

Video Analysis Made Easy

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A simple, and inexpensive, way to maximize your coaching with practical video analysis software



The phrase “paradigm shift” was popularized by Thomas Kuhn in his 1962 book *The Structure of Scientific Revolution*. It is used to describe a change in basic beliefs about a ruling theory of science. It can also be used to represent a major change in personal beliefs on any subject.

For example, most people believe that the shortest distance between two points is a straight line. In the movie *Event Horizon*, scientist William Weir (played by Sam Neill) presented the idea that if you could fold space, then the shortest distance between two points would be zero. The possibility of folding space would cause us to look differently at many of our ideas. Not into physics? OK, how about considering the difference in perspective that a person who has been blind since birth would experience upon regaining the ability to see?

Eye-opening, certainly. Now, how

about the paradigm for biomechanical analysis? For most coaches, it very likely consists of two firmly held beliefs: 1) Biomechanical analysis is impossible to understand unless your credentials have most of the letters of the alphabet after your name, and 2) It's too expensive. Not to overturn cherished notions, but let's just say some practical – and uncomplicated! – software from Quik Scout will help dispel these myths. And shift your paradigm, so to speak.

Keeping It Simple

When BFS was introduced to the creators of Quik Scout Technologies, what impressed us first was that the company has been involved in the field of improving sport performance through video analysis since 1982. The company has a proven record of success and has refined its products so they are easy to learn, easy to use and affordable – in fact, the basic, single-user system called Quik Scout inMotion costs less than \$200! There are more expensive software products in their line, but the basic program will fulfill many of the needs of even the most sophisticated coach. Also, the program works with your own computer and video camera.

When you install Quik Scout inMotion, you will be introduced to the home screen (Figure 1). This screen will guide you through the three basic sections in the software: *Capture*, *Organize* and *Analyze*.

CAPTURE. *Capture* is a function that enables you to hook your computer to your video camera so that you can record the video on your computer. Again, there's nothing else to buy! Also, Capture enables you to input videos that you have already recorded into your computer system.

ORGANIZE. *Organize* enables you to break down your videos into segments and to organize these segments into categories. If your video clips are of a track event, for example, you could categorize them by event and then by athlete.

ANALYZE. Now is where the fun begins! *Analyze* enables you to break down all your video clips, frame by frame (Figure 2). There are various drawing tools that can help you with this process, such as by tracing the bar path of an exercise (Figure 3). But there's much, much more!

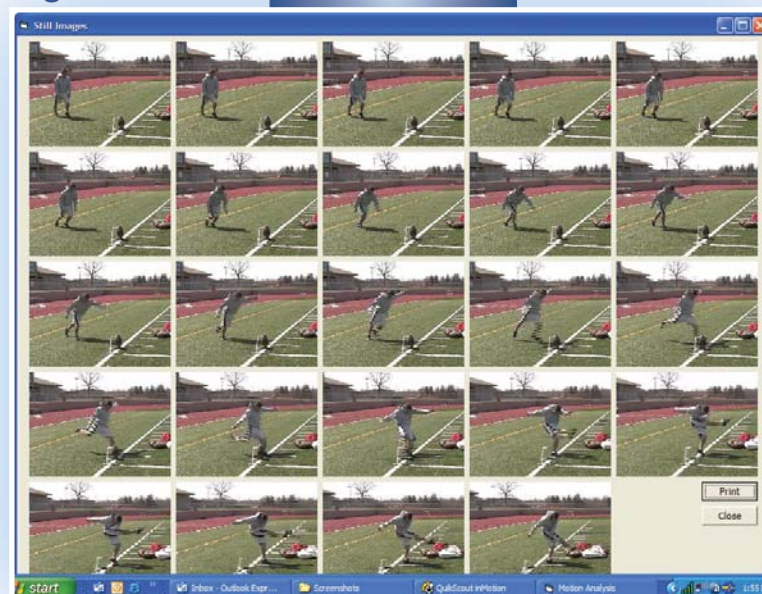
In addition to analyzing the technique of one

