# ELECTROLINK
SIMPLE ADVANCED TECHNOLOGY

# DVB-T/T2 REMUX SYSTEM UP TO 10W RMS
## FOR TERRESTRIAL DIGITAL TV TRANSMISSION WITH SATELLITE RECEIVERS

# DTT LINE

## INDEX

## GENERAL INFORMATION - 1.1 Introduction

The remux system is composed of three parts.

- **Remux with integrated SAT receivers**
- **10W UHF amplifier** (optional)
- **Bandpass filter with directional coupler** (optional)

## GENERAL INFORMATION - 1.2 Layout
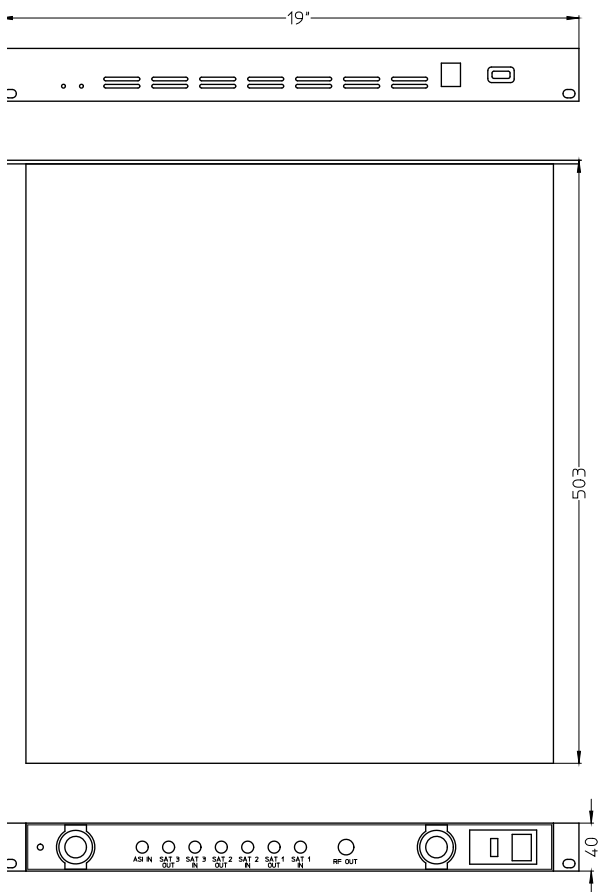
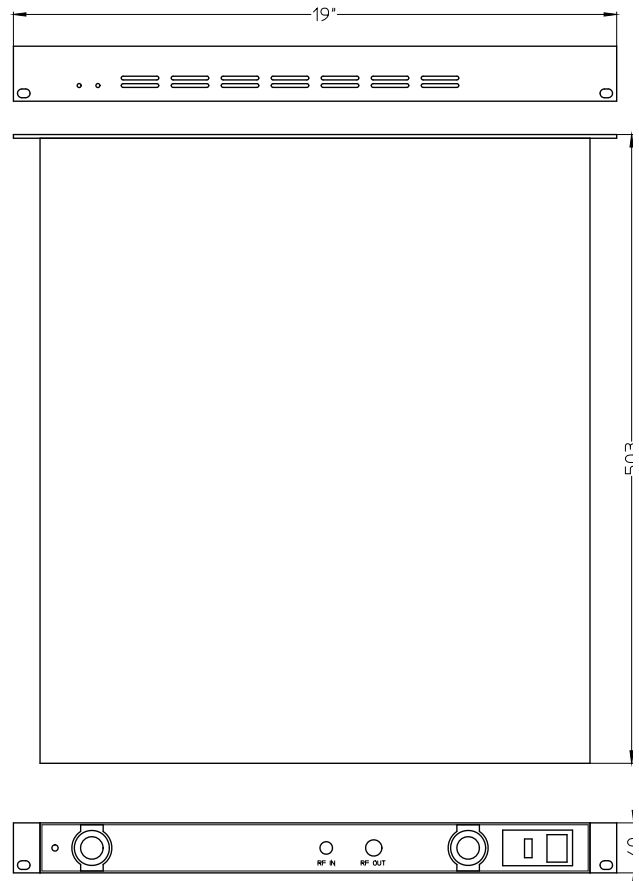The followig pictures show the size of the three parts.

