

SHORT FORM Product Catalog 2006

INNOVATIVE PROBLEM SOLVING TOOLS FOR BROADCAST

REMOTE CONTROL & TELCO

AT-1616

The AT-1616L is designed for general I/O control applications. The AT-1616L is equipped with 16 form C relays with LED indicators. The AT-1616L provides 16 - 5 to 24 volt opto-isolated inputs with LED status and may be configured for wet or dry applications. The AT-1616L is equipped with both a RS-232 and RS-485 serial port at baud rate from 600 to 115k. Two AT-1616Ls may be rack mounted with the optional RM-3 rack mount shelf (1 RU's).



AVR-8

The AVR-8 may be used as a voice response and remote control system. The AVR-8 automatically reports changes detected on any of its eight digital inputs to a remote telephone and/or pager. After speaking a greeting message that may identify the source of the call, the AVR-8 then speaks a unique message for each input change. Each message comes factory programmed, but may easily be re-recorded with your own customized messages. After reporting, the AVR-8 allows you to give commands or activate any of the four relays through your telephone keypad. The AVR-8 also features a tower light monitoring function, send and receive audio monitoring. All programming is performed with a standard touch-tone, telephone. Screw terminals are provided for audio, digital input and relay connections.



BOR-4 (Box O' Relays)

The BOR - 4 provides four independent 2PDT relay interfaces with two optically isolated or 5-volt TTL/CMOS compatible inputs. Programmable logic and pulse stretching (delays) from 500 ms (1/2 second) to 108 minutes is another unique feature. A perfect tool for converting sustained network closures to a pulse. Screw terminals are provided for all connections.



BOS (Box O' Switches)

The BOS offers 12 N.O. dry contact switches with status LED's in a sloped-front desktop panel with a write-in strip. A handy time saver where remote switches and LED's are needed. Screw terminals are provided for all connections.

Manufactured with Pride in America

Table of Contents

Product	Page	Product	Page	Product	Page	Product	Page
Remote Control/Telco Tools				Product Switcher/Router Tools			
NEW! AT-1616	1	NEW! ADCS III	5	DAS 8.4	6	2x6 DA	10
AVR-8	1	NEW! CC-5	5	NEW! ESS-1	7	NEW! CSD-1	11
BOR-4	1	CC-II A	5	NEW! RDDA 4X4	7	NEW! DTD-16	10
BOS	1	NEW! HPA-4	5	SS 16.16	7	DTE-16	9
DC-8 PLUS	2	NEW! HR-1 (MP)	5	SS 16.4	7	MT-1	9
DMS-III	2	NEW! WVRC-8	5	SS 2.1 BNC III	7	TMT-2	9
NEW! DSD-2	2			SS 2.1 Term III	8	TT-1	10
NEW! GPI-32	2	Satellite Control Tools		SS 4.1 III	8	NEW! SRC-2	11
NEW! IP-9	2	COA-15	4	SS 4.2	8	NEW! SRC-2X	11
LOV-II	3	COA-37	4	SS 8.1 II	8	SUM-4	10
PS-99	3	COP	4	SS 8.2	8	NEW! Time Sync Plus	11
ROS	3	DSC-32/64	4	Mounting Accessories			
Silence Monitor III	4			NEW! Flex Panel	12	VAD-2	9
SRC-8 III	3	Switcher/Router Tools		RM-3	12	WRC-4	10
SRC-8/RMT	4	8x1 DAS	6				
SRC-32	3	16x1	6				
STA-III	4	16x2	6				
		ACS 8.2	6				
		NEW! ADMS 44.22	6				



DC-8 Plus

The DC-8 PLUS Dial-up Remote Control allows the user to control and monitor external devices from any touch-tone, telephone. The DC-8 PLUS when called, will answer the phone line after a user programmable number of rings (up to 20), accept an access code (none to eight digits) and if valid, allow the control of six SPDT, two 2PDT relays and the monitoring of eight logic level status inputs. The DC-8 PLUS is equipped with an adjustable audio hybrid, allowing the user to send and/or receive external audio, while controlling the unit. Additionally, the unit is equipped with an auxiliary audio input and a mute circuit to control an optional delay unit for the removal of DTMF tones. The pager alert function allows the activation of up to three digital pagers, by any or all of the status inputs, allowing the display of a user's defined telephone number and which status input triggered the alarm. All programming is performed with a standard touch-tone, telephone. All functions may be programmed remotely, except the recall of factory defaults and setting of the access code, which must be done locally. Screw terminals are provided for all connections.



DMS-III

The Broadcast Tools AES/EBU Digital Monitor & Switcher III is designed to accept and automatically or manually switch two AES/EBU signal sources when an AES digital error and/or analog silence are detected. Features include: Automatic control function that switches to a back up source upon failure of the main source; Switch functions can be triggered by loss of clock, AES digital error flags, front panel transfer switch, external switch contact and/or the internal analog stereo silence sensor. Additional features: Front panel error status and sample rate LED indicators; front panel headphone jack and level control; balanced stereo monitor output; remote control; removable screw terminals; Plug & Play installation; dip-switch selection of precise time delay from 2 seconds to 85 minutes and restore timing delay from off to 10.2 minutes; defeatable sonalert aural alarm; SPDT status relays; SPDT one-second pulse relay. The DMS III may be set on a desktop, mounted on a wall or as part of the new RA-1, Rack-Able mounting shelf.



DSD-2

The DSD-2 is a 25/35 Hz sub-audible detector with a single channel 50-hertz high pass filter. The DSD-2s unique detection algorithm virtually eliminates false triggering due to level variations. Features include; SPDT relays and front panel LEDs for each detected tone and a third for combinational tone detection; detection enable/disable optically isolated input with front panel LED indicator; balanced input and output termination via 1/4" T/R/S jacks and plug-in euroblock screw terminals; RS-232 tone detection port; front panel input audio presence and overload LEDs and level control. The DSD-2 is powered by a surge protected internal bi-polar 15vdc power supply affording superior headroom and high definition audio. The DSD-2 may be set on a desktop, mounted on a wall or up to three units may be mounted on the optional RA-1, Rack-Able mounting shelf.



GPI-32

The GPI-32 interfaces 32 optically isolated inputs to a users PC's RS-232 or USB port. The serial data conforms to our standard switcher PIP format. The GPI-32 is equipped with dual plug-in Euroblock connectors and two independent DB-37 connectors that may be interfaced directly to the DB-37 connectors located on the StarGuide II/III relay cards. Additional features: dual RS-232 connectors, one for daisy-chaining multiple units on the same legacy serial port and a DB-9 to interface to our supplied USB adapter; LED indicators for power and input activity; twin power connectors allowing up to four units to be driven off of one power transformer. The GPI-32 is supplied with two 3-foot mating DB-37 connectorized cables, serial cable and wall transformer. The GPI-32 is powered by a surge protected internal power supply. The GPI-32 may be mounted on the optional RM-3 mounting shelf.

IP-9

The IP-9 adapts the Harris Intraplex MA-404 modular jack to a male DB-9 connector. Supplied with a seven foot, straight-through six conductor modular cable. Sold in pairs.



