supply working from 100 through 240 V 50/60Hz but also a car charger. The plastic enclosure is protected with a blue rubber envelope but that is not all concerning

ergonomics. Additionally, the happy owner of a S30 gets a vanity case attachable to a belt and a strip to hang the meter on a neck.

If there is an USB connector, one should expect an USB cable and some PC soft

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# DEVISER



**1** MENU
1- FIND   1/2

**2** MENU
5- SETUP   2/2

**3** DISEQC   S ⊓ V/R
ASTRA 2B  28.2E 11954
S: �@@@@@@@@@@@  70%
Q: �@@@@@@@  45%

**4** TP-MEAS   S ⊓ V/R
ASTRA 2B  28.2E 11954
POWER: 70.9 dBµV
MER:   7.4 dB
C/VBER:9.8E-3  <1E-8

**5** SPECT   dBµV   H/L
69
49
F:12844/FULL  MRK:68

**6** ANGLE-CALCULATE
AZ:    EL:    POL:
16.6   29.2   10.1

**7** SETUP
5-1   VERSION

**8** SETUP-VER
S30
Satellite Meter
SN:000085  SW:1.00.08
HW:1.01 A  BW:1.00.02

**9** SETUP-CONFIGURE
5-2-1  LIGHT ON

**10** SATELLITE LIST
EUTW4-W7  36.0E
ASTRA 1G  31.5E
▶ ASTRA 2B  28.2E  2/6

**11** ASTRA 2B TP
▶ 12032
TYPE: DVB-S
F:12032 MHz
SR:27500 KS/s  1/2

**12** ASTRA 2B TP
▶ POL:H/L
22KHz:ON
ROLL:0.35
SAVE AND EXIT  2/2

**13** BATTERY
BATTERY
44 %

**14** SETUP-CONFIGURE
5-2-2  5 MIN OFF

**15** SETUP-CONFIGURE
5-2-5  CONTRAST

**1. Main Menu (the first page)** - consists of: Find, Measure, Spectrum and Angle

**2. Main Menu (the second page)** - consists of: Setup and DiSEq

**3. Find function** - shows signal strength and quality along with the top values registered during antenna setup; there is also a beep generated with pitch changing in accordance with signal quality

**4. Measure function** - transponder parameter measurement results are displayed here

**5. Spectrum function** - the full bandwidth is shown; you can also zoom to 320, 160 or 80 MHz with the up/down arrow buttons

**6. Angle function** - displays the calculated azimuth and elevation angles for the entered geographical coordinates of the dish and the satellite position

**7. Setup submenu** - consists of 4 items: Version, Configure, Sat Settings and Battery

**8. Version** - as you can see, we tested a very early product with serial number 000085

**9. Configure submenu** - consists of five items: Backlight, Timer, Beep, Units and Contrast (the fifth one is visible after four presses of the right arrow button)

**10. Satellite List** - pops up right after entering Sat Settings; you are supposed to select a satellite in order to view its specific settings and transponders

**11. Transponder Settings** - the first page of two

**12. Transponder Settings** - the second page of two

**13. Battery** - indicates how much charge is still left in the internal battery
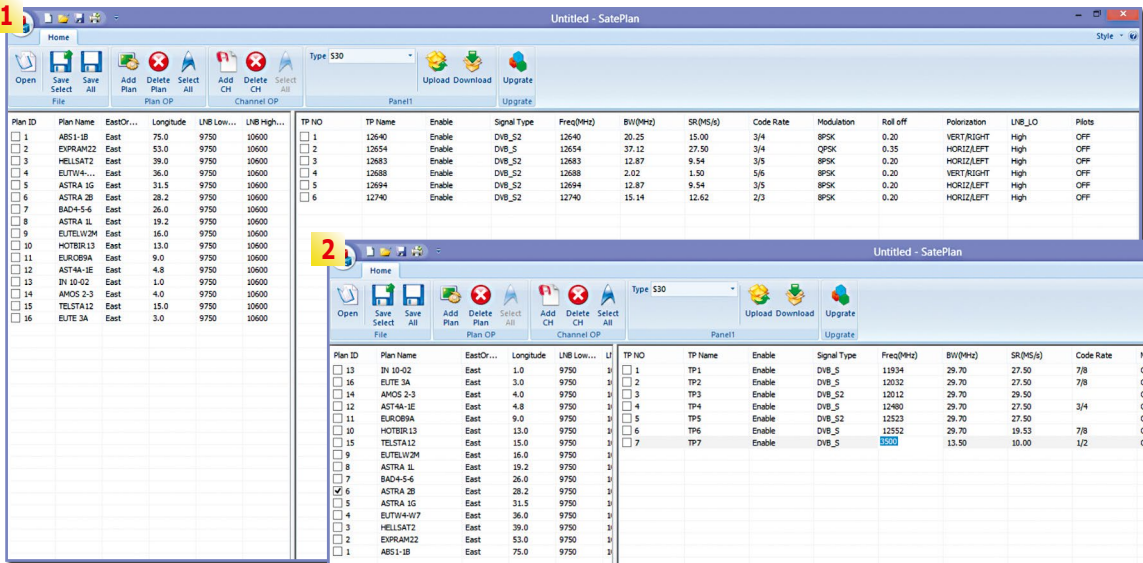
**14. Configure submenu (the first page)** - allows you to set backlight (on/off), inactivity timer (5, 15, 30 minutes or always on), beep (on/off) and units of power channel measurement (dbuV, dBmV or dBm)