**Figura 1.2a Remultiplexing**

**Figura 1.2b Amplifier**

## GENERAL INFORMATION - 1.2 Layout

The followig pictures show the size of the three parts.
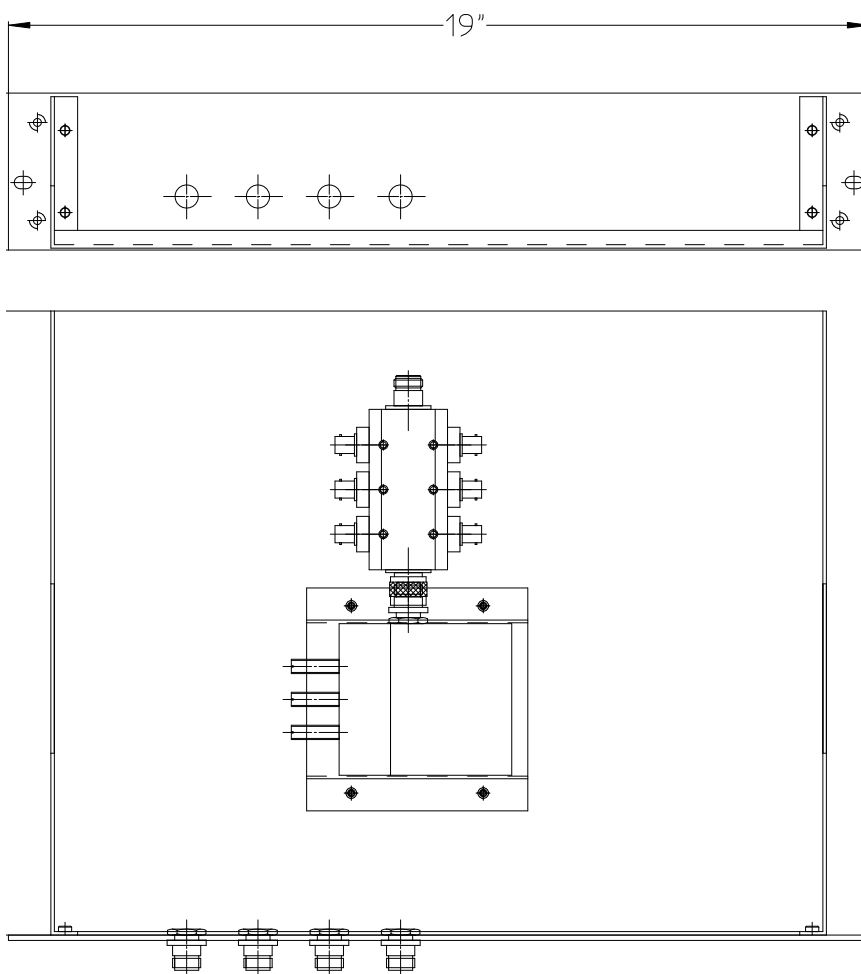


