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Cable Meter

User Manual

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1. Introduction

Thank you for purchasing our cable alignment meter. It should provide years of trouble free operation.

Please read this guide to familiarize yourself with all the features and options available.

Take care of the meter by keeping it warm and out of the rain.



2. Supplied items



Maxpeak CAM
Cable Alignment Meter with
protective leather case



Spare F to F Connector



IEC to F adapter



USB Cable



Car socket charger



Wall socket charger



Mains lead for region

3. Getting started

Before using the instrument, a full charge should be performed (as described in Chapter 4).

On our website www.maxpeak.tv ; Click on the “new instrument wizard” and follow a few steps to create a user profile and download firmware and settings.



1. Create a Maxpeak user profile:

• Navigate to our website: “www.maxpeak.tv”

- The website senses your location and language automatically. If your language choice is different and available, click on the flag in the top right hand corner.

! The website language is the language that will be loaded in the firmware. e.g. if you have selected English, then the meter will be in English as well.

• Create the profile.

- Enter the security number from the picture.
- Enter a “User name” and “Password” and valid email address.

! The e-mail address entered in the procedure needs to be valid. A confirmation e-mail is sent to this address and your account will not enable until you reply to it.

If you do NOT receive a confirmation email within 5 minutes, it is likley your virus program and / or email provider has treated the email as SPAM. Try to retrieve the email or follow the alternative method.



The USB socket is located under the rubber moulding on the instruments left side.



2. Product Registration, connect to pc:

● Connect the meter to the computer

- Lift rubber molding on left side of the instrument to reveal the USB socket.
- Connect the USB lead from the instruments USB socket to the computer USB interface.
- If connecting for the first time: follow the Windows driver installation process.

❗ *Help with driver installation is available from our website, www.maxpeak.tv/support.php
If windows cannot find the driver it can be downloaded from our support pages.*

● Register product online

- Download the “Registration” program. Next register the product.
- The firmware is selected automatically.
- Now select the required settings (transmitters) from the right hand side. A maximum of 70 can be selected.
- Download the “Maxpeak Installer” and install the firmware and settings.

❗ *Help with product registration is available from our website, www.maxpeak.tv/support.php*

3. Update firmware and download settings:

● Firmware update

- Make sure you are logged in on the Maxpeak website and that the instrument is connected to the computer.
- In the top right menu, click 'Products'. Then in the left menu, click 'Firmware Download'.
- Follow the instructions given at the 'Firmware Download' page.

! *Help with firmware download is available from our website, www.maxpeak.tv/support.php*

● Settings download

- Make sure you are logged in on the Maxpeak website and that the instrument is connected to the computer.
- In the top hand menu, click 'Products'. Then in the left menu, click 'Settings Download'.
- Follow the instructions given in the 'Settings Download' page.
- Please note, the website will remember your settings from previous selections. This helps if you want to retain your last choice and simply want to update for the latest settings.
- You can add and / or remove settings.

! *Please note that once a setting download has taken place the previous settings are over written.*

! *Help with settings download is available from our website, www.maxpeak.tv/support.php*



Before updating firmware and download settings, remember to be logged in with a Maxpeak user account and that the instrument is connected to the computer.

4. Charging procedure



The charging socket is located under the rubber moulding on the right side of the instrument.



Only use the included car or wall socket chargers for charging the meter.



Press Select to use the meter while charging

The meter is delivered with a nominal charge only. It needs 24 hours of initial charge before usage. The battery reaches full capacity after a couple of charges.