Figure 1



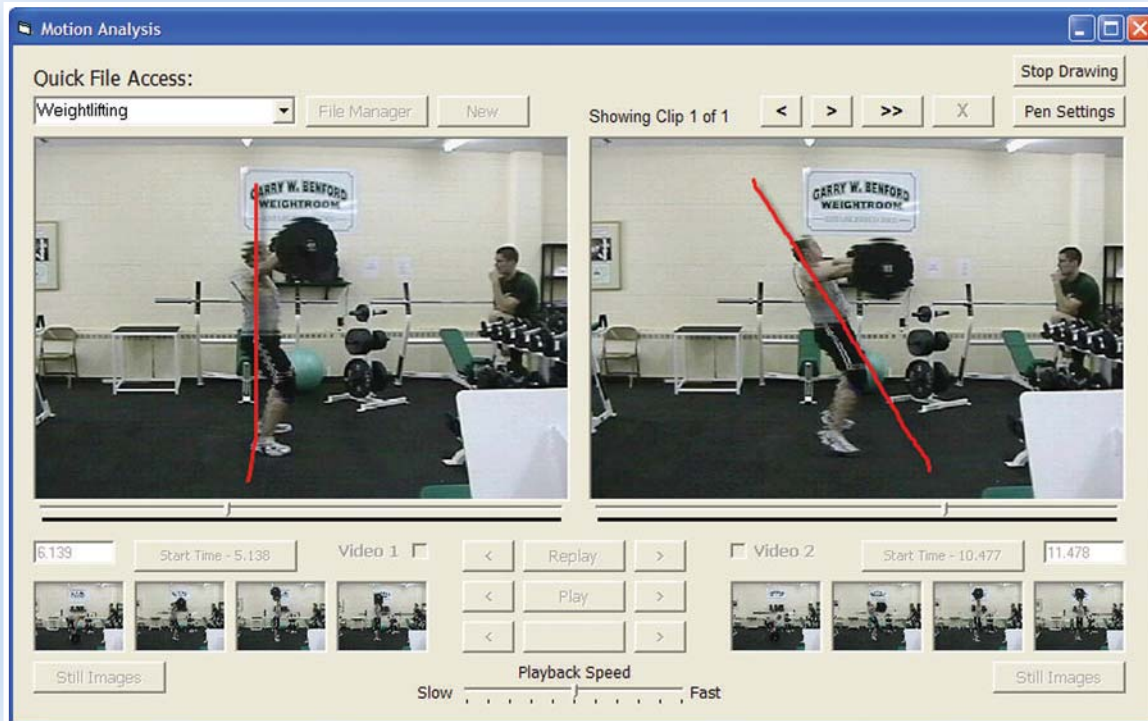
The home screen of Quik Scout inMotion is divided into three basic sections

Figure 2



The Analyze function enables you to break down video clips, frame by frame

Figure 3



Drawing tools help you determine technique aspects of athletic performance

athlete on a single video, you can open another video clip alongside it. It can be of the same athlete or of another athlete (Figures 4 and 5). Imagine comparing your baseball swing to that of A-Rod? Your sprinting technique to Carl Lewis? Or your golf swing to Tiger Woods?

After analyzing an athlete's technique, you can store your work on your computer or on a CD you can share with the athlete. As the season progresses, you can pull up those older

clips and see how an athlete's technique has changed so present workouts can be modified.

According to Coach Dan Budziszewski, head coach for varsity football and assistant softball coach at Harborcreek High School in Harborcreek, PA, inMotion has been instrumental in improving the mechanics and performance of both his girl's softball pitchers and place kickers on the varsity football team. Said Coach Budziszewski, whose softball team won

Figure 4



By placing video clips side by side, you can compare an athlete's performance with another athlete (or even a coach) and can observe progress over time.

Figure 5



Figure 6



“Knees aligned” is one of the six training principles called the Six Absolutes, and in these two photos you can see how it applies to the squat. Using the Six Absolutes is a simple way to perform biomechanical analysis.

the state championships, “inMotion makes technology coaching tools affordable to any school system and provides athletes a level of feedback we could never achieve with regular video cameras. Athletes of this generation respond very well to video feedback and incorporate what inMotion displays into their practice routine.”

Video Analysis and the Six Absolutes

If you don't have a background in biomechanics, or if like most coaches you have several mint-condition (OK, *unused*) books on the subject in your personal library, start by applying the BFS Six Absolutes.