**Figura 1.2c Bandpass filter**

The remux system allows to receive up to three satellite bouquets, mux and modulate them in the dvb-t or dvb-t2 format in the uhf band. The result obtained will be that of recreating a single channel containing a series of programs at the user's request in the preferred format.
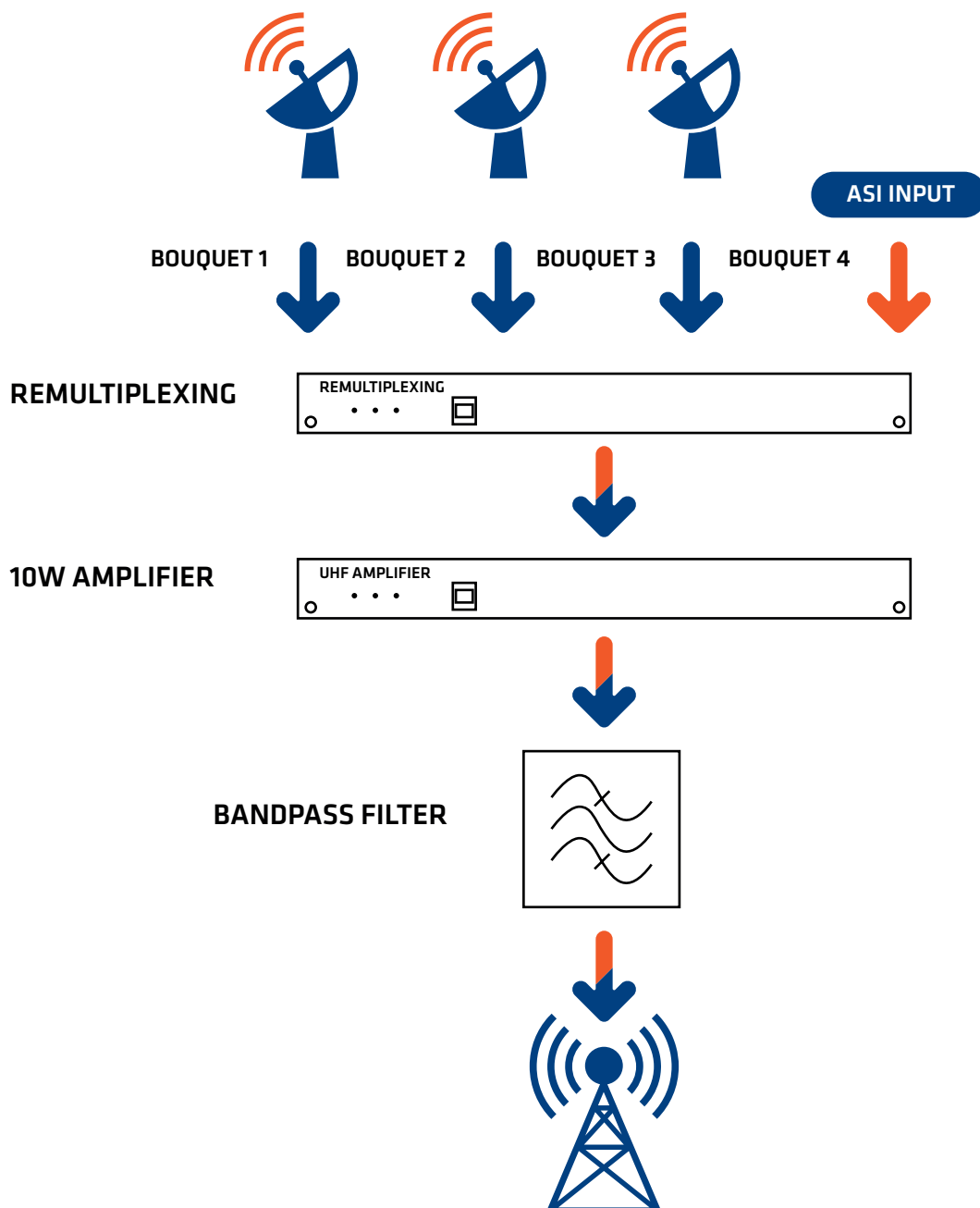


**Figura 1.3a Block Diagram**

**SYSTEM COMPOSITION - 2.1 Remultiplexing**

inside the Remultiplexing module the following units are available:
- Up to three SAT receivers
- An ASI input
- A REMUX board
- A multistandard modulator

The transport streams  coming from the SAT receivers are processed by a Remultiplexer which allows you to select the programs coming from the sources and to generate a transport stream signal to be sent to the modulator input. The selection of the programs must take into account the maximum modulation capacity of the chosen standard.