Charging procedure:

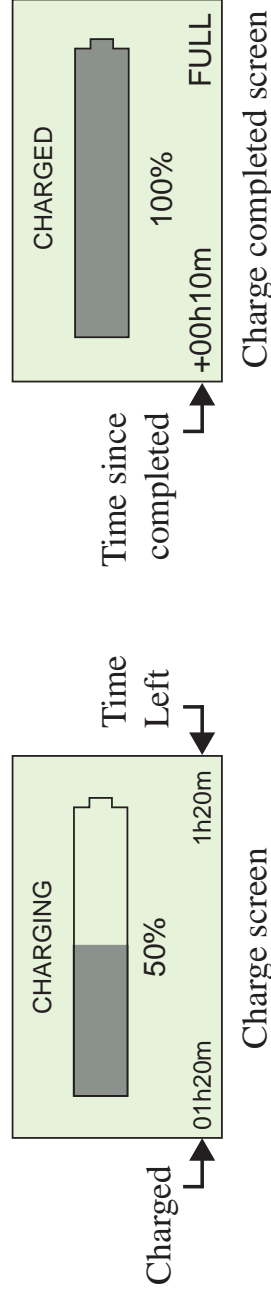
- Lift the rubber moulding on the top right side of the instrument to reveal the charging socket.
- Plug the lead from either the included car¹ or wall socket chargers to the instrument.

⚠ *Please note that warranty is not valid if another non-supplied charger is used.*

- Now the battery is charging. A full charge will take 3 hours.

➡ *Removing the charger from the charging socket puts the instrument in Standby-mode.*

- Press Select button to put the meter in meter mode² while charging, after 10 minutes the meter returns to the charge screen



¹ Some vehicles need ignition turned on in order to provide power to the cigarette lighter socket.
² Using the instrument while charging may result in less accurate measurements.

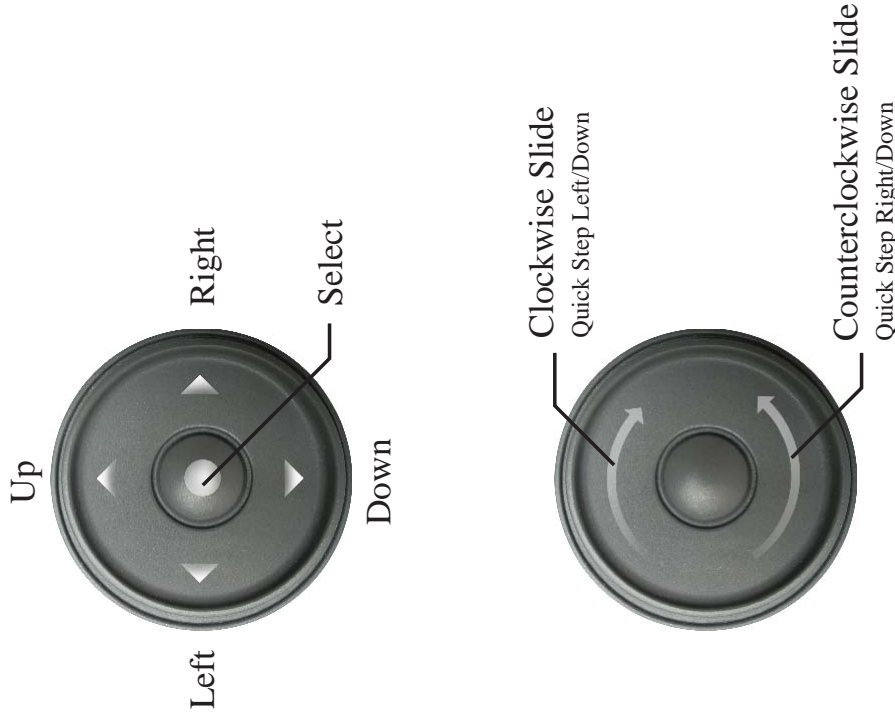
5. Touch-wheel control

The meter is controlled using a touch sensitive wheel and a distinctive Select button at the wheels centre.

- The meter is switched ON/OFF by keeping the “Select” button pressed.
- A shorter “Select” click¹ is used for data entry in the Setup view and Transmitter menu.

