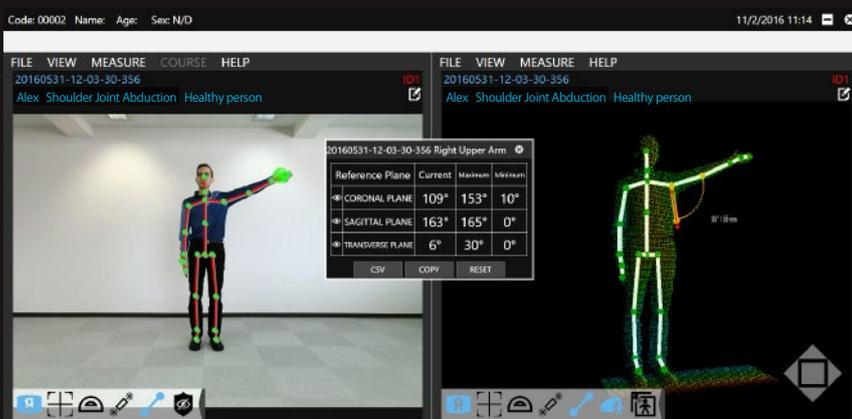


- A masterpiece of Rehabilitation

“AKIRA”

Mobile Motion Visualizer AKIRA is a medical equipment that was born out of the needs of rehabilitation. With a contactless sensor, it is able to evaluate the ranges of joint motion. Using AKIRA is as simple as taking a video. Without any marker and without increasing the burden on patients, it is able to measure and records all the 3D information, relating to posture and motion of the body. Furthermore, it is equipped with an array of functions aiding analysis and measurement. As a range of joint motion measuring device this system can be widely used for scenarios where body measurements are required, not just for medical purpose.



【Video View】

【3D View】



Medical device reporting number : 34B2X10008000001
 Medical instruments24 Perception and locomotion organ testing equipment
 Generic name : Tester of joint movement
 JMDN : 36148000 General medical device

“Looking into the future of Rehabilitation”

Effective measurement

Measuring range of joint motion of a patient with motion impairment using a goniometer is difficult. Another issue is that observational errors occur depending on the person measuring. In addition, the effect of rehabilitation needs to be judged by the condition of the whole body such as posture and the bending of the trunk.

The 3D data of the entire body measured by MMV AKIRA can be used for purposes such as “evidence of the progress of rehabilitation”, “informed consent to the patient” and “conference type examination by the doctor”.

Following this, the aim is to maintain/improve motivation of patients, promote development of new effective training techniques and bring about innovation in the field of rehabilitation.

Flexible data linkage

Measured data including angle and joint position can be output to CSV and used for analysis by a different tool and data collection by another system.

【Angle】

Reference Plane	Current	Maximum	Minimum
CORONAL PLANE	109°	153°	10°
SAGITTAL PLANE	163°	165°	0°
TRANSVERSE PLANE	6°	30°	0°



【Joint position】

Diverse motion analysis

Using measured data, motion and joint angle can be checked three dimensionally and in real time. For example, by using the tracking function, the joint motion path can be checked visually from any direction. It is also possible to check the degree of recovery by superimposing 3D data measured at different times.

【Tracking】



【Overlay】



Measurement support

Patients will do the same motion as in the explanation video, therefore the movements can be measured easily. Furthermore, by automating a sequence of motions/evaluations, measurement is made efficient. Evaluation can be made based on measured results. Therefore at the time of measurement it is possible to focus on the patient. By using video for explanation, it promotes standardization of evaluated motion.

