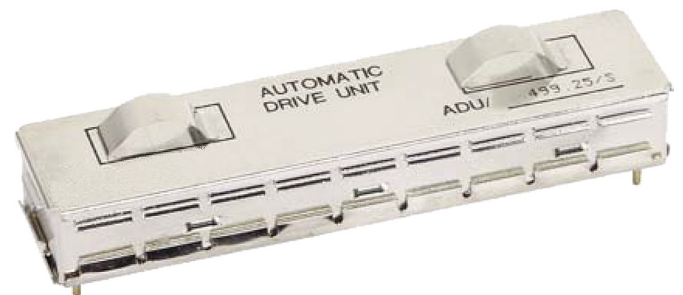


# ADU and QADU

## Automatic Drive Unit/ QAM Automatic Drive Unit

### FEATURES

- Provide amplifier output level stabilization over temperature.
- Several analog frequency values available (ADU)
- Two digital frequency values available (QAM ADU)
- QAM ADU utilizes QAM-modulated digital channel as pilot (no need to hold analog channel when expanding digital bandwidth)
- All common ADU models utilize SAW filters to detect pilot signal
- All current ADU models meet FCC and CENELEC requirements



### PRODUCT OVERVIEW

ARRIS's automatic drive unit, model ADU-\*, and QAM automatic drive unit, model QADU-\*, are automatic gain control (AGC) devices. Cable system signal levels vary as cable attenuation and hybrid output vary over temperature. The function of the ADU is to monitor the output level of a selected pilot signal at the output of the host amplifier, and send any detected changes in amplitude back to the Bode equalizer. The Bode then makes appropriate corrections in order to adjust the gain of the amplifier to maintain a constant output level for a range of input levels. The ADU/QADU is a plug-in accessory that may be configured into the amplifier (depending on model), or ordered as a separate item for field installation. Use of the ADU/QADU does not reduce station gain.



The current ADUs and QADUs use surface acoustic wave (SAW) filters to select the pilot frequency. There are several frequency values available. For the traditional analog ADUs, the pilot frequency is a continuous wave (CW) signal or an available NTSC television signal not scrambled by the sync suppression method. Motorola also offers the QAM ADU, which uses a QAM-modulated digital channel for a pilot signal. This is ideal for cable operators wishing to expand their digital channels below 550 MHz, thereby encroaching into traditional analog space. There is then no need to hold an analog channel. There are two pilot frequency choices available for the QADU, 609 MHz or 711 MHz, both of which are above 550 MHz meaning most cable operators carry digital channels at these frequencies. The QAM ADU also offers a gain-hold feature. If the pilot level drops by 20 dB or more, the gain is set to mid-range. For more information, please contact your ARRIS Account Representative.

### ADU-\*/QADU-\* AUTOMATIC DRIVE UNIT SPECIFICATIONS

Pilot Frequency	403.25/S, 439.25/S, 445.25/S, 499.25/S, 549.00/S, 609.00/S (QADU), and 711 MHz (QADU)
Control Level ("Setting Range"):	
Fo = 400-429 MHz	Min. = 37.0 dBmV, Max. = 49.0 dBmV
Fo = 430-459 MHz	Min. = 36.5 dBmV, Max. = 48.5 dBmV
Fo = 460-505 MHz	Min. = 36.0 dBmV, Max. = 48.0 dBmV
Fo = 506-550 MHz	Min. = 35.5 dBmV, Max. = 47.5 dBmV
Fo = 609 MHz	Min. = 38.0 dBmV, Max. = 50.0 dBmV
Pilot Level Accuracy	+/-0.4 for +/- 3 change at input
IDC	70 MA
AC Power	2.13 W

### RELATED PRODUCTS

Installation Services	BLE100
MB100	BT100
SFE/SRE EQ	

## Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

**Note:** Specifications are subject to change without notice.

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