

# Telemetry-/Video- Receiver with Touch-Panel-LCD

## Model TUR1

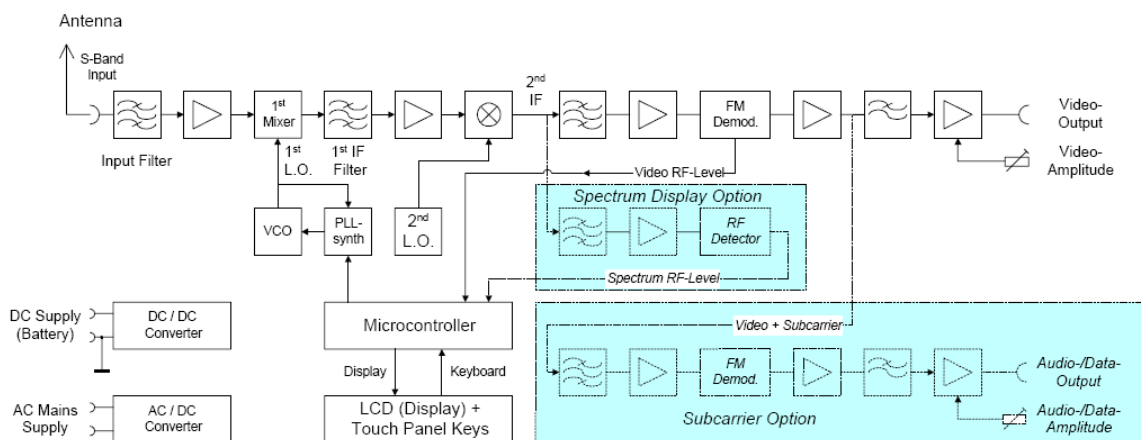


The TUR1 is a compact, dedicated FM-receiver for telemetry or video with optional subcarrier and optional spectrum monitor. The S(E)-band signal from the antenna input is filtered and downconverted in two stages to 360 and 70 or 21.4 MHz. The demodulated video / data signals are output at 75 Ohms (BNC).

### Easy user control

- Carrier frequency controlled from touchscreen-LCD on the front panel, 10 kHz resolution.
- Output amplitude of the video/data outputs adjustable on the rear panel.
- RF signal strength displayed as bargraph on the front panel LCD.
- Optional spectrum monitor.

### Block Diagram



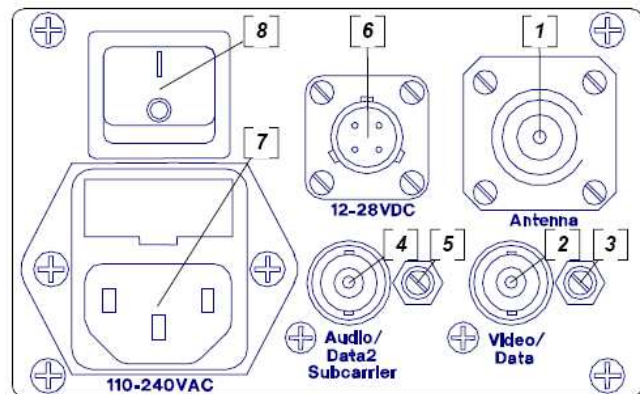
## 1 Connectors

- 1 L-/S-band input (antenna), N-female
- 2 Video output (75 Ω), BNC-female
- 3 Video output amplitude adjustment
- 4 OPTION SC1  
Audio output (75 Ω), BNCfemale  
OPTION SC2  
Digital data output (TTL/CMOS), BNC-female
- 5 OPTION SC1  
Audio output amplitude adjustment
- 6 DC Supply (Battery) connector 12 V DC,  
with fuse 1 A, and RF-level output  
connector (1 kOhm), PT02-male

### Pin Assignment

- A Pos. Supply Input +12...28 V DC  
B Supply GND ( 0 V )  
C  
D

- 7 Low voltage mains plug 110/240 V AC,  
IEC 950, with mains filter and fuses 1 A
- 8 Power supply switch, AC (mains) / DC



## 2 Technical Data

Input Frequency	2300 to 2400 MHz, or 2400 to 2500 MHz, other frequency ranges on request
Input Filter	Coaxial 3 circuit-input filter, Bandwidth 100 MHz
Frequency Tuning Resolution	1.st L.O.: 10 kHz steps
RF-Input (Antenna Connector)	N-female, 50 Ohms
1 <sup>st</sup> IF	360 MHz, fixed Bandwith 20 MHz
1.st L.O. Reference Oscillator	12,8 MHz, stability 1 x 10 <sup>-5</sup>
Noise Figure	2,5 dB
1 db Compression point	+5 dBm
IF Suppression	> 80 dB
2 <sup>nd</sup> IF	70 MHz, fixed Bandwith choice 100 kHz ... 14 MHz for video
Demodulator	FM
Video output	BNC, 1 VSS at 75 Ohms, with nominal deviation, adjustable 0...150%
Video output frequency range	10 Hz ... lowpass cutoff frequency (5.5 MHz for video)
Option SC1:	Audio (on subcarrier) BNC, 1 VSS at 75 Ohms, with nominal deviation, adjustable 0...150%
Option SC2:	dig. Data (subcarrier) BNC, 1 VSS at 75 Ohms, with nominal deviation, adjustable 0...150%
Operating temperature	0 ... +45°C
Power supply	AC Mains supply 100 to 250 V AC, 10 W, with fuses 1 A (5 x 20 mm), DC supply (Battery) +12 to 28 V DC, 7 W
Housing	Aluminium Profiles
Dimensions	64 x 105 x 225 mm, height x width x depth (without connectors)
Weight	ca. 2,5 kg