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“WAVE PLUS” MULTICHANNEL ELECTROMYOGRAPH

USER MANUAL

Redaction:	SALES – M. DELLACORNA GM – A. DELLACORNA	
Check:	GM – A. DELLACORNA	
Approval:	GM – A. DELLACORNA	
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Revision:	Approval Date:	Changes Description:
01	24/02/2012	Revision post IMQ review
02	30/12/2013	Added new miniwave electrode

The **system is** classified according to 93/42/CEE regulation

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including such that may cause undesired operations.

Any change or modification not expressly approved by Cometa Srl for compliance could void the user's authority to operate the equipment.



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1. INTRODUCTION

Wave Plus system is an innovative multi-channel wireless surface electromyographic system with accelerometers.

The leading specifications of this new system are:

- Wireless and low-power electrodes for a quick patient set-up and for movements performed in total freedom;
- Acquisition of SEMG signal simultaneously with the accelerometer signal
- Digital transmission via RF;
- Receiver device equipped with analog and digital (USB port) data output for all channels;
- Developed with high integration “SMD” technology;
- Compatible with ISM standard – low power devices (ETSI, FCC, JAPAN);
- Designed to be integrated with lab equipment for multipurpose acquisition systems.

2. DESTINATION AND CLASSIFICATION

Wave Plus is a system for the data collection of biologic signals; the main system feature is the absence of cables between the transmitters on the patient and the data receiver/recording unit.

This allows the acquisition of EMG and accelerometer signal while patient is free to move.

This feature is very useful for clinical and scientific applications, for example in pathologic gait analysis or in rehabilitation.

Low invasivity and high safety allow to use Wave Plus system for patients who tolerate the adhesive electrodes and conductive gel for SEMG detection through medical electrodes.

Wave Plus system application areas are:

- Neurology;
- Physiatry and rehabilitation;
- Orthopedy;
- Ergonomics;
- Sport medicine;
- Veterinary.

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