



SATELLITE ACCESSORY LIMITED NINETY (90) DAY WARRANTY

This Channel Master equipment is warranted to be free from defects in material and workmanship under normal use and service. Channel Master shall repair or replace defective equipment, at no charge, or at its option, refund the purchase price, if the equipment is returned to Channel Master not more than ninety (90) days after shipment. Removal or replacement of equipment and its transportation shall not be at the cost of Channel Master except Channel Master shall return repaired or replaced equipment freight prepaid.

This Warranty shall not apply to equipment which has been repaired or altered in any way so as to affect its stability or durability, nor which has been subject to misuse, negligence or accident. This warranty does not cover equipment which has been impaired by severe weather conditions such as excessive wind, ice, storms, lightning or other natural occurrences over which Channel Master has no control, nor shall this Warranty apply to equipment which has been operated or installed other than in accordance with the instructions furnished by Channel Master.

Claimants under this Warranty shall present their claim along with the defective equipment to Channel Master immediately upon failure. Non-compliance with any part of this claim procedure may invalidate this Warranty in whole or in part.

This warranty is expressly in lieu of all other agreements and warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, Channel Master does not authorize any person to assume for it the obligations contained in this warranty and Channel Master neither assumes nor authorizes any representative or other person to assume for it any other liability in connection with the equipment delivered or provided.

In no event shall Channel Master be liable for any loss of profits, loss of use, interruption of business, or indirect, special or consequential damages of any kind.

In no event shall Channel Master be liable for damages in an amount greater than the purchase price of the equipment.



User Instructions

Model 1007IFD Satellite Signal Meter with rechargeable battery and charger

INTRODUCTION

The 1007IFD satellite signal meter has been designed for the installation and maintenance of a satellite TV system. It features signal strength measurement by both meter indication and audible tone indication for dish antenna peaking. LNB voltage and current measurement is also provided. An internal, rechargeable nicad battery pack with output switchable between 13V, 18V, 13V/22KHz and 18V/22KHz allows a dish antenna to be installed prior to installation of the satellite receiver. The output voltage and 22KHz tone presence from a satellite receiver may also be monitored. The internal 22KHz generator allows "alternate satellite" selection on certain types of systems with an integrated LNB/multiswitch. A 117 VAC wall plug type charger is included.

TECHNICAL SPECIFICATIONS

Frequency range	950-2150MHz
Impedance	75 ohm
Sensitivity (per transponder)	-32 to +4 dBm 1 transponder -41 to -5 dBm 8 transponders -44 to -8 dBm 16 transponders
Insertion Loss	4dB
Indication	Analog Panel Meter 100uA FSD
Acoustic Indicator	0.2 to 5.0KHz
LNB Voltage Measurement	0-25VDC
LNB Current Measurement	0-500mA
Nicad Battery Pack Output	13V, 18V, 13V/22KHz, 18V/22KHz
Tone Output	0.6V square wave, 22KHz
Tone Indicator	Requires >300mV, 18-24KHz
Battery Life	3 hours between charges at 170 mA LNB current
Wall Plug Charger Output	24VDC at 100 mA conn. center positive
Charge power/time	24VDC at 60 mA for 12 hours
RF Connectors	Type F female
Dimensions H x W x D	3.5" x 6.0" x 4.5" (89 x 152 x 114 mm)
Weight	36 oz. (1032g)

Channel Master® LLC reserves the right to modify their designs or specifications, in the light of future developments, without prior notice. The performance figures quoted are typical and are subject to normal manufacturing and service tolerances.

OPERATION

1) Powering by Satellite Receiver or Internal Battery

This switch selects between powering the meter from the satellite receiver and simultaneously monitoring its LNB voltage and tone presence; or, powering the meter from the internal nicad battery with the ability to generate a 22KHz tone when required.

Note: Leave in the "BATTERY OFF" position so as not to drain the battery when:

- The meter is not in use.
- The battery is being charged.

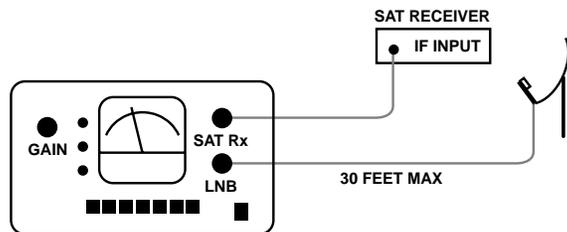
2) Battery Check

Verify the condition of the battery by pressing: "**BATTERY POWERED**" plus "**18V**" plus "**V**". If the indication is "recharge" or in the yellow position, it will be necessary to recharge the unit before use with the internal battery is possible. A further battery test should be made under load (with the LNB connected). It is recommended that the unit is charged overnight after approximately three (3) hours use. Charging with the 24VDC source as supplied is recommended. Note the DC power input jack is center positive.

3) Wiring Diagram

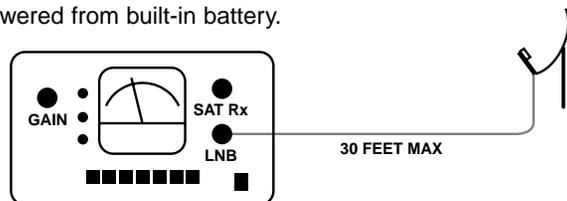
A short cable should be used between the LNB and meter. Ensure the wiring is completed before the satellite meter or receiver are switched on. Be careful to avoid short circuits when the coaxial cables are connected or disconnected.

- LNB powered from satellite receiver.



CAUTION! To prevent reverse powering the satellite receiver, never connect the satellite receiver to the meter's LNB connector or damage to the satellite receiver may result.

- LNB powered from built-in battery.



4) 13/18V Selection

This button only functions in the battery powered mode. Press the 13/18V switch to select the desired LNB voltage.

Note: Avoid using the 13V position for extended periods. The 18V position provides cooler operation.

5) 0/22KHz Selection

This button only functions in the battery powered mode. The 22KHz mode must only be used with certain kinds of integrated LNB/multiswitch to select the "alternate satellite" where direct access to the LNB is not possible.

Note: The instantaneous voltage at the "trough" of the 22KHz waveform will be 0.3V lower than the indicated voltage.

The presence of a 22KHz tone from either the satellite receiver or internal generator is indicated by the 22KHz LED.

6) LNB Voltage Measurement

Press the "V" switch. It indicates the DC voltage supplied to the LNB.

Note: The 13V and 18V LEDs provide a further indication of LNB voltage.

The LNB voltage is greater than 15V when the 18V LED glows and less than 15V when the 13V LED glows.

7) LNB Current Measurement

Press the "mA" switch. It indicates the DC current supplied to the LNB.

8) Antenna Peaking

Coarse align the antenna using instructions supplied with your system. After switching on, press the "level" (and tone switch if required). Adjust the dish azimuth and elevation for maximum meter indication or highest pitch tone.

Use the gain control to maintain 80-100% of full scale deflection where meter resolution is optimum.

CAUTION! Note the LNB volts, LNB current and signal level switches are interlocked. Never attempt to press more than one of these switches in at the same time or damage to the meter may result.

BATTERY CHARGING

For optimum battery life, follow these guidelines:

CAUTION! The 1007IFD is factory shipped with the battery in a partially charged state. It should be used without charging until the "BATTERY TEST" mode reaches the yellow position. It should then be charged overnight using the charger provided. The unit should then be charged overnight after each three(3) hours of use.

Note: Optimum battery performance is obtained after the first few charge/discharge cycles. The powering switch must be in the "BATTERY OFF" position during charging.