FOA

User's Guide

ROVER

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GET TO KNOW YOUR FOA

FRONT PANEL

SUPPLIED WITH 3 INTERCHANGEABLE OPTIC CONNECTORS

WARNINGS

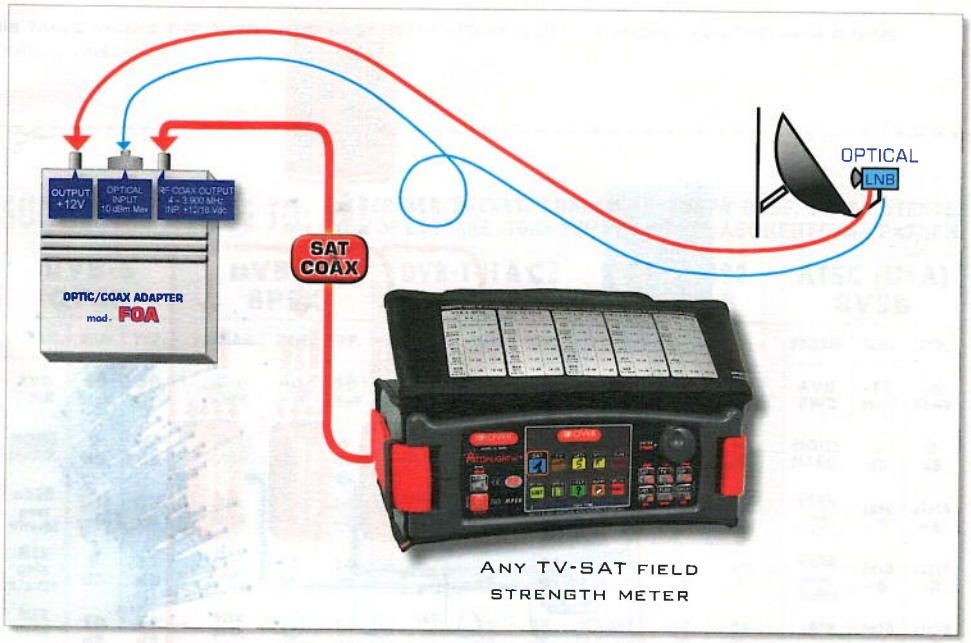
WARNING! DANGER:

NEVER BRING THE ENDS OF THE OPTIC FIBER CABLE NEAR TO YOUR EYES.
IT CAN CAUSE IRREVERSIBLE DAMAGE TO YOUR EYESIGHT.

OTHER WARNINGS:

PERIODICALLY CLEAN THE OPTICAL SENSOR USING A COMPRESSED AIR SPRAY FOR ELECTRONIC DEVICES. AS COMPRESSED GASES CURRENTLY AVAILABLE ARE DENSER THAN AIR, WE RECOMMEND THAT YOU CAREFULLY FOLLOW THE SAFETY INSTRUCTIONS SPECIFIED ON THE PACKAGING. NEVER USE COMPRESSED AIR FROM ENGINE COMPRESSORS. ALWAYS PROTECT THE OPTICAL INPUT, WHEN NOT IN USE USING ITS SPECIAL ANTI-DUST PROTECTION.

CONNECTIONS & MEASUREMENTS



ANY TV-SAT FIELD STRENGTH METER

CONNECTIONS

1. CONNECT THE OPTICAL OUTPUT OF THE LNB TO THE OPTICAL INPUT OF THE FOA ADAPTER.
2. CONNECT THE OPTICAL LNB POWER SUPPLY TO THE +12V OUTPUT OF THE FOA ADAPTER.
3. CONNECT COAX RF OUTPUT (4-3900 MHz) TO THE RF INPUT OF YOUR METER.

NOTES:
DUE TO THE OPTICAL LNB'S HIGH ABSORPTION (500 MA), WE SUGGEST, WHEN POSSIBLE, THAT YOU POWER THE METER USING AN EXTERNAL MAINS POWER SOURCE (220 VAC) AND YOUR METER'S AC ADAPTER.

