DACUM Research Chart for Audio Visual Technician

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Duties

⟵——————————————— **Tasks** ———————

A **Prepare for Project or Service**	A-1 Review project documentation	A-2 Verify project documentation	A-3 Evaluate project location	A-4 Coordinate with project personnel (e.g., customer, engineers, general contractors)	
B **Install AV System**	B-1 Transport project resources	B-2 Setup for cable pull	B-3 Pull cable (CAT5, COAX, 22-4)	B-4 Terminate cable	B-5 Mount cameras
	B-13 Clean up job site				
C **Configure Audio Components**	C-1 Set up wireless microphones	C-2 Set input gain structure	C-3 Set input EQ	C-4 Route audio signals	C-5 Set compressor/ limiters
D **Configure Video Components**	D-1 Optimize video sources	D-2 Optimize scaler settings	D-3 Optimize camera settings	D-4 Set video routing	D-5 Optimize display settings (e.g., aspect ratio, resolution)
E **Configure Control/Network Components**	E-1 Setup network devices (e.g., switches, routers)	E-2 Assign device identifiers (e.g., IP addresses, device codes)	E-3 Upgrade device firmware	E-4 Integrate VTC into customer network	E-5 Program remote control devices
F **Finalize AV Project**	F-1 Execute punch list items	F-2 Perform final clean up	F-3 Perform system commissioning	F-4 Compile project documentation (e.g., pictures, account notes, final report)	
G **Perform Preventative Maintenance**	G-1 Verify AV system functionality	G-2 Clean AV system components	G-3 Inspect system connectivity	G-4 Replace projector lamp	G-5 Update device firmware and/or software
H **Repair AV Systems**	H-1 Verify system failure	H-2 Troubleshoot system failure	H-3 Process manufacturer return authorization	H-4 Replace failed components	H-5 Modify device code

Acronyms

3D – Three Dimensional
AMP – Amplifier
AV – Audiovisual
AVB – Audio Video Bridging
CAT5 – Category 5
COAX – Coaxial Cable
CTS – Certified Technology Specialist

DVR – Digital Video Recorder
EQ – Equalizer
HDMI – High Definition Multimedia Interface
IP – Internet Protocol
LED – Light Emitting Diode
VTC – Video Teleconference

A-5 Acquire project resources (e.g., materials, tools, equipment)						
B-6 Mount speakers	B-7 Mount projection screens	B-8 Mount projectors	B-9 Mount microphones	B-10 Mount monitors	B-11 Mount wall plates & floor boxes	B-12 Build equipment rack
C-6 Set output EQ	C-7 Set echo canceller	C-8 Set acoustic delay	C-9 Set output levels	C-10 Optimize amp settings	C-11 Set speaker taps	C-12 Verify audio levels
D-6 Verify video sources						
E-6 Upload device program code	E-7 Test remote monitoring system	E-8 Verify control system operation				
F-5 Compile customer documentation (e.g., instructions, manuals, as-builts, videos)		F-6 Train end users	F-7 Obtain final sign off			
G-6 Update maintenance log						
H-6 Rework system cabling	H-7 Verify AV system operation	H-8 Retrain end users				

General Knowledge and Skills

Critical thinking skills
Problem solving skills
Communication skills
Mechanical skills
Regulatory knowledge
General networking skills
Product specific knowledge
Knowledge of consumer trends
Analytical skills
Organizational skills
Time management skills
Computational skills (weights and measures,
  metric conversion)
Soldering skills
General termination skills
Good driving record
Knowledge of company policies
Rigging skills
No fear of heights
Ability to lift 50 pounds

Use of hand tools
Use of power tools
Basic math skills
Interpersonal skills
Customer service
Computer skills
General construction

Worker Behaviors

Punctual
Independent
Sense of humor
Thick skin
Active listener
Flexible
Patient
Conscientious
Friendly
Creative
Self-starter
Perseverance
Adaptable
Passionate

Knowledgeable
Honest
Hard working
Driven
Dependable
Accommodating
Cleanliness
Respectful
Professional
Positive
Confident

Tools, Equipment, Supplies and Materials

Fish tape
Glow rods
Hand tools
Power tools
Multi-meter
Crimper
Compression tools
Solder tools
Toner
Video test generator
Light meter
Ladder
Bolt cutter
DSAM (Digital Service
Activation Meter)
Lift
Scaffolding
Laptop
Work vehicle
Cable caddy
Audio tester
Punchdown tool

BNC Tester
Personal protective equipment (hard hat,
  safety glasses, steel toe shoes, gloves)
Business cards
Layup sticks
Gopher pole
Label maker
Stud finder
Fasteners (zip ties, velcro)
Pulley system
Hoist
Heat gun
Hand truck
Cable lube
Pull string
Lighting (flood light, head lamp,
  flashlight)
Spackle
Tweaker
First aid kit
Electrical tape
Cable stripper

Future Trends and Concerns

Analog sunset
AVB
Touch screen technology
Virtual interaction
Organic LED
3D Technology
Wireless HDMI
Video wall technology
Content protection
Removable DVR hard drive
Wireless technology
Internet protocol version 6
Steaming/Archiving
Presentation capturing
Unified communications
Legacy equipment
Consumer cost and cost in general
Green initiative
Certifications (Certified Technology
  Specialist, InfoComm