LOV II

The Broadcast Tools® LOV II, Loss of Video Switcher with Four Channel Audio Switcher is designed to accept and automatically or manually switch two NTSC/PAL signal sources, along with four balanced analog audio channels. Features include: Automatic control function that switches to a back up source upon failure of the main source; Switch functions can be triggered by any video error, front panel transfer switch and/or external switch contact. Additional features: Front panel error status and valid video LED indicators; remote control of all front panel features; removable screw terminals for audio and remote control; BNC connectors for video with termination jumpers; Plug & Play installation; dip switch selection of precise time delay from 2 seconds to 85 minutes and restore timing delay from off to 10.2 minutes; defeatable sonalert aural alarm; SPDT status relays; SPDT one-second pulse relay. The LOV II may be set on a desktop, mounted on a wall or up to two units mounted on the RA-1, Rack-Able mounting shelf.



PS-99

The Programmable Schedule 99 can store and control up to 99 events. Events may be programmed with Hour/Minutes/Seconds and Day/Month/Year or Day of Week, along with Daylight Savings Time. Each event may control the RS-232 serial data port and/or any of the six SPDT one amp relays. Thirty-two serial control macro strings of up to 32 ASCII or HEX characters each can be stored and scheduled at specific times. Programming is accomplished with any non-dedicated computer. Features include: Front panel LED status indicators and programming connector; Relays may be programmed for either a one second momentary or on/off contact closures; Nonvolatile user program memory; Super stable clock processor with battery back-up. Additional features: Optically isolated Sync input with LED indicator, allowing clock updates any minute and second within the hour from an external closure; Auto leap year correction; DST Programming; 24-hour time format and removable screw terminals. The PS-99 may be set on a desktop, mounted on a wall or up to three units mounted on the RA-1, Rack-Able mounting shelf.



ROS (Rack O' Switches)

The ROS is similar to the BOS, but in a single-space rack unit with a write-in strip. Two DB-25 female connectors are provided for all terminations.



Silence Monitor III

The Silence Monitor III improves on the features of the original Broadcast Tools SSM. The Silence Monitor III is designed to monitor any stereo or two independent monaural sources, generate alarms and transparently switch to back-up source equipment when silence is detected. The front panel and remote transfer switch allows manual input switching in stereo mode. Additional features include: front panel, remote control and relay monitoring; plug-in euroblock screw terminals; Plug & Play (NO POTS) installation; dipswitch selection of silence detection of 23, 25, 35 and 45db; Precise time delay from 2 seconds to 85 minutes; precise restore timing delay from off to 42 minutes; defeatable sonalert aural alarm; relays for most remote functions. The Silence Monitor III may be set on a desktop, mounted on a wall or as part of the new RA-1, Rack-Able mounting shelf.



SRC-8 III Serial Remote Control

Connecting through an RS-232 or RS-422 serial port, the SRC-8 III can notify your PC software program that any of 8 opto-isolated inputs has been opened or closed and allows your software to control eight SPDT, 1-amp relays. Communication with the SRC-8 III can be accomplished via short "burst" type ASCII or binary commands from your PC (computer mode). Also, two units can be operated in a stand-alone mode (master/slave mode) to form a "Relay extension cord," with 8-channels of control in each direction. The unit can communicate using RS422 or RS232, at data rates up to 38400. The SRC-8 III may be expanded to 32 inputs x 32 outputs. Optional external Ethernet capabilities may be added.



SRC-32 Serial Remote Control

Connecting through an RS-232 or RS-422 serial port, the SRC-32 can notify your PC software program that any of 32 opto-isolated inputs has been opened or closed and allow your software to control eight SPDT, 1-amp relays and an additional 24 open collector outputs. Communication with the SRC-32 can be accomplished via short "burst" type ASCII or binary commands from your PC (computer mode). Also, two units can be operated in a stand-alone mode (master/slave mode) to form a "Relay extension cord," with 32-channels of control in each direction. The unit can communicate using RS422 or RS232, at data rates up to 38400. The SRC-32 may be expanded to 128 inputs x 128 outputs. Optional external Ethernet capabilities may be added. The SRC-32 is supplied with a 16 x 2 LCD display to indicate the status of both the inputs and outputs. A push button switch allows LCD display selection of either inputs or outputs.

Discontinued Products

10X1	See the SS 8.1 II or 16x1
3x2	See the SS 4.2
6x1	See the SS 8.1 II
8X2	See the ACS 8.2, SS 4.2, SS 8.2 or SS 16.4
DEC-16	See the DTD-16
DSC-20	See the DSC-32/64
ENC-16	See the DTE-16
FM 3.1	See the ACS 8.2
IPC-1	See the MT-I
IPC-2	See the TMT-III
MC-16	See the STA-III
PBB-24	See the Special Order
PSC	See the PS-99
PSC II	See the PS-99

Check our website for updated product replacement suggestions.

Can't find what you're looking for?
Visit our website at www.broadcasttools.com for downloadable manuals, complete product information, and a list of dealers.





SRC-8/RMT

The SRC-8/RMT is the desktop extension of the SRC-8 III. The SRC-8/RMT is supplied in an ergonomic designed desktop with six large push buttons corresponding to the first six inputs on a mating SRC-8 III. When any of the six push buttons are pressed, the corresponding mated SRC-8 III relay is closed. Two additional contact closure inputs are available to control relays seven and eight on the mated SRC-8 III. The six LED indicators correspond to the first six inputs on the mated SRC-8 III. Input seven on the mated SRC-8 III controls the "Very Loud Buzzer" while input eight controls a SPDT relay. Baud rates are such to accommodate most POTS/ISDN codecs along with T1/LAN or wireless link transceivers. The rear panel is equipped with a RS-232 connector, power jack and the six-position screw terminal. We offer custom applications on request.



STA-III Smart Telephone Autocoupler

The STA-III provides a convenient interface between a telephone line and the users equipment. Below is a list of features.

- Auto-answer and auto-disconnect via CPC (calling party control) and/or long dial tone hang up signals, allowing use behind PBX telephone switches and POTS lines.
- Front panel, plus remote line seize and drop control.
- Remote line busy input.
- Electronic telephone hybrid.
- Remote controllable send and receive audio switcher.
- Balanced bridging audio input with automatic signal limiter with front panel level control.
- Balanced low Z audio output with front panel level control.
- Front panel LED's display power, ring, valid DTMF tone.
- Two remote controllable SPST relays.
- External hook relay activates when a valid access code is accepted.
- Momentary SPST relay for End Of Call.
- User programmable number of rings before auto-answer.
- User programmable up to ten-digit access code, if required.
- User defeatable beep tones on line seize.
- All connections via screw terminals.
- Loop-thru jack.

SATELLITE CONTROL



COA-15 Connect-O-Adapter 15

The Connect O' Adapter 15, (COA-15), provides an effective way to convert the DB-15 connector to removable screw terminals. The COA-15 is designed to plug into the male 15-pin D-Sub connector on any StarGuide II or III Audio Module. The COA-15 is equipped with an eight-position removable screw terminal for connection to the 4 relays. Mounting screws are provided to secure the COA-15 to the Audio Modules DB-15 connector.



COP Connect-O-Pad

The Connect O' Pad, (COP), provides an effective way to connect and adjust (alternate only) the audio outputs on your StarGuide II and III receivers. The COP is designed to plug into the male 9-pin D-Sub connector on any StarGuide II or III Audio Module. The COP is equipped with an eight-position removable screw terminal for connection to the balanced left, right, monaural outputs, audio and chassis grounds. Left and right multi-turn trimmers are provided for level adjustments. The COP has approximately 1-db of insertion loss, allowing level adjustments from -1db to off from program reference. Mounting screws are provided to secure the COP to the audio decoder modules DB-9 connector.



