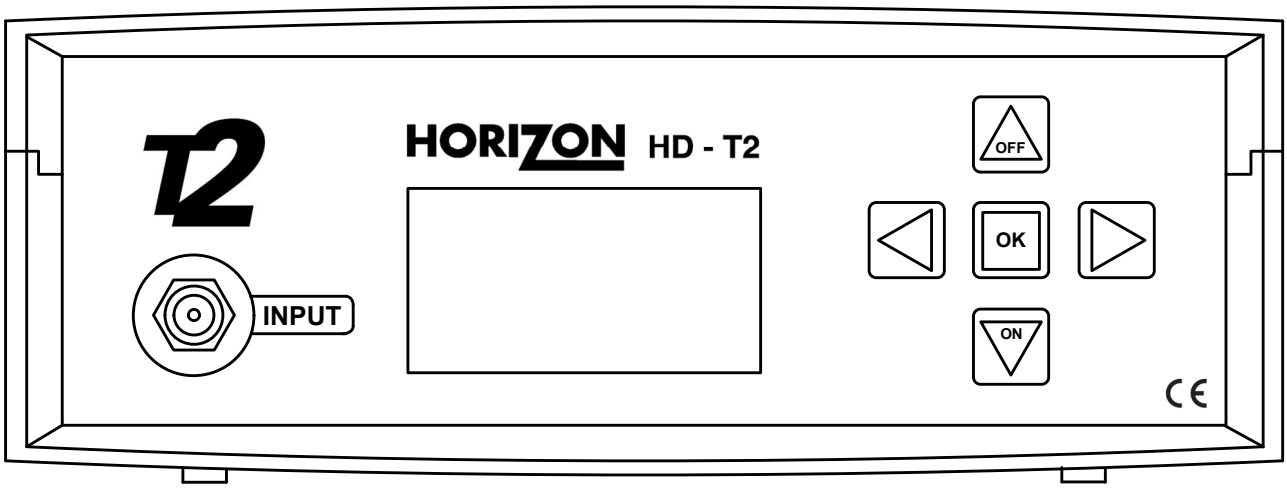
HD-T2
DVB-T2 Terrestrial Meter



User Manual

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Issue No. 1
Horizon Part Number: KM158

Contents

Please read through these instructions carefully before using your new HD-T2 meter to familiarise yourself with all of the features available.

Overview

Thank you for choosing to purchase the Horizon Global Electronics HD-T2 DVB-T2 terrestrial meter. The HD-T2 terrestrial meter features all the functions you will need to perform analogue, DVB-T and DVB-T2 installations.

The HD-T2 has an easy to read 128 x 64 pixel LCD with adjustable brightness and contrast, real-time measurement of analogue, DVB-T and DVB-T2, spectrum analyser, constellation diagram (including 256 QAM rotation), slope test, data logging (free software download), replaceable input connector, USB connectivity (for transmitter list updates), 12 Volt in-car charger, AC charger (built in), selection of transmitter by post code (UK only), a high capacity Li-ion battery, adjustable shoulder strap (detachable) and nylon carry case with an accessory pocket.

Meter MOT

Horizon Global Electronics is now offering a meter MOT service, so that you can be sure that your HD-T2 is always performing to a reliable standard and giving you the most accurate results for your installation needs. For more details on meter MOT please contact us directly at Horizon Global Electronics by calling us on **+44 (0)1279 417 005** or via our website ***www.horizonhge.com***

This symbol is used to alert users of a possible hazard while operating the unit.

- **WARNING! This device is capable of generating 12 Volts DC at the input connector.**
- Do not expose this meter to rain or moisture.
- Avoid storing your meter in a vehicle overnight as low temperatures will impact the battery life.
- Clean only with a soft dry cloth.
- Always use the protective case and cover provided.
- Read these instructions through carefully before using your meter for the first time.
- Care should be observed when using the carry strap as this can present a chocking hazard; only use the strap when slipping or falling is not a posibility.
- Do not disassemble your meter or interfere with the internal components; as this will void the warranty and there is the possibility of electric shock.

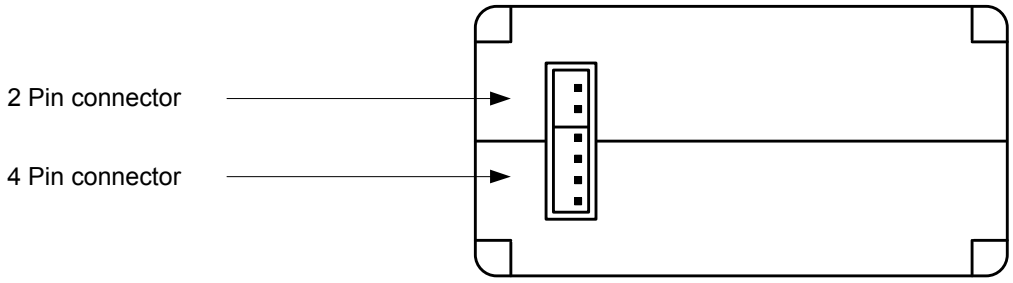
If this equipment is used in a manner that is not specified by the manufacturer, the protection provided by the equipment may be impared.

