

D&R (founded in 1973) is a company heavily involved in advanced console design.

Although a leader in the "in-line" format design, D&R's technology has expanded to encompass the "on-air" type of console with the "Aircom" series.

The "AIRCOM" is a sophisticated, high quality, on air console based on the experience gained with the successful "AIRTEQ" series. The totally modular welded steel chassis houses "state of the art" electronics, resulting in extremely low noise and reliable "radio tool". The separate meterbridge houses high resolution meters and space to accept several accessories.

The combination of essential functions, together with understanding the needs of today's starting broadcasters has made this console the best logical choice. All internal switching is done by solid state C-mos switches.



### FULLY MODULAR STRUCTURE GIVES FREEDOM OF SYSTEM BUILD-UP.

All interconnections are by way of locking I.D.C. connectors on flexible ribbon cable, allowing modules to be placed together wherever it suits you. The "AIRCOM" is designed with reliability in mind, a workhorse you can build your station around. The chassis can accept up to 16 input modules as well as the master section with its scriptspace for the log or script. The power supply is built in and thoroughly stabilized.

### THE MIC MODULE WITH 100 MM LINEAR FADER HAS ELECTRONIC MUTE SWITCHING.

The mic module has an electronic balanced low noise input circuit utilizing an XLR type connector, an insert jack connector and a "cough" input, which allows you remotely to silently interrupt the broadcast by way of a pushbutton located near the announcer.

Starting at the top of the module, a wide range gain control is capable of leveling dynamic as well as condenser microphones. The necessary 48 volt phantom powering can be set by individual jumper settings per channel.

The three band equalizer has carefully chosen frequencies with a restricted range to avoid "over equalizing". The "flat" position is easily identified by centre detented controls. Two Aux sends give selectable, controllable foldback,

which can be derived post fader. There are two extra feeds called "clean feeds", necessary to work with up to two external telephone hybrids. The panpot balances the signal between the left and right stereo busses.

Mounted below the panpot is an "on" switch, used to bring in the signals instantly as well as interrupt the broadcast when necessary. This function can also be externally activated by the "cough" logic.

### INTELLIGENT LOGIC CIRCUITRY QUARANTEES FAILUREFREE BROADCASTS.

The "cue" switch can send the pre fade channel signal to the CRM and or to the cue output. The cue switch is disabled when the fader is in its up position and the on switch is activated as well when the mics are used in the control room (self op active). A red light output (mic on) is available at the cough connector. The mic on signalling together with the activating of the mic channel can be performed in two ways. Either you put the on switch in its stand-by position (green led on) and you bring in the signal by moving up the fader or the other way around. First the fader and then the on switch. A very convenient way and the choice is up to you!

The peak indicator lights when a signal reaches its 4 dB point below clipping. The channel fader is a new extremely smooth ALPS fader with integrated micro switch, generating the red signalling and driving the logic, to control the mute and cue functions.



**THE STEREO INPUT MODULE HAS TWO SELECTABLE INPUTS.**

This stereo module is capable of accepting two line level signals such as turntable pre-amps, CD players, tape cartridge or reel to reel tape machines. The active stereo inputs are unbalanced utilizing XLR type connectors and jacks.

Pulse/continuous opto coupler contacts are provided for starting and stopping external equipment by moving the fader from the off position or by activating the "on" switch, as is the way in the mic channel.

The inputs and remote connectors are selected by the A/B switch.

The wide range "active feedback" gain control will easily handle consumer and professional equipment. In this module the three band equalizer also has restricted ranges to avoid over equalizing and centre detented pots to easily identify the "flat" position of the eq.

**TWO CLEANFEEDS ARE STANDARD.**

Two AUX sends are available for foldback purposes and two internal cleanfeed busses. The "ON" circuit is activated electronically by the front

panel switch or by moving the channel fader.

The cue switch sends the stereo pre fade signal to the phones and CRM (if enabled) and always mono summed to the cue output. The cue function is disabled when the fader is in its up position and the on switch is activated. The balance control adjusts imbalances in stereo information.

The peak led indicates a signal reaching the 4 dB point prior to clipping.

The extremely smooth 100 mm linear fader with integral micro switch controls all logic in the channel and master section.



**MICROPHONE MODULE.**

Balanced mic input.

Channel insert send and return.

Cough connector with red light signalling.

Wide range mic gain.

Three band equalizer with restricted range.

Aux 1 and 2 sends and two extra cleanfeeds per channel.

Pan-pot for optimum stereo image.

"On" switch for "Red light" indication as well as fader start.

"Cue" switch for communication.

Peak led indicates input overload.

100 mm fader controls audio and "Mic on" indicator.



**STEREO LINE MODULE**

Selection between two sets of stereo line level signals.

