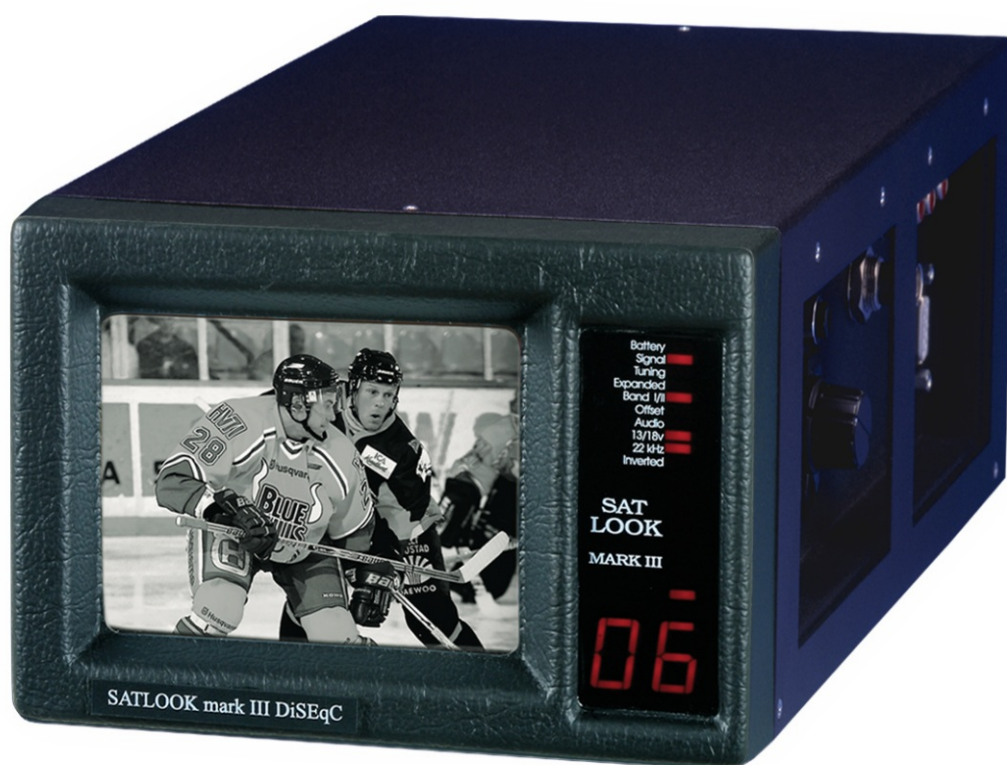


SATLOOK MARK III

DiSEqC

Manual English



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1. Description:

EMITOR SATLOOK Mark III DiSEqC is a measuring-instrument developed in Sweden for exact alignment and adjustment of satellite-dishes. The instrument is provided with a 4.5" B/W-monitor which either shows normal TV-channel or the frequency spectrum 950-2150 MHz.

It's very easy to detect satellite signals in the spectral-mode and the spectrum can be expanded for correct adjustment of the polarisation.

Channel search is done with a large knob on the side of the instrument or by help of the two digit LED-display on the front-panel.

Switching between spectrum/TV-mode is made easy by pushing a button.

The polarisation of the LNB is switchable 13V/18V and the Hi-Lo band with 22 kHz-tone. Both functions are indicated with LED's.

The instrument is protected from short-circuit when connecting the LNB.

The DiSEqC-function controls all DiSEqC-accessories (like switches and LNB's). The function is easily implemented and very flexible to use.

Sound-frequencies between 5.5-8.5 MHz can be tuned in and listened to.

The power of the instrument is supplied by a built in and rechargeable battery. The battery is recharged from the external battery charger or the car-adaptor.

Recharging of the battery is supervised by a microprocessor which sense when charging of the battery is maximized. This is also indicated with "CH" on the two digit LED-display.

Even though the instrument has a lot of functions it is still very easy and flexible. SATLOOK Mark III DiSEqC weights only about 3.5 kg incl. the battery and the carrying-case.

More battery-power can be provided by the optional BATSET-unit.

There is also an optional positioner/magnetic/polarizer-unit, called SATSET, available with separate battery which also can supply power to the instrument.

