



Smartwireless

# Turbo Turbo

700 channel UHF  
true diversity



# Turbo

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true diversity

The Turbo and Twin-Turbo professional series from Smart Wireless has established itself to be the preferred choice of the installer when providing radio microphone solutions for schools, colleges and churches.



Within the Turbo range are the following products :

- T1001 – 700 channel True Diversity receiver
- T1002 – Twin 700 channel True Diversity receiver
- T1003 – UHF Beltpack transmitter
- T1004 – UHF Beltpack transmitter with cardioid lapel microphone
- T1005 – UHF handheld transmitter with Dynamic capsule
- T1006 – UHF handheld transmitter with Condenser capsule



The Turbo range features sophisticated Phase Locked Loop circuitry with 700 selectable channels making it easy for the user to choose non-interfered channels.

Typical installations will allow up to 8 systems to be used simultaneously when combined with the recommended antenna distribution and booster units.

With a large range of additional accessories available, the Turbo provides a professional solution for many wireless applications.

- 700 channels , frequency range 840 – 870 MHz
- Rack mounting receivers, metal chassis
- Detachable TNC antenna with antenna power for RF boosters
- Balanced XLR audio output
- LCD display on receiver and transmitter
- Transmitter recharging function
- Front or rear mounting antenna option on Twin receiver



# UHF receiver

T1001



### Features

- True diversity operation
- 700 selectable channels between 840 and 870 MHz
- Balanced XLR and un-balanced jack audio output
- 8v antenna phantom power
- TNC detachable 1/2 wave antenna
- Steel chassis, 1/2 19" rack design
- 19" rack kit included
- Transmitter recharging port with flylead
- Headphone monitoring jack and volume control
- Adjustable squelch control
- Programmable LCD display

### Specifications

- Carrier Freq. range : UHF band 840 – 870 MHz
- Oscillator : PLL synthesized
- Modulation : FM
- Frequency Stability : +/- 0.005%
- S/N ratio : >94dB, at 48KHz deviation and 60dBuV antenna input
- Image and Spurious Rejection : 80dB min
- Receiving Sensitivity : 6 dBuV
- Selectivity : > 50dB
- AF Response : 50Hz to 15kHz (+/- 3dB)
- T.H.D. : < 1% (at 1KHz)
- IF Freq. : 1st : 56MHz, 2nd : 10.7MHz
- Dynamic range : . 96dB
- Tone Signal : 32.768KHz
- Audio Output : Balanced and unbalanced
- Output level : Line : 1V(0dB), 600R , Mic 100mV
- Power supply : 12vDC
- Current consumption : 500mA
- Dimensions : 211 x 44 x 180 mm



### Included accessories

- 19" rack kit for single receiver
- Joining plate and single rack ear, to mount two receivers side by side
- 12vdc 1A Plug top power supply
- DC to DC lead for Transmitter (NiMh) charging
- XLR to XLR audio lead
- 2 x 1/2 wave TNC detachable antenna



### Optional accessories

- A1001 – Antenna distribution amplifier
- A1002 – In-line antenna RF booster
- A1003 – TNC to TNC lead 500mm
- A1004 – TNC to TNC lead 1000mm



# dual UHF receiver

T1002



### Features

- True diversity operation
- 700 selectable channels between 840 and 870 MHz
- Balanced XLR and un-balanced jack audio outputs
- 8v antenna phantom power
- TNC detachable 1/2 wave antenna
- Steel chassis, 1U 19" rack design
- Transmitter recharging ports with flyleads
- Headphone monitoring jack and volume control
- Adjustable squelch control
- Programmable LCD display
- Integral Antenna distribution

### Specifications

- Carrier Freq. range : UHF band 840 – 870 MHz
- Oscillator : PLL synthesized
- Modulation : FM
- Frequency Stability : +/- 0.005%
- S/N ratio : >94dB, at 48KHz deviation and 60dBuV antenna input
- Image and Spurious Rejection : 80dB min
- Receiving Sensitivity : 6 dBuV
- Selectivity : > 50dB
- AF Response : 50Hz to 15kHz (+/- 3dB)
- T.H.D. : < 1% (at 1KHz)
- IF Freq. : 1st : 56MHz, 2nd : 10.7MHz
- Dynamic range : . 96dB
- Tone Signal : 32.768KHz
- Audio Output : Balanced and unbalanced
- Output level : Line : 1V(0dB), 600R , Mic 100mV
- Power supply : 12vDC
- Current consumption : 800mA
- Dimensions : 421 x 44 x 180 mm

### Included accessories

- Front mounting antenna kit, including tnc leads and connectors
- 12vdc 1A Plug top power supply
- DC to DC leads for Transmitter (NiMh) charging
- 2 x XLR to XLR audio lead
- 2 x 1/2 wave TNC detachable antenna

### Optional accessories

- A1001 – Antenna distribution amplifier
- A1002 – In-line antenna RF booster
- A1003 – TNC to TNC lead 500mm
- A1004 – TNC to TNC lead 1000mm



## Beltpack Transmitter with lapel microphone

T1004



### Features

- Switchable mic/line level input
- Low power consumption using 2 x AA batteries
- Programmable LCD display
- Adjustable audio gain control
- Mini 3 pin XLR connector
- Battery level indicator
- Charging input port for rechargeable battery operation
- Up/Down channel control
- Will accept a number of different microphone options with mini 3 pin XLR