Remote connectors for starting and stopping equipment.

Active gain control for optimum leveling.

Three band equalizer with restricted range.

Aux 1 and 2 sends are post fader. Two cleanfeeds per channel.

Balance control with restricted range to optimize stereo image.

"On" switch to activate channel/fader start.

"Cue" switch to pre fade listen channel.

"Peak" led indicates channel overload.

100 mm fader controls audio and start and stop pulses.

**MASTER SECTION CONTAINS EXTENSIVE COMMUNICATION CIRCUITRY.**

The master module contains the necessary circuitry to accept signals from the channels. A scriptspace is located beneath the control section, while the headphone output is conveniently located on the front of the chassis.

There are four sections on the master module. Section one controls the announcers output. This output can be fed permanently from the main outputs or follow the cue signals to also be able to listen to what is going on in channels or stereo and tape returns.

The left presenters output can be set permanently to the main output left, if desired,

while it is also possible to exclude this left section from the talkback circuitry by jumper selection on the printed circuit boards. The right "ear" will always be interrupted by the engineers talkback mic, when selected.

Aux one and two are both controlling the outgoing signals. The cue switches are provided to check levels and signals.

The connector panel houses the following in and outputs.

The din standard meter connector contains the outputs of the left/right CRM output but can be set "permanently" by jumper setting to follow the main left output.

The "mic on" connector is opto coupler

seperated to drive external red light signalling. Aux one and two are unbalanced + 6dBu outputs.

The announcers's output is a high level stereo output to be connected to several medium impedance headphones in parallel.

**ALL FUNCTIONS ARE INDICATED BY LEDS.**

This section contains the quest outputs amps and cleanfeed masters. The quest output amps are fed by the main signal only, and can only be interrupted by the talkback mic of the engineer. This will assure you of relaxed quests waiting for their turn, without being disturbed by conversations in the communication circuits.

The cleanfeed outputs are straight forward and used to drive external telephone hybrids. The cleanfeed sends can be individually selected per channel by jumper settings, to avoid feedback in the return channel of the hybrid. The cue switches are provided to check levels and signals.

The connector panel houses the cleanfeed outputs and stereo quest output, which is also capable of driving more than one headphone set.

**MAIN OUTPUTS ARE TRANSFORMER BALANCED.**

The main outputs have several smart features to make the "AIRCOM" the right choice for your budget.

The main left right mix busses, have individual inserts for limiters while the mono output and stereo tape output can be selected by jumper settings to follow the channel inserts or follow the mix amps directly before the signal goes to the inserts.

The tape outputs also have jumper settings to select between +4 dBu and -10dBv output level.

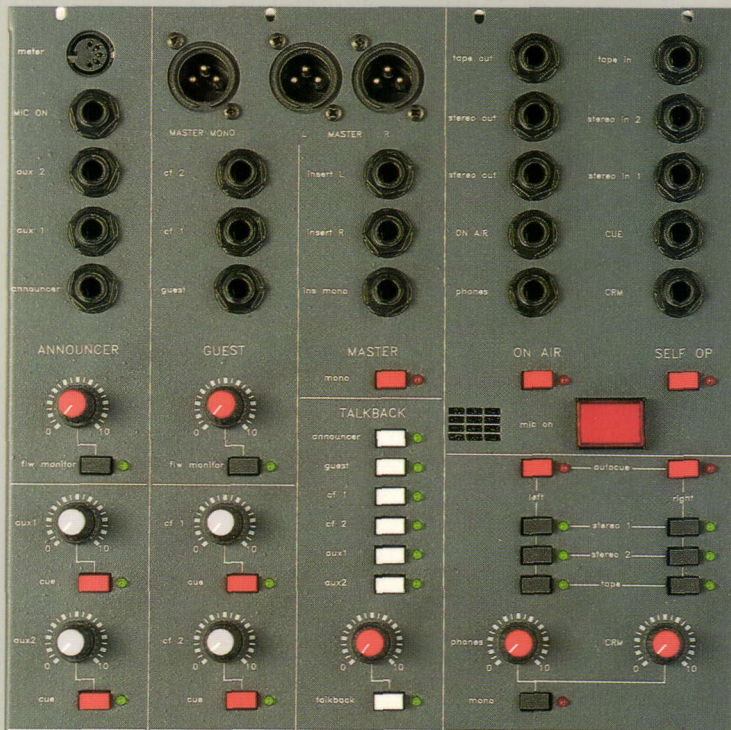
The possibility to have an external mono limiter in the mono output insert only makes the "Aircom" even more versatile.

All three main outputs are transformer balanced and capable of driving low impedance lines via XLR type conectors.

