MIXERS

ARX MIXX & MIXXMASTER

ARX announce two minimalist mixers in one rack unit, each with four inputs, and suitable for live or studio applications

FUNCTIONS

The two Mixx and MixxMaster mixers are presented in a 1 RU 19 inch rack mount package. Both offer four inputs and a stereo output.

The Mixx model has four identical channels, with microphone sensitivity adjusted on the rear panel. A gain trim control is accessible solely via a a screwdriver blade, modifies the sensitivity of the input to adapt it to the level of the signal. A centre click marked with a tick corresponds to a standard vocal microphone, typically a Shure SM 58 according to the instructions for use. Input Connectors are standard 3 pin female XLR type. Global phantom power on all inputs uses a switch on the rear panel, associated with an LED on the front. Note that if you use unbalanced signals, or even balanced

A formula easily adapted for installations large and small

ones that don't support phantom power, you will have to disable the phantom power to selected channels inside the unit.

Each channel has a direct output to individually send its signal to a multitrack tape recorder, for example: the output is post-level control. Three EQ controls for Low, Mid and High modify the frequency response curve and change the

sound, changing the proportions between the fundamental signal and the harmonic. A panoramic control and a channel level control complete feature set. The Mixx doesn't have an overall level control, which is not a problem considering the specific application of the Mixx: it will always exist elsewhere in the signal chain.

The MixxMaster is distinguished by an appreciably different configuration. We still have two Mic/Line inputs, identical to those of the Mixx, but there are also two stereo line inputs with quarter inch jack connectors. The first has three way EQ and level controls, and the second has a level control only thus leaving space on the front panel for two master volume controls.

ARX gives duck-

Mixx and Mixxmaster input controls - two complementary products
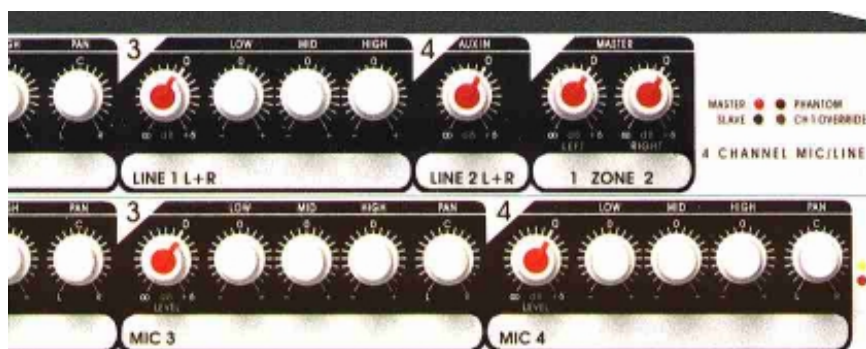
ing priority to channel 1. The DIN connectors on the rear join the mixers together by linking the buses. You can create the mixer of your choice, by combining several Mixx/MixxMaster units because the MixxMaster can be switched to master or slave mode. In master mode,

Professional construction without compromise

it controls the overall level of all the signals that arrive on all its buses. In slave mode, it is content with managing the signals of its own inputs without worrying about what happens on the bus inputs. This way, we will be able to have a mixer having as many channels as the number of units linked up.

SPECIFICATIONS

Each mixer has its own setup. Very simply, the Mixx has four identical mic/line inputs, with the line function enabled by switching in a pad. One control adjusts the gain. Three EQ controls, one level control which handles the output bus and the direct outputs. The signals are mixed

and leave on balanced outputs and on the bus connectors.