COA-37 Connect O' Adapter 37

The Connect O' Adapter 37, (COA-37), provides an effective way to convert the DB-37 connector to removable screw terminals. The COA-37 is designed to plug into the male 37-pin D-Sub connector on any StarGuide II or III Relay Module. The COA-37 is equipped with four, eight-position removable screw terminals for connection to the 16 relays. Mounting screws are provided to secure the COA-37 to the Relay Modules DB-37 connector.



DSC-32 / 64 Satellite Channel Controller

The DSC-32/64 allows complete remote control of TWO StarGuide II/III, Wegener Unity 4000 or ComStream receivers. An encoder control along with the 16 x 2 LCD display provides local control and program descriptions, while external control may be in the form of serial commands from a host computer and/or 32 contact closures per receiver port. Sixty-four, thirty-two character ASCII character strings are provided for each receiver port. Custom programming is accomplished with a NON-DEDICATED computer. Other uses include contact closures to RS-232 serial conversion. 1-RU.

STUDIO TOOLS



ADCS III

The ADCS III provides professional quality 24-bit A/D conversion, along with AES path insertion and interruption functions. The ADCS III may be configured as a standalone A/D converter or to switch AES or stereo analog inputs into another AES stream. The ADCS III is a perfect companion for analog EAS encoders/decoders to be inserted into an AES program stream. The ADCS III is equipped with relay bypass in case power is removed from the unit. The A/D converter may be configured for sample rates of 44.1 or 48kHz (32kHz may be special ordered) or an external word clock from 32 to 96kHz. Additional features include; balanced stereo analog input, AES input, AES output and remote control via plug-in euroblock connectors. The front panel is equipped with left and right analog input trimmers, overload, audio presence and power LED indicators. Input transfer switches are provided along with LED indicators. Most front panel functions and status are available on the rear panel connector. The ADCS III is powered by a surge protected internal bi-polar 15 vdc power supply affording superior headroom and high definition audio. The ADCS III may be set on a desktop, mounted on a wall or up to three units may be mounted on the optional RA-1, Rack-Able mounting shelf.



CC-5

Building on the success of the CC-IIA, Broadcast Tools® introduces the CC-5. The CC-5 offers the solution for interfacing non-broadcast consoles or digital workstations to any type of studio. Features include: The switch console and controller may be separated; 5 channels of insert switching to turn on or off console input channels or other source equipment (i.e. microphone preamps); Channel LED's may be programmed to flash when activated; balanced stereo monitor amplifier mute control; channels 3,4,5 may be programmed for momentary operation, which is handy for intercom and special mute functions when activated. Additional features: Stereo balanced internal or external (program/off-air) monitor switcher; the controller may be purchased separately and controlled from user supplied switches and indicators.



CC-II A Console Controller

The CC IIA provides a non-broadcast mixer (Mackie) with three channels of microphone switching. Additional features include; monitor level control; monitor muting; warning light relay; remote control of channel switches and status relays. Works with most (MI) mixers and/or DAW's with microphone channel inserts.



HPA-4

The HPA-4 with talkback/cue, powers up to four sets of headphones. Each output is supplied with a hefty stereo amplifier and may be configured to accept talkback/cue audio on the left headphone with a simple contact closure to ground. Front and rear panel T/R/S jacks are provided with each output, along with front panel level controls. The stereo balanced input is adjustable with the front panel master level control, while the balanced monaural talkback input is equipped with a rear panel trimmer. Additional features include; power, talkback/cue active and program audio activity front panel LED indicators, surge protected internal bi-polar 15-vdc-power supply affording superior headroom and high definition audio and is equipped with two power jacks allowing one wall transformer to power two units. The half rack profile, allows the unit to be set on a desktop, mounted on a wall or as part of the new RA-1, Rack-Able mounting shelf.



HR-1 HR-1MP also shown

The HR-1 provides 1/8" and 1/4" headphone jacks with level control, momentary push button (cough,dump,etc) and mic-ON LED. The HR-1 may be desktop mounted, under counter or turret mounted with the optional HR-1/MP mounting plate.



WVRC-8

The WVRC-8 provides a cost-effective, one rack-unit solution for dial-up and/or Internet/LAN transmitter site control with recordable voice response in dial-up mode. The WVRC-8 was designed from a user point of view, so all of the basic functionality you need to control your site equipment is included. No options to purchase to get your site up and operating. The WVRC-8 is equipped with a browser based function program scheduler and alarm logger, while the user may select from four different sounds to play when an out of tolerance alarm is generated. The eight channels of telemetry, status and raise/lower control are perfect for most site requirements. Each high-resolution telemetry channel is capable of handling analog voltages between 0 and 10Vdc, while each of the eight optically isolated status channels may be configured for wet or dry input monitoring. The eight control channels are equipped with independent SPST one amp relays for the raise/on and lower/off functions. These relays may be latched, unlatched or momentarily closed. The WVRC-8 is supplied with spoken words and phases in English, while the user is free to record words and phases in their language. In addition, the WVRC-8 may be programmed for dial-up operation with most communication programs, while the Java applet programming may be performed using your favorite web browser. Future external add-on products such as X-10 modules, Zig-Bee hubs, and AC power controllers may be attached via the BT-Link expansion port.

Discontinued Products

RM-2	See the RM-3
SM-6	See the SUM 4
SP-1	See the ESS-1
SRC-8	See the SRC-8 III
SRC-16.16	See the SRC-8 III or SRC-32
SS 12.4	See the SS 16.4
SS 3.1	See the SS 4.1 III
SS2.1 BNC	See the SS 2.1 BNC III
SS2.1/TERM	See the SS 2.1 TERM III
SSM	See the Silence Monitor III
STI-II	Special Order
Time Sync	See the Time Sync Plus
Time Sync II	See the Time Sync Plus
UI-4 II	See the BOR-4

Check our website for updated product replacement suggestions.

Can't find what you're looking for?

Visit our website at www.broadcasttools.com for downloadable manuals, complete product information, and a list of dealers.



SWITCHERS / ROUTERS



8x1 DAS Digital Audio Switcher(s)

The 8x1 DAS Routes any one of eight AES/EBU digital inputs to 3 split outputs. Additional features include; which of any source are active at power-up; last source selected; enable switch; output muting; multi-drop RS-232 and RS-485 ports. Two versions: balanced 110 ohm with XLR connectors, or 75 ohm unbalanced with BNC connectors.



16 x 1

The 16x1, Sixteen input, Single Output Stereo Switcher/Router passively switches or routes any one of 16 stereo inputs to one stereo output or vice-versa through gold contact relays. The passive nature of the switching allows for any input level and impedance to be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. The 16 x 1 has features to allow selecting which of any source is active at power-up; last source selected; audio mute; an enable switch; an audio activity monitor w/remote status; a step input, providing a means of stepping though each source, while source number one is configured to route audio to the output in the case of loss of power to the unit. In addition to their normal use with audio signals, the 16x1 can also be used to switch digital signals and telephone lines. Control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port. Removable screw terminals are provided for all audio connections.



