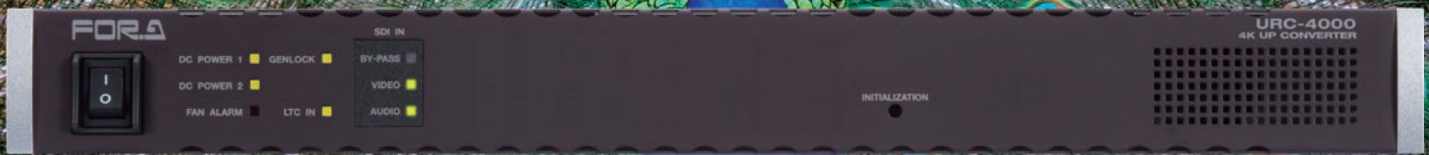


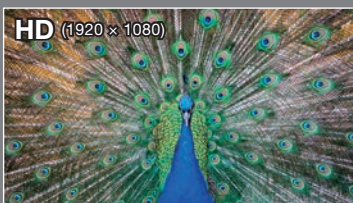
SUPER RESOLUTION 4K UP CONVERTER **URC-4000**

Welcome to new horizons in 4K



The URC-4000 provides powerful up-conversion and turns HD video into 4K in real time. Original I/P and resolution conversion developed by FOR-A, unleashes a new era in 4K conversion. Spatiotemporal frame interpolation is performed in which spatial and temporal changes in images are detected in high precision, on a pixel-by-pixel basis. Aliasing from conversion are reduced, and the resolution of still image areas is restored. Resolution is further improved through multi-scale nonlinear enhancement. An optional redundant power supply is also available, and firmware can be updated remotely over the Internet. Explore new territory in 4K.

New approach to I/P and resolution conversion



Spatiotemporal frame interpolation



Multi-scale nonlinear enhancement



Simulated images. Not actual 4K or HD images.

Multi-format support

The URC-4000 supports multiple input signals, including 1080/59.94i, 1080/50i and output signals, including 3840 × 2160/59.94p (1080/59.94p × 4^{*1}), 3840 × 2160/50p (1080/50p × 4).

*1 Four 1920 × 1080 streams are tiled horizontally and vertically to fill a 3840 × 2160 screen.

Optional redundant power supply

An optional redundant power supply can be added for critical live application.

3G-SDI Level A/B-compatible

Output of 3G-SDI Level A or B is supported.

Web Control

A built in web server provided GUI base control over LAN.

SNMP (Simple Network Management Protocol)

SNMP control and monitoring is supported (optional)

Specifications

| | |
|---|--|
| Input Video Formats | 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i |
| Video Inputs | 3G-SDI (Level-A/N): 3 Gbps or HD-SDI: 1.5 Gbps 75Ω BNC x 1 |
| Output Video Formats | 3840 × 2160/59.94p (1080/59.94p × 4), 3840 × 2160/50p (1080/50p × 4) ^{*2} |
| Video Outputs | 3G-SDI: 3 Gbps (Level-A/B ^{*3}) × 4: 3 Gbps 75Ω (BNC x 4) x 2 |
| Genlock Input | BB: NTSC 0.429 Vp-p/PAL 0.45 Vp-p or Tri-level Sync: 0.6 Vp-p, 75Ω, BNC x 1, loop-through (to be terminated with 75Ω terminator, if unused) |
| Sync Modes | Frame Sync, Line Sync, AVDL |
| Video Processing Functions | Proc. Amp., Color corrector |
| Proc. Amp. | Video level: 0.0% to 200.0% Chroma level: 0.0% to 200.0% Black level: -20.0% to 200.0% |
| Video Clip Mode | YPBPR, RGB |
| Color Correction Mode | Balance, Differential, Sepia |
| Audio Input and Output Embedded Audio | 16 channels (Group 1 to 4), 48 kHz, 16 to 24-bit, synchronous/asynchronous (3G Level-B output: It is valid only superposition of the Level-A.) |
| Audio Delay | 5 ms to 1,000 ms (adjustable in 1 ms steps) |
| Audio Processing | Sampling rate converter (SRC), Gain control, Down mix, Channel re-mapping, Channel mute (can be set per a channel) |
| Interface | Ethernet: 100Base-TX/1000BASE-T RJ-45 x 1 |
| Temperature / Humidity | 0°C to 40°C / 30% to 90% (no condensation) |
| Power | 100 V AC to 240 V AC ±10%, 50/60 Hz |
| Consumption (estimate) | Approx. 87 W (at 100 V AC to 120 V AC), Approx. 83 W (at 220 V AC to 240 V AC) |
| Dimensions / Weight | Approx. 430 (W) × 400 (H) × 44 (D) mm, Approx. 7.0 kg |
| Accessories | Operation manual, AC cord, Rack mount brackets |
| Consumables (if used 24 hours a day at room temperature) | Power supply unit (to be replaced approx. every 3 years) / Cooling fan (to be replaced approx. every 5 years) |