For the MixxMaster, ARX uses the microphone inputs of the Mixx with channel one getting priority when the ducker is switched in, plus a stereo input and an auxiliary input, this last having only a level control. Note that linking left and right channels changes them to mono. After mixing, the signals of the buses continues toward an automatic attenuater controlled by channel 1 if the user programmed the switch for this function. We recover the bus interface associated with the master/ slave switch.
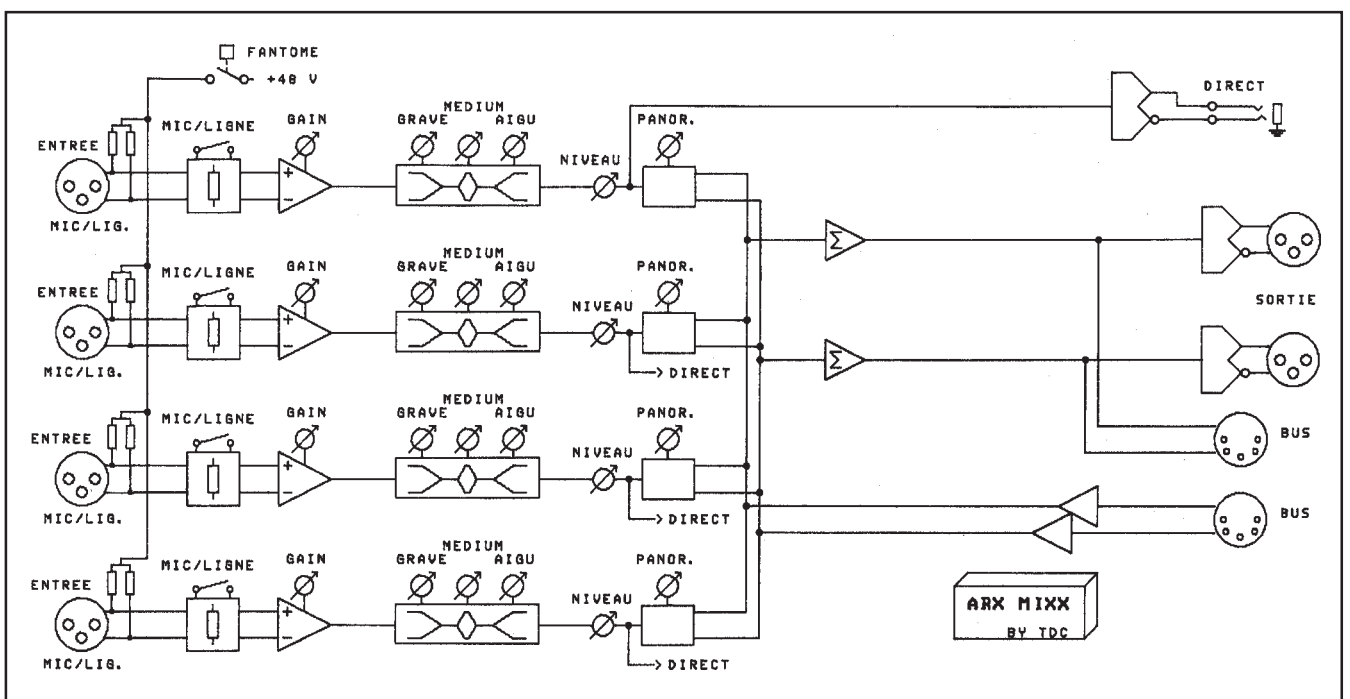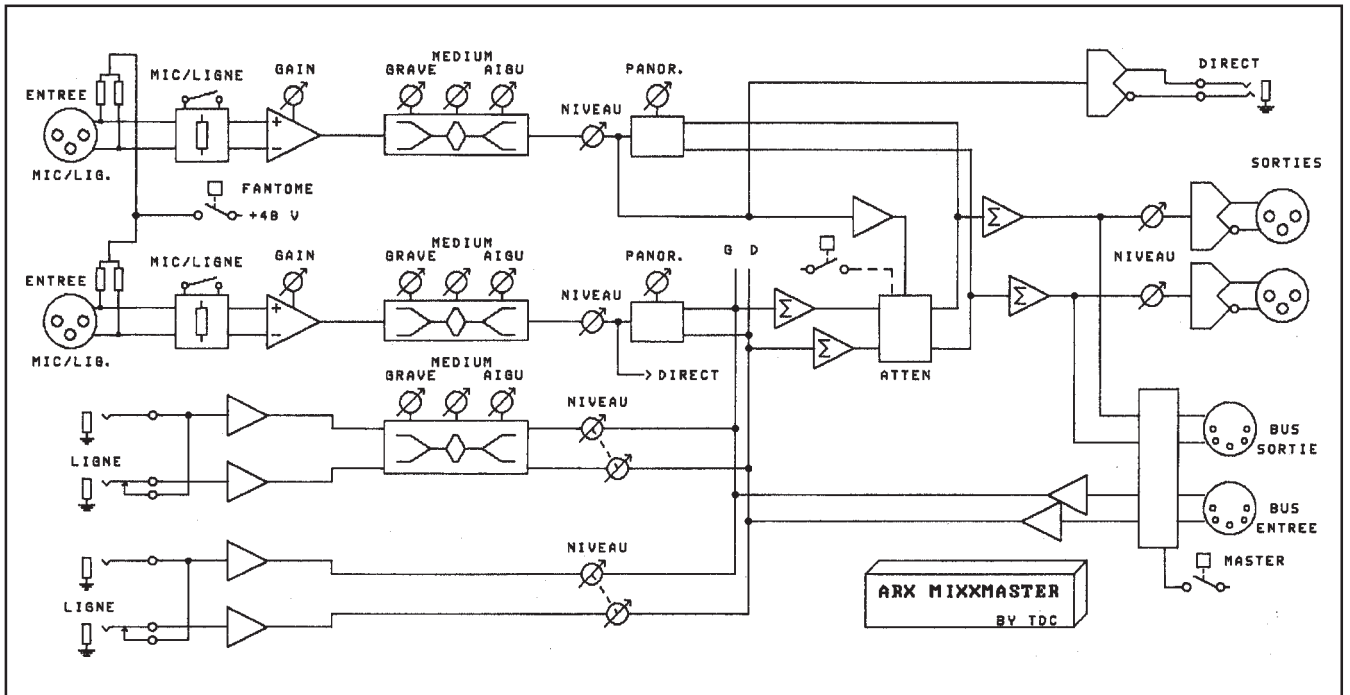
NIVEAU (dBu)	MICRO GAIN MAXI	MICRO GAIN MINI	MICRO GAIN MAXI	MICRO GAIN MINI	LIGNE 1	LIGNE 2	SORTIES
+ 30							
							+ 28 SAT SYM
+ 20							+ 21 SAT ASYM
							+ 20 SAT SYM 600Ω
							+ 18 SAT ASY 600Ω
+ 10							
0							0 NOM
		+ 5 SAT		− 4 SENS			
− 10		− 9 SAT					
− 20					− 20 SENS	− 21 SENS	
− 26 SENS		− 26 SENS					
− 30	− 30 SAT						
− 40			− 39 SENS				
− 50							
− 60	− 61 SENS						
− 70			− 73 BDF				− 69 BDF MEL 0
− 80				− 83 BDFA			− 81 BDFA MEL 0
− 90		− 95 BDF			− 89 BDF	− 90 BDF	− 90 BDF ESCLAVE
					− 98 BDFA		− 99 BDFA ESCLAV
− 100						− 102 BDFA	− 100 BDF TT 0
							− 102 BDFA TT 0
− 110		− 105 BDFA	− 102 BDF				
			− 105 BDFA				
− 120	− 124 BDF						
	− 127 BDFA						
− 130							ARX MixxMaster et Mixx