The wheel can be used in two ways:

- Standard four way navigation, by clicking¹ the wheel in each direction as shown in the top picture.
- Quick Left/Right stepping of values by dragging clockwise or counterclockwise as in the bottom picture.



6. Power up and shut down



Power Up:
Keep the Select button pressed.



Shut Down:
Keep the Select button pressed.

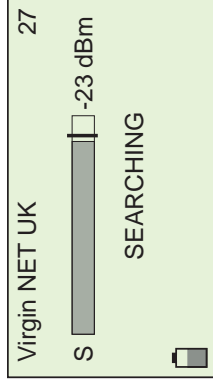
To turn the meter on, keep the “Select” button pressed for five seconds. At startup, the following information is displayed:



Firmware and settings file versions are displayed.

! To freeze this information, keep holding the Select button.

The meter then changes to the meter view:



The meter is now up and running. For the functionality available, please see: Chapter 7 - To adjust the antenna Chapter 8 - Setup view.

To shut down the meter, keep the “Select” button pressed, (similar when turning on the meter). When switching off, the screen below is displayed:



7. To check the signal.



Connect the F to F lead or other lead between the socket and to the connector of the instrument.

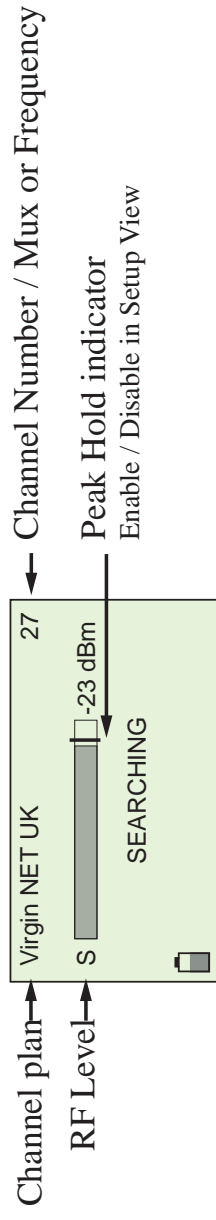
- Hook up the Socket with a F-connector.

⚠ *Use a screw of high quality on the F connector as it affects the readings. Do not use push-on F connectors as they are very unreliable, especially when they have been used a few times.*

- Connect the other end to the bottom of the meter and power up.

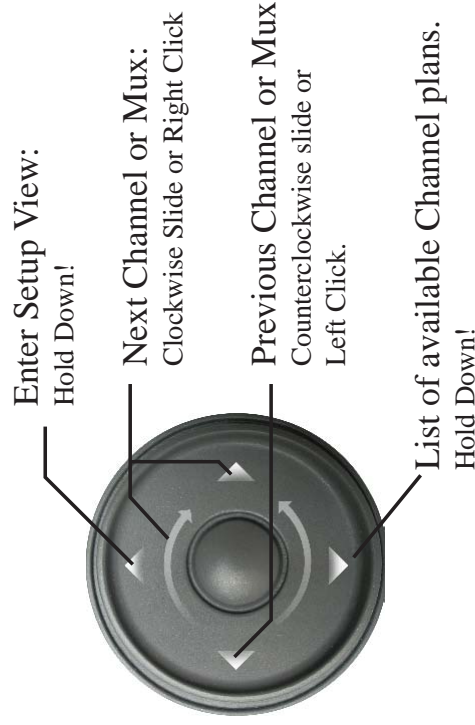
The meter view:

Initially the meter displays signal level and start to search for a match.

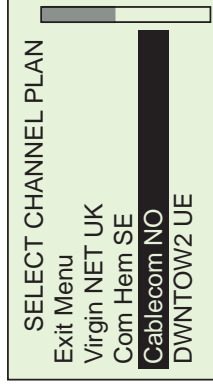


- To choose channel/mux, click Left / Right or slide the wheel.

When the preferred channel plan has been discovered, press the centre button to enter into channel/mux step through to check the selected transmitter.