16 x 2

The 16x2, Sixteen input, Dual Output Stereo Switcher/Router passively switches or routes any one of 16 stereo inputs to either or both stereo outputs or vice-versa through gold contact relays. The passive nature of the switching allows for any input level and impedance to be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. The 16x2 has features to allow selecting which of any source is active at power-up; last source selected; audio mute; 16 port GPI interface; an enable switch; two channel Audio activity monitors w/remote status; while source number one is configured to route audio to both outputs in the case of loss of power to the unit. In addition to their normal use with audio signals, the 16x2 can also be used to switch digital signals and telephone lines. Control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port. Removable screw terminals are provided for all audio connections.



ACS 8.2 Audio Control Switcher

The ACS 8.2 provides matrix audio switching of 8 stereo inputs to 2 stereo plus 2 mono outputs. Any input assigned to output one has fading capabilities. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port, stereo headphone amplifier with front panel output selection switch, headphone jack and level control, adjustable silence sensor on each output. Removable screw terminals are provided for most connections.



ADMS 44.22

The ADMS 44.22 is a four input stereo AES and four input stereo analog matrix switcher with two independent stereo analog and AES outputs in a 1-RU profile. Each input is equipped with a three band EQ, five types of filters and a leveler function. Any or all of the inputs may be mixed, faded, dimmed to either or both output pairs. Additional features include; selectable stereo VU meters; headphone amplifier; powered monitor output; 16 x 16 GPIO port and RS-232/USB port. The ADMS 44.22 is also equipped with an expansion port allowing a second unit to be added, increasing the inputs to sixteen.



DAS 8.4

The Broadcast Tools DAS 8.4 provides AES/EBU digital audio routing/switching of any one of eight AES/EBU inputs to four AES/EBU outputs. The DAS 8.4 may be used in Multicast applications, where an AES enabled EAS device assigned to input eight is routed to all four outputs via a contact closure or serial command. When the alert/test is completed, the DAS 8.4 will return to its last I/O configuration. The DAS 8.4 may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 serial port. The front panel is equipped with input and output selection push buttons, output assignment LED's, sample rate LED indicators and a headphone jack with level control. Additional features: 96 KHz AES receiver, a 24-bit D/A converter with analog balanced stereo output, headphone amplifier and 16 x 16 GPIO port. Installation is simplified with plug-in euroblock screw terminals. 1-RU chassis.

BROADCAST
tools

tinY TOOLS
POWERED BY BROADCASTtools®

Product Catalog

INNOVATIVE PROBLEM SOLVING TOOLS FOR BROADCAST



WVRC-8 8 Channel Web & Voice Remote Control System

The WVRC-8 provides a cost-effective, one rack-unit solution for WEB based and/or recordable voice response dial-up transmitter site control. The WVRC-8 was designed from a user point of view, so all of the basic functionality you need to control your site equipment is included. The WVRC-8 is equipped with a browser based function program scheduler and alarm logger, while the user may select from four email recipients and/or different sounds to play when an out of tolerance alarm is generated. The WVRC-8 is equipped with eight high-resolution telemetry channels; while each of the eight optically isolated status channels may be configured for 5 to 24vdc wet or dry input monitoring. The eight control channels are equipped with independent SPST one amp relays for the raise/on and lower/off functions. These relays may be latched, unlatched or momentarily closed. The WVRC-8 is supplied with spoken words and phrases in English, while the user is free to record words and phrases in their language. In addition, the WVRC-8 may be programmed for dial-up operation via HyperTerminal, while the Java applet programming may be performed using your favorite web browser. Future external add-on

products such as X-10 modules, Zig-Bee hubs, and AC power controllers may be attached via the BT-Link expansion port.

- Plug-in euroblock screw terminals for telemetry, status, raise/lower relays, stereo silence sensor audio and balanced caller/send telco audio.
- Jack for external power fail power supply.
- 1/8" T/R/S Jack for optional external temperature sensor.
- Stereo Silence Sensor.
- Front panel microphone for remote aural monitoring.
- Front panel LED indicators for most operational activities.
- Front panel local/operate switch with LED indicator.
- Front/Rear panel RJ-11 telephone jack used for user voice response recording.
- Front/Rear panel DB-9, RS-232 programming connector.
- Rear panel RJ-45 LAN/Ethernet interface.
- Rear panel RJ-45 BT-Link port.
- Rear panel RJ-11 telco line jack.



ADMS 44.22 Analog/AES Digital Matrix Switcher

The ADMS 44.22 is a four input stereo AES and four input stereo analog matrix switcher with two independent stereo analog and AES outputs in a 1-RU profile. Each input is equipped with a three band EQ, five types of filters and a leveler function. Any or all of the inputs may be mixed, faded, dimmed to either or both

output pairs. Additional features include; selectable stereo VU meters; headphone amplifier powered monitor output; 16 x 16 GPIO port and RS-232/USB port. The ADMS 44.22 is also equipped with an expansion port allowing a second unit to be added, increasing the inputs to sixteen.

Table of Contents

Product	Page	Product	Page	Product	Page	Product	Page
ADMS 44.22	1	NEW! ACS 8.2 Plus/RJ	3	FlexPhones	2	Smart Relay 4	4
NEW! ACS 8.2 Plus	3	AHR-1	2	RA-12 FlexRack	4	WVRC-8	1



FlexPhones Master

The FlexPhones Master is a professional Broadcast/Studio six channel distributed headphone system with independent talkback capabilities. Each of the six channels provides stereo program monitoring and selective talkback with interconnection via CAT5 cable to multiple **Active Headphone Remotes (AHR-1)** and/or **Monitor Selector Interface (MSI)**. Multiple masters may be cascaded to form larger systems.

The FlexPhones Master is equipped with inputs for stereo program and talkback audio. Rear panel program and talkback trimmers are provided to pre-set maximum input levels. The microphone/line level talkback input is available via a rear panel plug-in euroblock connector, while the front panel XLR connector facilitates the use of a user provided gooseneck microphone or headset. The front panel is equipped with a level control for local headphones with both 1/4" and 1/8" stereo headphone jacks. The six front panel talkback switches allow the user to independently communicate with each AHR-1 listener and can be configured to insert talkback audio into only the left or both ears and dim either or both program channels. Any combination of switches may be pressed, while the "All-Call" interrupts all listeners. The Talkback function can be remotely controlled. Six RJ45 jacks are provided to distribute audio and power via CAT5 cable to the AHR-1's, which conform to the Studio Hub format. Low-Z balanced audio distribution is used to preclude audio degradation with long cable runs.

Additional features include:

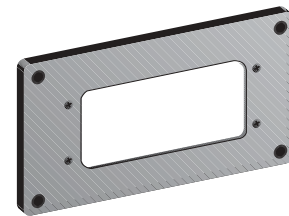
Front panel power and talkback LED indicators, surge protected internal bi-polar 24/15-vdc-power supply affording superior headroom and high definition audio. The half rack profile, allows the unit to be set on a desktop, mounted on a wall or as part of the new RA-1, Rack-Able mounting shelf.

The optional **Monitor Selector Interface (MSI)** provides transparent audio switching of the program and talkback functions into a studio's monitor system. The MSI is inserted between a studio's air or console's monitor feed and monitor amplifier. The MSI may be connected to the FlexPhones Master or AHR-1. All audio connections are balanced and supplied on plug-in euroblock screw terminals.

