

## **Basic Complete Community Radio Station Package**

**This system contains all the equipment needed to start broadcasting, plus a few extras:**

**A 6 channel mixing console, which allows 2 mics and 4 stereo audio sources (eg a CD player, cassette player or computer) to be plugged in and mixed or broadcast simultaneously.**

**2 CD/Mp3 players, which allow 2 pieces of music or other programming to be mixed together, or played seamlessly one after the other.**

**2 Portable Mp3 recorders, which allow 2 reporters to be out making recordings in the field simultaneously. Recordings can be transferred to a laptop or played back directly on the air.**

**A 40 Watt transmitter and half wave stacked dipole 3.7dB gain antenna, which provide sufficient power to broadcast to a range of 25km, depending on the height of the antenna, and the terrain of the local area.**

**And a lot more!**

**The equipment in this system is suited to a radio station with two rooms:**

**A Control Room, where the mixing console, other broadcast equipment is installed, used to engineer recordings and live broadcasts.**

**A Recording Room, where the radio presenter and guests are located.**

**The studio equipment could all be housed in one room, which would allow the radio host to also have control of the rest of the equipment.**

**With either arrangement, the transmitter should be housed in a separate room, as it has a loud fan which could be picked up by the microphones, and because the closer the transmitter is to the studio equipment, the more likely it is that feedback might be introduced into the system.**

# Basic Package Equipment List

## Studio Equipment

- 1 6 Channel Mixer (2 Mic/4 Line Inputs)
- 3 Dynamic Microphones
- 2 Studio Headphones
- 2 CD/Mp3 Players (Discmans)
- 1 Cassette Recorder
- 2 Portable Digital Recorders
- 2 Microphone Stands
- 1 Limiter / Compressor

## Transmission Equipment

- 1 40 Watt FM Transmitter
- 1 Stacked Dipole Antenna
- 1 RG 213 50 Ohm Antenna Cable (40m)
- 5 PL 259 Connectors
- 1 Lightning Arrester

## Extras

- 2 Power Strips
- 1 20 Pack of Batteries (AA)
- 1 Rechargeable Batteries (AA) + Charger
- 1 Blank Cassettes (20)
- 1 Tools (Toolkit, Multimeter, Soldering Iron, Tape, Ties etc.)

**TOTAL:** (excl. shipping and customs)

**£1500**

**Please note:** the following items are not supplied but are required and should be sourced locally:

Studio Building  
Studio Furniture (Desk, Chairs, Shelves etc.)  
Antenna Tower / Mast  
Voltage Regulator  
Copper Grounding Cable and 4' Copper Tube for Lightning Protection

## Payment Details

Payment can be made by wire transfer to:

Account Name: RadioActive Consulting Limited  
Bankers: Santander  
Bank Account: 47185580  
Sort code: 090127  
IBAN: GB87 ABBY 0901 2747 1855 80  
Swift Code / BIC: ABBYGB2LXXX  
Bank Address: Santander UK PLC, Business Banking, 301 St Vincent Street, Glasgow, G2 5NT, United Kingdom

### Please note:

Prices are in UK Sterling excluding VAT (0% VAT payable on goods exported outside the EU.)

Order will be assembled upon 50% payment. Assembly takes 4 – 6 weeks. Once the assembly is complete will contact you to ask for payment of the remaining fee. Once this has been received the order will be shipped.

**Please note: any equipment can be added to or removed from this package to suit specific project needs. Please contact us to discuss your particular requirements.**

# Basic Package Equipment Details

Below are descriptions and images of all the main pieces of equipment included in the basic package.

## 6 Channel Mixer



This 6 channel mixer allows 2 mics to be used simultaneously, along with 4 other audio sources (eg. 2 CD players and 2 Cassette Players). A computer can also be plugged in. This mixer has 4 stereo outputs. This means one output can be used to send the signal to the transmitter, two outputs can be used for recording, and one can be used for monitoring, via headphones (included).

If you would like to connect more than 2 mics, a small mic mixer can be added to the package at a cost of **£25**.

## 3 Dynamic Microphones



These clear-sounding mics are sturdy and durable, and able to handle dusty, dirty conditions, as well as being dropped by accident. 3 mics allows one to be taken into the field while 2 are used in the studio, or vice versa.

## 2 CD/MP3 Players



These are essential for playing audio CDs and mp3 CDs on the air. This CD player will play CDs burned on a computer. It can be powered with batteries or mains.

## “Long Play” Cassette Recorder



This cassette recorder allows you to record for 6 hours onto a single 90 minute cassette. Useful for recording your broadcasts, which is a requirement under community radio licensing law in many countries.

## 2 Portable Digital Recorders



These allow recordings and interviews to be made in the field and brought back to the studio to be broadcast. They have a built-in mic, and an input to connect an external mic and a headphone jack. Files can be transferred onto a PC or played back directly on air.



## 2 Studio Headphones

These high-quality studio headphones allow the presenter and one host to monitor what is being broadcast. This make and model produce quality sound and will last for a long time in tough conditions.



## Limiter/Compressor

This device is not essential, but useful to ensure that the sound being broadcast is not too quiet or too loud. It helps makes your station sound more professional.

## 40 Watt FM Transmitter

Connecting this 40 Watt Transmitter with a 3.7dB gain Antenna will provide on average of 100 Watts ERP. The transmitter can be supplied as mono or stereo.

## SWR/Power Meter

Not essential, but useful for monitoring the efficiency (SWR) and power of the system.

## RG 213 or RG8 50 Ohm Coaxial Antenna Cable (40m)

It is important to choose the right cable, as a lot of power can be lost with the wrong cable. It is used to connect the transmitter, swr meter, lightning arrestor and antenna.

## Lightning Protection

This consists of a small lightning arrester, fitted between the antenna and SWR Meter, and connected to a copper cable feeding to a copper rod buried into the earth.

## Half-Wave Stacked Dipole Antenna

The stacked dipole antenna gives a boost of 3.7dB to the power of the signal being broadcast. It must be attached to a 3-4 metre long metal pole with a diameter of 25-50cm. This must be placed as high as possible, to cover as large an area as possible.

## Basic 100 Watt ERP FM Transmission System

From the  
Limiter/  
Compressor  
in the  
Studios

40 Watt  
FM Transmitter

SWR / Power  
Meter

Lightning  
Protection

3.7dB Gain  
FM Antenna

(Earthed)