URGENT: Deployment Guide for Input Gain 500 Error Fix

Date: October 19, 2025

PR: #213 (https://github.com/dfultonthebar/Sports-Bar-TV-Controller/pull/213)

Severity: 🔥 CRITICAL

Estimated Deployment Time: 5-10 minutes

Executive Summary

This deployment fixes the **500 Internal Server Error** occurring on the input gain API endpoints that was preventing users from adjusting audio input levels. The fix updates all audio processor dynamic routes to properly handle async params for Next.js 15+ compatibility.

Issues Resolved

- **500** errors on /api/audio-processor/atlas-001/input-gain
- **V** Input gain sliders not functioning
- Configuration save operations failing
- ✓ Mock data verification completed

@ Pre-Deployment Checklist

Before deploying, ensure you have:

- [] Access to remote server: 24.123.187.42 (port 224)
- [] SSH credentials ready
- [] PR #213 reviewed and approved
- [] Backup of current database (optional but recommended)
- [] PM2 is running on the server

Deployment Steps

Step 1: Access Remote Server

ssh -p 224 ubuntu@24.123.187.42
Password: 6809233DjD\$\$\$

Step 2: Navigate to Application Directory

cd ~/Sports-Bar-TV-Controller

Step 3: Check Current Status

```
# Check current git status
git status

# Check current branch
git branch

# Check PM2 status
pm2 list
```

Step 4: Merge PR and Pull Changes

Option A: Merge via GitHub UI (Recommended)

- 1. Go to https://github.com/dfultonthebar/Sports-Bar-TV-Controller/pull/213
- 2. Review the changes
- 3. Click "Merge pull request"
- 4. Confirm the merge

Then on the server:

```
git checkout main
git pull origin main
```

Option B: Merge via Command Line

```
git fetch origin
git checkout main
git merge origin/fix/input-gain-500-error
```

Step 5: Verify Changes

```
# Check that the fix is applied
git log --oneline -5

# Verify the modified files exist
ls -la src/app/api/audio-processor/[id]/input-gain/route.ts
```

Step 6: Install Dependencies (if needed)

```
# Only if package.json was updated
npm install
```

Step 7: Rebuild Application

```
npm run build
```

Expected Output:

```
✓ Compiled successfully ✓ Creating an optimized production build
```

Step 8: Restart PM2

```
pm2 restart sportsbar-assistant
pm2 logs sportsbar-assistant --lines 50
```

Step 9: Verify Deployment

```
# Test the API endpoint
curl -X GET http://localhost:3000/api/audio-processor/atlas-001/input-gain
# Check PM2 status
pm2 status
# Monitor logs for errors
pm2 logs sportsbar-assistant --lines 100
```

Verification & Testing

1. API Health Check

```
# Should return 200 OK (not 500)
curl -X GET http://localhost:3000/api/audio-processor/atlas-001/input-gain
```

Expected Response:

```
{
   "success": true,
   "processor": {
      "id": "atlas-001",
      "name": "...",
      "model": "AZMP8"
   },
   "gainSettings": [...]
}
```

2. Test Input Gain Adjustment

```
curl -X POST http://localhost:3000/api/audio-processor/atlas-001/input-gain \
  -H "Content-Type: application/json" \
  -d '{"inputNumber": 1, "gain": -10}'
```

Expected Response:

```
{
  "success": true,
  "inputNumber": 1,
  "gain": -10,
  "message": "Input 1 gain set to -10dB"
}
```

3. Browser Testing

- 1. Open browser: http://24.123.187.42:3000
- 2. Navigate to Audio Control page
- 3. Go to Atlas System tab
- 4. Click Configuration button
- 5. Try adjusting input gain sliders
- 6. Verify no 500 errors in browser console (F12)

4. Atlas Communication Test

Check the Atlas communication logs:

```
tail -f ~/Sports-Bar-TV-Controller/log/atlas-communication.log
```

Look for:

- V Successful TCP connections to Atlas (192.168.5.101:5321)
- Proper JSON-RPC commands being sent
- Valid responses from Atlas processor

Troubleshooting

Issue: Build Fails

Symptoms: npm run build returns errors

Solution:

```
# Clear build cache
rm -rf .next

# Clear node modules and reinstall
rm -rf node_modules package-lock.json
npm install
npm run build
```

Issue: PM2 Won't Restart

Symptoms: pm2 restart fails or shows errors

Solution:

```
# Stop all PM2 processes
pm2 stop all

# Start fresh
pm2 start ecosystem.config.js

# Or use npm script
npm start
```

Issue: 500 Errors Still Occurring

Symptoms: Input gain endpoint still returns 500

Possible Causes:

- 1. Code not properly pulled
- 2. Build not completed successfully
- 3. PM2 not restarted
- 4. Database connection issues

Solution:

```
# Verify the fix is in the code
grep -A 5 "const params = await context.params" src/app/api/audio-processor/[id]/in-
put-gain/route.ts

# If not found, pull again
git fetch --all
git reset --hard origin/main
npm run build
pm2 restart all
```

Issue: Atlas Processor Not Responding

Symptoms: Timeouts or connection errors to Atlas

Solution:

```
# Verify Atlas IP address in database
sqlite3 data/sportsbar.db "SELECT id, name, ipAddress, port FROM AudioProcessor;"

# Test Atlas connectivity
ping 192.168.5.101

# Test TCP port
nc -zv 192.168.5.101 5321
```

Rollback Plan

If the deployment causes issues, follow these steps to rollback:

Step 1: Revert to Previous Commit

```
cd ~/Sports-Bar-TV-Controller

# Find the previous commit
git log --oneline -5

# Revert to previous commit (replace COMMIT_HASH)
git reset --hard COMMIT_HASH

# Example:
# git reset --hard 7071ab2
```

Step 2: Rebuild

npm run build

Step 3: Restart PM2

pm2 restart sportsbar-assistant

Step 4: Verify

```
curl http://localhost:3000/
pm2 logs sportsbar-assistant --lines 50
```

Post-Deployment Tasks

After successful deployment:

- [] Test all input gain controls on Atlas System tab
- [] Verify no 500 errors in browser console
- [] Check PM2 logs for any warnings
- [] Verify Atlas communication logs show successful connections
- [] Test configuration save/download functionality
- [] Inform users that input gain controls are now working
- [] Monitor application for next 30 minutes

Support & Contact

If Issues Arise:

1. Check Logs:

```
bash
pm2 logs sportsbar-assistant --lines 200
tail -f log/atlas-communication.log
tail -f log/error.log
```

2. Gather Debug Info:

```
bash
pm2 info sportsbar-assistant
git log --oneline -10
npm list next
```

3. GitHub Issues:

- Open an issue: https://github.com/dfultonthebar/Sports-Bar-TV-Controller/issues
- Reference PR #213

Atlas Processor Details

For reference during troubleshooting:

• IP Address: 192.168.5.101 (verify on production)

TCP Port: 5321HTTP Port: 80

Model: AZMP8 (8 zones)Username: admin

• Password: 6809233DjD\$\$\$

K Success Criteria

Deployment is successful when:

- Application builds without errors
- ✓ PM2 shows process running (green)
- V GET /api/audio-processor/atlas-001/input-gain returns 200
- V POST to input-gain endpoint returns 200
- V Input gain sliders work in browser
- No 500 errors in browser console
- Atlas communication logs show successful commands
- V No error messages in PM2 logs

📚 Related Documentation

• Pull Request: https://github.com/dfultonthebar/Sports-Bar-TV-Controller/pull/213

• Atlas Protocol Manual: ATS006993-B-AZM4-AZM8-3rd-Party-Control.pdf

Previous Fixes: FIXES_APPLIED.md
 Mock Data Audit: MOCK DATA AUDIT.md

Deployment prepared by: DeepAgent Al

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