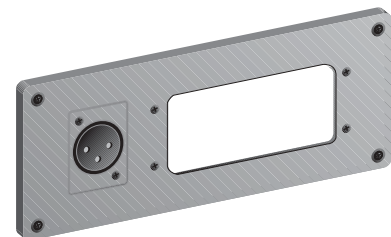


AHR-1 Active Headphone Remote

The **Active Headphone Remote (AHR-1)** contains a stereo amplifier designed to work with any combination of high-efficiency headphones with impedances between 24 and 600 ohms. The AHR-1 is equipped with 1/8" and 1/4" headphone jacks, level control, user configured utility momentary pushbutton and LED indicator. Two rear panel RJ45 jacks are provided for connection via CAT5 cable to the **FlexPhones Master**. The AHR-1 may be desktop mounted, under counter or with the optional **HR-1/MP** or **HR-1/MP-XLR** mounting plates, which may be turret or counter-top mounted.



Optional HR-1 MP mounting plate.



Optional HR-1/MP-XLR mounting plate.



ACS 8.2 Plus Audio Control Switcher **NEW!**

The Broadcast Tools **ACS 8.2 Plus** provides matrix audio switching of 8 stereo inputs to 2 stereo plus 2 mono outputs. Any input assigned to output one has fading capabilities. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. The ACS 8.2 Plus is equipped with a front panel monitor selection switch. This allows the user to select which stereo output the VU meters and headphone amplifier monitors. Optional* AGC modules may be added to each output channel to maintain consistent levels. The ACS 8.2 Plus may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 serial port (An optional USB adapter is available). Installation is simplified with plug-in euroblock screw terminals.

Features

- True matrix switching, any or all inputs may be assigned to any or all outputs. Any input assigned to output one may be faded up, down or dimmed from either the front panel, contact closures, 5-volt TTL/CMOS logic or the multi-drop RS-232 serial port.
- Logic functions via microprocessor and non-volatile memory.
- Internal stereo silence sensors monitor both output channels. Each is equipped with front panel "SS" LED indicators; separate SPDT alarm relays, adjustable alarm delay

- and restore duration. Sensitivity is factory set at -34db.
- Front panel input selection switches are provided for each input channel with separate output indicator LED's.
- Power-up selection of inputs to outputs, mute or last source selected.
- VU meters with front panel output selection switch.
- Stereo headphone amplifier with front panel output selection switch, 1/4" headphone jack and level control.
- Most configuration options via rear panel dipswitches.
- 16 input GPI port (PIP) with LED indicator.
- 8 open collector channel status outputs or programmable via burst commands.
- 8 SPDT relay outputs with multiplex function on output two.
- Programmable via serial burst commands.
- Multi-turn input and output level controls.
- Electronically balanced stereo inputs.
- Electronically balanced stereo and monaural outputs.
- Low noise and distortion circuitry.
- Remote control of front panel functions and status.
- Multidrop RS-232 serial port with data activity LED.
- Multiple units may be cascaded to expand inputs.
- 1-RU chassis.

** Must be installed at time of order or returned to factory for installation.*



ACS 8.2 Plus/RJ Audio Control Switcher **NEW!**

The Broadcast Tools **ACS 8.2 Plus/RJ** function and operation is identical to the ACS 8.2 Plus and adds multiple RJ45 connectors for all audio connections and the RJ-21X (punch block) connector for the GPIO connections. The RJ45 conforms to the Studio Hub format. The ACS 8.2 Plus/RJ provides matrix audio switching of 8 stereo inputs to 2 stereo plus 2 mono outputs. Any input assigned to output one has fading capabilities. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. The ACS 8.2 Plus/RJ is equipped with a front panel monitor selection switch. This allows the user to select which stereo output the VU meters and headphone amplifier monitors. Optional* AGC modules may be added to each output channel to maintain consistent levels. The ACS 8.2 Plus/RJ may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 serial port (An optional USB adapter is available).

Features

- True matrix switching, any or all inputs may be assigned to any or all outputs. Any input assigned to output one may be faded up, down or dimmed from either the front panel, contact closures, 5-volt TTL/CMOS logic or the multi-drop RS-232 serial port.
- Logic functions via microprocessor and non-volatile memory.
- Internal stereo silence sensors monitor both output channels. Each is equipped with front panel "SS" LED indicators;

- adjustable alarm delay and restore duration. Sensitivity is factory set at -34db.
- Front panel input selection switches are provided for each input channel with separate output indicator LED's.
- Power-up selection of inputs to outputs, mute or last source selected.
- VU meters with front panel output selection switch.
- Stereo headphone amplifier with front panel output selection switch, headphone jack and level control.
- Most configuration options via rear panel dipswitches.
- 16 input GPI port (PIP) with LED indicator.
- 8 open collector channel status outputs or programmable via burst commands.
- 8 SPDT relay outputs with multiplex function on output two.
- Programmable via serial burst commands.
- Multi-turn input and output level controls.
- Electronically balanced stereo inputs.
- Electronically balanced stereo and monaural outputs.
- Low noise and distortion circuitry.
- Remote control of front panel functions and status.
- Multidrop RS-232 serial port with data activity LED.
- Multiple units may be cascaded to expand inputs.
- 1-RU chassis.

** Must be installed at time of order or returned to factory for installation.*

Can't find what you're looking for?
Visit our website at www.broadcasttools.com for downloadable manuals, complete product information, and a list of dealers.





RA-12 FlexRack

The new Broadcast Tools **RA-12, FlexRack (2-RU rack panel)** provides mounting for up to twelve Flex-Chassis configured products. The RA-12 can be mounted

on either the front or rear rack rails. The RA-12 is pre-drilled for product mounting with mounting hardware supplied.



Smart Relay 4

The **Smart Relay 4** provides four independent DPDT relay and eight optically isolated 5 to 24vdc wet or dry inputs. The Smart Relay 4 is a perfect tool for converting sustained network closures to a pulse. User programmable logic and pulse stretching (delays) may be set from 50 ms to 99 hours, 59 minute and 59.99 seconds. Most programming can be accomplished with simple dipswitch settings, while advanced configuration is performed through the serial port using a non-dedicated PC with Windows HyperTerminal. Screw terminals are provided for all connections, while the optional RJ21X cable kit may be used to attach to a standard punch block. Power

may be applied to either the coax power jack on the unit or directly on the punch block. The Smart Relay 4 is supplied in an aluminum Flex-Chassis. The unit may be set on a desktop, mounted on a wall, up to two units mounted on the **RM-3 (1-RU)** or up to twelve units on the **RA-12 (2-RU)** Flex Rack Panel.

- Independent DPDT relays.
- Eight independent optically isolated 5 to 28 vdc wet or dry inputs.
- Basic logic functions can be programmed.
- The pulse stretcher or time delay may be user programmed from 50 ms to 99 hours, 59 minute and 59.99 seconds.
- Convert differing logic levels to DPDT contact closures.
- Time delay relays.
- Sustained contact to pulse converters.
- Rising and/or falling edge pulse converters.
- Latching (flip-flop) relays.
- Toggle action relays.
- Dual alternate action relays.

Manufactured with Pride in America

Due to the dynamic nature of product design, the information contained in this document is subject to change without notice. Broadcast Tools, Inc., assumes no responsibility

for errors and/or omissions contained in this document. Revisions of this information or new editions may be issued to incorporate such changes.

BROADCAST
t o o l s inc.

