

## **What is a 3D Motion Analysis System and how will it make me play better golf?**

The system is a wireless six-degree-of-freedom golf swing analysis and biofeedback training system with Mark Bull 3D biomechanics reports. 3D provides a quantitative record of how a player is swinging at any point in time. The measurement system is accurate to within 1 degree of rotation and 1mm of movement. The resulting report provides detailed information on body positions, speeds and timing sequences.

### **3D Biomechanics Systems**

The latest in 3D equipment provides expert interpretative biomechanical reporting on body, arm, hand and club motions during the golf swing. Real-time position and orientation of various parts of the body (head, shoulders, arms, hips, club, etc.) are recorded as the golfer swings the club - all in three dimensions. The system is available for full swing, short game and putting analysis. The benefits are extended further with the addition of 'biofeedback training' - proven to speed up the learning of new or changing of ingrained motor patterns. It is this biofeedback feature of the system that golfers gain the most from in the shortest time. Take video analysis further by adding a third dimension! Benefits of the 3D biomechanics system:

- Real-time 3D graphical images as you swing the club
- No lost information
- Quantitative data available immediately - this data cannot be measured using video Methods alone and many movements are impossible to see with the naked eye
- Biofeedback training - real-time feedback on whether desired swing positions are achieved, allowing you to instantly feel the movement and position you are trying to achieve
- View your swing from any angle - front, behind, above, below and both sides. Information can be readily combined with other data from your own testing or against other golfers
- Compare swings at different points in time
- Compare your own swing measurements against a professional golfer database and using a realistic model

**3D biomechanics provides a quantitative record of how a player is swinging at any point in time.**

- The measurement system is accurate to within 1 degree of rotation and 1 mm (1/25 inch)
- The resulting report provides detailed information on body positions, body speeds and timing sequences
- The analysis is ideal to use at the beginning of a series of lessons or at a golf school
- The system is also a great monitoring tool for elite players and amateurs alike
- It can also be an important tool to assist in the development of young players

## **Biofeedback Training**

The 3D biomechanics system provides instantaneous audio information to the student/golfer on club and body position throughout the swing in order to speed up technique change.

While the report provides recommendations for biofeedback training, only one parameter is chosen for working on at any one time. We all know how problematic too many swing thoughts can be!

The instructor or swing coach then has the ability to set the positions or ranges they believe are realistic for the golfer. The 3D system provides audio feedback when the player either conforms or fails to fit such postures or ranges. It could be as simple as working on shoulder alignment at address, more coil on the backswing or a better impact position. The end result is that the golfer is able to develop the all important 'feel' associated with change in technique. It is the development of this new 'feel' that allows the golfer to head back to the range and not immediately regress to their familiar pattern of movement.

3D biomechanics is a great teaching tool for low or high handicappers, even for elite touring players when changes in technique only need to be subtle ones. Multiple biofeedback sessions combined with lessons with a teaching professional are recommended for optimal results. Of course, it takes more than one lesson to develop great technique, but adding the 3D biomechanics system is a great way to speed and enhance your progress!