Here below an example of Remux application (with two SAT receivers) in DVB-T standard in Italy:

Receiver Sat 1 = 5°O MUX RAI 11637
**Rai 1 HD**
**Rai 2 HD**
**Rai News 24**
**Rai 3 TGR Lombardia**
Rai 3 TGR Emilia Romagna
Rai 3 TGR Piemonte

Receiver Sat 2 = 9°E MUX MEDIASET 12149
**Canale 5 HD**
**Italia 1 HD**
20 Mediaset HD
Mediaset Extra
**Rete 4 HD**

POSSIBLE COMBINATION TO BE TRANSMITTED:
**Rai 1 HD**
**Rai 2 HD**
**Rai News 24**
**Rai 3 TGR Lombardia**
**Canale 5 HD**
**Italia 1 HD**
**Rete 4 HD**

**SYSTEM COMPOSITION - 2.1.1 Block diagram**

The remux system allows to receive up to three satellite bouquets, mux them,
modulate them in the dvb-t or dvb-t2 format and deliver them to a uhf amplifier (existing or to be supplied).
The result obtained will be that of recreating a single channel
containing a series of programs at the user's request in the preferred format.

| INPUT 1 | INPUT 2 | INPUT 3 | INPUT 4 |
|---|---|---|---|
| RECEIVER SAT. | RECEIVER SAT. | RECEIVER SAT. | ASI INPUT |
| TS 1 | TS 2 | TS 3 | TS 4 |