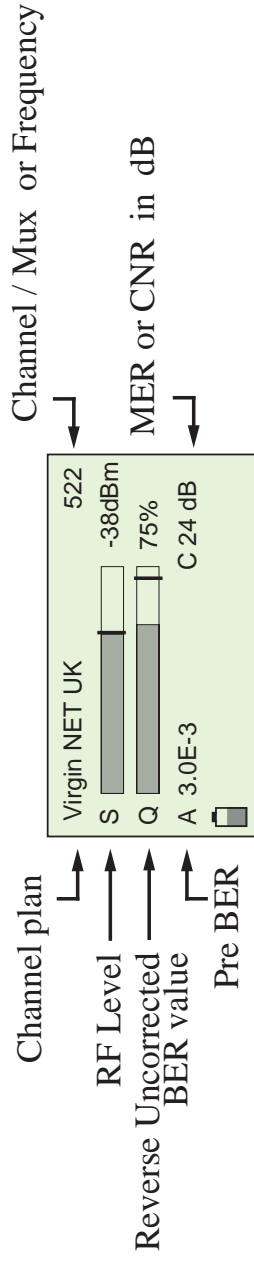
Hold down the “DOWN” to enter a menu where a new channel plan can be selected:



When a digital signal is found, the meter will beep twice and change from searching to include a Q bargraph together with numerical values for Pre and post BER and SNR or MER and CSI.

Check all channels and muxes for correct levels.

Please note that if no DVB-C transmission is on the selected channel / Mux, only RF Level will be displayed, e.g. an analogue channel!



8. Setup view / Scan mode

The Setup view is where settings and personal preferences are set. Enter the Setup view by holding “UP” on the wheel.

Enter Setup View:
Hold Up.



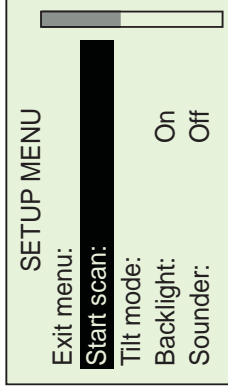
Hold finger at the top to enter set up mode.

Clockwise slide or Up:
Move Down
Press Select to change the selected value
Counter Clockwise slide or Down:
Move Up



Slide the wheel or press Left/Right to navigate the list of options

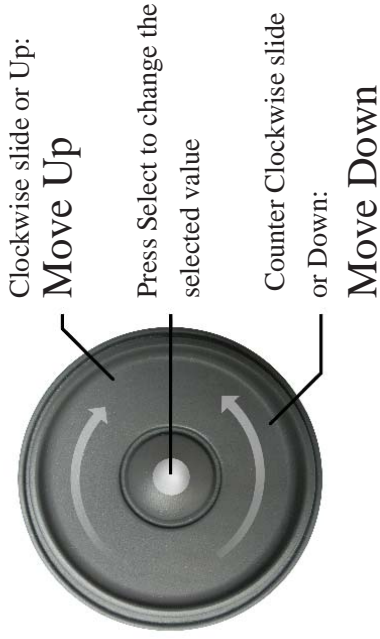
Press the centre of the wheel to enter a new value for the selected item.



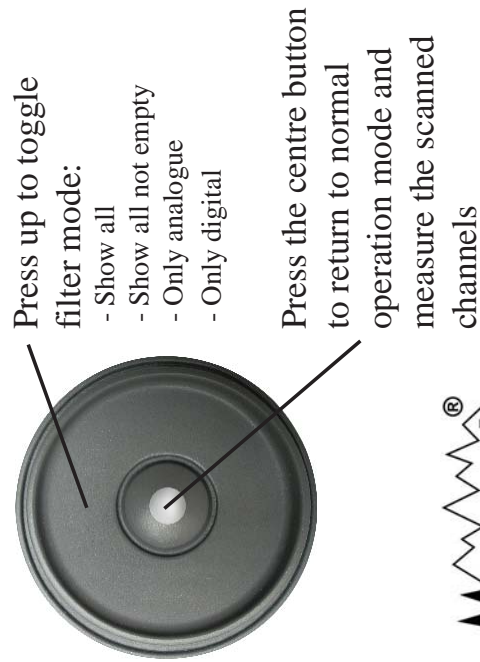
The following settings and choices are available:

