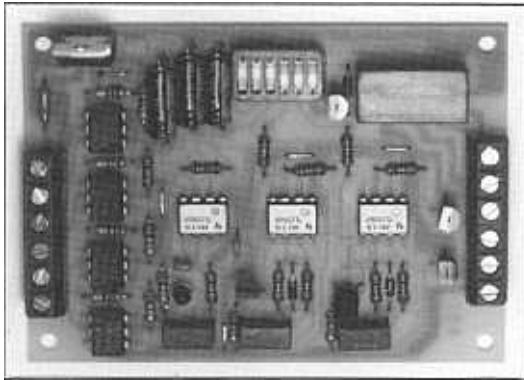


UNI-200 Universal Remote Interface Card



Description:

The UNI-200 from Broadcast Devices is a versatile circuit card that provides isolation between a remote control point and a controlled device. The UNI-200 uses dry relay contacts (normally open or normally closed) for its control outputs and open collector switched paths to ground for status or tally indicators. The UNI-200 is ideal for use with passive remote switch panels or as an interface buffer for remote telemetry systems. Signals to the card are opto-isolated and ground activated to provide the ultimate in isolation.

Through dip switch settings the UNI-200 can be programmed to provide a momentary or maintained (latching) closure. The momentary closure can be programmed to provide a "hold on" delay for situations that require debouncing or a temporary maintained closure. The status outputs can be programmed to flash an indicator at a variable rate or remain on steady. The status outputs can be

made to follow the state of the on-card relay or be externally triggered from an external source. On and off status outputs are provided as well as a regulated 12 volt source to drive tally lamps without any additional power supplies.

Applications:

Here are a few typical applications of the UNI-200 from our users. If you have devised a unique use for this product — write us! We'll be glad to pass your ideas on to other users. Your suggestions for product improvement and new product development are also greatly appreciated.

STL Controller

Most STL's require a maintained closure to activate the transmitter. The UNI-200 can provide this maintained closure via its latching mode. Momentary ON/OFF illuminated pushbuttons can be used to remotely control the transmitter and provide a return status indication. The external status inputs can be used to provide a real indication of transmitter operation.

CD Player Controller

Some CD players require a maintained closure to activate the PLAY mode. The UNI-200 can provide this using its latched mode.

Antenna Switch Controller

Most high power motorized coaxial antenna switches require a temporary maintained closure to activate a transfer. The momentary hold feature of the UNI-200 can be used in this application to turn a brief momentary closure (i.e. from a remote telemetry system) into a timed momentary closure to assure a complete transfer has occurred. The UNI-200 external status functions can be used to return the actual switch position.

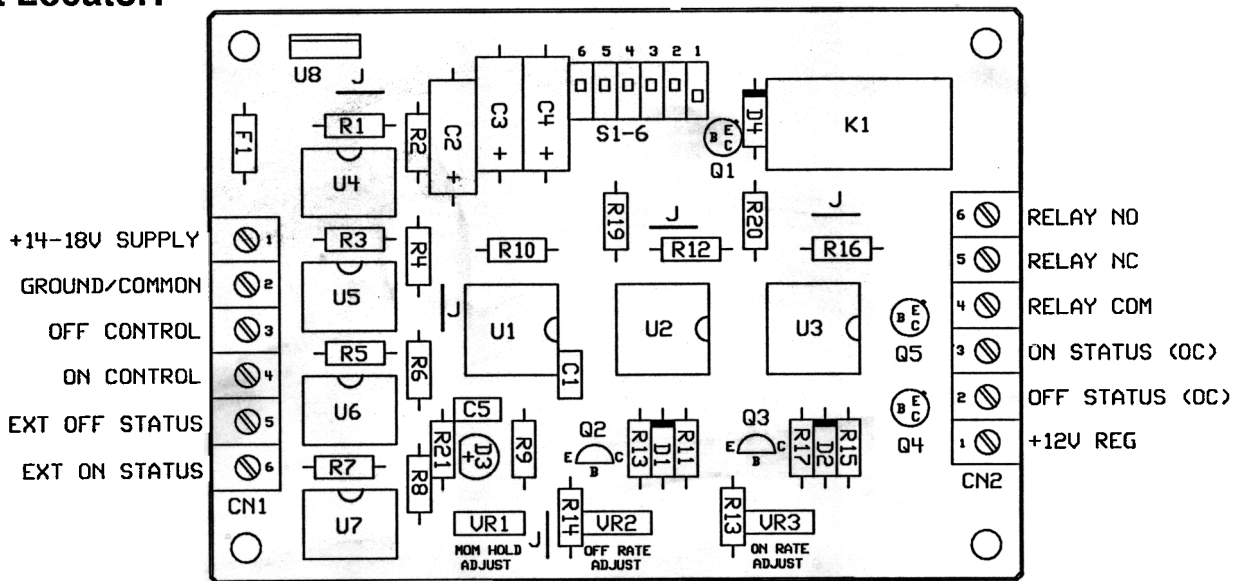
Turntable Controller

The momentary hold feature of the UNI-200 can be used to control turntables that require a momentary start/stop signal. The UNI-200 can be used to debounce a remote momentary closure to prevent false stops or starts.