**REMUX**

TS

**MODULATOR**

**RF OUTPUT DVB-T/T2**

**RF OUTPUT**

**POWER SUPPLY 230 VAC**

**SAT INPUT - OUTPUT**

**ASI INPUT**



ASI IN  SAT 3 OUT  SAT 3 IN  SAT 2 OUT  SAT 2 IN  SAT 1 OUT  SAT 1 IN  RF OUT
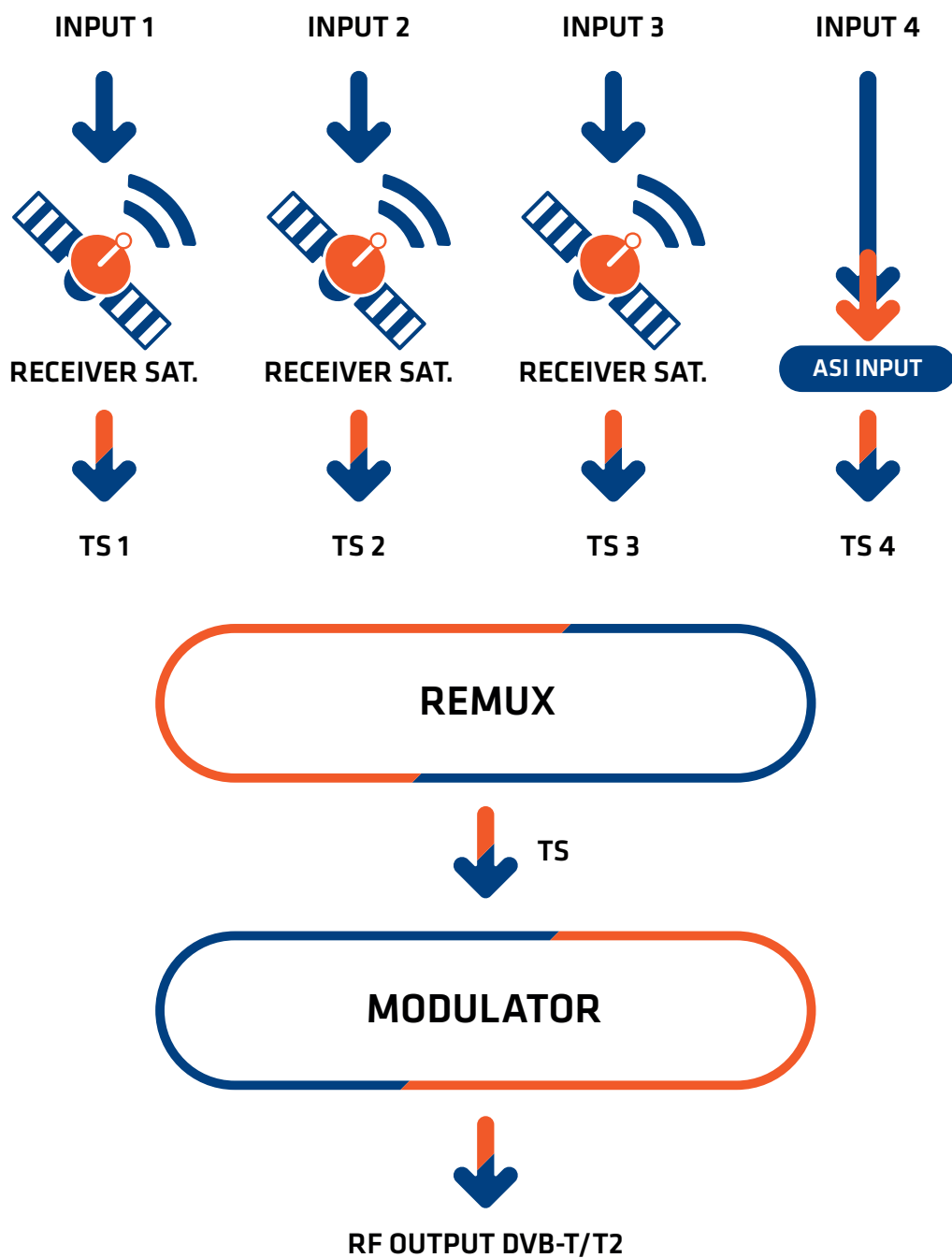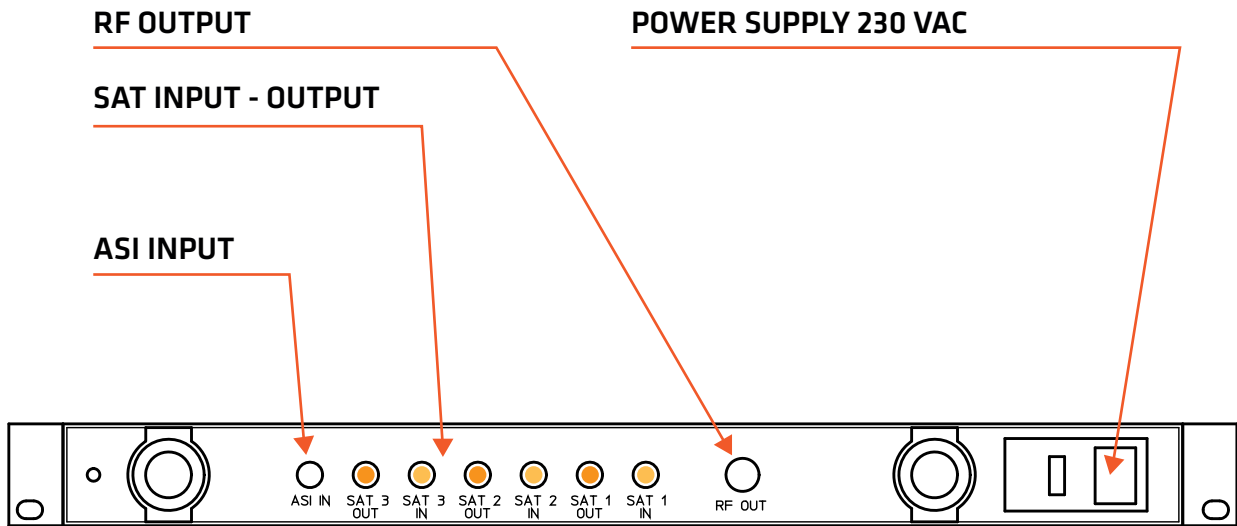
**REAR VIEW**

## SYSTEM COMPOSITION - 2.2 UHF amplifier

The 10w uhf amplifier allows to boost the RF signal from an input level of 100mW up to 10W RMS.