Battery safety

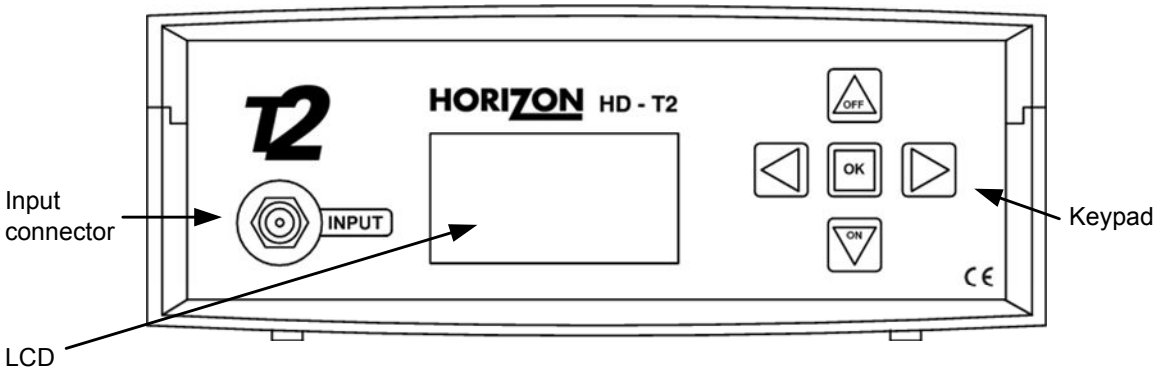
This meter is equipped a lithium-ion battery (Li-ion) that should only be charged by the meter either using the AC mains lead or DC car charger provided. The use of other types of charger may result in damage to your Li-ion battery back, your meter and be potentially dangerous (cause an electric shock). Always obtain official Horizon Global Electronics replacement batteries through our recognised distributors or from Horizon Global Electronics Ltd directly.

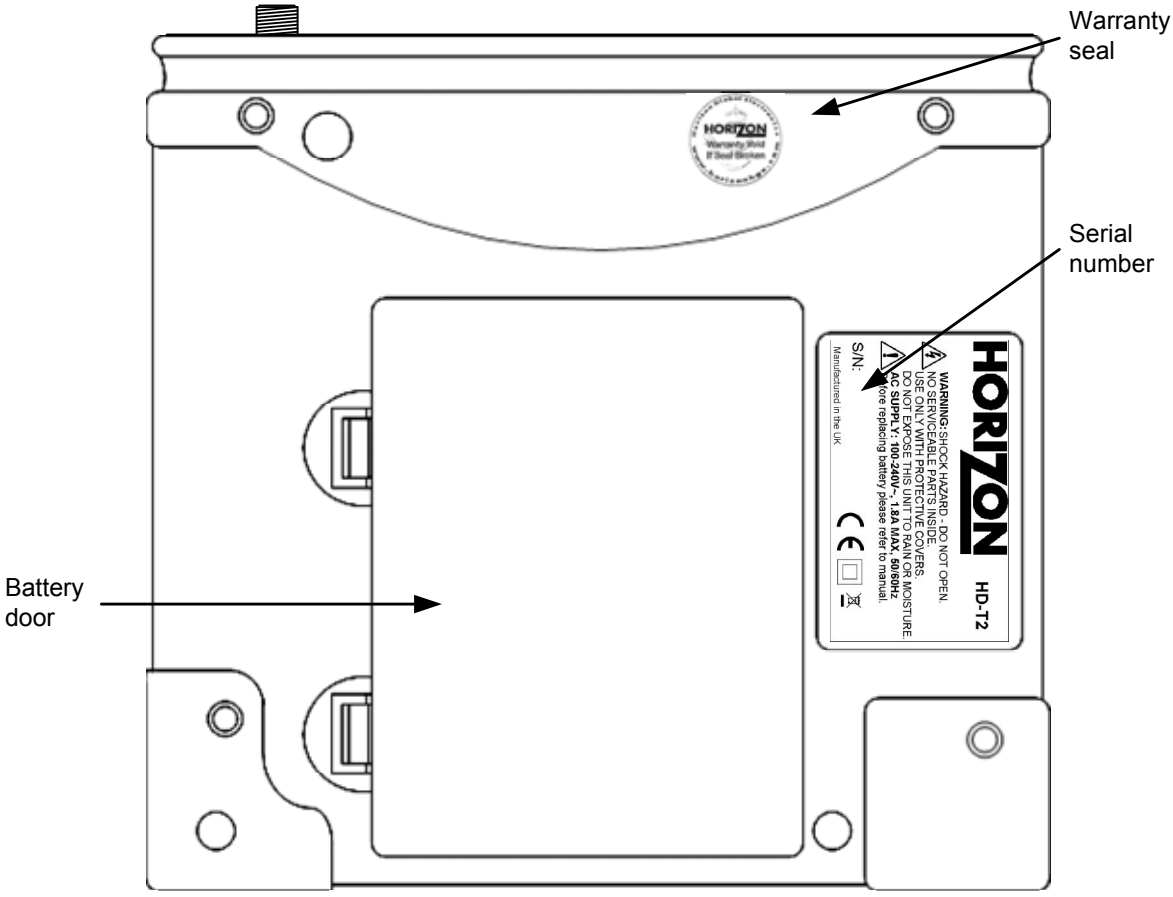
Li-ion battery notes:
A damaged battery can represent a hazard and should be replaced as quickly as possible. Always replace battery packs with genuine Horizon Global Electronics Ltd batteries – never attempt to repair them.

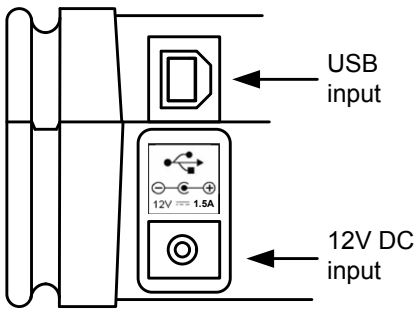
When it is necessary to disconnect the battery remove the 2 pin connector last. When refitting a battery connect the 2 pin connector first.

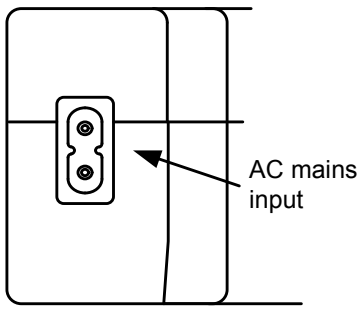


Remember:
Always follow the connection / disconnection information printed on the battery.
Do not short circuit the battery terminals.
Do not dispose of batteries in fire.
Do not disassemble the battery (there are no user serviceable parts inside).
If broken replace immediately.