131 State Street • Sedro-Woolley, WA 98284-1503 USA

Visit the Broadcast Tools website or contact us via e-mail, phone, or fax for more information, manuals, and a list of dealers.

All prices, specifications, availability, and delivery schedule are subject to change.

Broadcast Tools® is a registered trademark, and Tiny Tools™ is a trademark of Broadcast Tools, Inc.
© 2006 Broadcast Tools, Inc. All Rights Reserved



ESS-1

The ESS-1 provides a cost-effective, small profile solution for standard serial-to-Ethernet connectivity. It is ideal for applications requiring data support for both RS-232 and RS-422 communications. The ESS-1 allows any device with a serial port, Ethernet connectivity and is ideal for serial tunneling or applications where a COM port, TCP Socket, UDP Socket, or UDP Multicast functionality is needed. Serial bridging/tunneling allows two previously non-networked devices to easily communicate information and operate with existing installed software applications on an Ethernet network. The ESS-1 also works with software applications using TCP/UDP Sockets, allowing a serial device to interoperate with the software applications without the need to install a driver. The ESS-1 is simple to install locally or remotely through most web browsers or our supplied configuration utility. The included "Device Installer" utility application will automatically detect all ESS-1 devices on your network. A Set up guide is provided to make network configuration hassle-free. The ESS-1 is FCC part 15 verified and is intended for commercial use only. The small profile of the ESS-1 makes installation hassle-free.



RDDA 4x4

The RDDA 4x4 quad-mode AES/EBU digital distribution system provides up to sixteen outputs from a single digital source. The sixteen outputs may be split into four groups, providing four transformer-balanced outputs each from a single source. The RDDA 4x4 is ideal for distributing AES/EBU signals of sample rates up to 96kHz and/or word clock around your facility without any signal alteration.

The RDDA 4x4 is equipped with four transformer balanced loop-thru inputs with selectable termination and sixteen transformer-balanced outputs with selectable termination. There are four configuration modes selected by DIPswitches. Single mode, operates as a 1 x 16 D.A. Dual mode operates as a 2 x 8 D.A. Tri-mode operates as 3 x 4 D.A. and the quad mode, which operates as a 4 input x 4 output D.A. All modes are independent with no interaction between channels.

Inputs, outputs and status are supplied on plug-in euroblock connectors. Input signal presence is monitored and displayed on four front panel LEDs with remote open collector status provided on the rear panel. The RDDA 4x4 is powered by a surge protected internal power supply. The half rack profile, allows the unit to be set on a desktop, mounted on a wall or as part of the new RA-1, Rack-Able mounting shelf.



SS 16.16

The Broadcast Tools® SS 16.16 provides audio routing of 16 stereo inputs to 16 stereo outputs. This type of switching allows any one stereo input to be assigned to any/or all stereo outputs; no mixing of inputs is permitted. The SS 16.16 may be controlled via front panel encoder controls and/or multi-drop RS-232 serial port. A 40x4 LCD back lit display provides for input descriptions and macro setup. A 16 x 16 GPIO port is provided for use with automation systems. FREE MS Windows "NetSwitch/II remote control software is available for web download. Two versions are provided, serial/USB and Ethernet. Installation is simplified with removable screw terminals (Euro).



SS 16.4 Stereo Matrix Switcher

The SS 16.4 provides matrix audio switching of 16 stereo inputs to 4 stereo plus 4 monaural outputs. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, 16 macro locations, control via front panel encoders controls, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop RS-232 or RS-485 serial port, 24 GPI inputs, 16 OC outputs and 8 SPST relays. Removable screw terminals are provided for most connections.



SS 2.1 BNC III Switcher/Router

The SS 2.1/BNC III passively switches or routes a variety of electrical signals to a single destination or vise-versa. The SS 2.1/BNC III selects any one of two inputs to dual outputs through 75-ohm resistors (may be removed). The SS 2.1/BNC III provides PASSIVE switching through gold contact relays. The passive switching means that the unit can route a signal in either direction. Due to the passive nature of the switching, any input level and impedance can be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port. Removable screw terminals are provided for most connections.

Special Order

- FP-1
- ICM-16 System Controller
- ICM-16/CM
- ICM-16/DT II
- ICM-16/MHI
- ICM-16/Tool Box II
- RM-1
- SDD-8
- TS-6
- USC-16/SG

Check our website for updated product replacement suggestions.

Can't find what you're looking for?

Visit our website at www.broadcasttools.com

for downloadable manuals, complete product information, and a list of dealers.





SS 2.1 Term III Switcher/Router

The SS 2.1/Term III passively switches or routes a variety of electrical signals to a destination or vice-versa. The SS 2.1/Term III selects any one of 2 stereo inputs to a single stereo output. The SS 2.1/Term III provides PASSIVE switching through gold contact relays. The passive switching means that the unit can route a signal in either direction (any one of 2 stereo inputs to a single destination, or a single source to any one of 2 destinations). Due to the passive nature of the switching, any input level and impedance can be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port. Removable screw terminals are provided for most connections.



SS 4.1 III Switcher/Router

The SS 4.1 III passively switches or routes a variety of electrical signals to a destination or vice-versa. The SS 4.1 III selects any one of 4 stereo inputs to a single stereo output. The SS 4.1 III provides PASSIVE switching through gold contact relays. The passive switching means that the unit can route a signal in either direction. Due to the passive nature of the switching, any input level and impedance can be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. Additional features include; selection of any active source at power-up, last source selected, audio mute, step input, control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port. Removable screw terminals are provided for most connections.



SS 8.1 II Switcher/Router

The SS 8.1 II passively switches or routes a variety of electrical signals to a destination or vice-versa. The SS 8.1 II selects any one of 8 stereo inputs to a single stereo output. The SS 8.1 II provides PASSIVE switching through gold contact relays. The passive switching means that the unit can route a signal in either direction. Due to the passive nature of the switching, any input level and impedance can be used. Inputs may be balanced or unbalanced, while output levels, impedance, distortion, noise and balancing will match that of the selected input. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, control via front panel switches, contact closures, 5-volt TTL/CMOS logic, open collector, an audio activity monitor w/remote status; a step input, 8 input GPI port and/or multi-drop serial port.



SS 8.2 Stereo Matrix Switcher

The SS 8.2 actively switches any combination of 8 stereo inputs to either or both of the 2 stereo and monaural outputs. Additional features include; 3 switching modes, which of any source are active at power-up; audio mute; I/O trimmers, internal silence sensor, selectable headphone and powered speaker level controls and outputs. LED VU meters, control via front panel switches, contact closures, 5-volt TTL/CMOS logic and or multi-drop RS-232/RS-485 serial port, 16 input GPI port, 8 relays and 8 open collector outputs and RS-232/RS-485 serial ports, pluggable screw terminals and input expansion port.



SS 4.2 Stereo Matrix Switcher

The SS 4.2 provides matrix audio switching of 4 stereo inputs to 2 stereo plus 2 mono outputs. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. Additional features include; selection of any active source at power-up, last source selected, audio mute, an enable switch, control via front panel

switches, contact closures, 5-volt TTL/CMOS logic, open collector and/or multi-drop serial port, stereo headphone amplifier with front panel output selection switch, headphone jack and level control, adjustable silence sensor on each output. Removable screw terminals are provided for most connections.

tiny TOOLS™

POWERED BY BROADCASTtools®

tiny TOOLS, tiny PRICE!