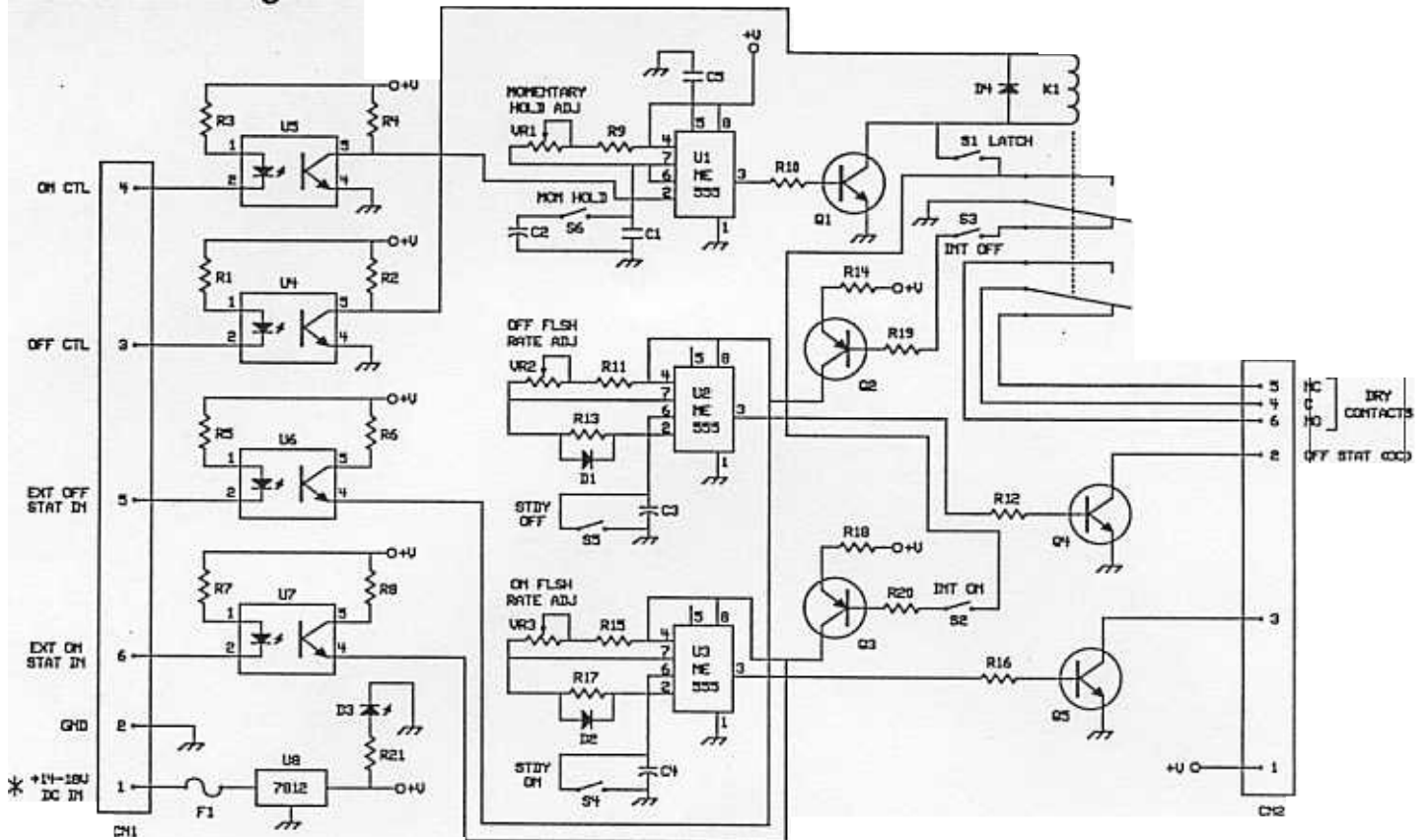
Reel-to-Reel Interface

Older reel-to-reel decks require that the remote control use a normally closed switch to activate the STOP mode. This prevented easy use of parallel remote controls and required the use of a different type of switch than all the other deck controls. Because the UNI-200 provides you with normally open and normally closed relay contacts this situation can be reversed to allow a momentary closure to activate the STOP mode.

Connection Data and Component Locator:



Schematic Diagram:



* NOTE: 14-18 VOLTS IS THE RECOMENDED SUPPLY VOLTAGE FOR PROPER OPERATION WITH GOOD OUTPUT REGULATION. THE CARD WILL FUNCTION PROPERLY WITH VOLTAGES AS LOW AS 12 VOLTS BUT OUTPUT REGULATION TO AN EXTERNAL LOAD IS NOT GUARANTEED. SUPPLY VOLTAGES ABOVE 18 VOLTS MAY OVERHEAT THE REGULATOR UNLESS SUFFICIENT VENTILATION IS PROVIDED.