HORIZON HD - T2
INPUT
OFF
OK
ON
Input connector
LCD
Keypad


Warranty seal
Serial number
Battery door
HORIZON
HD-T2
S/N:
Manufactured in the UK


USB input
12V DC input


AC mains input

The HD-T2 comes supplied with this instruction manual, and the accessories illustrated below. Please check that all of the items are present, if any items are missing contact your supplier.

Only the manufacturers replacement accessories should be used, otherwise the safety of the meter may be impaired and your warranty would be invalidated.

12V DC Car Charger Lead. Fitted with a 2 Amp protection fuse. (P/N: AW992CIG)

Li-Ion Rechargeable Battery Pack. (P/N: BP1501)

USB lead for transmitter list or firmware updates (P/N: AW998USB)

240V AC Mains lead. Fitted with a 3 Amp protection fuse. (P/N: AW993UKP)

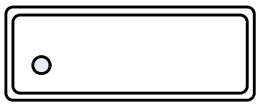
Replaceable F-F barrel connector (fitted) and UHF to F type adaptor.

P/N: JFFPC09F

P/N: JFFC494N

Nylon carry case with accessory pocket and detachable carry strap. (P/N: AL006BK-2)

Rain cover. (P/N: ARHDCM) The rain cover should remain fitted at all times.



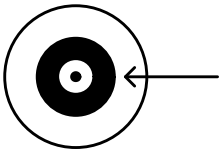
Periodically your input connectors will need replacing to maintain your meter's performance; please refer to page 5 for more details on how to remove and replace the input connector.

Safety note: Do not use the carry strap where there could be a risk of falling or choking. The carry strap is designed to support the weight of the HD-T2 meter and its accessories only; and should not be used for other than its intended purpose.

Maintenance

Note: Your HD-T2 features a replaceable F barrel input connector, and periodically these will require replacement and inspection to insure continued reliable operation. To remove the F barrel connector use an 11 mm or 7/16th spanner (or deep socket).

Carefully clean the surrounding area gently with a dry lint free cloth to prevent debris from falling into the F connector socket well.

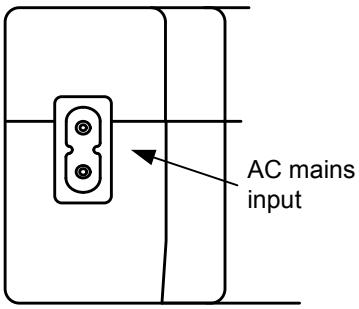


Tip: Check for any copper fragments that may have gathered in the well of the F barrel socket on the meter. These can be removed with a dry cotton bud or air duster. When replacing with a new F barrel connector avoid over tightening, it should only be tight enough to prevent removal by hand.

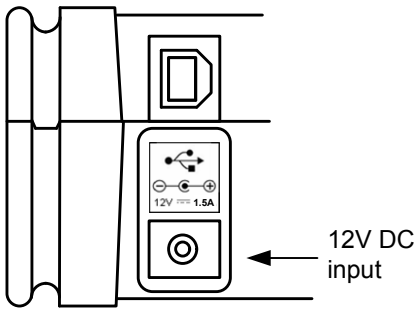
Battery charging

When you receive your meter the battery will be in a discharged state, we recommend an initial charge of 8 hours (or overnight) prior to first use.

There are two methods of charging the battery, AC mains (through the on board charger) or 12V DC through the car charger accessory supplied. Charging with AC is recommended and charging with DC is useful as a battery top up on route to the next installation when the battery power happens to be low.



For AC charging a suitable figure of eight mains lead is supplied. The charge circuit can operate on AC voltages from 90 to 250V



During battery charging the LCD will be active but not back lit, and the current percentage of charge will be shown along with the duration of time that the meter has been on charge. During charging the battery icon in the lower right of the display will animate.

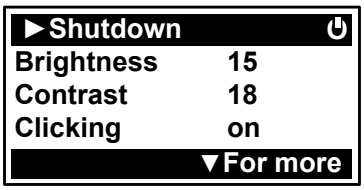
Once the battery charging has been completed the display will change to **Charge Complete;** at this point the battery is maintained with a low level charge.

Note: While charging your battery your meter will not operate.

Tip: We recommend that you charge your battery overnight prior to the next working day.

Note: When not in use the battery will slowly discharge (this is for the battery monitoring circuit) which is normal.

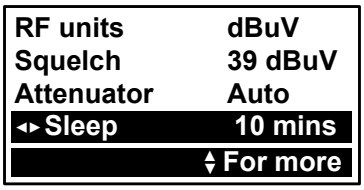
To access the setup menu on your HD-T2 meter while the meter is off press the **Off** button. In the set up menu you can customise the display **Brightness** and **Contrast**, turn on or off the audible **Clicking**, change the **RF units** of measurements, adjust the **Squelch**, set the **Attenuator**, set the **Sleep** timer, set the meter **Language**, restore the **Default** setup, verify the **Version** number and check the **Battery** voltage.



The Brightness can be set from Off (0) to 16 levels 14 or 15 is recommended.

The Contrast can be set from Off (0 which is invisible) to 40 (which is black) 18 to 22 is recommended.

Clicking can be set as On or Off.

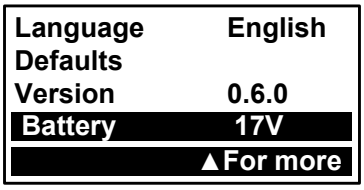


The RF units available are dBuV, dBmV and dBm

The Squelch can be set from 24 to 64 dBuV or -37 to +4 dBmV or -85 to -45 dBm this is the threshold adjustment where you can define what level represents a valid signal.