## Handheld Transmitter

T1005/6

### Features

- Choice of Dynamic (T1005) or Condenser (T1006) capsules
- Low power consumption using 2 x AA batteries
- Programmable LCD display
- Battery level indicator
- Charging input port for rechargeable battery operation
- Up/Down channel control
- Choice of coloured ID caps supplied



### Specifications

- Carrier Freq. range : UHF band 840 – 870 MHz
- Oscillator : PLL synthesized
- RF Power Output : 10mW (max)
- Freq Stability : +/- 0.005%
- Maximum Deviation : +/- 48KHz
- Spurious Emission : > 60dB below carrier freq
- T.H.D. : < 1% (at 1KHz)
- Tone Signal : 32.768KHz
- Operating Voltage : DC1.5V x 2 AA dry cell or rechargeable NiMh
- Current Consumption : 70mA +/- 5mA
- Dimensions : 268(L) x 52mm head diameter
- Freq response (T1005) : 50Hz to 16KHz
- Freq response (T1006) :

### Specifications

- Carrier Freq. range : UHF band 840 – 870 MHz
- Oscillator : PLL synthesized
- RF Power Output : 10mW (max)
- Freq Stability : +/- 0.005%
- Maximum Deviation : +/- 48KHz
- Spurious Emission : > 60dB below carrier freq
- T.H.D. : < 1% (at 1KHz)
- Tone Signal : 32.768KHz
- Operating Voltage : DC1.5V x 2 AA dry cell or rechargeable NiMh
- Current Consumption : 70mA +/- 5mA
- Dimensions : Bodypack : 100(L) x 65(W) x 27(D)mm
- Uni-directional lapel mic included (TurboLap)

## Antenna distribution Amplifier

A1001

The A1001 antenna distribution amplifier is designed to provide full level RF signal to multiple Smart wireless Turbo (T1001) or Twin Turbo (T1002) diversity UHF receivers. Each A1001 will feed up to four receivers. Multiple A1001 units can be linked together if further connectivity is required.

The A1001 can be fed by a single pair of antenna. We recommend that the distribution amplifier is used with a pair of A1002 antenna boosters to improve the overall coverage of the system.

The distribution amplifier will also provide the required dc power for up to four receivers, negating the use of the individual plug top power supplies for each receiver. The unit comes complete with 19" rack mounting ears, all antenna TNC cables and all dc power cables.



### Specifications

- Frequency range: 650~950MHz
- Gain Range: 3dB±0.5dB
- Connectors: RF input: TNC jack, RF output: TNC jack
- Maximum deviation: ±15KHz
- Nominal supply voltage: 12V~18V
- Current Consumption: 25mA (max.)
- Voltage output: DC8V (80mA) for antenna booster connection

## Antenna RF booster

A1002

The A1002 antenna booster kit is designed to improve the receiving sensitivity and S/N ratio of the Smart Wireless Turbo Professional radio microphone systems, when these systems are used in large venues such as stadiums or cathedrals.

The in-line antenna booster amplifier is designed to compensate the RF signal loss through extending the aerial cable. This booster is phantom powered through the antenna cable via the Turbo Professional receiver or A1001 antenna distribution amplifier.

The kit comes complete with an antenna mount, which can be used to connect the aerial to a wall or a conventional microphone stand with a 5/8" thread. The kit utilizes the existing 1/2 wave antenna that is supplied with the Turbo Professional systems.

The A1002 ,may be used in conjunction with A1003 (50cms) or A1004 (100cms) TNC to TNC antenna leads.

### Specifications

- Frequency range: 650~950MHz
- Gain : 9dB(±1dB)
- Impedance 50 ohms
- AE Phantom power requirement 8v

A1002 shown with mic stand (not included)



A1003 TNC lead



A1004 TNC lead





## Cardioid Headset Microphone S1005

### Specifications

- Cardioid pickup pattern
- Freq. response :
- Connector : 3pin mini XLR
- Foam windshield included



## Miniature Omni –directional lapel microphone S1008

The S1008 is a miniature lapel microphone which provides discrete pick-up. It has been designed to work with any of the Smart Wireless beltpack transmitters.

This microphone is an ideal upgrade from the standard lapel microphone for those who want a wider frequency response and a lower profile appearance.

### Specifications

- Omni-directional lapel microphone
- Frequency response : 30Hz to 20kHz
- Sensitivity : -42dBV/Pa
- Connector : Mini XLR
- Dimensions : 8mm diameter x 18mm length
- Cable length : 1.2m
- Accessories : Supplied with microphone tie clip



## Miniature Cardioid lapel microphone S1020

The S1020 is in the same range as the S1008 microphone but it offers a cardioid pick-up pattern.

### Specifications

- Cardioid lapel microphone
- Frequency response : 70Hz to 15kHz
- Sensitivity : -42dBV/Pa
- Connector : Mini XLR
- Max input : 118dB
- Dimensions : 8mm diameter x 18mm length
- Cable length : 1.2m
- Accessories : Supplied with microphone tie clip



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