2. Operation:

A. Unpacking.

Start with unpacking the instrument and check that the following items are in the cardboard box:

1. SATLOOK Mark III DiSEqC instrument.
2. Nylon carrying case with shoulder strap.
3. Car-adaptor 12v.
4. External power supply 220v/13.5v.
5. Adaptor BNC-male/F-female.
6. Owner's Manual.

The instrument keypad and the close by the connections for coaxial- and power- cables are illustrated in picture No 1.

Mainswitch, power On/Off.

The big knob has functions for; tuning, marker-control, and to move the expanded spectrum.

The two small knobs adjust volume and audio-frequency 5.5-8.5 MHz.

Frontdisplay:

LED 1	Batterycheck
LED 2	Signalstrength
LED 3	Tuningdisplay
LED 4	Expanded spectrum
LED 5	Band I/II
LED 6	Offset
LED 7	
LED 8	13/18v
LED 9	22 KHz
LED 10	Inverted video

LED 11-20 Shows signalstrength

B. Batterycheck.

As the instrument has been stored for some time before transportation it is important to check the battery-condition.

To do this turn the mainswitch On.

When starting the instrument, the monitor turns on in spectrum-mode and LED nr 2 on the front-display will be lit. The two digit LED-display indicates "SP" for spectrum.

The loudspeaker is switched off when the instrument is turned on.

Push the No 6 button on the keypad to read the battery condition. The condition is indicated on the two digit LED-display with a value between LO, 1-9, HI.

If the battery needs recharging, use the power-supply enclosed.

NOTE, The instrument should be turned off when the battery is recharged.

The two digit LED-display (automatically turned on when recharging) shows "CH", for charging, while recharging.

Recharging from discharged battery to about 85% capacity takes aprox.3 hours.

C. Connection and installing a satellite dish.

When the battery is charged the instrument is ready to use.

Connection of coaxial-cable and LNB is preferably done when the instrument is turned off. In case of connecting when the instrument is On and if a short-circuit occur, it's no harm done due to the fact that the instrument is protected against such a failure and will automatically turn off itself.

After correcting the problem, restart the instrument and it will operate normally.

The instrument starts in the spectrum-mode which makes it easy to detect the satellite/s You're looking for. If You want to switch on the loudspeaker function (beeper), press the No 8 button (on/off).

When a satellite is received, the monitor immediately show "peaks" which are getting bigger when the signal is increasing.

If the loudspeaker (beeper function, button nr 8) is switched On there are higher and higher tones when the signal level is getting stronger.

Audio carriers can be tuned in when pushing button nr #. The two small knobs below the keypad adjust the volume and the audio-frequency between 5.5 and 8.5 MHz.

Both the beeper- and the audio- function can be operational at the same time.

If You want to see what satellite You're receiving, change to picture-mode with button No 1.

It is advisable that You, before switching between spectrum and picture, use the knob on the side of the instrument which controls the marker on the monitor. Put the marker on a suitable peak and switch to picture with button No 1.

As there are different transmission standards and coding systems etc. it is not certain that a satellite immediately can be identified. Push button No 4 and use the knob for tuning in the frequency-range and try to find a certain channel for identification.

If the LNB is of a Universal type, change polarity by pushing button Nr 0 (13/18v) and Hi-Lo band with button nr * (22 kHz).
Both functions are indicated with LED's on the front-panel.

The instrument does also support the DiSEqC level 1.0 standard. Activate the function by pressing the nr 5 button and the corresponding digit for the DiSEqC-function wanted (see below).

Push button Nr 2 to return to the spectrum-mode.

When the required satellite is found, maximize the incoming signal by the following methods:

1. Max lengths on peaks in spectrum-mode.
2. Max value on the two digit LED-display.
3. Max height on LED-bar.
4. Highest tone from the loudspeaker.

If the incoming signal is so strong that the displays show max-values, reduce the incoming signal by pushing button Nr 7 (offset).

When using the expanded spectrum-function (button nr 3), it is easy to see the suppression of the polarity. This function is consequently used for adjustment of the right polarisation.