The Attenuator is ideally left in the Auto position but 10, 20 and 30 dB's of attenuation can be selected.

The Sleep timer can be set from 1 to 30 minutes or set to Never (always on). The sleep timer is a useful feature that will prevent your battery from accidentally running down.



The available languages are English, French, German, Italian, Spanish, Dutch, Polish, Swedish, Danish, Norwegian, Croatian and Finnish.

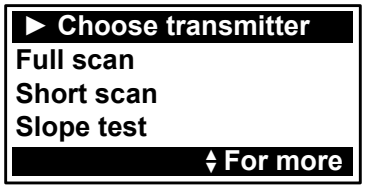
The Defaults function will reset the setup mode back to factory default.

The Version is for information purposes and has no other function.

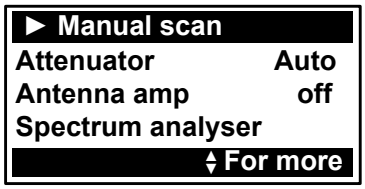
The Battery option shows the available battery voltage.

Once you have setup your meter to your preferences return to the top of the menu and press the right arrow button to exit and shutdown.

Main menu overview



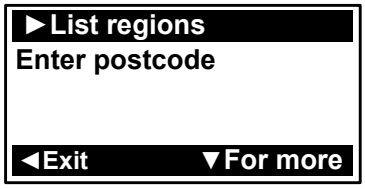
On switching on your HD-T2 meter you are presented with the main menu; (from here you can select the following options) Choose transmitter, this can be selected from the region list or you can enter a post code for a list of nearby transmitters (**Note:** Only the UK model features the post code function at this time), select Full scan of VHF and UHF frequencies where the meter will stop on any analogue or digital TV services found. The Short scan can be used once a transmitter has been selected, then the meter will only scan the known DVB-T and analogue transmissions from the selected transmitter. The slope test will give you a visual representation of the available modulated carriers coming from the selected transmitter. The Manual scan gives you the choice to search for DVB-T, PAL-I or DVB-T2 modulated carriers by using a marker to select a channel from a dynamic histogram. The Attenuator can also be adjusted. The Antenna amp enables you to power mast-head amplifiers directly with either 5V DC (for active antennas) or 12V DC for conventional mast-head amplifiers. The Spectrum analyser mode enables you to visually verify the presence of carriers or detect the presence of unwanted interference (for example from 4G data services). The Log transmitter function enables you to log the measurement values of the selected transmitter in a single group (with a unique reference number) for download to your PC and inclusion in your installation reports. The Log all function will log the levels of any carrier found within the scan selected.



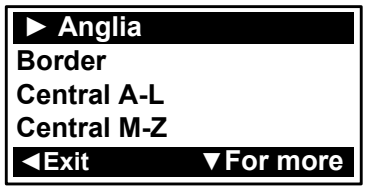
There is also the option to turn off the meter at the very top of this menu.

Choosing a transmitter

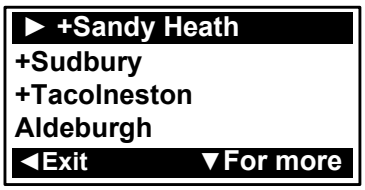
The HD-T2 offers three methods of selecting a transmitter, select by Region, Post Code Entry or from a favourites list. **Note:** On initially using your meter the Favourites will not be available as over time the HD-T2 will remember the last five selected transmitter for quicker access.



The List regions function will present you with a list of TV regions for your country and from there you can select the required transmitter.



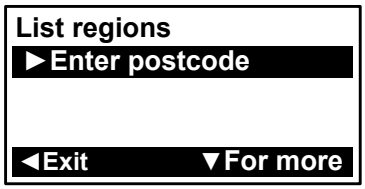
Anglia has been chosen in this example.



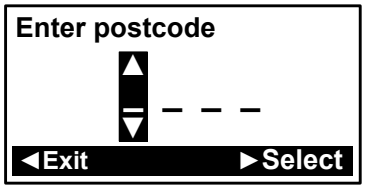
The available transmitters are listed.

Note: Use the arrow buttons to navigate the menus and the **OK** button to select.

Enter postcode



The HD-T2 features a useful transmitter lookup by post code feature this enables you to enter the first half of the installation site post code and you will be presented with a list of transmitters to choose from for that region. **Note:** The transmitter selections marked with a plus symbol are the power transmitters.



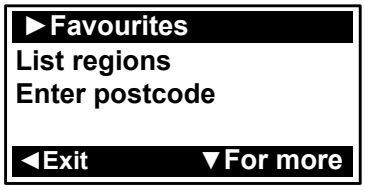
To enter a post code use the up and down arrows to select a number or letter and then press the right arrow button to step on to the next character. Once you are ready press **OK** to view the list of transmitters for that region.

Note: You can navigate back through the menus in the event of making a mistake.

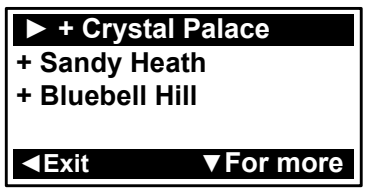
Note: This feature is only available for the **UK** at the time of publishing of this manual.

Favourites

As you use your HD-T2 meter the most selected transmitters will be remembered and placed in the favourites list enabling quicker access to your most commonly used transmitters.

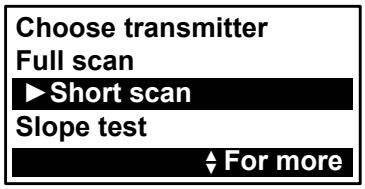


Favourites have been chosen in this example.