**TALKBACK SECTION MAKES COMMUNICATION VERY COMFORTABLE.**

The talkback section has a built in very sensitive electret microphone which can be selected to all relevant output sections of the Aircom.

The engineer can talk to the announcer, to the quest, to the cleanfeeds and to the aux sends. This could be individual as well as a combination of several outputs. The talkback is electronically switched to be able to dim the control room monitor, which makes conversation more easily to perform.



**"SELF-OP" SWITCH LETS YOU CHOOSE BETWEEN BEING AN ANNOUNCER, OR ENGINEER, OR BOTH.**

The "ON-AIR" switch controls the external on-air box which interfaces the console and the off air signal on one side and the broadcast lines on the transmitter side.

The "MIC-ON" lamp indicates whenever a mic channel is on the air, while the "SELF-OP" switch lets you choose whether the CRM needs to be muted when you are "on the air" to avoid feedback. Also the cue output will be muted in the "self-op" mode.

It is possible to individually choose which CRM channel you want to be activated by the cue system.

This makes it very "transparent" to work with the "AIRCOM" in live broadcast. Just look at your control center and see whats going on in your signal paths.

**THE STEREO INPUTS CAN BE ADJUSTED TO ACCEPT NEARLY ANY LEVEL OF ANCILLARY EQUIPMENT.**

Two stereo sources and one tape return can be connected to the CRM section. Their connectors are all stereo jack sockets with high contact pressure and made from silver nickel contact material. The tape and stereo outputs are isolated from each other to avoid problems with short circuiting one of the outputs.

The phones output is a high level stereo output located on the right front side of the chassis, while the CRM output is located on the connector panel. The mono switch both affects the CRM and phones output.

On the connector panel you will also find the cue output connector, which will be affected by the mute and dimming control of the mic-on logic signals and talkback switch.

The phones output will be unaffected by these control signals.

**THE METER BRIDGE COVERS UP ALL INPUT CONNECTORS.**

The meter bridge elegantly covers up all connectors of the Aircom, while access still is very easily accomplished by simply lifting the meterhood.

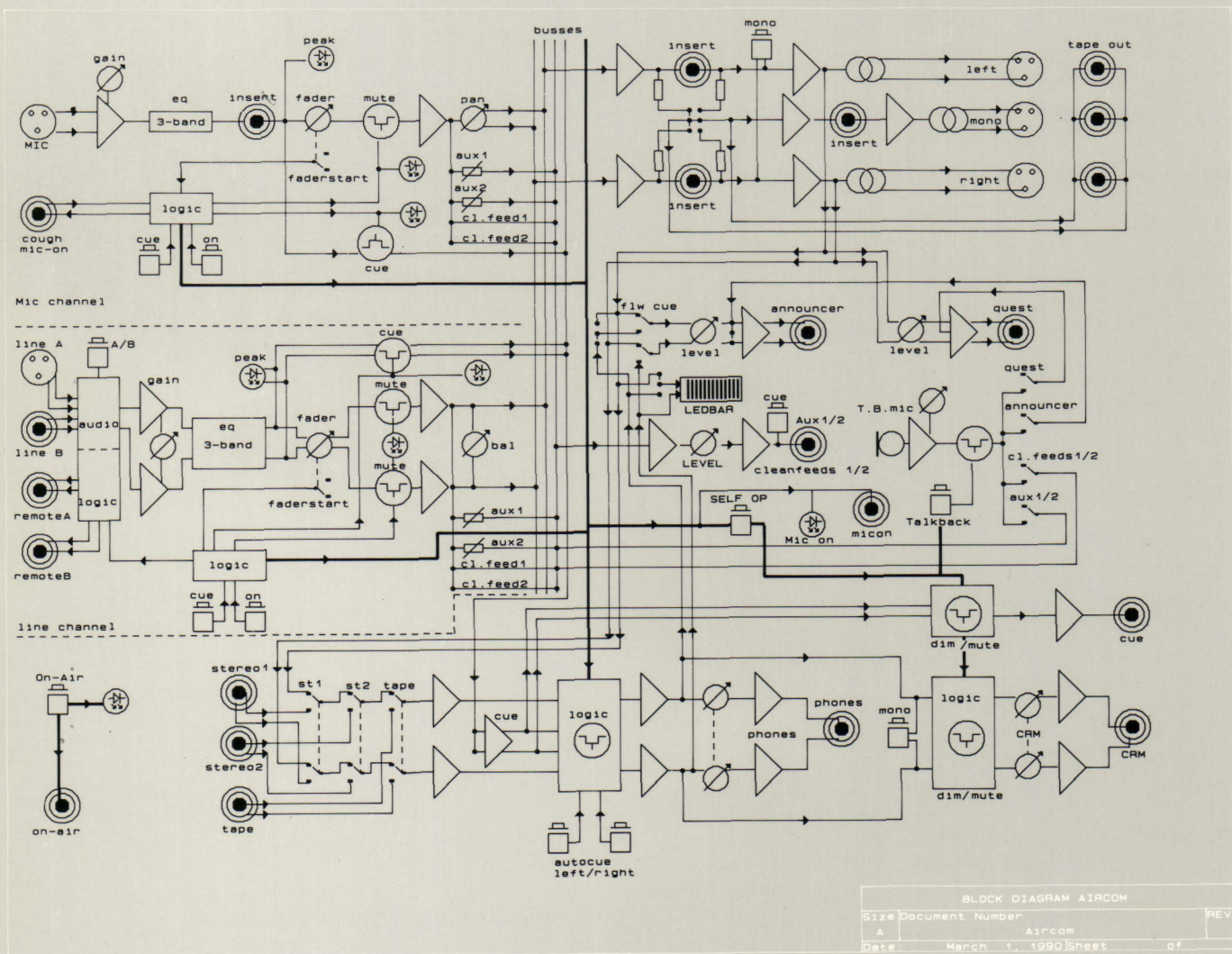
The meter bridge houses the 25 segment peak reading led bars and space for five signal processors (such as telephone hybrids and or accessories).