branded by the Japanese manufacturer NEC. ARX standardizes on the use of 1% resistors, a luxury you can afford! Less successful were the instructions for use that describe the inputs and outputs, without any schematic illustrations.

CONSTRUCTION

These ARX mixers benefit from professional manufacturing techniques. The components are installed on double sided fibreglass printed circuit boards with plate-through holes.
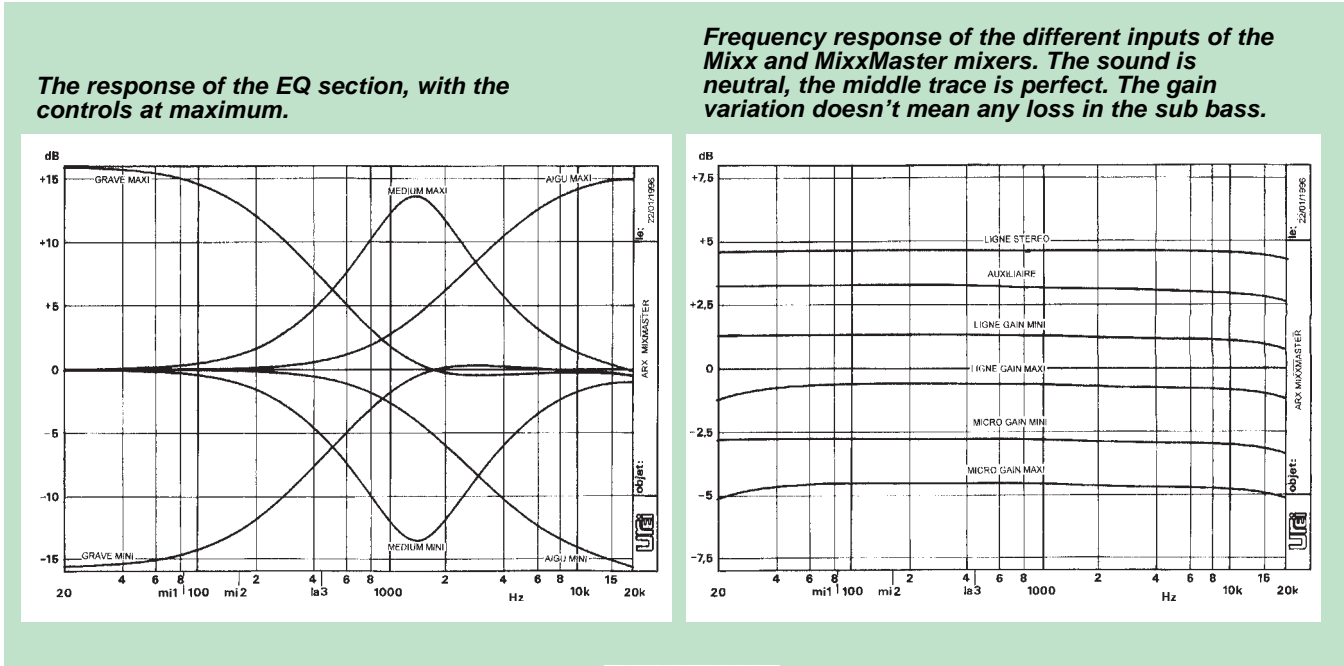
The heaviest capacitors are glued as well, avoiding damage to their fragile connections.