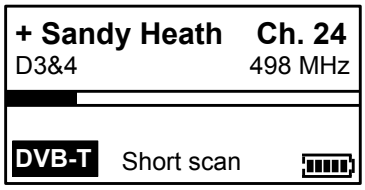


We can see that the main power transmitters for the south east are listed in the favourites.

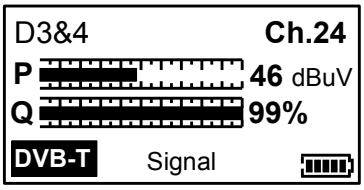
Once you have selected your required transmitter you are now ready to align your antenna.



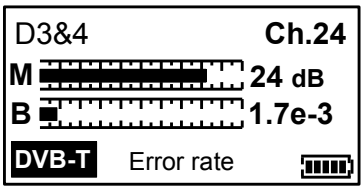
Your meter will default to Short scan and this option will step through the available servicers from the selected transmitter, stopping on next available service. The left or right arrow button can be used to choose the direction of the scan as required.



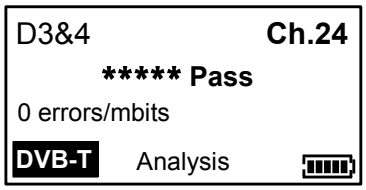
Here Sandy Heath was chosen as the transmitter and the first DVB-T mux has been found as indicated by the DVB-T inverse symbol in the lower left hand corner of the display. Press the On button to step through the different measurement modes.



The carrier (P) power is shown in the selected measurement value (in this case dBuV) and the Q represents the signal quality. In Short scan the mux name is also displayed at the top left, for example BBCA, BBCB or D3&4 etc.

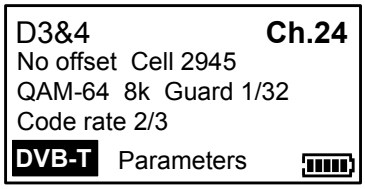


The MER and Bit Error Rate values are shown also.



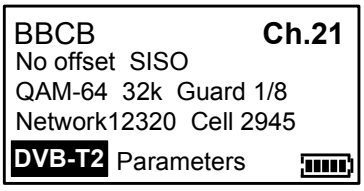
The visual analysis check there is a pass / fail indication along with the bits in error number.

Note: These steps illustrate the Short scan functions.

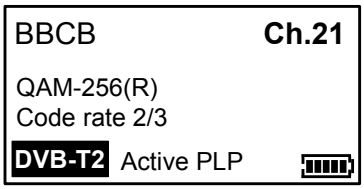


Finally the offset, Cell number and modulation scheme is shown.

DVB-T2

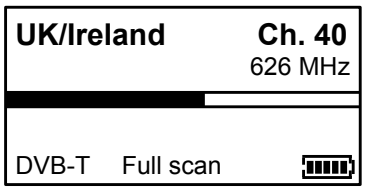


When a DVB-T2 service has been identified the service parameters are also available, here we can see that the service is single input single output (SISO).



There is also a further indication if the constellation is rotated along with the code rate of the service. Physical Layer Pipe is also indicated if present.

Full scan

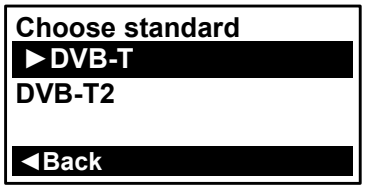


The Full scan mode is available without a transmitter being preselected and will scan for analogue, DVB-T and DVB-T2 services stopping on any service identified.

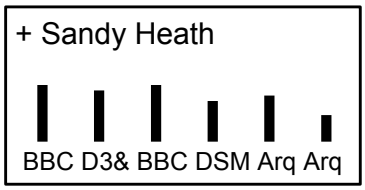
The mode shown in the lower left of the screen will alternate between digital (DVB-T/T2) and analogue (PAL UK) during the scan. **Note:** The direction of the scan can be changed by pressing the left or right arrow button.

Once a lock is acquired you will be able to cycle through all the measurement modes as seen previously in the Short scan, but without the transmitter mux identifiers.

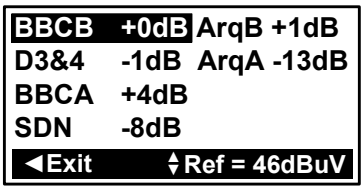
Slope test



The first screen of the slope test shows a histogram of the levels of each mux available from the previously selected transmitter. **Note:** Most transmitters at this time would only have a single DVB-T2 mux. Select the right arrow button to move on to the next screen.

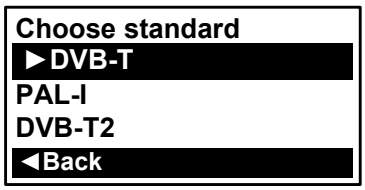


On selecting the standard the next screen of the slope test shows a histogram of the levels of each mux available from the previously selected transmitter. This is especially useful for the installation of distribution systems. Pressing the right arrow button again will show the slope comparison.

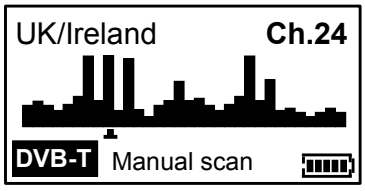


The next display enables you to compare levels, where the selected mux is referenced at 0 dB (zero) compared to the others.

Manual scan



When selecting Manual scan, you will then need to select a standard from DVB-T, PAL-I and DVB-T2.



The real-time histogram will enable you to select a channel number of interest. Depending on the mode selected the display in the lower left corner will reflect this choice and also indicate a lock. By selecting the On button you can view the measurement values directly.

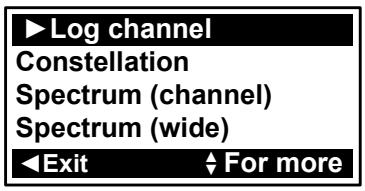
Use the left or right arrow buttons to move the marker to the required channel.