Parts List:

Resistors:

R1,3,5,7	2.2K 1/4W 5%
R2	220 1/4W 5%
R4,9-13,15-17,19-20	10K 1/4W 5%
R6,8,14,18	470 1/4W 5%
R21	1K 1/4W 5%
VR1-3	100K SGL TURN

Capacitors:

C1,5	.1uf 50V CER
C2,3,6	10uf 35v EL

Semiconductors:

U1-3	NE555CP TIMER
U4-7	TIL119 OPTO-ISOLATOR
U8	7812 12v POS VOLTAGE REG
Q1,4-5	2N2222A NPN TRANSISTOR
Q2,3	2N3906 PNP TRANSISTOR
D1,2,4	1N914 DIODE
D3	T-1 RED LED

Miscellaneous:

K1	ORMON G2VN-234P-US 12V RELAY
CN1-2	6 TERM SCREW CLAMP CONNECTOR
S1-6	ALCO ADE06 6PST DIP SWITCH
F1	1A PICO FUSE

DIP SWITCH SETTINGS

	FUNCTION	ON	OFF
1	Closure type	Latching	Momentary
2	On status	Internal	External
3	Off status	Internal	External
4	On status	Steady	Flash
5	Off status	Steady	Flash
6	Mom pulse	Hold	Follow

Note: Momentary hold mode should not be used when the latching mode is on. When switch #1 is ON switch #6 should be OFF.

Warranty:

BROADCAST DEVICES, INC. PRODUCTS ARE WARRANTIED AGAINST FAILURE DUE TO FAULTY MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF SHIPMENT TO THE ULTIMATE USER. THE WARRANTY COVERS REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AT THE FACTORY, PROVIDED THE UNIT HAS BEEN RETURNED PREPAID BY THE USER, UNDER A RETURN AUTHORIZATION NUMBER FORMALLY OBTAINED FROM THE FACTORY. THE ABOVE WARRANTY IS VOID IF THE UNIT HAS BEEN MODIFIED BY THE CUSTOMER OUTSIDE OF RECOMMENDATIONS FROM THE FACTORY, OR IF IT HAS BEEN ABUSED OR OPERATED OUTSIDE OF ITS ELECTRICAL OR ENVIRONMENTAL SPECIFICATIONS. IF CUSTOMER CONDUCTED FIELD TESTS SUGGEST THAT THE UNIT MAY BE FAULTY WHETHER IN OR OUT OF THE WARRANTY PERIOD, A FULL REPORT OF THE DIFFICULTY SHOULD BE SENT TO THE BROADCAST DEVICES, INC. FACTORY AT PEEKSKILL, NY. THE OFFICE MAY THEN SUGGEST FURTHER HELPFUL FIELD TESTS, OR AUTHORIZE RETURN FOR EVALUATION AT THE FACTORY.

UNITS FOR FACTORY INSPECTION SHOULD BE WELL PACKED AND SHIPPED DIRECT TO THE BROADCAST DEVICES, INC. FACTORY AT 5 CRESTVIEW AVENUE, PEEKSKILL, NY 10566. THE RETURN AUTHORIZATION NUMBER MUST APPEAR ON THE OUTSIDE OF THE SHIPPING CONTAINER. OTHERWISE THE UNIT WILL NOT BE ACCEPTED. NOTE: FREIGHT COLLECT SHIPMENTS WILL BE REFUSED. WHEN THE UNIT HAS BEEN RECEIVED, INSPECTED AND TESTED, YOU WILL RECEIVE A REPORT ON THE FINDINGS ALONG WITH A QUOTATION ON ANY RECOMMENDED REPAIRS FALLING OUTSIDE OUR STANDARD WARRANTY. UNITS RETURNED FOR IN-WARRANTY REPAIRS WHICH ARE FOUND TO BE NOT DEFECTIVE WILL BE SUBJECT TO AN INSPECTION AND HANDLING CHARGE. IN-WARRANTY UNITS, FOUND TO BE THE RESPONSIBILITY OF BROADCAST DEVICES, INC. WILL BE REPAIRED AND RETURNED PREPAID AND FREE OF CHARGE. ALSO AT THAT TIME, A CREDIT WILL BE ISSUED FOR INCOMING FREIGHT CHARGES.

OUT-OF-WARRANTY UNITS NEEDING REPAIR REQUIRE A PURCHASE ORDER AND WILL BE INVOICED FOR PARTS, LABOR AND TRANSPORTATION CHARGES. COMPONENTS USED IN ALL BROADCAST DEVICES, INC. PRODUCTS ARE THE HIGHEST COMMERCIAL GRADE AVAILABLE. EACH ONE IS GIVEN A RIGID ACCEPTANCE TEST UPON RECEIPT. NEVERTHELESS, AS WITH ALL COMPONENTS, THERE IS A CERTAIN SMALL PERCENTAGE OF FAILURE. BROADCAST DEVICES, INC.'S WARRANTY INCLUDES FREE REPLACEMENT AT THE FACTORY OF ANY COMPONENT WHICH FAILS WITHIN ONE YEAR OF THE DATE OF SHIPMENT.

WHEN ORDERING REPLACEMENT PARTS, ALWAYS SPECIFY: A) PART NUMBER, DESCRIPTION, AND QUANTITY NEEDED; B) DATE OF PURCHASE; C) ANY SPECIAL SHIPPING INSTRUCTIONS.