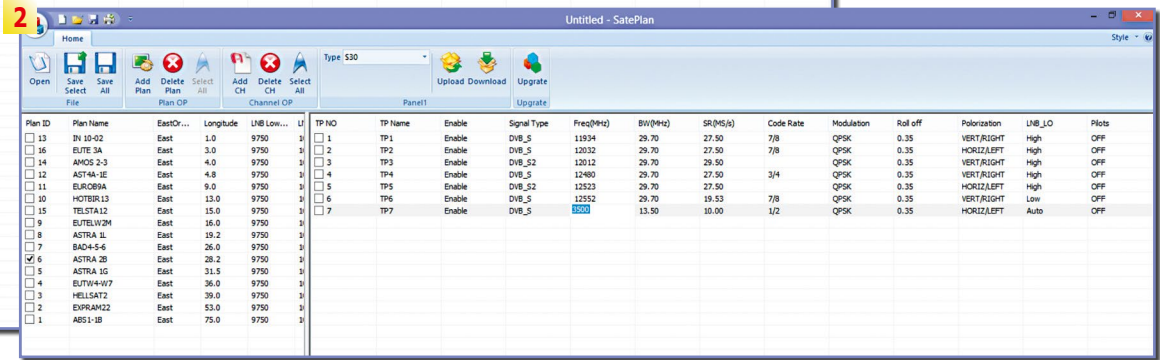**15. Configure submenu (the second page)** - allows you to set contrast of the display

ware, right? Right! You get all of them in the set. The software is provided on a small CD-ROM. Deviser also provides an Operation Manual in hard copy. The manual is very easy to follow and its electronic version is additionally available on the CD-ROM. The final items in the set are two female-to-female F connectors. You screw in one of them to the S30. The other one is a spare you can use when the first one if torn off due to frequent usage.

The small keyboard is self explanatory. You have 4 arrow buttons and a power/enter button in the middle. Below them, there are two buttons for entering the menu and leaving it. If you need to change settings, you simply highlight it and the use up/down buttons to change a digit. Some non-numerical settings, like satellite names, can be edited on a PC and later downloaded to S30 thanks to the SatePlan Editor software for Windows.

When you power up the S30 for the first time you'll truly enjoy its display. It is very easy to read thanks to the backlit. The meter starts with its signal finding window in which you can directly select the desired satellite and its transponder. Except for the signal strength and quality bars, the Deviser S30 shows the maximum values registered so it is very easy to see that we had turned our dish a little bit too much

and signal started to drop. If this is more practical for you, you can even not pay too much attention to the readout but listen to the beep the S30 generates. The higher the pitch, the better the antenna alignment. We want to praise Deviser for the very fast response. It reacts immediately for even the smallest movement of a dish.

Our S30 test sample had 16 popular European satellites per-programmed. If the transponder selection for a given satellite does not suit your needs, you enter the Main Menu (button MENU) and navigate to Setup - Satellite Settings where you can adjust all parameters of any transponder associated with the satellite. It is normal that not all satellite beams cover the whole continent, so even if you live in Europe and you bought the S30 here, it can happen that some of the pre-programmed transponders are not receivable in your region. Editing parameters is easy

as everything else in S30.

If you put a little more effort and install the SatePlan software on your PC (Windows OS), the edition will be even easier. Additionally, you will be able to add new satellites, new transponders, enable some of them or disable others. The editor software is much more convenient than the one we remember from S20. It is here were we noticed the important differences between the new S30 and its predecessor S20. Very important: the S30 can measure DVB-S2 transponders, something what its older brother S20 could not do.

In this class of meters, the spectrum view is often just a gadget of little use. But not with the S30. Once you display a spectrum view, you can set a marker on a transponder "mountain", press the Enter button and the S30 will automatically recognize all its parameters (frequency, SR, DVB type, FEC) and display its measurement

results. It was really a very nice surprise for us to discover this. In this way you do not even have to care about checking satellite charts. This is another new feature in S30.