3. Functions:

Keypad, normal mode:

1. Picture/Invert.
2. Spectrum.
3. Expanded spectrum.
4. Tuning, display 00-99 on/off.
5. DiSEqC-mode. → →
6. Batterycondition, display LO,0-9,HI.
7. Signalstrength offset, on/off.
8. Beeper, on/off.
9. Freq.band I/II.
0. 13/18v.
- *. 22 KHz on/off.
- #. Audio on/off.

DiSEqC-mode:

1. LNB 1
2. LNB 2
3. LNB 3
4. LNB 4
- 5.
- 6.
7. Hi LO
8. Horizontal
9. Toneburst A
0. Vertical
- *. Lo LO
- #. Toneburst B

1. Is used for switching to picture-mode. If the instrument is equipped with the optional inverted video, push the button for a couple of seconds and the picture will be inverted. To go back to normal video, repeat the pressing of the button.
2. This function is used for showing the frequency-spectrum. In this mode the knob on the side of the instrument controls the marker of the monitor.
3. Expands the spectrum. It is a good help for adjusting the right polarisation. When this mode is switched on it is indicated by LED 4 On.
4. Normally, the instrument present signal-strength on the two digit LED-display. Pressing button nr 4 activates the tuning indication with a value from 00-99. Pressing the button again returns to the signal-strength mode.
5. Activates the DiSEqC-mode. Press the nr 5 button and the corresponding command-button (ex. for LNB 1, press button nr 5 and button nr 1). Short-list for the different DiSEqC-commands is printed above and also as a sticker in the carrying-case.
6. Shows for a couple of seconds the battery condition with a value between LO, 1-9, HI.
7. This function is used when the incoming signal is so strong that the instrument shows max-values when the dish has not been maximized. The offset-function reduces the incoming signal. The function is indicated by LED 6 when switched On.
8. Turn the loudspeaker on/off. Increasing signal level is indicated by higher pitch tones.
9. For switching between the two frequency-bands: 950-1750 MHz and 950-2150 MHz.
0. For switching the polarity with 13/18v in the coaxial-cable. 13/18v is also indicated on the front-display with LED 8, On/off.
- *. For switching the 22 Khz-tone on/off.
- #. Turns the audio on/off. The audio is tuneable from 5.5 to 8.5 MHz. Volume and audio-frequency between 5.5 and 8.5 MHz are adjusted with the two small knobs below the keypad.

4. Maintenance.

The instrument is equipped with a rechargeable battery and it is important that the battery is maintained.

Recharging should be done with a car-adaptor (enclosed) or with an external power supply of at least 12v,1 Amp, center-pin -plus and chassi -earth.

Note, do not use other methods. The instrument may be damaged or its life-span may be shortened.

Note, the instrument can be operated, for shorter periods of time, by an external power supply which must be of at least 12v/1 Amp.

Contact Your dealer for more information.

Adjustments for vertical hold, brightness and contrast are located under the instrument.

Contact Your dealer for proper adjustments.

SATLOOK Mark III DiSEqC is designed for outside use in rough conditions but it should not be exposed for rain or snow as this can damage or shorten the lifetime of the instrument.

5. Technical Specification:

EMITOR SATLOOK Mark III DiSEqC.

Input frequency:	950-2150 MHz.
Input level:	30-100 dByV-volt.
Input impedance:	75 ohm, BNC-kontakt.
Audio bandwidth:	5.5 to 8.5 MHz, Mono.
Measuring method:	1. Full spectrum, normal or expanded mode. 2. 4.5" B/W-monitor with full picture. Optional with pos/neg-video. 4. Levelcheck on single channel with LED-bar display. 5. Levelcheck with audio from loudspeaker.
Max-level:	Spectral with max peaks. Two digit LED-display with max value. LED-bar with max indication. Highest tone from loudspeaker.
Supply voltage LNB:	13v/18v, switchable.
Tone switch:	22 KHz.
DiSEqC:	Standard DiSEqC according to level 1.0.
Operational:	Aprox. 1 hour.
Weight:	Aprox. 3.5 kg incl. battery.
Accessories:	Rechargeable battery 12 volt 3.0 Amp. Car-adaptor. External power supply. Nylon carrying-case. Adaptor BNC/F-connector. Manual.
Options:	Extra battery-pack, called BATSET. Positioner/magnetic/polarizer-unit, called SATSET.

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