## SYSTEM COMPOSITION - 2.2.1 Connections

**RF OUTPUT**

**RF INPUT**

**POWER SUPPLY 230 VAC**

RF IN          RF OUT
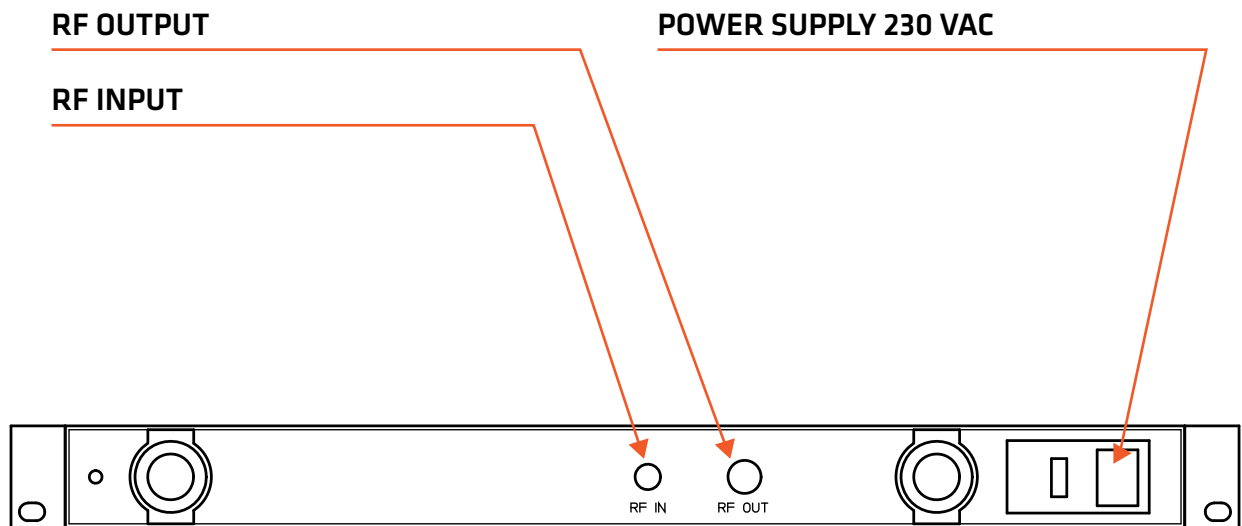
**REAR VIEW**

## SYSTEM COMPOSITION - 2.3 Bandpass filter

The bandpass filter allows to filter spurious signals generated by the amplifer.
A directional coupler is available in order to monitor the rf signals to antenna.