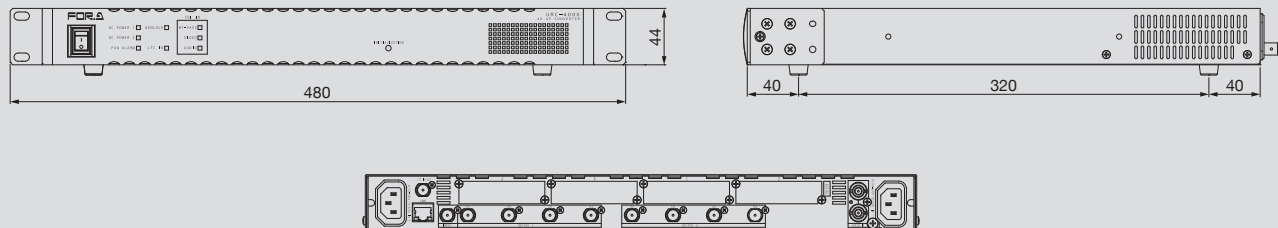
*2 Without 50/60 Hz frame rate conversion

*3 Level B: Supports only dual mapping in SMPTE 372M

The above specification is as of January, 2017

Dimensions

Unit: mm



Head Office: 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan

ISO 9001 and 14001 certified
(Sakura R&D)

<http://www.for-a.com/>

FOR-A Corporation of America: Tel: +1-714-894-3311
11155 Knott Ave., Suite G&H, Cypress, CA 90630, U.S.A.

FOR-A Corporation of America East Coast Office: Tel: +1-201-944-1120
2 Executive Drive, Suite 670, Fort Lee Executive Park, Fort Lee, NJ 07024, U.S.A.

FOR-A Corporation of America Service Center: Tel: +1-352-371-1505
2400 N.E. Waldo Road, Gainesville, FL 32609, U.S.A.

FOR-A Corporation of America Miami Office: Tel: +1-305-931-1700
8333 North West 53rd Street, Suite 450, Doral, FL 33166, U.S.A.

FOR-A Corporation of Canada: Tel: +1-416-977-0343
1131A, Leslie Street #209, Toronto, Ontario, M3C 3L8, CANADA

FOR-A Europe S.r.l.: Tel: +39-039-879-778
Via Volturmo, 37, 20861 Brugherio MB, Italy

FOR-A UK Limited: Tel: +44-(0)20-3044-2935
Trident Court, 1 Oakcroft Road, Chessington, KT9 1BD, UK

FOR-A Italia S.r.l.: Tel: +39-039-881-086/103
Via Volturmo, 37, 20861, Brugherio MB, Italy

FOR-A Corporation of Korea: Tel: +82-(0)2-2637-0761
1007, 57-5, Yangsan-ro, Yeongdeungpo-gu, Seoul 150-103, Korea

FOR-A China Limited: Tel: +86-(0)10-8721-6023
1307 Huateng Building, No. 302, 3 District, Jinsong, Chaoyang, Beijing 100021, China

FOR-A Middle East-Africa Office: Tel: +971-(0)4-551-5830
Dubai Media City, Aurora Tower, Office 1407, P.O. Box 502688, Dubai, UAE

Agiv (India) Private Limited (FOR-A India): Tel: +91-22-2673-3623
2nd Floor, Valecha Chambers, Link Road, Andheri (W), Mumbai 400053, India