The integrated circuits, mounted on support bases (easy to replace) are the 4558 classics or the less widespread 4574

MEASUREMENTS

In the absence of any output level indicators, we established our output level to 0 dBu, being 0.775 V to set a typical enough reference.

In the table you can see a relatively im-

The response of the EQ section, with the controls at maximum.

Frequency response of the different inputs of the Mixx and MixxMaster mixers. The sound is neutral, the middle trace is perfect. The gain variation doesn't mean any loss in the sub bass.

portant difference between the levels of 'A' weighted and non weighted signal to noise. However this phenomenon only appears when the two mixers are working independently. In slave mode, the background noise reduces considerably. The balanced output level can reach + 28 dBu, ARX uses an output stage needing a ground, unlike transformer balanced outputs that one sometimes sees.

The output impedance of 430 ohms balanced changes to 150 unbalanced.

Impedance equals 1 kohm on the XLR microphone inputs when the line input is not switched in and reaches 1.6 kohm when it is. On the line input on channel 1, we measured an input impedance of 14 Kohm while on channel 2, it was 7.2 Kohm.

Superb performance all round

The harmonic distortion rate measured at 1 kHz to the limit of saturation is 0.052%. To 10 kHz, it changes to 0.066%.

The frequency response curves are all that you can ask for in in this type of product and more. It is interesting that at maximum gain, the attenuation to the low frequencies is reduced. The high frequency response doesn't change.

The EQ controls produce some classic curves.

Etienne LEMERY

The DIN connectors serve to link the two units, creating a unique mixer.
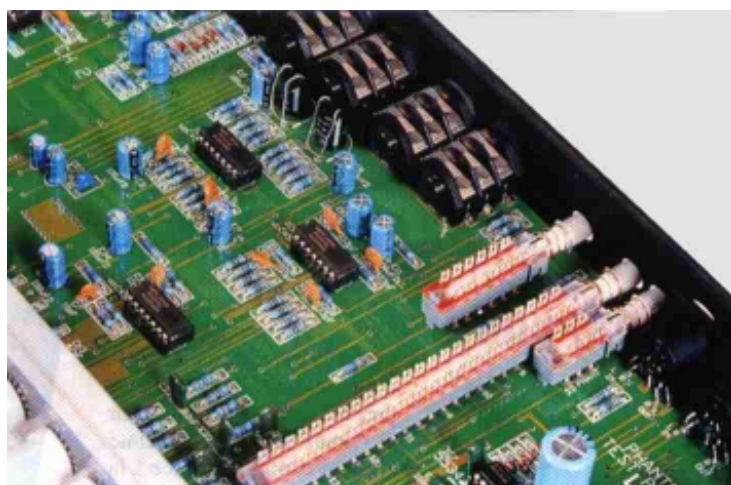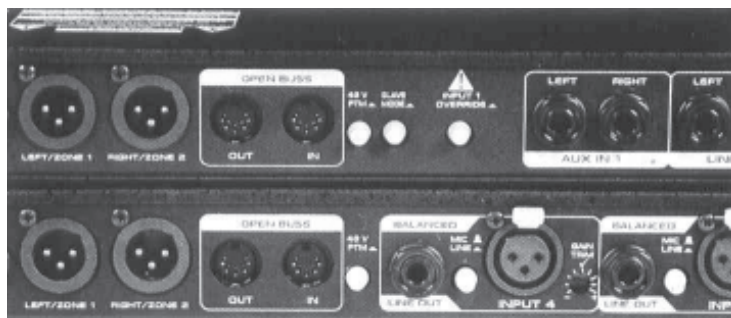
This switch deserves to be in the record books! It is the longest that we have ever seen. To the top you can see the black cylinders of the opto-couplers.