We were also pleased to find the DiSEqC 1.0 and 1.1 submenu. Using it, you can send a command to switch to a given signal source. We tested it with a DiSEqC 1.1 switch in our test antenna setup and everything was working as expected. Thanks to this function, you can not only verify that the antenna is aligned correctly but also that the whole distribution system is OK.

After checking the functions and features, the time came to compare the Deviser S30 to another meter and see if its measurement results are really credible. We selected a very good and very expensive signal analyzer as our reference. Tables below show the results for two satellites: ASTRA on 28.2° East and EUROBIRD on

| ASTRA on 28.2 East | | | | | S30 | | Reference Meter | |
|---|---|---|---|---|---|---|---|---|
| Transponder | Frequency | Pol. | Type | Symbol Rate | Power [dBuV] | MER [dB] | Power [dBuV] | MER [dB] |
| 1 | 11934 | V | DVB-S | 27500 | 73.6 | 10.3 | 71.8 | 9.4 |
| 2 | 12032 | H | DVB-S | 27500 | 69.2 | 8.5 | 69 | 7.5 |
| 3 | 12012 | V | DVB-S2 | 27500 | 70.1 | 10.7 | 70.2 | 9.9 |
| 4 | 12480 | V | DVB-S | 27500 | 66.1 | 10.1 | 69.6 | 10.4 |
| 5 | 12523 | H | DVB-S | 27500 | 64.5 | 8.4 | 65.1 | 7.3 |
| 6 | 12607 | H | DVB-S | 27500 | 70.1 | 9.5 | 68.5 | 8.5 |

| EUROBIRD on 7 East | | | | | S30 | | Reference Meter | |
|---|---|---|---|---|---|---|---|---|
| Transponder | Frequency | Pol. | Type | Symbol Rate | Power [dBuV] | MER [dB] | Power [dBuV] | MER [dB] |
| 1 | 11727 | V | DVB-S | 27500 | 67.3 | 9.6 | 67.2 | 8.6 |
| 2 | 11900 | H | DVB-S2 | 27500 | 69.5 | 9.3 | 67.9 | 8.2 |
| 3 | 11919 | V | DVB-S | 27500 | 66.5 | 8.6 | 64.8 | 7.6 |
| 4 | 11996 | V | DVB-S | 27500 | 64.5 | 9.2 | 63.1 | 8.1 |
| 5 | 12130 | H | DVB-S | 27500 | 68.6 | 10.4 | 66.1 | 9.4 |
| 6 | 12322 | H | DVB-S | 27500 | 67.1 | 10.3 | 65.6 | 9.4 |

7° East. The S30 was a little bit too positive in its measurements. It showed about 1 dB more in both: channel power and MER. Such small difference is in fact a good result. So far, we never found two meters showing exactly the same values. Usually, the difference was even greater than that between the S30 and our reference. So, we confirm that the Deviser S30 results are credible.

Because the test results were so good, we could not resist to check if the S30 could match our expensive analyzer with a very, very weak signal of low symbol rate. We selected the EUROBIRD transponder 11389 H SR=3642. Our reference meter measured the power as 62.2 dBμV and the MER as 3.8 dB. Practically it was a reception at threshold.

The Deviser S30 was able to measure the power (56.3 dBuV) but could not to lock to the signal and measure its MER. It is not a shame for this class of a meter. We would be extremely surprised if it could match our reference.

If you are thinking about buying a satellite meter, you should ask yourself: shall I really be forced to measure such weak signals? Usually, there are much stronger transponders receivable next to weak ones - like in the case of EUROBIRD. And you can perfectly align the dish using rather the strong transponders than the weak ones.

To sum it up, we can truly recommend Deviser S30 to all but extremely demanding professionals dealing with complex problems in satellite reception. The S30 is fast in responding, very easy to use, and easy to reprogram. Not only the meter itself but also its PC software is more matured than for the older S20. Its workmanship leaves nothing to be desired.

## EXPERT OPINION

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**+**
- Ease of use
- Fast response
- Accurate measurements
- Good workmanship
- Many useful accessories

**−**
- No DiSEqC 1.2 and USALS for motorized systems

## TECHNICAL DATA

| | |
|---|---|
| Manufacturer | Deviser Electronics Instrument Co., Ltd. |
| Fax | +86-22-27645002 |
| E-mail | overseasbiz@deviser.com.cn |
| Web page | www.devisertek.com |
| Model | S30 |
| Function | Satellite Antenna Meter |
| Input Frequency | 950~2150 MHz |
| Input Signal Level | 30~110 dBμV |
| Symbol Rate | 1~45 Ms/sec |
| LCD | 128 x 64 pixels |
| LNB max current | 400 mA |
| Power Supply | 12 V DC 1.2 A |
| Operating Time | 2.5 hours when fully charged |
| Charging Time | 3 hours |

## MORE ABOUT THIS COMPANY

www.TELE-satellite.com/TELE-satellite-1107/eng/deviser.pdf



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