

Dear Customer,

November 2015

Over the years we often have received interesting information and facts based on client experience with the Sonodore microphones. In addition, new developments take place all the time. This kind of information is usually not available on our website, but may very well be of interest to you. Therefore, we have produced this newsletter.



# **MPM** series

The MPM series has existed for a few years now. There have been some changes and developments and it will further evolve in the future. This is a short summary of the MPM series.

# Background

Why are Neumann capsules chosen?

Good sound quality, reliability, constant quality and good delivery.

Why use a tube amplifier?

Tubes have a very smooth and natural sound. But they have a higher noise and input capacitance than fet amplifiers, which means they can only be combined with 1" capsules.

Why use a fet amplifier?

Fets have a lower noise and lower input capacitance so the sound is more detailed and precise. Why use this enclosure?

The price of the microphone can be substantially lower.

Why use the Rycote suspension?

Good quality and reliability.

# **MPM-81**

This multi pattern microphone has the characteristic of a 1" mylar diagram sound: a little presence plateau around 10KHz, full and rich sound, low noise.

With a tube amplifier it's very useful for vocal recordings: a very smooth and natural sound.

With a fet amplifier it's useful for all kinds of musical instruments.

The sound is very alive, but not too sharp or metallic.

Research has just been finished to design a tube amplifier which is optimized for non vocal recordings: a faster amplifier with more "fet specifications". This new amplifier is available now.

## **MPM-91**

This multi pattern microphone is designed to record all kinds of musical instruments. It's a general-purpose microphone due to 1)the 3/4" dual mylar diagram and 2)the very smooth frequency response for all polar patterns over a wide acceptance angle. Its sound has a very natural and transparent characteristic. Due to the smaller diagram it is only available with a fet amp.

#### MPM-?

Research is being done to use a good copy of the AKG CK12 capsule, because of its good reputation (the original metal version, not the modern Teflon version).



#### **Microphone cables**

In cases you find the overall tonal balance of a microphone too sharp, the van Damme Tour Grade Classic XKE Starquad cable could be used. This cable has a milder tonal balance than the Mogami starquad while maintaining the sound quality. The price of the Van Damme cable is the same as the Mogami.

## Li-ion batteries

The experiences with the modern Li-ion batteries are good:

- 5 times lighter and smaller than lead acid batteries with the same capacity.
- easier to charge
- a slightly better sound quality than the lead acid batteries.

But to reach the 60V for the active powered microphone with 4pin XLR, the system becomes too complex. So, Li-ion battery powered equipment is at the moment only available for the 6 pin XLR norm with +15V and -15V. And high capacity Li-ions are difficult to obtain, so equipment which need a large current can't be built. The maximum practical pre-amp at the moment contains 4 channels. Battery powered 60V(4 pin XLR) systems and multi channel pre-amps will be supplied with lead acid batteries.



#### **RCM-402** reliability

Since the first production of the RCM-402, there have been no reports of malfunction of the capsule, due to age or manufacturing fault.

When 20 year old capsules are measured, the sensitivity remains the same.

So as long as the capsule is not mechanically damaged, the RCM-402 and CCM-65 remain on specs.



#### **MPB-502**

What's so special about the MPB-502?

1) Battery powered microphone and pre-amplifier: a much more relaxed, natural and precise projection of the sound images, less noise, much better reproduction of low frequencies.

2) Unbalanced pre-amplifier: better sound quality than balanced pre-amp

Due to the high output level of the sonodore microphones interference is no problem.

3) The gain is made by switches instead of potentiometers. Result: no contact problems and therefore no creaking noise.

4) One audio capacitor in the signal path can be removed, because the pre-amp and microphone powering is combined. Result: better sound quality.

5) The sound of the pre-amp is tuned for Sonodore microphones.

6) Only first-class audio components are used.

## **Audio samples**

For most of our microphones, audio samples are available.

It's not complete at the moment, but more files will appear in the future.



## **Electronic components**

Manufacturers of electronic components sometimes change or stop production of components. That means some good audio components will disappear and others will arise.

A good example was the Black Gate electrolytic capacitor: no other brand could match the sound quality of it. The production stopped many years ago. But happily, there's always some new old stock.

At this moment we have enough stock for many years to use in the Sonodore microphone. The same with Giga Ohm resistors (the first resistor after the capsule). Modern resistors do not sound as good as the old ones. But fortunately, we were able to get some new old stock here as well.

A good example of new products are the resistors of Takman: no other brand can match the sound. We always try to use the best components in Sonodore microphones.

Obviously, it's important to determine the sound quality of electronic components used in the Sonodore products. That's why the current test equipment has been improved and new has been purchased, in order to improve listening tests. As a result, the sound of an electronic component can be better determined and Sonodore products can be better optimized.

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