Pressing the OK button during this mode will take you to the Spectrum and Constellation modes.

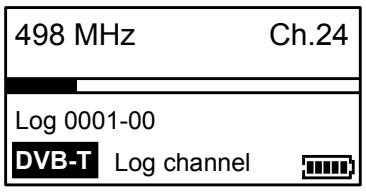
The HD-T2 features three types of logging Log channel, Log transmitter and Log all. When measurements are logged they are tagged with an incremental reference number for inclusion with your installation documentation. The data log file format is .csv which can easily be imported into the majority desktop applications.

Note: Log entries are only made when a valid carrier has been found (digital or analogue).

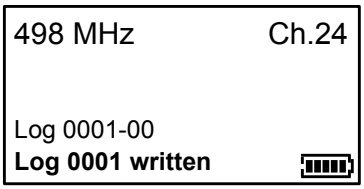
The log channel function is accessible from the secondary sub menu that is accessed with the **OK** button during measurement mode, the log transmitter and log all functions are directly available from the primary sub menu.



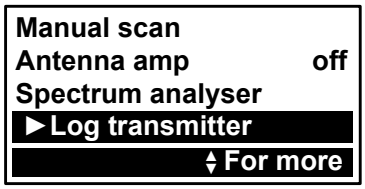
The secondary sub menu is shown here on the left.



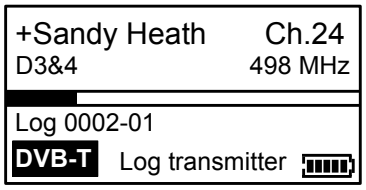
Here we can see that the measurement values of channel 24 are being logged to entry 0001-00.

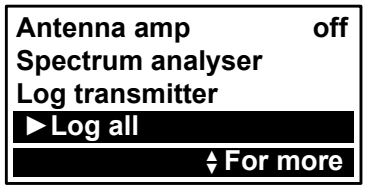


Once the log has been written you can press the **OK** button to return to the measurement mode, alternatively the meter will return to measurement mode after a few seconds.

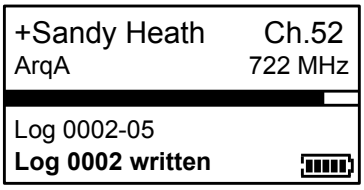


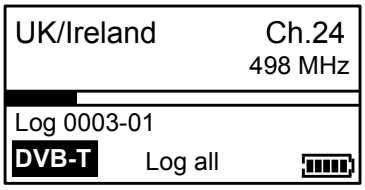
The Log transmitter function will group log all of the available services from the selected transmitter in an incremental fashion where the leading number remains constant and the number after the dash increments.



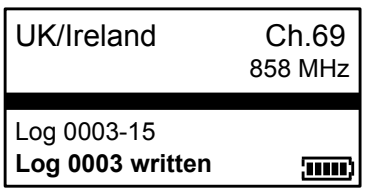


Log all will scan from the bottom of VHF to the top of UHF logging any carriers that are found above the squelch threshold.

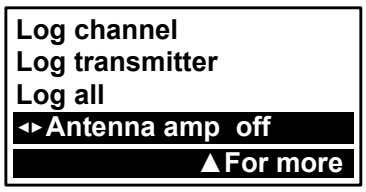




Note: To view your log results download the HD-T2 log reader application from the www.horizonhge.com web site.



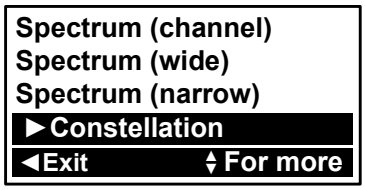
Antenna amplifier



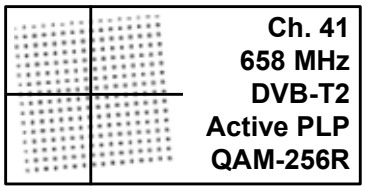
The HD-T2 features an on board DC supply of 5 Volts for active antennas and 12 Volts for mast head amplifiers. This feature makes it easier to install amplified antennas as a cable does not need to be run to provide the 5 or 12 Volts during antenna installation. With the Antenna amp option highlighted select the voltage required by using the right or left arrow button.

Constellation

The constellation feature is especially useful when tracing digital noise problems (4G), or over amplification.



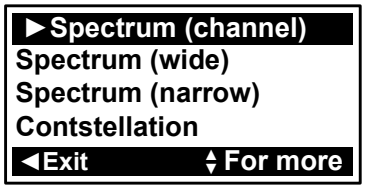
The constellation diagram function is only available once a lock has been obtained on a DVB-T/T2 mux and is available from the primary sub menu by pressing the OK button during the measurement mode.



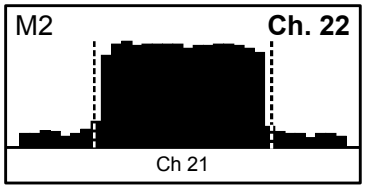
Shown here on the left is a QAM-256 Rotated constellation. To zoom in on the constellation diagram use the On button to select different regions of the diagram. QAM and QPSK constellations are supported. You can return to the measurement mode by pressing the Off button once.

When the constellation diagram is distorted it can indicate that the quality of the digital signal has been impaired.

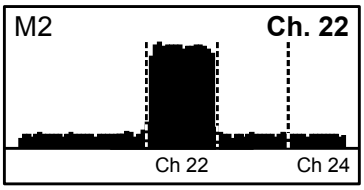
Spectrum



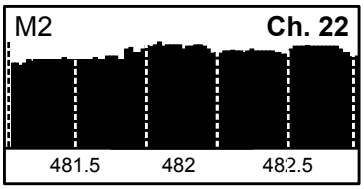
The HD-T2 features a spectrum display that can show signals present in the FM, DAB, VHF and UHF range of frequencies. If a transmitter has been selected then then mux name can also be displayed as illustrated in the examples below.