The heavy duty power supply has a toroidal transformer and is located beneath the scriptspace.

Can you afford not to afford the Aircom? The new D&R radio console that is setting standards in a new developing area of upcoming budget radio stations.

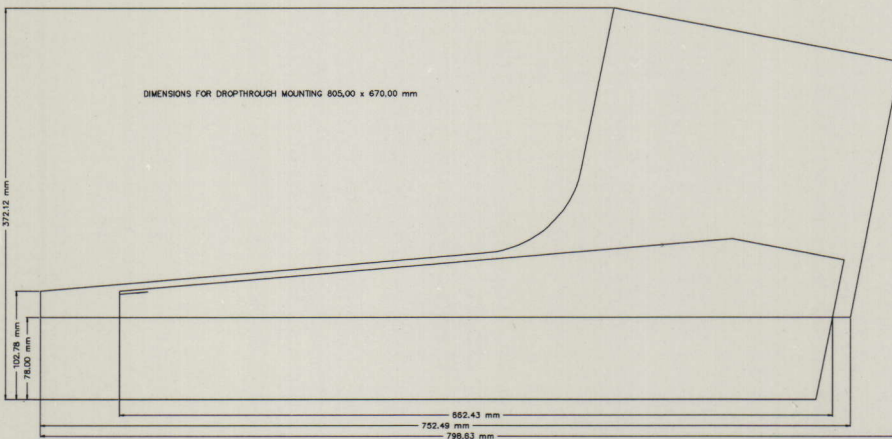
**The "AIRCOM"**

**TOTAL CONTROL**



## SPECIFICATIONS

INPUTS	Mic inputs: balanced 2 kOhm, R.F. protected. C.M.R.R. at 50 Hz: -76 dB. Sensitivity: -70 dBu to -28 dBu for +6 dBu out. Signal to noise ratio.: - 129.00 dB. Line (stereo) inputs: unbalanced 10kOhm minimum. Signal to noise ratio: -90 dB.	Sensitivity: -20dBu to +20dBu active controlled for +6dBu output. Insert: input unbalanced at 10 kOhm. Sensitivity: 0dBu. Tape returns in master: -20dBu to +6dBu at 10kOhm minimum.
OUTPUTS	Left/right/mono +6dBu transformer balanced. Aux 1/2, Cleanfeed 1/2, Cue, CRM, +6 dBu at 47 Ohm, unbalanced.	Phones / announcer / quest, +15dBu at 47 Ohm.
EQUALIZATION	+/- 12 dB at 10 kHz shelve. +/- 12 dB at 3 kHz bell curve. +/- 12 dB at 60 Hz shelve.	
OVERALL	Frequency response: 20-20.000 Hz +/- 0.5 dB. Harmonic distortion: less than 0.02 % at all levels. Max gain through desk: 86 dB. Cross talk: channel to channel: -90 dB at 1 kHz.	Noise: -86 dBu (one channel @ 0dB) A/B line crosstalk: -80dB. Max output: +26dBu into 2 kOhm. Headroom: +22dB above internal nominal level.
REMOTES	All control inputs are on jack sockets. Channel/master mic-on signalling is via buffered transistors and or opto couplers.	Machine remote control is via seperate opto couplers for start and stop pulseor contineous signals.
WEIGHT	Aircom 16: 40 kg (88lbs)	
OPTIONS	Conductive plastic faders	
DIMENSIONS		



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mixing consoles