Exit menu:		Exit back to meter view
Scan mode:		Enters the scan mode
Tilt mode:		Enters the tilt mode
Backlight:	On, Off	Display backlight. Turn off when not needed to save battery time.
Sounder:	On, Off	Sound feedback while peaking signal. Beeps faster as signal quality increase.
Auto shutdown:	Never, 3-15 min	Time before meter shuts off to save battery, default=6 min.
RF Level:	dBuV, dBm	Select RF Level display entity.
SNR/MER:	SNR, MER	Select whether to display SNR or MER value
Channel number / Frequency		Display either channel number or frequency
Peak Hold:	On, Off	A vertical hold line indicating the top value reached. This applies to all meter bars.
Touch sens:	Low, Medium, High	Adjust the touch wheel sensitivity.
Restore to default:		Restore the setup view menu values to factory defaults

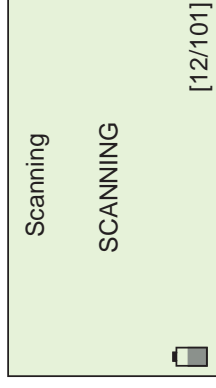
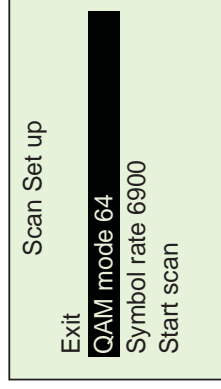
9. The Scan mode



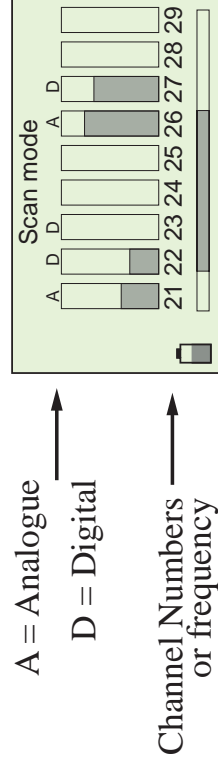
Slide the wheel or press Up/Down to navigate the list of options
Press the centre of the wheel to enter a new value for the selected item.



In the SCAN mode the meter can look for channels over the whole spectrum. First select the constellation mode (QAM) and symbol rate for the proposed SCAN.



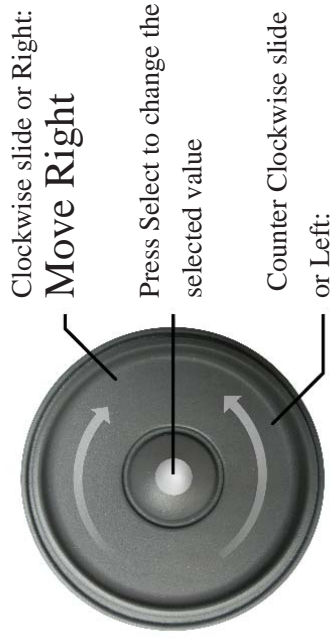
After scanning is complete, the channels and their levels are shown. All DVB-C digital channels are also indicated. 6 channels can be shown at any given time. Please note only digital channels with the selected QAM and symbol rate will be shown.



Empty bar means no signal!

Scroll bar indicating current position, use wheel to move left and right

10. Tilt mode.



Move Left

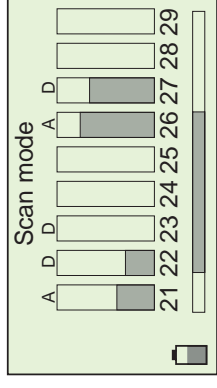
Slide the wheel or press Left/Right to select up to 5 channels.