Selecting Spectrum (channel) will display the channel of interest in the centre of the display window. Press the left or right arrow buttons to navigate up or down frequency. Press the On button to exit to the measurement mode or the OK button to return to the primary sub menu.



Selecting the Spectrum (wide) function will show a wider span so that more adjacent carriers are visible.

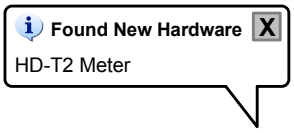


Selecting the Spectrum (narrow) function will fill the display with a narrow span of the selected channel.

The USB driver installation for the most part is automatic on connection of your HD-T2 meter to your computer via USB for the first time. The steps illustrated show a typical Windows XP installation.

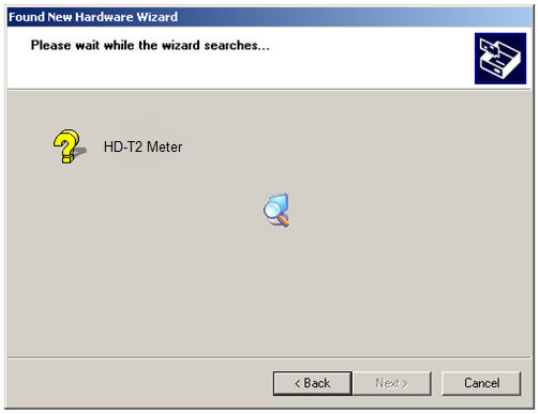
Before starting the driver installation process please ensure that your computer is connected to the internet, and that your HD-T2 meter has at least 25% battery charge remaining.

Connect your HD-T2 meter to your computer with the USB lead supplied and the Found New Hardware wizard will begin.



When prompted select **Yes, this time only** and then click the **Next>** button.

Select **Install the software automatically (Recommended)** then click the **Next>** button

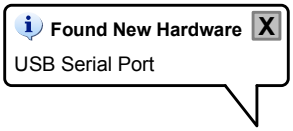


While your computer is searching for the drivers a window like this will be visible.

The first stage of the driver installation is complete. Click **Finish** to continue loading the next driver.

USB driver installation

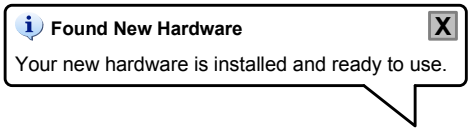
The second stage of the USB driver installation will now begin.



To complete the installation of the required drivers ensure that **Install the software automatically (Recommended)** then click the **Next>** button.

While your computer is searching for the driver a window like this will be visible.

The HD-T2 driver installation process is now complete. Click the **Finish** button to close the window.



You are now ready to download transmitter updates or firmware updates from the ***www.horizonhge.com*** web site.

On occasion it may be necessary to update the transmitter list on your HD-T2 meter. Downloads are on a country basis (some larger countries are split into convenient regions). Downloads for your HD-T2 can be found on the ***www.horizonhge.com*** web site.

HD-TM Plus Downloads

Select Region

UK/Ireland

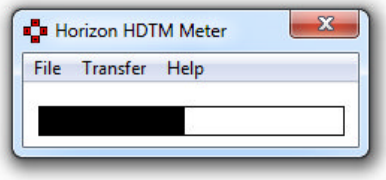
Email to:

Send By Email

Download Now

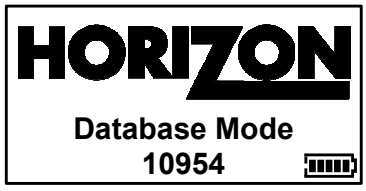
Important: If you have logged any measurements make sure you download these to your computer before updating your transmitter list as this operation will reset the log entries.

Select the country (or region) that you require and click on **Download Now** you can also choose to have the settings file emailed to you. You can choose to save this file (we recommend to your desktop so that it's easily found, or open it directly.

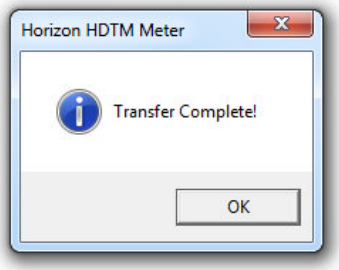


Open your received file and a small program will appear as illustrated above. If you have already connected your meter to your computer and downloaded the drivers you can click on **Transfer** to load your new transmitter settings into your meter. The driver installation is detailed on the next few pages.

On connecting your HD-T2 to your computer via the USB lead supplied the meter will enter **USB Mode**.



Click on Transfer to upload the new transmitter data to your HD-T2 meter. During this time **Database Mode** is seen.



When complete the meter will return to **USB mode** and you can disconnect your meter.

Glossary

BB	Base Band
BCH	Bose Chaudhuri Hocquengham
BER	Bit Error Rate
DVB	Digital Video Broadcasting
DVB-T	DVB system for Terrestrial Broadcasting
DVB-T2	Second generation Digital Video Broadcasting Terrestrial
FEC	Forward Error Correction
FEF	Future Extension Frame
FFT	Fast Fourier Transform
IFFT	Inverse Fast Fourier Transform
LDPC	Low Density Parity Check
MFN	Multi Frequency Network
MISO	Multiple Input, Single Output
MPEG	Moving Pictures Expert Group
Multiplex	A stream of all the the digital data with in a physical channel
OFDM	Orthogonal Frequency Division Multiplex
PAPR	Peak to Average Power Ratio
PLP	Physical Layer Pipe
QAM	Quadrature Amplitude Modulation
RF	Radio Frequency
SFN	Single Frequency Network
SISO	Single Input Single Output
Tx	Transmitter
UHF	Ultra High Frequency (band)
VHF	Very High Frequency (band)

Measurement definitions

dBm	dB(mW) – power relative to 1 milliwatt. No reference impedance is assumed.
dBmV	dB(1 mV_{RMS}) – voltage relative to 1 millivolt across 75 Ω.[25] Widely used in cable television networks, where the nominal strength of a single TV signal at the receiver terminals is about 0 dBmV. Cable TV uses 75 Ω coaxial cable, so 0 dBmV corresponds to −78.75 dBW (−48.75 dBm) or ~13 nW.
dBµV	dB(1 μV_{RMS}) – voltage relative to 1 microvolt. Widely used in television and aerial amplifier specifications. 60 dBµV = 0 dBmV.
MER	The *modulation error ratio* (MER) is a measure of the signal-to-noise ratio (SNR) in a digitally modulated signal expressed in dB.