The tiny TOOLS™ line of products offers exceptional functionality at an affordable price. Tiny TOOL™ products are manufactured with the same quality and innovation as all our Broadcast Tools® products. All amplified products are powered by an internal bi-polar 15vdc surge-protected power supply, affording superior HEADROOM! and high definition audio. Each tiny TOOL™ is a compact one-quarter-rack space unit, allowing the mounting of up to four units on the optional RA-1 rack shelf. Most products are furnished with plug-in euroblock connectors.



tiny TOOLS
POWERED BY BROADCASTtools®

VAD-2 Voice Alarm Dialer

The tiny TOOLS VAD-2 is a user programmable two-input with integrated stereo silence sensor, multi-number voice/pager auto dialer, designed for dial out voice message notification. The VAD-2 has two dry contact inputs and stereo silence sensor, which, when tripped, will sequentially dial up to four different phone numbers and play back a user recorded message corresponding to the tripped input. The VAD-2 is also equipped with two SPST one amp relays for the control of external equipment. The VAD-2 can store up to four 32 digit phone numbers and one 32 digit pager phone number which may be associated with any of the two inputs and/or stereo silence sensor. The VAD-2 is capable of remote or local configuration and message recording with a total recording time of 16 seconds. The two SPST relays may be programmed for momentary, latching or tone duration operation. The VAD-2 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTtools®

MT-1 Match Tool

The tiny TOOLS MT-1 is an active bi-directional stereo level-matching interface. The MT-1 interfaces IHF-compliant, consumer and semi-professional audio gear with professional studio equipment. The MT-1 is a bi-directional interface providing four separate amplifiers. The first amplifier pair converts -10dbv consumer unbalanced gear to +4dbu balanced outputs and may be configured for an additional 6db of gain. The second set of amplifiers convert +4dbu balanced inputs to -10dbv consumer compatible outputs. All four outputs are adjustable from the front panel. Gold plated RCA jacks are provided for unbalanced equipment, while removable screw terminals are supplied for the balanced equipment. The MT-1 is designed to afford superior headroom and high definition audio. The MT-1 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTtools®

TMT-2 Twin Match Tool

The tiny TOOLS TMT-2 is a twin active unidirectional stereo level-matching interface. The TMT-2 interfaces IHF-compliant, consumer and semi-professional audio gear with professional studio equipment. The TMT-2 is a unidirectional interface providing four separate amplifiers. Each amplifier converts -10dbv consumer unbalanced gear to +4dbu balanced outputs and may be configured for an additional 6db of gain. All four outputs are adjustable from the front panel. Gold plated RCA jacks are provided for unbalanced equipment, while removable screw terminals are supplied for the balanced gear. The TMT-2 is designed to afford superior headroom and high definition audio. The TMT-2 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTtools®

DTE-16 DTMF Tone Encoder

The tiny TOOLS DTE-16 is a feature rich DTMF tone/sequence encoder that is user programmable to encode up to four tone sequences or a single tone via any one of 16 contact closure inputs and/or the RS-232 serial port. Each input may be programmed to generate a tone for the duration of the closure or tone burst immediately on command. A passive mixing network is provided to mix both the program and encoder audio if required. Programming is performed using a non-dedicated PC's COM port equipped with Windows HyperTerminal. Features: Encodes all 16 DTMF tones; adjustable tone generation time; balanced low Z output, passive program mixer input; front panel status for power, valid DTMF tone, serial data activity, recessed programming push button with LED indicator and recessed output level control with a range of off to +4dbm. All connections are on screw terminals except for the DB-9 female serial port connector. The DTE-16 may be set on a desktop, wall mounted or up to four units mounted on the RA-1, Rack-Able mounting shelf.

Discontinued Products

10X1	See the SS 8.1 II or 16x1
3x2	See the SS 4.2
6x1	See the SS 8.1 II
8X2	See the ACS 8.2, SS 4.2, SS 8.2 or SS 16.4
DEC-16	See the DTD-16
DSC-20	See the DSC-32/64
ENC-16	See the DTE-16
FM 3.1	See the ACS 8.2
IPC-1	See the MT-1
IPC-2	See the TMT-II
MC-16	See the STA-III
PBB-24	See the Special Order
PSC	See the PS-99
PSC II	See the PS-99

Check our website for updated product replacement suggestions.

Can't find what you're looking for?

Visit our website at www.broadcasttools.com

for downloadable manuals, complete product information, and a list of dealers.





tiny TOOLS
POWERED BY BROADCASTTOOLS

2x6 DA Distribution Amplifier Tool

The tiny TOOLS 2x6 DA Tool stereo distribution amplifier is equipped with a stereo line level high Z input, which accepts a balanced or unbalanced source with six active balanced low Z output amplifiers. Each output amplifier may be paired for stereo or each output pair may be summed for monaural operation without affecting the separation of the other outputs. Each output amplifier has a front panel recessed level control. Features: Selectable input gain switch of -10dbv or +4dbu eliminating the need for level conversion, monaural jumpers and removable screw terminals. The 2x6 DA is designed to afford superior headroom and high definition audio. The 2x6 DA may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTTOOLS

TT-1 Telco Tool

The tiny TOOLS TT-1 is more than just an ordinary telephone line coupler. The TT-1 is a rack-able compact telephone line powered auto-answer and auto-disconnect hybrid/coupler. The TT-1 utilizes dual-hybrid transformers providing full duplex audio at a plain old coupler price. We provide a rear panel multi-turn hybrid NULL trimmer to allow the user to achieve approximately 20dB separation figures. Additional TT-1 features: front panel line seize button, call drop button, auto-answer/monitor-TAP switch, audio mute switch, and off-hook and ring indicators. A rear panel RJ-11 is provide for connection to a POTS line along with a second RJ-11 loop-thru jack that may be configured to disconnect attached devices when the TT-1 goes off-hook. Plug-in euroblock screw terminals along with 3.5mm stereo jacks are provided for balanced send and caller audio. Plug-in euroblock screw terminals are provided for remote seize and drop inputs and the SPDT off-hook dry relay contacts. The TT-1 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTTOOLS

SUM-4 Stereo Utility Mixer

The tiny TOOLS SUM-4 provides four line level high Z inputs, which accepts a balanced or unbalanced source; stereo and monaural balanced low Z outputs; individual front panel level controls; stereo mixing/link port for input expansion and removable screw terminal connectors. The SUM-4 is designed to afford superior headroom and high definition audio. The SUM-4 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTTOOLS

DTD-16 DTMF Tone Decoder

The tiny TOOLS DTD-16 is a full-featured DTMF tone/sequence decoder that is user programmable to decode up to four tone sequences or a single tone and assign it to any one of four relays, twelve open collectors and/or the RS-232 serial port. The relays/open collectors may be programmed to close for the duration of tone, pulse immediately after completion of detection, wait a programmed length of time after detection or latch/unlatch. Programming is performed using a non-dedicated PC's COM port equipped with Windows HyperTerminal. Features: Decodes all 16 DTMF tones; adjustable tone detection time; Line level high Z input, which accepts a balanced or unbalanced source, front panel status for power, each relay, valid DTMF tone, serial data activity, recessed programming push button with LED indicator and recessed input level control with a range of -20 to +8dbu. All connections are on screw terminals except for the DB-9 female serial port connector. The DTD-16 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tiny TOOLS
POWERED BY BROADCASTTOOLS

