PROGRAMME DE FORMATION

MOTION CONTROL FOR FILMING

MRMC Flair Operator on Modula Rig

ProLive Formation SARL
Pôle de l'Evènementiel
191 rue des 5 voies
59200 Tourcoing
03.59.05.54.34

2018

Duration : 35 hours or 5 days

Teacher :

Tim Heys-Cerchio has been working in and around film since the mid-90's as a Cameraman and Director of Photography. He has been running Flair and Mark Roberts Motion Control rigs as a freelance operator since 2002 on commercials and feature film productions. Due to his experience as a Flair operator he was specially trained and commissioned by Mark Roberts Motion Control in 2016 to install new Bolt Highspeed Cinebots and other MRMC rigs and train new customers on their use.

Public : Camera Operators/Assistants, Grips, SFX Technicians and VFX Artists

Partnership with :

RCS Lille métropole 792097 305 00017

Code APE 3559 A

Enregistré sous le numéro de déclaration 31590826059, ce numéro n'a pas valeur d'agrément.

LEARNING OBJECTIVES

at the end of the training the attendee must be able to : Assemble, lay and level Track sections. Assemble/disassemble the Modula Rig and Ulti Head in different configurations ; Understand Safety procedures Set-up multiple Axis equipment, Zero and Limits. Control the Modula Rig through Hand Held Box and Mouse/Keyboard. Secure and Synchronise a Camera and add Lens Controls. Program, Edit and Re-Time multiple position moves. Understand and use the Flair Target Tracking features and Roll Modes. Perform Lens Calibration and Camera Nodalisation. Use Cartesian Controls for camera positioning. Program Inputs and Outputs. Calibrate external controls and use Mimic Mode recording. Import and export data from CGI packages

CONTENT AND SKILLS

Day 1

- Motion control explained—typical uses and applications
- A brief history—Mark Roberts Motion Control world leader
- Introduction to the Modula Rig
- principle of operation and definittion of parts
- Laying down the track
- Levelling basics
- Joining the rails : precision rail lineup, rack alignment, End stop Buffers
- Rig and Ulti-Head assembly
- Swan Neck : over-slung and under-slung modes
- Modularity and alternative (simplified) Rig configurations
- Power supply and electrical connections (Earth and generators)
- Connecting the Rig to the controler, the Umbilical
- Rig safety and E-stop circuit
- The FLAIR console and the root box

Day 2

- PC File organisation and program
- FLAIR software installation and folders
- FLAIR interface structure : Main display, Sidebar Menus, Run control bar
- 3 Button mouse operation
- Engaging Axes and moving them around : Rig safety
- The Hand Held Box : operation and setup
- Mouse and Keyboard operation, HHB speed + - buttons
- Axis calibration and setup—Conventional directions
- Zeroing and Homing
- Setting limit and Datum sensors on the Track
- Setting up a camera—Ulti Head nodal adjustments
- Camera remote operation—External control and Synchronisation
- FIZ Motors : connections, basic calibration and limits

Day 3

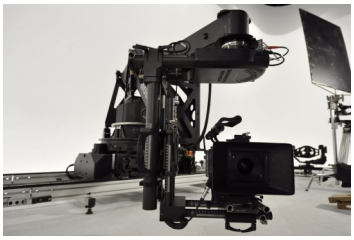
- Move Programming basics, the numeric Display
- Simple 2 point moves (straight line)
- Axes fairings—Computer and Users modes
- Graphic display overview
- 3 point moves (curves) - introduction to splines
- Curve reversal and Holds
- Move saving and storage
- Running a move : FWD Run, BCK run, Back to 1, Browsing
- GOTOs and the frame Slider Bar
- Move Editing
- Time Base and Frame Counts
- Line add, Insert and Delete
- « Ripple through » operations
- Scaling, Streching and Move FX
- Move checking
- Speed and Acceleration limits
- FPS adjustment Move and Camera
- Repeatability at different speeds
- Real Time—High Speed—Slow Speed
- Stop motion and animations

Day 4

- The Trigger Box : External triggers, Input and Output
- Timing events during a move
- The Bloop light, Pre Holds and Post Holds
- Timecode triggering
- Advanced move Programming—Target Tracking Basics
- Target position and distance Measurement
- 3D Graphic Display
- Rip Model Display
- Roll Control Modes (Basic)
- Target tracking moves and 3D Fairings
- Focus Controlled Modes
- Lens setup, calibration and scaling : Focus, Zoom and Iris
- Nodal Point and Offsets

Day 5

- Cartesian Controls
- Notional Axes and CGI environment
- Rig Geometry and Kinematics setup
- Arm/ Head singularities and limitations
- Advanced Roll Modes
- Mimic Mode operation
- Pan Bars, Foot Pedal, Focus and Zoom control Setup
- Mimic Record and Playback



MEANS OF EVALUATION

Practical exercise, Oral revision of theoretical notions, Shoot realistic situation footage.

A certificate of participation will be issued at the end of training.

REQUIRED SKILLS

Basic knowledge of professional camera systems, dolly track positioning techniques and Windows PC operation. Good understanding of written and oral english is also required.

www.proliveformation.fr