BER explained

BER is the number of bits in error / the total number of bits. Let's say that 1 million bits are transmitted, and three bits out of the 1 million bits received are in error because of some kind of interference between the transmitter and receiver. The BER is calculated by dividing the number of error bits received by the total number of bits transmitted: 3/1,000,000 or 0.000003. We can further express 0.000003 in scientific notation format - the way most BER measurements are shown. Scientific notation is nothing more than a shorthand method of expressing very large or very small numbers. Our example of 0.000003 is written in scientific notation as 3×10^{-6}. Another variation is to write scientific notation in the form 3.0E-06, which means the same thing as 3×10^{-6}.

$1 = 1 \times 10^{0}$ or 1.0E00
1/10 or $0.1 = 1 \times 10^{-1}$ or 1.0E-01
1/100 or $0.01 = 1 \times 10^{-2}$ or 1.0E-02
1/1,000 or $0.001 = 1 \times 10^{-3}$ or 1.0E-03
1/10,000 or $0.0001 = 1 \times 10^{-4}$ or 1.0E-04
1/100,000 or $0.00001 = 1 \times 10^{-5}$ or 1.0E-05
1/1,000,000 or $0.000001 = 1 \times 10^{-6}$ or 1.0E-06 and so on….

Note: The lower the BER the better the signal quality.

Notes

DVB-T

Carriers	2k / 8k
Guard Intervals	1/4, 1/8, 1/16, 1/32
Code Rates	1/2, 2/3, 3/4, 5/6, 7/8
Modulations	QPSK, 16-QAM, 64-QAM
Bandwidth	5, 6, 7 and 8 MHz

DVB-T2

Carriers	1k, 2k, 4k, 8k, 8k+Ext, 16k, 16k+Ext, 32k, 32k+Ext
Guard Intervals	1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128
Code Rates	1/2, 3/5, 2/3, 3/4, 5/6
Modulations	QPSK, 16-QAM, 64-QAM, 256-QAM
Bandwidth	5, 6, 7 and 8 MHz
Pilot Pattern	PP1-PP8
PLP Mode	Single / Multiple (SISO / MISO)
PLP Constellation	QPSK, 16-QAM, 64-QAM, 256-QAM
PLP Constellation Rotation	Automatic and indicated with “(R)”
ID CELL	4 digit broadcast information
Network ID	5 digit broadcast information
PLP	Shown as active or inactive

General specification

Universal AC Battery Charger 100V AC~240V AC ~ 0.8A MAX 50/60Hz.
Figure of 8 AC input connector for mains charging.
2.1 mm female plug for external charging via 12 Volt DC 2 Amp fused vehicle charger (supplied).
12V DC charger 1.5A MAX.
Run time with full charge in excess of 6 hours continuous use from 2.4Ah Li-ion (Lithium Ion) battery.
Antenna input via ‘F’ type female connector (removable) 75 Ohm impedance with short circuit protection.
Computer interface via USB for transmitter and firmware updates.
5 or 12 Volt option for masthead power.
RF input range 48 to 862MHz.
Dynamic input range to +10 dBm (with selectable attenuation).
Compliant with ETSI EN 302 755 (DVB-T2), EN 300 744 (DVB-T) standards.
Spectrum display.
Constellation display.
Histogram display.
Data logging (requires the “Log reader” program available for free from ***www.horizonhge.com***).

Battery removal / replacement

The Li-ion battery pack is replaceable. Handle the battery with care during this procedure. Remove the HD-T2 from its carry case, place it on a flat surface with the battery door facing upwards, release the two catches on the battery door and detach it completely. Press the battery down at the top (nearest the connectors) so that the bottom of the battery will lift up. Now cover the battery with your hand and turn the meter over (so that you catch the battery). Carefully detach the battery connectors in the order specified (removing the two pin connector last on disconnection and when refitting connecting the two pin connector first). You can now fit a replacement battery in the reverse order. **Note:** Avoid pulling the battery cable as it is short to ensure a snug fit.

LIMITED WARRANTY

Horizon Global Electronics Ltd will, at our option, repair or replace any Horizon Global Electronics Ltd HD-T2 meter found to be defective in manufacture within the warranty period of 1 year.

The warranty period is determined by the date of purchase. Keep your receipt as proof of your purchase, otherwise the warranty would be determined by the date of manufacture.

This warranty does not apply to damage caused by accident, misuse or deliberate tampering with the unit. Tampering with the seals will immediately invalidate your warranty. This does not affect your statutory rights.

DECLARATION OF CONFORMITY

Manufacturer: Horizon Global Electronics Ltd.
Address: First Floor Office, Allen House, Edinburgh Way, Harlow, Essex, CM20 2HJ

Declares that the HD-T2 terrestrial installation meter complies with the following directives and standards.

Safety EN610 10-1:2001 EMC 61326:1997

All Horizon Global Electronics Ltd products are ROHS compliant.

Technical Department
Horizon Global Electronics Ltd.
April 2012

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