WRC-4 Web Based Remote Control

The tiny TOOLS WRC-4 is a fresh approach to remote site monitoring and control, or providing an inexpensive solution to Internet enabling your present remote control system. The WRC-4, combined with web access and your favorite web browser, brings you the following features, all available in this small, but powerful tiny TOOL: A powerful built-in web-server with non-volatile memory; 10/100baseT Ethernet port; four channels each of high resolution analog inputs with a large monitoring range; TTL compatible digital (contact closures) inputs; SPST one amp relays; open collector outputs; front panel status indicators and a single front panel temperature sensor. The WRC-4 has carefully been RFI proofed, while including the accessories other manufactures consider optional. The WRC-4 is supplied with plug-in euroblock screw terminals and loaded with a generic web page that may be edited by the end user. The WRC-4 works with either dynamic or static IP addresses (when used with a dynamic IP, an inexpensive cable or DSL router may be required). Multiple WRC-4's may be used with a user provided Ethernet hub. The WRC-4 may be set on a desktop, mounted on a wall or up to four units mounted on the RA-1, Rack-Able mounting shelf.



tinyTOOLS
POWERED BY BROADCASTTOOLS®

CSD-1 Composite Stereo Decoder

The CSD-1 converts a composite stereo signal into discrete left and right balanced outputs. Features include; twin BNC input connectors; multi-turn input level control; twin power connectors allowing up to four units to be driven off of one power transformer; front panel output trimmers; front panel stereo and power LEDs and plug-in Euroblock output connectors. The CSD-1 is powered by a surge protected internal bi-polar 12vdc power supply affording superior headroom and high definition audio. The CSD-1 may be set on a desktop, mounted on a wall or up to four units may be mounted on the optional RA-1, Rack-Able mounting shelf.



tinyTOOLS
POWERED BY BROADCASTTOOLS®

SRC-2 Serial Remote Control

The tiny TOOLS SRC-2 interfaces two optically isolated inputs and two SPST relays to a RS-232 or USB port. The SRC-2 can notify a users PC software program that any of two optically isolated inputs have been opened or closed and allows your software to control two SPST, 1-amp relays. Communication with the SRC-2 is accomplished via short "burst" type ASCII commands from the users PC. Also, two units may be operated in a standalone mode (master/slave mode) to form a "Relay extension cord," with two channels of control in each direction. The unit communicates using RS-232 at baud rates up to 9600. The SRC-2 is powered by a surge protected internal power supply. The SRC-2 may be rack mounted on the optional RA-1 mounting shelf. Ethernet capabilities are available with the SRC-2X.

tinyTOOLS
POWERED BY BROADCASTTOOLS®

SRC-2X Serial Remote Control

The tiny TOOLS SRC-2X interfaces two optically isolated inputs and two SPST relays to a 10/100baseT Ethernet port. The SRC-2X can notify a users PC software program that any of two optically isolated inputs have been opened or closed and allows your software to control two SPST, 1-amp relays. Communication with the SRC-2X is accomplished via short "burst" type ASCII commands from the users PC. Also, two units may be operated in a standalone mode (master/slave mode) to form an "Ethernet (Internet) relay extension cord with two channels of control in each direction. Configuration is via most web browsers. The SRC-2X is powered by a surge protected internal power supply. The SRC-2X may be rack mounted on the optional RA-1 mounting shelf.



tinyTOOLS
POWERED BY BROADCASTTOOLS®

Time Sync Plus

The tiny TOOLS Time Sync Plus provides four separate GPS time referenced outputs. The first is a SPST relay, which pulses at 12:00, 22:00, 42:00, 54:30 each hour and is user programmable in each of four locations for any minute and second each hour. The second output is an active high driver with a 100 ms pulse each second, while the third output is a 4800-baud, RS-232 serial port providing a time zone adjustable hours, minute and seconds time code. The fourth output provides an active high driver in the ESE TC-90 serial time code format. Indicator LED's are provided to display power/valid GPS data, programming mode and time sync relay operation. The Time Sync Plus is powered by a surge protected internal power supply. The Time Sync Plus may be rack mounted on the optional RA-1 mounting shelf. Each Time Sync Plus is supplied in a small profile plastic enclosure, while the Garmin 12 Channel GPS receiver with embedded antenna is housed in a water-resistant case and designed to withstand the riggers of outdoor conditions. The GPS receiver is supplied with an approximate 10-foot cable, longer CAT-5 cable lengths of up to 100 feet may be used.

Discontinued Products

RM-2	See the RM-3
SM-6	See the SUM 4
SP-1	See the ESS-1
SRC-8	See the SRC-8 III
SRC-16.16	See the SRC-8 III or SRC-32
SS 12.4	See the SS 16.4
SS 3.1	See the SS 4.1 III
SS2.1 BNC	See the SS 2.1 BNC III
SS2.1/TERM	See the SS 2.1 TERM III
SSM	See the Silence Monitor III
STI-II	Special Order
Time Sync	See the Time Sync Plus
Time Sync II	See the Time Sync Plus
UI-4 II	See the BOR-4

Check our website for updated product replacement suggestions.

Can't find what you're looking for?

Visit our website at www.broadcasttools.com for downloadable manuals, complete product information, and a list of dealers.



ACCESSORIES

Installed products not included



Flex Panel

The Flex-Panel is an innovative solution which allows the user to configure a filler panel to the required width when used with the RA-1 Rack Shelf.



RA-1 shown with two type III devices and included filler plate

RA-1 (Rack-Able) 1-RU Rack Shelf

The new RA-1 (1-RU rack shelf) provides mounting for three tri-rack or two half rack "Rack-Able" configured products. The RA-1 is pre-drilled for flush and recessed product mounting. The RA-1 is furnished with filler panels and mounting hardware. The RA-1 is equipped with 3*6-32 holes for cable channel or cable tie support.



Shown with installed products

RM-3 Rack Shelf

RM-3 allows mounting of one or two small profile type BTI products horizontally in one rack space. The rack shelf is flanged for strength and is equipped with eight 6-32 stand-offs. The front panel is pre-drilled with six 1/4" holes that may be used for ventilation, or to mount user-provided switches, push buttons, LEDs etc. Mounting hardware is included. 4.6 inches deep.



USB to RS-232 Serial Cable

The USB Serial adapter cable provides USB connectivity with all Broadcast Tools products with a RS-232 serial port.

Features

- USB to RS-232 Serial interface (DB-9 & DB 25)
- USB specification rev. 1.1
- Support over 1Mbps data transfer rate
- Support remote wake-up and power management
- DB-9 to DB-25 adapter included

Manufactured with Pride in America

Due to the dynamic nature of product design, the information contained in this document is subject to change without notice. Broadcast Tools, Inc., assumes no

responsibility for errors and/or omissions contained in this document. Revisions of this information or new editions may be issued to incorporate such changes.

BROADCAST
tools inc.

131 State Street
Sedro-Woolley, WA 98284-1503 USA

Visit the Broadcast Tools website or contact us via e-mail, phone, or fax for more information, manuals, and a list of dealers.

All prices, specifications, availability, and delivery schedule are subject to change.

Broadcast Tools® is registered trademark, and Tiny Tools™ is a trademark of Broadcast Tools, Inc.

© 2006 Broadcast Tools, Inc. All Rights Reserved