MEASUREMENTS

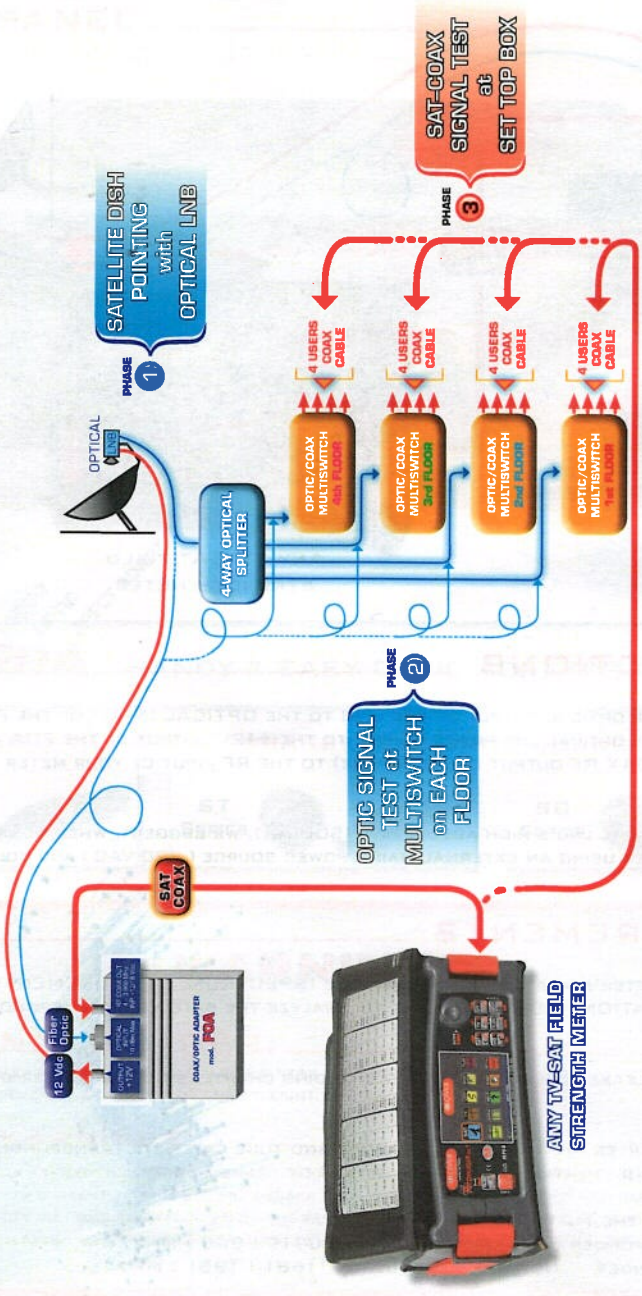
1. USE YOUR METER'S MEASUREMENT FUNCTIONS (SPECTRUM, MEASUREMENTS, CONSTELLATION, PICTURES, ETC.) TO ANALYZE THE SATELLITE TRANSPONDERS.

NOTES:
TO THAT END, PLEASE REFER TO THE CORRESPONDING CHAPTERS OF YOUR METER'S USER MANUAL.

IMPORTANT:
THE FOA CONVERTER ALLOWS YOU TO MEASURE AND TUNE SATELLITE TRANSPONDERS ONLY AND IN THE LOW BAND - VERTICAL POLARIZATION (VL) OF TRANSMISSION.

EXAMPLES FOR THE HOT BIRD SATELLITE:
- FROM TRANSPONDER NO. 110 – FREQUENCY 10719 (969) MHz
- TO TRANSPONDER NO. 159 – FREQUENCY 11681 (1931) MHz

APPLICATION EXAMPLE



SUGGESTED VALUES

THIS TABLE SHOWS THE SUGGESTED MEASUREMENTS AT A USER'S SOCKET FOR THE MAIN DIGITAL MODULATIONS.

SUGGESTED VALUE TO: SUBSCRIBER SOCKET, KUNDEN ANTENNEN DOSE, PRESA UTENTE, PRISE DE L'ABONNE', TOMA FINAL DE USARIO, АБОНЕНТСКИЙ РАЗЪЕМ

DVB-S QPSK

PARAM.	MIN	TYP.
AVG PWR	40 dBµV	50 dBµV
NOISE MARG.	3 dB	6 dB
αBER post Viterbi	2x10 -6	2x10 -8
MER QPSK 2/3 FEC	9 dB	12 dB
MER QPSK 3/4 FEC	10 dB	13 dB
MER QPSK 5/6 FEC	11 dB	14 dB

DVB-S2 8PSK

PARAM.	MIN	TYP.
AVG PWR	40 dBµV	50 dBµV
NOISE MARG.	3 dB	6 dB
PER 8PSK	<1x10 -7	<1x10 -8
MER 8PSK 2/3 FEC	11 dB	14 dB
MER 8PSK 3/4 FEC	12 dB	15 dB
MER 8PSK 5/6 FEC	13 dB	16 dB

DVB-T-H & GB COFDM

PARAM.	MIN	TYP.
AVG PWR	40 dBµV	50 dBµV
NOISE MARG.	6 dB	9 dB
αBER post Viterbi	2x10 -6	2x10 -8
MER 64 QAM 2/3 FEC	25 dB	28 dB
MER 16 QAM 2/3 FEC	20 dB	23 dB
MER QPSK 2/3 FEC	14 dB	17 dB

DVB-C & J83 QAM A-B

PARAM.	MIN	TYP.
AVG PWR	45 dBµV	55 dBµV
NOISE MARG.	6 dB	9 dB
bBER pre R.S.	<1x10 -6	<1x10 -8
αBER post R.S.	<1x10 -8	<1x10 -8
MER 64 QAM	30 dB	>34 dB
MER 256 QAM	34 dB	>38 dB

ATSC (USA) 8VSB

PARAM.	MIN	TYP.
AVG PWR	-15 dBmV	-5 dBmV
NOISE MARG.	2 dB	9 dB
bBER pre Trellis	1x10 -3	<1x10 -6
bBER post Trellis	3x10 -6	<1x10 -8
αBER pre R.S.	3x10 -6	<1x10 -8
MER	16 dB	23 dB

ROVER INSTRUMENTS

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