DIRECTIONAL COUPLER

BANDPASS FILTER

MONITORING

The system con be controlled remotely via LAN interface.
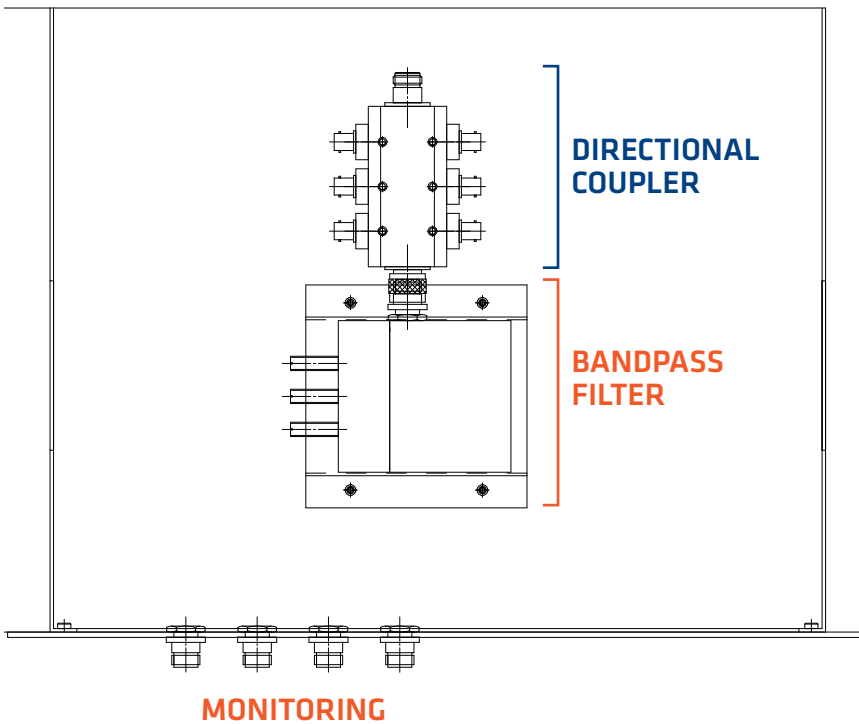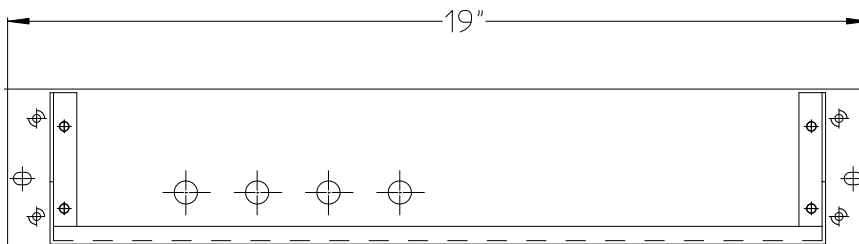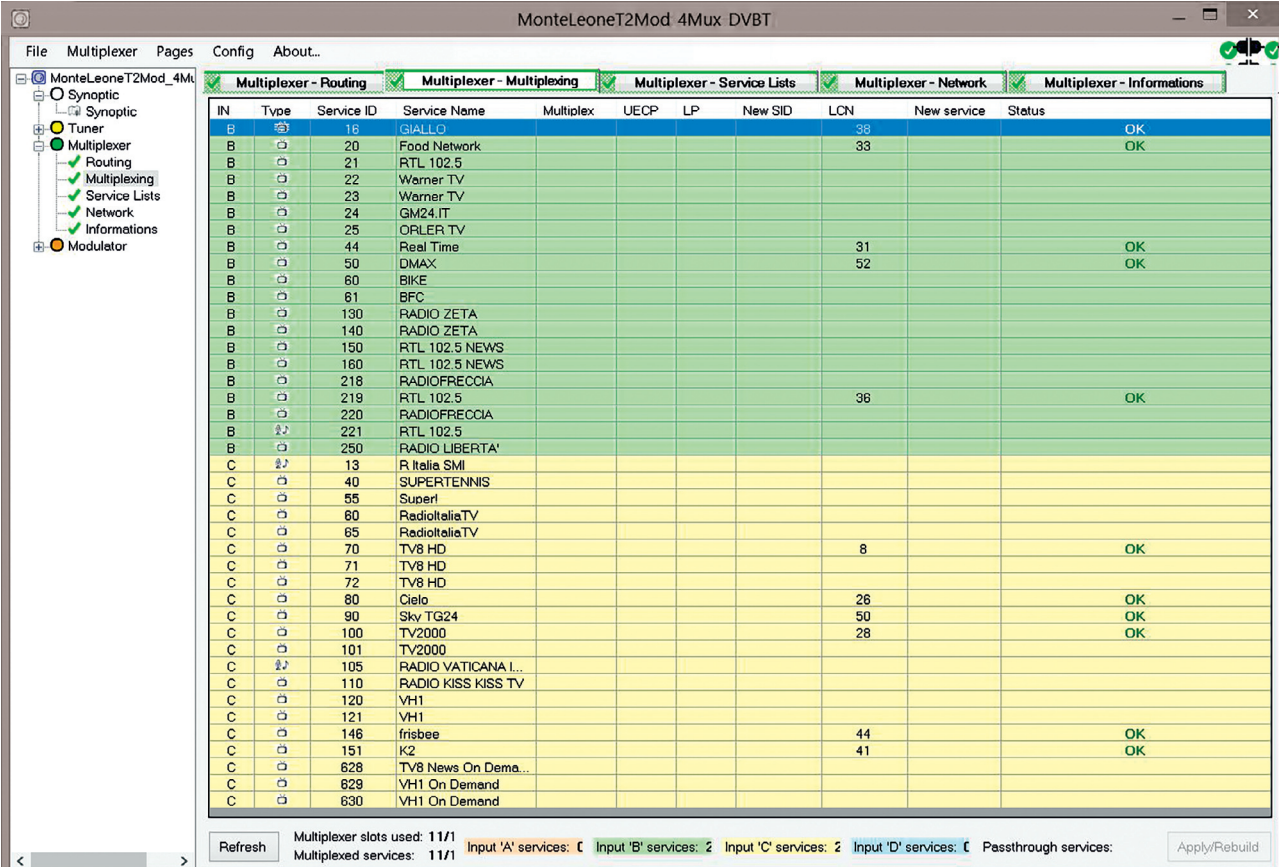The RJ45 connector for the remote interface is located on the rear part of the device.