Press the centre of the wheel to enter a channel.

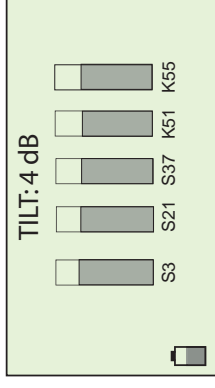
Press the center of the wheel to start measuring the TILT



In the TILT mode the meter can look for channels over the whole spectrum and then select 5 channels to check the tilt so amplifiers can be set up correctly. First select the constellation mode (QAM) and symbol rate needs to be set up, just like in SCAN set up menu.



After the SCAN is performed, please select 5 channels to be used to measure the scan. Simply move the cursor to the required channel and press center button to include this channel. Repeat for the other channels



After the 5 channels have been select (or less by exiting via center press) the tilt is displays in dB.

11. Battery replacement



Remove the screw located at the upper back side of the instrument.



Take away the battery lid and disconnect the current battery pack.



Attach the socket of the new battery to the connector on the instrument. Put the battery pack in place and put back the lid and screw.

The meter is powered by a replaceable NiMH battery pack. As with all batteries the pack will deteriorate in with time.

❗ To maximize the lifetime of the battery pack, make sure to use/discharge and recharge the meter frequently

When the battery pack needs to be replaced, spare packs can be ordered from an authorised reseller.

⚠ Do not use any other kind of non original batteries. A different pack can damage the meter and invalidate the warranty.

Battery Replacement:

Changing the battery pack is a simple procedure.

- Unscrew the screw and take away the battery lid.
- Remove the battery and disconnect the plug.
- Connect the new battery pack to the plug.
- Place the pack as shown in the bottom picture to the left.
- Initially charge the meter for 24 hours as described in Chapter 2 - Charging.

12. Specification

- Full Band VHF and UHF
- Replaceable F-connector
- 75 Ohm imp 30 to 100 dBuV
- RF Level as dBm or dBuV, Range -82 to -25 dBm 25 to 82 dBuV Precision +- 2.5 dB
- True MER or SNR displayed in dB Range 10 to 36 dB Precision +- 1 dB
- Pre and Post BER in numerical value Range preBER 0.001 % to 10 % Precision +- 5 %
- Quality displayed in % (reverse BER)
- RF,BER and MER displayed together
- Backlit graphics display 128*64 pixels
- Integrated rechargeable NiMH battery
- Charged from wall or car adaptor
- Meter operates while charging
- Run time in excess of 4 hours
- up to 70 transmitters
- Built in audible sounder
- All DVB-C constellations QAM 16, 32, 64, 128 and 256 catered for
- Upgrade of settings, firmware and language via USB 2.0
- 200 * 75 * 56 mm , 400 grams

The manufacturer reserves the right to change this specification without prior notice

Warranty

This product carries a manufactures warranty against faults or manufacturing defects for a period of 12 month from first registration of the product on the support website www.maxpeak.tv. Maxpeak reserve the right to replace or repair a faulty meter. The warranty does not cover misuse or damage caused by dropping the meter or if the meter has been opened.

Declaration of conformity:

We, the manufacturer, Maxpeak Ltd 2nd Floor Compton House 29-33 Church Road Stanmore HA7 4AR ENGLAND declares that TAM (terrestrial meter) meets the following standards and directives:

Low voltage : 73/23/EEC , 93/68/EEC EMC: 61000-6-1:2001 61000-6-3:2001 and ammendment A11:2004
RoHS

P Lagerstedt (Director) Potters Bar 1:st of May 2008



Recycle:



Please recycle the carton and packaging.

Do not throw out the NiMH battery, recycle!

Do not discard the meter at the end of useful life, recycle!

Notes

info@maxpeak.tv

www.maxpeak.tv