The Six Absolutes are six training principles that are amazingly effective in teaching – and analyzing – perfect technique. They are as follows:

1. Use an Athletic or Jump Stance
2. Be Tall

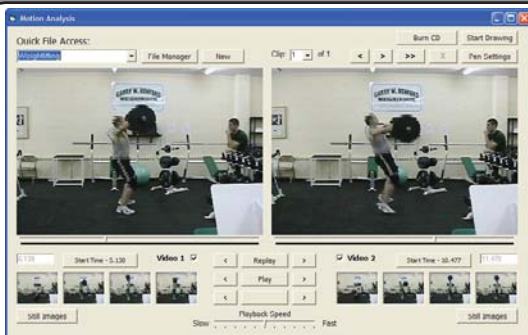
3. Spread the Chest (lock in the lower back)
4. Toes Aligned
5. Knees Aligned (knees over toes)
6. Eyes on Target

For example, baseball players who slump over in their hitting stance need to “Spread the Chest” so they will be able to best transfer the power from the legs to the torso and arms. If athletes are buckling their knees in the squat (Figure 6), they do not have their toes aligned (Absolute #4) and Knees Aligned (Absolute #5). Using these terms not only gives you a way to make biomechanical analysis simple but also provides a common terminology that all athletes in any sport can relate to.

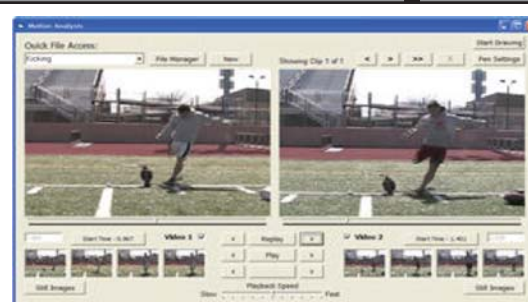
At BFS, we are excited to team with Quik Scout Technologies to bring this practical and economical video analysis software to coaches. Isn't it time you shifted your paradigm? **BFS**

Quik Scout

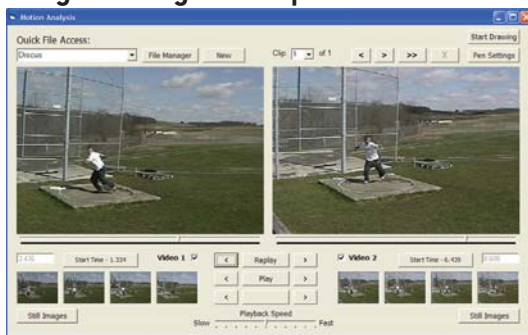
Bio Mechanics Made Simple



Weight Lifting Technique



Football Technique



Track and Field Technique



Baseball-Hitting Technique



Sprinting Technique



Softball-Pitching Technique

- Improve performance and prevent injuries
- Compare technique with elite athletes
- Measure improvements in sport skills
- Share results with personal CD's

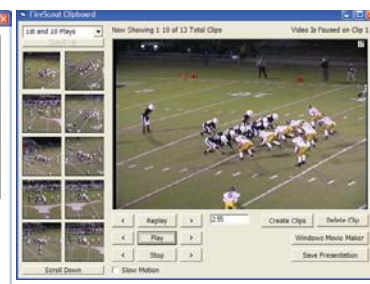


inMotion
\$195⁰⁰
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 (Individual License)
 Call for additional options

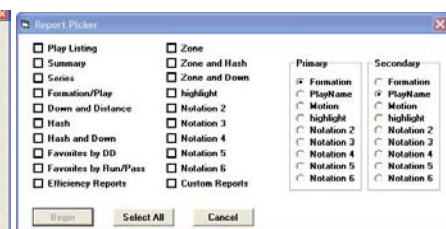
Also Available: Fire Scout Pro - Call for pricing and options



Data Entry Screen



Video Editing Screen



Scouting Reports

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Teach Championship Habits

SIX ABSOLUTES

1. ATHLETIC OR JUMP STANCE
2. BE TALL
3. SPREAD THE CHEST
4. TOES ALIGNED
5. KNEES ALIGNED
6. EYES ON TARGET

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ABSOLUTE ONE

ATHLETIC OR JUMP STANCE

Athletic Stance For the squat & box squat
Jump Stance For the clean & hex bar

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ABSOLUTE TWO

BE TALL

To be tall when lifting, means to stay in the correct power line

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ABSOLUTE THREE

SPREAD THE CHEST

Spread the chest to keep the lower back correct.

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ABSOLUTE FOUR

TOES ALIGNED

Toes are straight when sprinting, jumping, lifting, and even stretching.

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ABSOLUTE FIVE

KNEES ALIGNED

Always keep knees directly over the toes.

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ABSOLUTE SIX

EYES ON TARGET

Keep your eyes on target straight ahead (generally) when lifting, sprinting, jumping and even stretching.

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POWER LINE

ATHLETIC OR JUMP STANCE
Parallel Squat

BE TALL
Power clean

SPREAD THE CHEST

TOES ALIGNED
Box Squat

KNEES ALIGNED
Hex Bar Deadlift

EYES ON TARGET

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