**MonteLeoneT2Mod 4Mux DVBT**

File  Multiplexer  Pages  Config  About...

Tree:
- MonteLeoneT2Mod_4Mu
  - Synoptic
    - Synoptic
  - Tuner
  - Multiplexer
    - Routing
    - Multiplexing
    - Service Lists
    - Network
    - Informations
  - Modulator

Tabs: Multiplexer - Routing | Multiplexer - Multiplexing | Multiplexer - Service Lists | Multiplexer - Network | Multiplexer - Informations

| IN | Type | Service ID | Service Name | Multiplex | UECP | LP | New SID | LCN | New service | Status |
|----|------|-----------|--------------|-----------|------|----|---------|-----|-------------|--------|
| B | | 16 | GIALLO | | | | | 38 | | OK |
| B | | 20 | Food Network | | | | | 33 | | OK |
| B | | 21 | RTL 102.5 | | | | | | | |
| B | | 22 | Warner TV | | | | | | | |
| B | | 23 | Warner TV | | | | | | | |
| B | | 24 | GM24.IT | | | | | | | |
| B | | 25 | ORLER TV | | | | | | | |
| B | | 44 | Real Time | | | | | 31 | | OK |
| B | | 50 | DMAX | | | | | 52 | | OK |
| B | | 60 | BIKE | | | | | | | |
| B | | 61 | BFC | | | | | | | |
| B | | 130 | RADIO ZETA | | | | | | | |
| B | | 140 | RADIO ZETA | | | | | | | |
| B | | 150 | RTL 102.5 NEWS | | | | | | | |
| B | | 160 | RTL 102.5 NEWS | | | | | | | |
| B | | 218 | RADIOFRECCIA | | | | | | | |
| B | | 219 | RTL 102.5 | | | | | 36 | | OK |
| B | | 220 | RADIOFRECCIA | | | | | | | |
| B | | 221 | RTL 102.5 | | | | | | | |
| B | | 250 | RADIO LIBERTA' | | | | | | | |
| C | | 13 | R Italia SMI | | | | | | | |
| C | | 40 | SUPERTENNIS | | | | | | | |
| C | | 55 | Superl | | | | | | | |
| C | | 60 | RadioItaliaTV | | | | | | | |
| C | | 65 | RadioItaliaTV | | | | | | | |
| C | | 70 | TV8 HD | | | | | 8 | | OK |
| C | | 71 | TV8 HD | | | | | | | |
| C | | 72 | TV8 HD | | | | | | | |
| C | | 80 | Cielo | | | | | 26 | | OK |
| C | | 90 | Sky TG24 | | | | | 50 | | OK |
| C | | 100 | TV2000 | | | | | 28 | | OK |
| C | | 101 | TV2000 | | | | | | | |
| C | | 105 | RADIO VATICANA I... | | | | | | | |
| C | | 110 | RADIO KISS KISS TV | | | | | | | |
| C | | 120 | VH1 | | | | | | | |
| C | | 121 | VH1 | | | | | | | |
| C | | 146 | frisbee | | | | | 44 | | OK |
| C | | 151 | K2 | | | | | 41 | | OK |
| C | | 628 | TV8 News On Dema... | | | | | | | |
| C | | 629 | VH1 On Demand | | | | | | | |
| C | | 630 | VH1 On Demand | | | | | | | |

Refresh  Multiplexer slots used: 11/1  Multiplexed services: 11/1

Input 'A' services: 0  Input 'B' services: 2  Input 'C' services: 2  Input 'D' services: 0  Passthrough services:  Apply/Rebuild